

Indaver Ireland Limited

IE Licence Review Application

Planning Decisions and Inspector's Reports

Reference: LA010332

Issue | 7 July 2023

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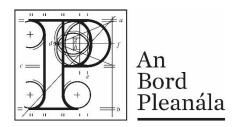
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1. Planning Ref: ABP-307433-20

Inspector's Report



Inspector's Report ABP-307433-20.

Development Site Sustainability Project.

Location Carranstown, Duleek, Co. Meath.

Planning Authority Meath County Council.

Applicant Indaver (Ireland) Limited.

Type of Application Application under S37E of PDA 2000

as amended.

Observers Darren O'Rourke TD

John A Woods

Cllr Paddy Meade

Patrick Shiels.

Dates of Site Inspections 3 March 2021 and 20 December 2021.

Inspector Mairead Kenny.

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1.0 Introduction

- 1.1. The application relates to the existing Waste to Energy (WtE) facility operated by Indaver since 2011 at the 9.9 ha site at Carranstown, Duleek, Co Meath.
- 1.2.A 10-year permission is sought for the proposed development, which is described as a Site Sustainability Project.
- 1.3. The proposed development includes an increase in the intake of waste and residues, a tank farm for aqueous waste, alterations to buildings and other facilities and use of excess electricity in the production of hydrogen.
- 1.4. The existing facility is licensed by the EPA under register number W0167 03 pursuant to the Industrial Emissions Directive. The existing facility accepts 235,000 tonnes per annum (TPA) of household, commercial and industrial non-hazardous waste and up to 10,000 TPA of hazardous waste.
- 1.5. The proposed changes include an additional 15,000 TPA of waste, which may be hazardous and an increase by 30,000 TPA of intake of flue gas and other residues for pre-treatment prior to export to Northern Ireland. An aqueous waste tank farm is proposed, and a bottom ash storage building would be constructed for the storage of bottom ash generated on site. excess electricity currently generated at the site is to be utilised to generate hydrogen.
- 1.6. This application has been subject of pre-application consultations under section 37 (B) of the Planning and Development Act 2000 as amended. The Board confirmed the status of the proposed development is strategic infrastructure.
- 1.7. The Board has engaged the services of a specialist consultant to address the topic of major accidents and hazards. The report of the consultant is attached as Appendix 1.

2.0 Site Location and Description

2.1. The proposed development site (PDS) is part of the Indaver Waste to Energy (WtE) facility at Carranstown in north Co Meath. The stated site area of the overall WtE site is 9.9 hectares. The facility has been in operation since 2011.

- 2.2. The PDS is located 1.8km to the south-west of the M1 and directly north of the R152 from which it takes access. Platin cement works and quarry is to the north and north-east of the PDS and Donore village over 2km to the north-west. The closest village is Duleek which is to the south-west and is also served by the R152. In terms of the primary elements of the road network the site is positioned adjacent and to the north-west of the R152 between Duleek and Junction 8 (Drogheda) of the M1. The R152 also serves Platin. To the south-west of the site is a junction where the R152 and the R150 meet and this is also the access point into Duleek town.
- 2.3. The character of the overall area would be described as rural, but it is noteworthy also for the presence of large industrial facilities notably the complex which has emerged around the Platin quarry and the Indaver site. The area overall is also noteworthy due to the presence of major infrastructure including power lines and a main railway line as well as the motorway.
- 2.4. The defined application site comprises the overall 9.9-hectare plot. The internal layout of the site may be considered in two zones, to the north and south of the 110kV exclusion zone which basically bisects the site. This exclusion zone is one of three wayleaves within the site. There is also a 2m wide wayleave along the north-eastern boundary for a 38kV line and a 14m wide wayleave for the high-pressure gas main that cuts through the southern half of the site.
- 2.5. The northern portion of the site houses the main process building and is the intended location for some of the more significant elements of the proposed development including a waste tank farm and a bottom ash storage building. The tallest structure on site is the process building (41m with an associated 65m high stack). Throughout the remainder of the site the scale of buildings is small, and heights are low this would include workshop and office spaces.
- 2.6. The site entrance is positioned in the southern corner of the site. In the southern half of the site is the main entrance and parking and offices. There is a major landscaped berm in the eastern corner beyond which is the closest residential dwellinghouse. This location is intended to house a hydrogen generation unit and additional parking and other development.

- 2.7. The site topography generally falls towards the west. The site drainage is by way of a stormwater drainage system based on SuDS principles. This includes an open pond in the western site corner adjacent to the vehicular entry point to the process building.
- 2.8. Photographs of the site and surrounding area which were taken by me during inspection are attached.

3.0 **Proposed Development**

The development is as described in detail in the applicant documentation including the public notices, Environmental Impact Assessment Report and Natura Impact Assessment.

The applicant's original submission was subject of a request for further information which was issued by the Board on April 22

3.1. Key elements

The key elements are:

- 3.1.1. An **increase in the total waste** accepted for treatment in the WtE facility from the permitted 235,000 to 250,000 tonnes per annum (TPA).
- 3.1.2. This is **to include up to 15,000 TPA of additional hazardous waste** (an increase from the currently permitted 10,000 TPA). The hazardous waste will be a mix of solid and aqueous waste.
- 3.1.3. Development of an aqueous waste tank farm and unloading area for storage and processing of aqueous liquid wastes this will involve 3 no. new tanks of 300m³ capacity of which 2 no. will be for the acceptance and storage of liquid waste and one will be used during maintenance for storage of boiler water.
- 3.1.4. Development of a **hydrogen generation unit** (HGU) the process will utilise electricity currently generated at the site, which at times is not required by the electricity grid.
- 3.1.5. Development of an **ash storage building for storage of up to 5,000 tonnes of bottom ash** currently produced on site this will allow for monthly export over a two-

- or three-day period by truck to Drogheda port for export to continental Europe for recovery.
- 3.1.6. Increasing the capacity of existing ash pre-treatment to involve additional waste acceptance capacity and infrastructure for an additional 30,000 TPA of third-party boiler ash and flue gas cleaning residues and similar residues this will bring the site total up to 280,000 TPA. The pre-treated ash would be transported in 1m³ flexible intermediate bulk container (FIBC) bags to Northern Ireland for recovery.
- 3.1.7. Warehouse, workshop and emergency response team (ERT) /office building to support existing maintenance activities this will involve repurposing of the existing warehouse and workshop building (for storage of FIBC bags), relocation of those functions to a new two-storey building which will also include additional office accommodation the building will be split into three separate areas to accommodate the warehouse, workshop and office/ERT functions.
- 3.1.8. New concrete yard and parking for up to 10 trucks, tanks or containers this is related to access and vehicular movements in and out of the bottom ash storage building and for deliveries to the warehouse. Part of it will be a contained area for the parking of containers, trailers and tankers associated with aqueous deliveries and transport of residues in containers/trailers off-site.
- 3.1.9. **Demolition and rebuilding of an existing office building** on site with a slightly increased footprint this will be a new permanent single-storey office and staff welfare building. The existing modular building which will be replaced was erected for construction/commissioning of the plant and made a permanent feature by way of a permission granted in 2014.
- 3.1.10. Other site upgrades which include relatively small features such as weather canopies, extensions to hardstanding areas, personnel access routes, additional car parking spaces for staff and contractors on site. Site landscaping includes reconfiguration of berming adjacent the proposed HGU for the purposes of screening and to reduce the amount of material to be moved off-site and extension of an existing berm adjacent to the main road to match in with the existing berm and provide additional screening.

3.2. Structures and processes

- 3.2.1. More detail with respect to the main structures and their locations as well as the processes involved is provided below I refer to the annotation used in Figure 4.4 of the EIAR, a copy of which is attached to this report.
- 3.2.2. The aqueous waste tank farm (8) will be to the north of the main process building and will comprise 3 no. 300m³ tanks of up to 25.5m height and 4.5m diameter. These will be of mild steel and located in a concrete bund. The aqueous waste tank farm will replace an existing mobile facility presently located to the south of the process building. The existing tanker unloading area south of the process building will be upgraded and will contain 3 bays and provide for sampling and if necessary, for short-term storage of unsuitable wastes prior to export. Further detail of the processes involved in the operation of the aqueous waste tank are presented in section 4.5.3/Vol.2/EIAR.
- 3.2.3. The physical structures required for the **increased intake of third-party boiler ash** and flue gas cleaning residues and similar residue for pre-treatment will comprise 3 no. silos housed within the existing WtE process building and an unloading area outside the main process building. Pre-treatment has been taking place on site since 2018 and involves the mixing of boiler ash, flue gas cleaning residues and water and discharging this into FIBC bags for transport to a saltmine in Carrickfergus for recovery. Currently 25,000 TPA of third-party residues similar to those produced at the site are exported to Germany and Norway.
- 3.2.4. The **HGU (15)** will be housed in a warehouse style building 33m by 25m in plan and 11m high. This will be located in the southern half of the PDS between the offices and existing earthen berm / eastern site boundary. The detail of the process including the basis for calculation of the energy efficiency is set out in section 4.5.4/Vol.2/EIAR. The process is alkaline water electrolysis electrical current is supplied by way of two electrodes submerged in an alkaline -water solution. The hydrogen and oxygen formed are diverted to separate cells, the oxygen is discharged to the atmosphere, the hydrogen to a water scrubber and the electrolyte recycled back into the unit. The hydrogen is later compressed and will be held in a 100m³ capacity storage tank which will be capable of holding 2 tonnes hydrogen at

- 350 bar. A final polishing step, if required, can be provided and is described. There may also be a need for a water purifier unit which is described.
- 3.2.5. The stated **efficiency of conversion of electrical energy** into hydrogen is 60%. It is assumed that the unit will run for 1,000 hours per annum and generate 160 tonnes of hydrogen per annum.
- 3.2.6. The hydrogen generated will either be connected to the natural gas network at a location close to the site boundary at the R152 or will be used as a fuel in vehicles. The application includes a proposed above ground installation (AGI) which will be in the ownership of Gas Networks Ireland (GNI) and will facilitate the feeding of hydrogen into the network in relation to which an application has been made to GNI. The other potential uses are on site storage for fuelling trucks and buses, or tankering off-site for industrial uses or to fuel distribution centres. The proposed development includes a concrete re-fuelling area to facilitate fuelling of trucks, buses and bulk hydrogen transport tankers.
- 3.2.7. The bottom ash storage building (1) is to be located in the northern corner of the site adjacent the existing on-site wastewater treatment system and percolation area. This warehouse style building will be 61m by 25m in plan and with a maximum height of 14.5m.
- 3.2.8. The warehouse, workshop and office / ERT building (4/5) will be 32.3m by 4.5m in plan and up to 10m in height. The office and ERT area will accommodate up to ten additional Indaver staff with facilities for both the Indaver staff and permanent contractors. Foul effluent will drain to the existing on-site system and percolation area.
- 3.2.9. The office building to be reconstructed (14) will accommodate 23 staff which is stated to be one additional staff member over the permitted level and will include a visitor display room, meeting room, gym and a canteen. This will replace the existing modular office building and will have a slightly increased floor area. Foul effluent will be drained to a new on-site treatment and percolation system which is described as being similar to the existing one on site and which is to be located between the office and car park.
- 3.2.10. To cater for additional staff and to facilitate visitors and contractors to the site 32 additional car parking spaces (18) are proposed.

- 3.2.11. **Landscape berm extensions** are proposed along the R152 frontage and a 7m increase in height of the mound in the eastern corner will be undertaken.
- 3.2.12. The existing temporary trailer park will be repurposed to provide a **dedicated permanent contractor's compound** with a footprint of 5,350m². This is to provide welfare facilities and space for contractor facilities during maintenance and construction works in the future. The 36m² toilet block will be retained as a permanent feature with a new dedicated treatment plant which will connect to the existing percolation area servicing the gatehouse.

3.3. Construction and infrastructure

Some of the information provided on construction phasing and engineering services is set out below.

- 3.3.1. The development will be carried out in two phases. Phase 1 has an estimated construction and commissioning duration of 16 months and will involve the aqueous waste tank farm and tanker unloading area, the bottom ash storage building, the warehouse, workshop and ERT building, the new concrete yard and parking area and the development of a permanent contractors compound and access. Phase 2 will have a construction and commissioning duration of 12 months and will consist of construction of the HGU and additional car parking and demolition and replacement of the single-storey office building.
- 3.3.2. **Fill and crushed stone** in the amount of 2,300 m³ will be imported and surplus material of approximately 31,000 m³ of soil and other materials will be removed.
- 3.3.3. **Construction phase traffic levels** will give rise to an increase in the order of 1% to 1.3% of traffic on the local road network during peak travel hours.
- 3.3.4. The **construction period employment** will be up to 120 workers in phase 1 and 100 in phase 2.
- 3.3.5. **Hours of construction** will be 0700 1900 Monday to Friday and 0700 1300 Saturday.
- 3.3.6. The existing plant is designed to **contain firewater within the waste bunker**. The tank farm bund has been sized to cater for different scenarios and includes the option that excess fire water would be directed to the 300m³ retention tank and to the existing large attenuation pond. In the event of a fire, the firewater will be stored for

- removal from site for disposal or for transfer to the tank farm for treatment in the furnace.
- 3.3.7. There are various arrangements within the site for collection / disposal of foul effluent including a secondary treatment system located at the northern boundary which serves the main facility and holding tanks which serve existing offices and portacabins.
- 3.3.8. Water supply for the electrolysis units in the HGU will be from a new supply or alternatively from the existing process water system. When running 2.2m³/hour will be needed compared with a current abstraction rate for the site of 9m³/hour. The available groundwater production wells are stated to have a yield of 300m³/day.

3.4. Design detail and other consents

Some of the information presented by the applicant relating to detailed design and requirements for further consents is provided below.

- 3.4.1. In the detailed design phase all required safety measures will be determined through the undertaking of hazard and operability studies (HAZOP). A hazard identification exercise has been carried out for the entire site covering the existing and new risks (Appendix 17.1/EIAR). A comprehensive site emergency plan has been developed and is included as Appendix B of the CEMP (Appendix 5.1/Vol.3/EIAR). A dedicated Emergency Response Team has been appointed.
- 3.4.2. Under the terms of the Industrial Emissions licence Indaver prepares an Annual Environmental Report (AER) for the EPA and which is available on the EPA website. The IE licence contains over 200 individual conditions governing all aspects of the operation and control of the facility. An IE licence review will be submitted to the EPA.
- 3.4.3. The facility also has consents from the Commission for Regulation of Utilities (CRU) to generate electricity and consultation with the CRU is underway with respect to future consents / licences for the HGU.
- 3.4.4. The storage of Hydrogen will require a licence from Meath County Council.
- 3.4.5. A detailed assessment has been undertaken of existing and proposed substances stored on site under the **COMAH Regulations**. The proposed development will not

- require a notification to the Health and Safety Authority as the site will be sub threshold for lower tier facilities.
- 3.4.6. A transfrontier shipment of waste (TFS) is in place for the export of treated boiler ash and flue gas cleaning residues between the site and the saltmine in Carrickfergus. A new TFS or a modification will be required to accommodate the increases proposed. If there is no landfill capacity in Ireland bottom ash will be exported to Europe and a TFS will be required.
- 3.4.7. Section 4.11/Vol. 2/EIAR refers to Best Available Techniques (BAT) which is stated to be applicable to the proposed development in the context of the BREF's for Waste Treatment and Emissions from Storage. Implementation of the revised BREF which was adopted in 2019 at EU level will be undertaken, which is relevant to the existing facility. BREF's for waste treatment and emissions from storage are stated to be relevant to the tank farm, bottom ash storage building and silos for acceptance of third-party residues. Waste acceptable procedures and related matters are already in place for the aqueous waste treatment. Other design measures relevant are described.

3.5. Decommissioning

- 3.5.1. Decommissioning activities are provided for under the Closure, Remediation and Aftercare Management Plan (CRAMP) that is in place under the IE licence and will be updated and expanded to take account of the proposed development under any review of the IE licence. In the event of decommissioning de-stocking, decontamination and cleaning operations will be carried out in areas designed for unloading, storage and handling of the raw materials.
- 3.5.2. If no further use can be identified for the site condition 27 of PL17.219721 relating to the demolition of buildings and restoration of the site would be implemented. This would result in removal of 50,000 tonnes of material from the site (2,364 truckloads) over a 5-month period.
- 3.5.3. Decommissioning would be implemented to the satisfaction of the EPA and under the terms of the CRAMP.

4.0 Submissions

4.1. Chief Executive Report

- 4.1.1. The views of the Chief Executive of Meath County Council are set out in a planning report received by the Board on 14 September 2020. The report has regard to the matters specified in section 34(2) PDA.
- 4.1.2. Sections 1 notes the presentation of this report at the meeting of Meath County Council on 7 September 2020 and summarises the planning history.
- 4.1.3. Section 2 provides a description of the site and the proposed development.
- 4.1.4. Section 3 of the report describes **relevant policy** including from:
 - National Planning Framework
 - National Development Plan 2018-2027
 - National Hazardous Waste Management Plan 2014-2020
 - Regional Spatial Strategy for the Eastern and Midland Region 2019-2031
 - Eastern-Midlands Eastern Region Waste Management Plan 2015-2021
 - Meath County Development Plan 2013-2019.

4.1.5. Section 4 reviews the EIAR.

- It is considered that the EIAR contains the information specified in Schedule 6 of the PDR.
- Regarding population, human health, and biodiversity a summary is provided of the contents of relevant chapters. The Environment Section and Heritage Officer have no objections in terms of public health and biodiversity subject to conditions pertaining to CEMP, WMP, dust emissions and noise and excavated material. Information from chapters 5, 6, 10 and 11 is highlighted. Relating to biodiversity the comments of the Council's Heritage Officer are set out and recommendations for conditions are included.

- Regarding Land, Soil, Water, Air and Climate the report notes that the
 Environment Section has provided conditions in respect of potential
 effects on air quality. The Environment Section has no concerns from a
 flooding perspective. It is noted that the Water Services Section have no
 concerns subject to conditions. Information from the relevant chapters is
 summarised.
- Regarding material assets, cultural heritage and landscape, the
 comments of the Transportation Department which are deemed to be
 directly applicable are quoted and the recommendation of the
 Transportation Department provided. Details from the relevant EIAR
 chapters are presented.
- Regarding interactions these are considered in chapter 18 along with cumulative effects and other effects. The EIAR refers to numerous discussions and communications between the various specialists and the design team throughout the design process which helped to identify and minimise the potential for significant interaction of impacts. Measures to minimise impact have been incorporated into the design and included in all of the assessments and the residual impacts have been assessed. The internal reports of the planning authority outline various issues which should be addressed by way of planning conditions relating to biodiversity/ecology, environment, public health, roads and water.

4.1.6. Section 6 addresses Appropriate Assessment.

- The Board is the competent authority in relation to Appropriate Assessment.
- Article 6 (3) of the Directive refers.
- Comments of the Heritage Officer of MCC are quoted. It is concluded that
 there will be no significant effects (direct or indirect) on the qualifying
 interest of any Natura 2000 sites, either individually or in combination with
 other plans or projects.

4.1.7. Section 7 notes the **internal reports and provides a planning assessment**.

• The full text of internal reports is contained in Appendix 1.

- Conditions outlined in these reports relate to the management of this site during construction and operation to ensure pollution avoidance and protection of residential amenity.
- It is also considered appropriate to restrict HGV traffic from passing through Duleek village.
- Appropriate landscaping is required to be agreed by condition.
- Regarding planning policy, the lands are not zoned but the facility has been in operation since August 2011 and is licensed under an Industrial Emissions licence by the EPA. The proposal relates to amendments to a permitted and licensed WtE facility.
- It is noted that under the pre-application process the Board identified the need to provide a strong justification for the office building. Policy ED POL 20 to normally permit development for the expansion of existing authorised industrial or business enterprises in the country where the resultant development does not negatively impact on the character and amenity of the area and where it is demonstrated that the proposal would not generate traffic of the type and amount which is inappropriate for the standard of the access roads. Having regard to the Environment and Transportation reports and policy context it is reasonable to assert that the proposed development is acceptable in principle.
- Regarding layout and design, it is noted that the proposal relates to an
 intensification of use of a permitted and licensed WtE facility. The
 proposed building work is largely located in the north-east corner of the
 site away from the R152 and beyond the existing buildings, screen
 planting and berms, is relatively small in scale and its design incorporates
 mitigating features relating to colour and finish which will assist in the
 integration of the proposal and a reduced potential visual impact.

Section 8 concludes -

 Based on the examination of the documentation, in the context of national, regional and local planning, waste, energy and climate change policy and the planning history of the site and where there is an existing WtE facility in operation with similar type developments it is the view of MCC that the proposed development is acceptable in principle. The reports from the various internal sections/departments support the proposed development subject to a number of planning conditions.

The recommended conditions include:

- A maximum overall capacity intake of 280,000 tpa.
- Construction Stage Traffic Management Plan to be agreed with the planning authority that requires HGV traffic to avoid accessing the site via Duleek village.
- No HGV traffic during the operational stage shall route through Duleek, unless absolutely necessary.
- Construction Environmental Monitoring Plan to be updated and communicated to all site personnel and to include but not be limited to the range of matters set out.
- Waste Management Plan (WMP) for proposed development to be prepared and implemented and to include but not be limited to the range of matters set out.
- Dust emissions at site boundary not to exceed 350 mg/m²/day.
- Construction works to be in accordance with noise guidance set down under BS 5228 – 1: 2009.
- During construction the noise levels at noise sensitive locations shall not exceed 70 dB (A) between 0700 to 1900 hours Monday to Friday and 0800 to 1400 hours Saturday and 45 dB(A) at any other time. Noise exceedances must be agreed in writing with Meath County Council prior to the activity taking place.
- If it is necessary to import soil and stone or topsoil a certificate of registration or waste facility permit shall be secured in advance.
- All excavated material stored on site shall be set back a minimum of 10 m
 from any drainage ditches/water courses on site. A silt fence shall be

- installed at a minimum of 3 m from any drainage ditches/water courses on site and shall be maintained until vegetation is re-established.
- All refuelling shall take place in a designated refuelling area at least 30 m from water courses, details of which shall be included in the CEMP.
- All hydrocarbons, chemicals, oils etc shall be stored in a dedicated bunded area at least 30 m from water courses and capable of storing 110% of capacity. Adequate supply of spill kits and hydrocarbon absorption pads to be stocked on site.
- In relation to the surface water a number of details shall be agreed with the planning authority prior to commencement of development.
- Trees and hedgerows shall not be removed during nesting season in accordance with the Wildlife Act.
- Complaints Register to be maintained during construction stage.

A summary of the contributions made by councillors at the meeting of Meath County Council of 7 September 2020 meeting in relation to the proposed development is presented and the issues raised include:

- Increase in HGV movements and the impact on traffic on Duleek, Julianstown and the N2.
- Progressive increase in tonnage since the parent permission was granted.
- Cumulative impact of this application and the current SIDS application from Irish Cement needs to be considered.
- Need for a regional EPA office in South Drogheda.
- Need to consider the people living in the area and proximity of the site to schools.
- Self-regulation a concern.
- Need to seek 'Best Practice' and not just rely on policy.
- Need to reduce our waste as a society and strive to a carbon neutral environment.

 Some members praised the operator in terms of how the facility has blended into the surrounding environment.

It was agreed by the members to attach the detailed comments as an addendum to the minute of the meeting to be submitted as part of the report to ABP. 11 no. Members are listed as having spoken. Written submissions are attached from 3 no. Members.

4.2. Prescribed Bodies

4.3. Environmental Protection Agency

- 4.3.1. Indaver Ireland Ltd was issued an industrial emissions licence for the following:
 - 11.3 Disposal or recovery of waste in waste incineration plants or in waste coincineration plants-
 - (a) for non-hazardous waste with a capacity exceeding 3 tonnes per hour
 - (b) for hazardous waste with a capacity exceeding 10 tonnes per day.

The licence may need to be reviewed or amended. The proposed hydrogen generation unit may be a licensable activity.

Should a licence review application be received all matters to do with emissions to the environment and all documentation will be considered and assessed.

Should the Agency decide to grant a licence it will incorporate conditions to ensure that appropriate standards and use of Best Available Techniques.

A number of documents are referenced.

4.4. Health Service Executive

The main conclusions of the HSE report are as follows:

- A public consultation process could not be located in the EIAR and meaningful public consultation is recommended.
- An investigation is required into exceedances of faecal coliforms present in the majority of groundwater samples from on-site monitoring boreholes to ensure that all on-site wastewater treatment facilities are correctly operating.

- The proposed new proprietary treatment unit and percolation area associated
 with the contractors compound and replacement offices requires a site
 suitability assessment. Minimum separation distances as set out in the
 Wastewater Treatment Manual for Small Communities must be complied with.
 The location of the bottom ash storage facility is noted in this respect.
- The proposed additional storm water tanks to increase the attenuation capacity in lieu of expansion of the existing stormwater drainage network is noted. This does not provide a solution for the disposal of the increased volumes of surface water which will be generated. Further clarification is required in respect of the new concrete yard in particular.
- Clarity is required on the cumulative impacts of air emissions from the
 proposed development and the Irish Cement fossil fuel replacement and
 alternatives raw materials development. An assessment of total environmental
 loading is required and not just an assessment against compliance with the
 parametric value for each specific emission.
- To offset transport emissions the applicant should promote sustainable modes
 of travel and make efforts to improve the sustainability of the haulage fleet
 delivering to and from the site and aim towards a low emissions vehicle policy.

4.5. Transport Infrastructure Ireland

Regarding the national road network:

- No details of the assessment of potential impacts to the national roads and associated junctions are provided.
- The M1 is an important strategic link providing critical international connectivity.
- TII recommends that consideration be given to the preparation of a revised TA which would include a full analysis of potential impact to junction 8.
- Any additional works required as a result of the TA should be funded by the developer.

Regarding the Leinster Orbital Route:

- The subject site is within the line of the Leinster Orbital Route (formerly known as the Outer Orbital Route) between Drogheda and Navan as identified in the Leinster Orbital Route feasibility study final report issued by the authority in March 2009, which is on the TII website.
- The proposal to develop an Outer Orbital Route is included in the development plan and is identified for long-term protection in the current RSES for EMR and the NTA's transport strategy for the Greater Dublin Area 2016 – 2035.
- The relationship of the subject site to the LOR does not appear to have been assessed in the documentation submitted in support of the subject application.
- Objective TRAN OBJ 21 of the Meath County development plan 2013 2019 refers. It is especially important close to major junctions that the identified corridor be protected from development intrusion.
- TII acknowledges the planning history of the subject site. It is considered that
 the matter should be addressed by the applicant in consultation with Meath
 County Council in the interest of demonstrating that the subject application is
 compatible with the LOR scheme and that the proposed development will not
 undermine the long-term delivery of the route.
- TII recommends reference to section 2.9 of the DoECLG guidelines in that regard and the policy outlined relating to the protection of alignments for future national road projects.

4.6. Department of Communications, Climate Action and Environment

The submission received from Geological Survey of Ireland states that GSI has no specific comments or observations to make on this matter at this time.

4.7. Third Party Observations

4.7.1. Darren O Rourke

In his capacity as TD for Duleek and Sinn Fein spokesperson on Climate Action, Communications Networks and Transport Mr O'Rourke objects to the proposed development, insists on the need for an oral hearing in the interest of clarity and transparency and comments as follows:

- Inconsistent with national and EU policy in particular the Programme for Government and the EU Green Deal.
- Failure to address a number of matters which were raised in the Inspector's
 report under ABP 305252–19 including with respect to potential environmental
 impacts associated with the increase in overall volume and the specific waste
 types, traffic and transport, odour and noise and climate. All aspects of energy
 use and generation need to be assessed as well as the risk of major
 accidents or disasters including fire safety issues. There needs to be a
 justification for the offices.
- The land is not appropriately zoned to allow for the proposed development.
- Over intensification of heavy industry in the area would have negative implications for residents.
- Essential need for a regional office of the EPA in Duleek to deliver on commitments relating to air quality in the Programme for Government
- The development should not be considered Strategic Infrastructure.
- Potential very profound impact on water table locally which is already poor or moderate in terms of WFD status.
- Potential impacts have been identified for European sites and for flora and fauna, which is a very serious matter.
- Concerns relating to harmful emissions posing acute and chronic health risks and the inadequate consideration given to cumulative impacts.
- Existing roads infrastructure is deficient to cater for proposed traffic.
- Concerns relating to odours, noise and waste and potential significant impact on sites of archaeological significance.
- NIS fails to assess the development in combination with other plans and developments. For example the landfill and cement works are omitted. The Board cannot carry out an appropriate assessment which would comply with the requirements of the Habitats Directive.

- Hugely negative impact on the ecology/environment in Duleek, Donore,
 Kentstown, Drogheda and surrounds.
- The proposed development should be opposed and must be considered in the context of the latest policy and legal developments including the Supreme Court judgement in relation to the National Mitigation Plan.

4.7.2. John A. Woods

The points made are as follows:

- By the company's own admission some years ago the incinerator is not fit to burn any hazardous material. This matter was also put before the last oral hearing but totally ignored.
- The smoke (black and other colours) is proof enough that the incinerator is not suitable for burning hazardous material, further proven by yet another incident at the incinerator lately.
- The Board has also permitted the Platin cement incinerator. The combined effect would be the burning of almost 1 million tonnes of waste material including toxic and hazardous waste in this area.
- There is a need for major upgrades of roads in the area including a bypass of Duleek to allow for the extra HGV traffic.
- The removal of additional tonnage of ash will lead to more hazardous landfill sites in the area leading to ever greater health problems.
- Milk and other food production could be contaminated in time as a result of
 this extra tonnage as has happened in other parts of Europe. Before allowing
 for burning of more waste incinerator companies should be required to put in
 place proper facilities as required by European law.
- There should be an oral hearing on this application.
- The facilities that are there at present are unfit for purpose. It is urgent that the EPA puts a permanent office in the area with 24-hour and seven day monitoring in the area around the incinerator and up to 3 km away in all directions.

4.7.3. Paddy Meade

As a county councillor for this area, I have received a number of submissions relating to this proposal. The points of my submission are:

- Section 7.4 of the National Policy Framework Alternative Fuels Infrastructure for Transport states that there is no national target for hydrogen.
- It is not possible to quantify the risks associated with the proposal as the
 quantity of hydrogen is referred to as a volume and without any data for
 pressure or temperature. Similarly, the figure of 10 MW_e does not define how
 much hydrogen would be produced in the year. No information is available as
 to the efficiency of the conversion of thermal to electrical energy. Direct feed
 of electricity to the grid may be better.
- Incineration of organic fractions of waste is of very low order in terms of generation efficiency and compares poorly to other means. Energy derived from non-renewable fuels such as refuse derived fuels is not renewable.
- Intensification of use and expansion of this facility at this location may not comply with Energy, Waste, Energy Efficiency and Climate related Directives.
- The description of a 10-year permission is not clear.
- The NTS does not quantify the amount of electricity generated simply refers to the quantum is sufficient to power 30,000 homes. It is not clear that it complies with the requirements of the EPA Act as amended in relation to BAT.
- The description of public consultation in section 1.3 of the NTS which refers to the community liaison committee is not a public consultation.
- The NTS does not explain or demonstrate compliance with County or Regional policy, provides no information relating to alternative sites and does not allow for reasons for the conclusions to be drawn.
- The incineration should be undertaken close to the source of the waste and at a location with potential for use of recovered heat in district heating systems.
- The impact on dairy farmers related to contaminated rainfall if there were impairment to air quality is of particular concern.
- The value of the community benefit fund has been eroded by cost increases.

- The NTS relating to population and health is entirely inadequate.
- An oral hearing is requested in order to explore the nature of the proposal as
 the documents submitted are inadequate to determine how it complies with
 EU, national, regional and local authority policy and to provide for exploring of
 possible nuisance on the local community.

4.7.4. Patrick Shiels

The main points of this submission are:

- The proposed development appears to differ from that described in the preapplication consultation. The development is not Strategic Infrastructure.
- The NTS does not identify the source of the hazardous waste. Use of resources and energy efficiency questions arise due to the plant location.
- The application does not demonstrate how it aligns with the policy objectives of the EU in terms of 2030 targets and 2050 targets.
- A 10-year permission is inappropriate in the context of the National
 Hazardous Waste Management Plan 2014 2020 and efficiency objectives.
- It is not clear if parts of the permission could be implemented such as the hazardous waste incineration and other parts long fingered.
- The plant on the application form is defined as a waste to energy facility. The
 extent to which the existing facility is well located and designed to align with
 current and future thrust of energy policy has not been assessed adequately.
 This issue is fundamental as to whether the facility should be expanded or
 have use intensified or whether policy decisions should favour other locations.
- A range of environmental impacts affect the locality and wider area by virtue of the operation of the plant. These impacts include energy consumption related to long haulage and associated emissions.
- The description of the hydrogen generation process in section 4.3 is vague.
- If the waste to energy plant did not have a means of using the waste heat the overall performance of the waste-to-energy plant would be questionable and it

- would effectively perform as an incineration facility with very low energy recovery merit.
- Any prospect of tankering hydrogen to market suggests storing on site at
 considerable density per volume. In other words, substantial tonnage would
 have to be stored. Hydrogen engages the Seveso Directive in relation to the
 lower tier requirements at a quantity of just 5 tonnes. In the absence of
 information from the NTS it is not possible to describe the nature of the
 proposal as required by Article 5 of the EIA Directive.
- It is clear from reading the NTS that the proposed development fails to meet the requirements of the Directive.
- Page 85 of Project Ireland 2040 NDP refers to a combined approach to waste management and resource efficiency. The plan also sets out objectives for district heating. It is essential that the approach in determining this application is consistent with the objectives of the NDP and with EU waste policy.
- The location of other WtE facilities is not evaluated or the potential to use the recovered heat and energy if the plant operated at a different location or what is the strategic value of this location.
- The value of the community fund has diminished with cost increases and with the growth of the population at Duleek, which has a deficit of appropriate community facilities and suffers disadvantage in attracting higher paying jobs by reason of hosting the WtE plant. Rotation of the membership of the committee would also be appropriate.
- Suitability of Duleek for district heating system should be evaluated as part of
 the determination in this application and sufficient lands proximate to the plant
 might be zoned for residential or process heat industry to avail of the heat
 recovered from the municipal waste.
- The proposal has not been sufficiently described and documented to meet the legal requirements for a valid application and would inform proper consideration. It would be best if the application was withdrawn to allow for submission of a more considered detailed proposal or an alternative site.

- The Board should facilitate a public hearing to allow further questions to be
 put to the applicant in order that the nature of the proposal can be better
 understood and to explore in detail the various alternatives.
- It is not possible to see in a transparent manner from the documentation that no substantial risk to human health would arise.

5.0 **Planning History**

5.1. On Site- Selected Cases

ABP - 302447 - 18

- 5.1.1. This is an application for permission under section 146B PDA for alterations to the terms of PA0026 to allow annual tonnage of waste accepted for treatment at the facility to be increased from 220,000 TPA to 235,000 TPA on a permanent basis. The documentation clarifies that 10,000 tonnes of that waste can be hazardous. At the time of making the application the plant had been operating to accept a tonnage of 235,000 tonnes since it received the revised IEL in July 2015.
- 5.1.2. The requested alteration was permitted on 3 April 2019. In its decision there were no conditions attached by the Board relating to the types of waste, or any other matters.
- 5.1.3. The Board considered that the requested alteration would not be materially contrary to the provisions of the government's waste policy in respect of the capacity requirement for thermal recovery facilities to 2030 under A Resource Opportunity, Waste Management Policy Ireland (Department of the Environment Community and Local Government, 2012), or the Eastern and Midlands Regional Waste Management Plan 2015-2021 and would accord with the provisions of the Meath County Development Plan 2013-2019 and with the proper planning and sustainable development of the area.

FS16072

5.1.4. Permission was granted by Meath County Council on 12 April 2018 for a single-storey modular office building of stated area of 387m2.

ABP - 300299 - 17

5.1.5. This provided for alterations under section 146B to previously approved permission PA0026. The alterations comprised permanent installation for acceptance of aqueous wastes, increase in overall capacity to 280,000 tonnes per annum in perpetuity. The Board issued a preliminary view on 10 April 2018 that the proposed alterations might be better addressed by way of an application under section 37E. The application was withdrawn.

PM 0007

5.1.6. This is an application for permission under section 146B PDA for alterations to permission granted on 4th of February 2013 under PA0026. The alteration was to include construction of a pre-treatment process plant (a solidification plant) to facilitate the pre-treatment of flue gas and boiler ash residues. The required alteration for such pre-treatment was described as consisting of the extension of the existing ash residue loading bay and construction of a pre-treatment process plant enclosure. Amongst the matters considered by the Board were the nature and scale and context of the alteration, the revised licence and the potential environmental impacts that might arise. The proposed alteration was permitted by order of 12th of April 2016 subject to completion in accordance with the plans and particulars.

PM 0004

- 5.1.7. This is an application under section 146B PDA for amendments to the existing development to allow waste to be increased temporarily to 235,000 TPA until 31 December 2019 and thereafter to 220,000 TPA unless a further permission is granted. It is also provided for acceptance of some additional types of waste defined as hazardous and non-hazardous in the European Waste Catalogue.
- 5.1.8. In its order of 1st August 2014, the Board set out an alteration to condition 3.
 - (1) The tonnage of waste accepted for treatment at the facility until the 31st day of December 2019 shall not exceed 235,000 tonnes per annum. Thereafter, the tonnage of waste accepted for treatment at the facility shall not exceed 220,000 tonnes per annum unless a further permission in this respect is granted.
 - (2) Non-hazardous waste to be accepted at this facility shall primarily be waste generated in the waste region in which it is located. Where non-hazardous waste is accepted from outside that region, it shall only be done in

- accordance with the proximity principle and Ministerial Policy as set out in Circular WIR:04/05.
- (3) The tonnage of separately collected hazardous waste accepted for treatment at the facility shall not exceed 10,000 tonnes per annum.
- 5.1.9. The only hazardous waste types to be accepted for treatment shall be in accordance with the European Waste Catalogue Codes listed in Table 2.1 of the Environmental Impact Statement submitted to An Bord Pleanála with the application on the 30th day of April 2012, as attached in Appendix 1 of this Order.
- 5.1.10. The stated reason for the condition is to clarify the nature and scope of the permitted development.

PA0026

- 5.1.11. This is an application under section 37E PDA for amendments to the existing development to increase the tonnage from 200,000 TPA to 220,000 TPA and allow the acceptance of some additional hazardous and non-hazardous waste types and ancillary development.
- 5.1.12. It also relates to change in status of some temporary office buildings to permanent and for 22 new car parking spaces associated with a modular office building.
- 5.1.13. Conditions attached included condition 3:
 - (a) Non-hazardous waste to be accepted at this facility shall primarily be waste generated in the waste region in which it is located and where non-hazardous waste is accepted from outside the region it shall be done in accordance with the proximity principle in ministerial policy set out in Circular WIR: 04/05.
 - (b) The tonnage of separately collected hazardous waste accepted for treatment at the facility shall not exceed 10,000 tonnes per annum.

The only hazardous waste types to be accepted for treatment shall be in accordance with the European Waste Catalogue Codes listed in Table 2.1 of the EIS submitted with the application to the Board on 30 April 2012 as attached in Appendix 1 of the Order.

- 5.1.14. The stated reason for the condition 3 is to clarify the nature and scope of the permitted development.
- 5.1.15. Condition 5 related to on-site wastewater treatment facilities.

PL 17.219721

5.1.16. This relates to an appeal of the decision of the planning authority (reg ref SA/60050) for a 70MW Waste to Energy facility on the site to process up to 200,000 TPA of residual waste. Condition 3 stated that waste acceptance would be confined to waste 'primarily' generated and produced in the North-East region.

PL 17. 126307

5.1.17. This relates to an appeal of the decision of the planning authority (reg ref 01/4014) to grant permission for a Waste to Energy facility on the site for thermal treatment/recycling of up to 170,000 TPA. The development was confined to waste generated and produced in the North-East region, to comply with the principles of the Regional Waste Management Plan. Condition 6 required the establishment of a Community Liaison Committee and condition 7 related to the payment of an annual contribution towards the cost of the provision of environmental improvement and recreation/community projects.

5.2. Other Cases

5.2.1. The following are two recently permitted significant developments.

ABP-309812-12 – Poolbeg increase in intake.

5.2.2. This relates to the Poolbeg WtE plant in Dublin city, which has a permitted intake of 600,000 tpa. The application is for an increase of 90,000 TPA. Permission was granted subject to conditions requiring that the waste thermally treated at the facility shall be municipal non-hazardous residual waste generated primarily in the Dublin Waste Management Region as proposed in the application and as permitted under the parent permission for that facility.

PA0050 - Irish Cement Limited - Alternative Fuels and Raw Materials.

5.2.3. This relates to the nearby Platin facility. By 2016 the maximum permitted quantity of alternative fuels (subject of a previous planning permission and EPA licence) in the amount of 120,000 tonnes per annum was being used. With growing demand for

cement the applicant sought permission to expand quantity and range of alternative fuels used in lieu of fossil fuels in the cement works and the introduction of alternative raw materials in the manufacturing of cement. Assuming operation at maximum capacity the achievement of 85% target for fossil fuel replacement would require 480,000 tonnes per annum of alternative fuels/raw materials. A full schedule of the proposed materials and their List of Waste (LOW) was presented.

5.2.4. Further details of permitted developments in the vicinity of the PDS are presented in the EIAR.

6.0 **Policy**

6.1. European Policy and Legislation

Waste Framework Directive (Directive 2018/851 amending Directive 2008/98/EC on waste)

- 6.1.1. The Directive enshrines the waste hierarchy order of prevention, preparing for reuse, recycling, other recovery and disposal. The amended Directive increased targets for the reuse and recycling of waste to avoid methods of waste treatment at the lower levels of the waste hierarchy. Revised targets include 55% recycling of municipal waste by 2025, reduction in landfilling of municipal waste to 10% or less by 2035, increased recycling targets for plastic packaging. The emphasis in the realm of hazardous waste is on minimisation and separate collection.
- 6.1.2. Recovery operations is defined as any operation where the principal result of which is waste having a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function or waste being prepared to fulfil that function, in the plant or in the wider economy. Recovery operations are described in Annex II. The energy efficiency criteria for energy recovery activities are established by the R1 formula. Where under this formula a level of efficiency meeting or exceeding 0.65 is met by a facility then that activity can be classified as recovery.
- 6.1.3. Amongst the provisions of this Directive is a requirement for a policy of national self-sufficiency in disposal installations and installations for the recovery of mixed municipal waste to be adopted where this is possible on the grounds of strategic need and to conform with the proximity principle.

Closing the loop - EU Action Plan for the Circular Economy (COM/2015/0614).

- 6.1.4. This outlines the Commission's proposals towards a more circular economy where the value of products, materials and resources is maintained in the economy for as long as possible and generation of waste is minimised. This approach is deemed to tie in with key EU priorities. The Commission's communication on the matter covers issues as broad as improved product labelling to aid consumers to the use of treated wastewater.
- 6.1.5. Waste management is addressed in section 3 of the action plan. The waste hierarchy is restated and is described as having the aim of encouraging options that deliver the best overall environmental outcome. It is noted that:

'The way we collect and manage our waste can lead either to high rates of recycling and valuable materials finding their way back into the economy, or to an inefficient system where most recyclable waste ends in landfills or is incinerated, with potentially harmful environmental impacts and significant economic losses.'

6.1.6. On the particular issue of waste to energy it is stated:

'When waste cannot be prevented or recycled, recovering its energy content is in most cases preferable to landfilling it, in both environmental and economic terms. 'Waste to energy can therefore play a role and create synergies with EU energy and climate policy but guided by the principles of the EU waste hierarchy. The Commission will examine how this role can be optimised, without compromising the achievement of higher reuse and recycling rates, and how the corresponding energy potential can best be exploited.'

European Circular Economy Package (CEP) 2018

- 6.1.7. Tied in with the EU Action Plan for the Circular Economy is a suite of amending Directives that constitute the Circular Economy Package. These amended directives were adopted in June 2018 and include:
 - Directive 2018/850 on the Landfill of Waste.
 - Directive 2018/851 on Waste and Directive 2018/852 on Packaging and Packaging Waste

- Directive 2018/849 on End-of-life Vehicles
- Other directives on batteries and accumulators and waste batteries and waste electrical and electronic equipment.
- 6.1.8. New targets set under the Circular Economy Package are required to be brought into force in Member States including with respect to reuse and recycling of waste and the amounts which may be landfilled.

EU Climate and Energy Framework 2030

6.1.9. Adopted in 2014 this set specific targets for the year 2030 of at least 40% reduction in GHG emissions with at least 32% of all energy generated from renewable energy resources and at least 32.5% improvement in energy efficiency. Annexes 1 and 2 of describe disposal and recovery operations.

European Green Deal 2019

6.1.10. This comprises a set of proposals adopted by the European Commission at the heart of which is the ambitious plan to cut greenhouse gas emissions ensuring net zero by 2050 combined with economic growth which is disconnected from resource use and sharing of benefits. A need to reduce waste generation is identified.

Industrial Emissions Directive (Directive 2010/75/EU on industrial emissions).

6.1.11. This is the primary EU instrument regulating pollution emissions from industrial installations. The stated aim is to achieve a high level of protection of human health and the environment taken as a whole by reducing harmful industrial emissions across the EU in particular through the better application of Best Available Techniques (BAT). Permits for installations listed under Annex I of the IED must take account the whole environmental performance of the plant covering emissions to air, water and land, generation of waste, use of raw materials, energy efficiency, noise, prevention of accidents and site restoration. Permit conditions including emissions limit values must be based on the Best Available Techniques. Monitoring requirements are set in the Directive.

Landfill Directive (2018/850/EU)

6.1.12. This legislation amending Directive 1993/31/EC required a significant reduction in the amount of municipal waste to be landfill and that by 2030 waste suitable for recycling or other recovery will not be permitted to be disposed of to landfill.

Renewable Energy Directive (2009/28/EC) and related

- 6.1.13. This Directive requires a commitment to produce energy from renewable sources. The submission by Members States of National Renewable Energy Action Plans and Progress Plans to the EC and reduce reliance on landfill as a waste disposal option is incorporated.
- 6.1.14. 'Clean Energy for all Europeans' was published in November 2016 and adopted in 2019 and set out a range of measures relating to energy efficiency, governance and renewable energy. In parallel the renewable energy directive was revised and included tighter and binding targets of 32%. As part of the European Green Deal the 'fit for 55 package' aims to put the EU on the path to climate neutrality by 2050. This will include an update of the Renewable Energy Directive (2018/2001/EU) which will strengthen provisions and set higher minimum targets in the sector of renewable energy for 2030.

EU Hydrogen Strategy – A hydrogen strategy for a climate neutral Europe (COM/2020/301)

6.1.15. This envisages the deployment by 2030 of renewable hydrogen (produced using electricity from renewable sources) at a large-scale as a key means for the EU to achieve a higher climate ambition and reduce greenhouse gas emissions in a cost-effective way. The roadmap set for 2050 at which point the aim is that renewable hydrogen would be developed sets out a stepped approach which takes into account the fact that renewable and low carbon hydrogen are not yet cost competitive compared to fossil-based hydrogen (mainly produced using natural gas or gasification of coal). In the short- and medium-term other forms of low carbon hydrogen are needed.

6.2. National Policy and Legislation

A Resource Opportunity – Waste Management in Ireland

6.2.1. A Resource Opportunity – Waste Management in Ireland published in 2012 confirms Ireland's commitment to implement the waste hierarchy set out in the Waste Framework Directive. In the hierarchy after recycling is 'other recovery' including waste to energy involving recovery of energy including the generation of electricity. A balance must be struck to ensure that material which could be reused or recycled is

not drawn down the hierarchy and that waste generation is not encouraged in order to provide feedstock for recovery processes. Waste is recognised as a resource and there is an opportunity for waste to be used as an indigenous energy source.

A Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020 – 2025

- 6.2.2. This replaces policy 'A Resource Opportunity Waste Management in Ireland'.

 Published in 2020 following a commitment in the Programme for Government to commence implementing a New National Waste Action Plan, this plan will inform future versions of statutory plans and the implementation of targets and objectives to tackle waste and move towards a circular economy including to shift the focus away from waste disposal and treatment.
- 6.2.3. The primary focus is prevention of waste generation. Delivery of targets in areas such as recycling will be assisted by the streamlining of the end of waste process which in turn will reduce pressure on waste disposal and recovery infrastructure. Noting the absence of powers to keep waste in Ireland for treatment, the possibility that outlets abroad are more competitive and the potential for exposure in the event of external shocks to the export market, policy and regulatory framework should be utilised to support indigenous capacity this would include improvements in collection, recycling, reuse and repair.
- 6.2.4. With respect to the waste management infrastructure at a national level the primary objective is stated to be to support the development of adequate and appropriate treatment capacity at indigenous facilities. The move away from disposal and increased use of recovery has helped Ireland in realising our EU targets but there is a need to drive on and move up the waste hierarchy with reducing reliance on recovery over the medium-term.
- 6.2.5. The existing structure of Regional Waste Management Plans will be replaced by a single amalgamated National Waste Plan for a Circular Economy, which has been through a pre-draft consultation. A draft plan is anticipated by the end of 2021.
- 6.2.6. The EPA's National Waste Prevention Program is under review submissions have been invited on the draft plan.
- 6.2.7. The National Hazardous Waste Management Plan is under review.

National Hazardous Waste Management Plan 2014-2020

- 6.2.8. The significant objectives of the plan include to strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export.
- 6.2.9. The plan sets out 27 key items including a range of policies and actions for industry and for public authorities to ensure hazardous waste generation is minimised and that it is suitably managed. Specific sectors are subject of recommendations including with respect to diesel, farm, electrical and other specific wastes.
- 6.2.10. Objective 14 relating to infrastructure and self-sufficiency is:
 - 14. (i) Keep under review the provision and facilitation of hazardous waste treatment capacity and make recommendations on the appropriate economic or other instruments necessary for such capacity to be provided, either by the private or public sector.
 - (ii) Develop national policy or guidance to direct the control of hazardous waste shipments in order to facilitate self-sufficiency in hazardous waste treatment where this is technically, economically, strategically and environmentally advisable.

6.2.11. Objective 20 is:

Seek to establish, with the appropriate Northern Ireland authorities, a north-south co-operative group working on hazardous waste issues.

- 6.2.12. In 2011 about half (149,037 tonnes) of the total of 287,376 tons hazardous waste managed in Ireland (excluding contaminated soil) was exported. Together the UK, Belgium, Germany and France accepted 92% of these exports.
- 6.2.13. In relation to solvents in particular the plan notes that over 36,482 tons of waste solvent was exported for incinerator or use as fuel in 2011, indicating that there is a quantity of solvent waste that could be treated commercially in Ireland. Subject to the application of the waste hierarchy the options as described in the plan are recycling, co-incineration and energy recovery in cement kilns or electricity/heat generation facility and thirdly incineration (combustion in dedicated incineration plant with recovery of energy).
- 6.2.14. Incineration in dedicated facilities is described as (then) currently the most widely used alternative for these wastes. It is a treatment technology that provides flexibility,

- and a wide range of hazardous waste can be accepted. It is noted that coincineration plants will only justifiably seek to burn the best material with the optimal calorific value. The remaining wastes (see table 22) plus solvent waste unsuitable for blending and co-incineration will still require alternative treatment.
- 6.2.15. It is therefore concluded that in combination with the blending of waste solvent for use in cement kilns and in the absence of alternative techniques capable of treating a wide variety of diverse waste streams incineration will be needed for Ireland to move towards self-sufficiency in the treatment of hazardous waste.

Progress Report on NHWMP 2014-2020, published 2018

- 6.2.16. The objective of minimising export of hazardous waste is described as being progressed. Nevertheless Ireland faces challenges to achieve self-sufficiency given the range of specialist treatments required and lack of economies of scale.
- 6.2.17. In terms of waste prevention programs, the progress report notes a reduction in the use of hazardous substances by the bio pharma chem industry and increased generation of hazardous ash from waste to energy plants. The latter waste stream is expected to increase over the coming years. Amongst the conclusions of the progress report is the need for greater focus and increased efforts in action item 14(ii) which relates to increasing Ireland's level of capacity for self-sufficiency with regard to the treatment and management of hazardous waste. In particular it is important that the management of significant quantities of hazardous fly ash from waste to energy plants and the associated infrastructural capacity needs are prioritised. The EPA Progress Report in 2018 notes that waste to energy plants have some capacity for treatment of hazardous wastes.

National Waste Statistics Summary Report for 2019, published 2021

6.2.18. This document published by the EPA presents the most up to date data. The data highlights the growing share of municipal and packaging waste being sent for energy recovery in tandem with falling recycling rates. EPA waste characterisation studies identify significant quantities of recyclable materials in refuse derived fuel incinerated in Ireland and the pledge to introduce a levy on waste recovery will be an important lever to ensure that waste operators are incentivised to extract the maximum amount of recyclable material from residual waste.

- 6.2.19. Of the 3.1 million tonnes of municipal waste generated in Ireland 46% was used in energy recovery in 2019. This is part of a longer-term trend with the decline in reliance on landfills.
- 6.2.20. While residual waste in Ireland is generally incinerated for energy recovery or landfill it is estimated that the amount of residual waste could be reduced by approximately 50% with proper segregation of recyclable and organic waste. The broadening of the scope of what can be recycled to include soft plastics will be an important part of the suite of measures which will reverse the decline in Ireland's packaging recycling rates.
- 6.2.21. Ireland met all current targets in 2019 with the exception of the specific target for collection of WEEE. Recent updates to EU regulations and directives will make the achievement of various targets for more challenging.
- 6.2.22. The hazardous waste sector has risen by 84% since 2012 and in 2019 65% of hazardous waste was exported for treatment. This reflects the fact that Ireland does not have the range of facilities to deal with all of the hazardous waste generated.
- 6.2.23. Appendix 1 presents a useful chart in terms of the outlook for future compliance with EU targets. Achieving compliance with the target that under 10% of municipal landfill waste would be disposed to landfill by 2035 was stated to be 'partially on track' and dependent on current and planned measures being implemented and effective. Similar statements are made with respect to the target of over 55% recycling of packaging waste, over 60% recycling of paper and cardboard and over 50% of recycling of metals. Objectives which are stated to be largely not on track include measures related to recycling of plastics and preparation for reuse and recycling of household derived paper and other products.
- 6.2.24. The Draft National Hazardous Waste Management Plan 2021-2027 with reference to the 2014-2020 NHWMP that the areas requiring further attention include increasing Ireland's level of capacity for self-sufficiency with regard to the treatment and management of hazardous waste.
- 6.2.25. The draft plan notes the steady increase in hazardous waste generated in Ireland and states that the estimated figure for 2019 is 580,977 tonnes. 100,000 tonnes of that waste in 2019 was bottom ash from Dublin WtE which has since been reclassified as non-hazardous. Of the overall figure there was an increase in

treatment of hazardous waste at Irish facilities by 30% on the previous year amounting to 146,309 tonnes. A further 55,282 tonnes were treated at the site of generation, including 1,133 tonnes at WtE facilities. The situation remains that Ireland does not have the facilities or economies of scale required to treat the full range of hazardous wastes it produces and in 2019 65% was exported for treatment in other European countries.

- 6.2.26. Key recommendations of this draft plan include:
 - 9 Strengthen knowledge of national hazardous waste capacity to inform infrastructure development and contingency planning, in accordance with the application of the proximity principle.
- 6.2.27. The reference to the proximity principle is expanded in section 6.1 it is noted that the lack of infrastructure in the form of a commercial hazardous waste landfill or hazardous waste incinerator is a risk due to reliance on export markets and represents a lost resource. It is recognised that complete self-sufficiency in terms of hazardous waste is not feasible but there is a need for Ireland to take responsibility and to take reasonable steps to provide appropriate treatment capacity. Amongst the issues requiring action on the path to increasing self-sufficiency is addressing the deficit in capacity for the substantial waste stream current exported for thermal treatment, i.e. co-incineration, use as fuel or incineration. 6.2 addresses treatment processes in more detail and in relation to solvent recovery references use in cement kilns and other industrial process and incineration at on-site incinerators in the pharma-chem sector and the incineration of 10,000 TPA at Carranstown.
- 6.2.28. 80,000 tonnes of Incinerator Bottom Ash were produced in Ireland in 2019 and the operators of the country's two WtE facilities have satisfied the EPA that this is non-hazardous and can be safely disposed of in a conventional landfill. Boiler ash and flue gas treatment residues continue to be classified as hazardous waste.

National policy framework alternative fuels infrastructure for transport in Ireland 2017 to 2030.

6.2.29. In relation to hydrogen the document notes the future emergence of a market in Ireland in the coming years as hydrogen use in Europe increases. Hydrogen is anticipated to increase its penetration across the entire fleet spectrum after 2030.

- 6.2.30. The use and benefits of hydrogen and transport is set out in section 5.5.
- 6.2.31. Section 6.5 states that hydrogen will be available for use in transport by 2020 but is unlikely to enter the mass market in Ireland until the end of the next decade.
- 6.2.32. Section 7.4 refers to hydrogen targets. Ireland has no immediate plans to establish a hydrogen refuelling network as the cost of the infrastructure is massively disproportionate to current demand. Ireland is willing to support trials.
- 6.2.33. Section 8.2 refers to measures to be considered by the end of 2020 which include a task force to consider the measure and options available for the purpose of accelerating the deployment of low carbon technologies including hydrogen.

White Paper: Ireland's Transition to a Low Carbon Energy Future, 2015-2030

6.2.34. This is a roadmap to policy and actions relevant to the energy sector up to 2030. It has regard to European and International climate change objectives and agreements. It notes that waste management policy in Ireland recognises the opportunity for waste to be used as an indigenous energy source and that the Waste Management Plans support the development of additional thermal recovery and biological treatment capacity within the state. It is noted also that the REFIT schemes continue to support the use of waste as a renewable energy feedstock.

Climate Action Plan, 2021

- 6.2.35. This plan seeks to tackle climate breakdown and achieve net zero greenhouse gas emissions by 2050. It identifies that the transition to climate neutrality will require changes across our society and economy including in the waste sector. The document notes Ireland's success in diverting waste from landfill, which contributes significantly to greenhouse gas emissions related to waste treatment. Minimising waste generation and improving segregation, reuse and recycling will lead to less emissions associated with waste transport and treatment.
- 6.2.36. The promotion of green hydrogen measures is supported. Green hydrogen is defined as usually referring to hydrogen produced by the electrolysis of water using renewable electricity and the only by product is oxygen. Although the plan identifies technological and cost barriers at present, green hydrogen is identified as a possible solution to some of the challenges in the energy sector, including as a back-up for renewables and for use in the transport sector.

National Planning Framework - published in February 2018 under Project Ireland 2040

- 6.2.37. Section 9.2 deals with resource efficiency and transition to a low carbon economy. National policy objective 56 is to sustainably manage waste generation, invest in different types of waste treatment and support circular economy principles, prioritising prevention, reuse, recycling and recovery, to support a healthy environment, economy and society. It is noted that Ireland has actively improved its waste management systems but that we remain heavily reliant on export markets for the treatment of residual waste, recyclable waste and hazardous waste. Population growth will increase pressure on waste management capacity. The ultimate aim is to decouple consumption from waste generation. In managing our waste needs the NPF support circular economy principles that minimise waste going to landfill and maximise waste as a resource meaning that prevention, preparation for reuse, recycling and recovery are prioritised in that order over the disposal of waste.
- 6.2.38. National Strategic Outcome 9 includes the following provisions:
 - Planning for waste treatment requirements to 2040 will require waste to
 energy facilities which treat the residual waste that cannot be recycled in a
 sustainable way delivering benefits such as electricity and heat production.
 - District heating networks will be developed, where technically feasible and cost-effective.
 - Development of necessary and appropriate hazardous waste management facilities to avoid the need for treatment elsewhere.
 - Adequate capacity and systems to manage waste including municipal and C&D waste in an environmentally safe and sustainable manner.

National Development Plan 2021 - 2030

6.2.39. Published in October 2021 this is the 10-year national capital expenditure framework. It constitutes a revised plan with increased emphasis on supporting the transition to a low carbon society. It sets out a major national investment project across all sectors, supporting inter alia investment measures necessary to meet climate ambitions and informed by climate and environmental assessment of each of the proposed measures.

- 6.2.40. Capacity will continue to be built in waste facilities including hazardous waste treatment and waste to energy and other projects. Facilitating the use of alternative fuels and nonrecyclable wastes in cement kilns is outlined.
- 6.2.41. Targets for waste recycling by 2030 set in the Waste Action Plan for a Circular Economy are restated. It is stated that Ireland has scope for major progress in all key areas of the waste hierarchy and specific objectives include strengthening the regulatory and enforcement frameworks for the waste collection and management system to maximise circular economy principles. An increase in targets for the roll-out of district heating is outlined.

Draft Greater Dublin Area Transport Strategy, November 2021

6.2.42. This updated strategy for the GDA omits the Leinster Orbital Route in favour of online road improvements.

National energy efficiency action plan 4 (NREAP) 2017-2020

6.2.43. This re-states support for the development of the economic potential of high efficiency code generation and efficient district heating and cooling including from waste heat and renewable energy sources.

6.3. Guidance and legislation

Climate Action and Low Carbon Development (Amendment) Act 2021

6.3.1. This was signed into law in July 2020. It establishes national climate objectives that the state shall pursue and achieve by no later than the end of the year 2050 the transition to a climate resilient, biodiversity rich, environmentally sustainable and climate neutral economy. The Act contains a number of objectives for the purpose of achieving that objective including the preparation of an updated Climate Action Plan. The preparation of local authority climate action plans and of sectoral emission ceilings are key elements.

Traffic and Transport Assessment Guidelines 2014

6.3.2. These guidelines were published by the then National Roads Authority and aim to provide guidance in the conducting of studies for traffic and transport assessment and evaluation thereof.

6.3.3. The requirement to carry out a traffic and transport assessment affecting national roads includes where traffic to and from the development exceeds 5% of the traffic flow on the adjoining road where congestion exists, or the location is sensitive.

Spatial Planning and National Roads Guidelines for Planning Authorities 2012

6.3.4. Section 2.9 of this document refers to the requirement to protect alignments for future national road projects. In planning future routes, the NRA will work with planning authorities. A development plan should identify any land required for future national roads projects including objectives that retain required lands free from development and ensure that adjacent development of sensitive uses is compatible.

EPA technical guidance on municipal solid Waste: pre-treatment and residuals' management

6.3.5. This sets down various requirements relating to management of MSW.

6.4. Regional Policy

Regional Spatial Strategy for the Eastern and Midland Region 2019-2031

- 6.4.1. This takes on board the outcomes of the NPF and seeks to determine the region's role in the achievement of the National Strategic Outcomes. To this effect certain regional objectives which are of relevance are identified. The requirements of the Eastern Regional Waste Management Plan shall be taken into account in the preparation of development plans.
- 6.4.2. Regional Strategic Outcome 7 and RPO 10.25 support the principles of the circular economy and greater resource efficiency.
- 6.4.3. RPO 10.20 supports the development of enhanced electricity and gas supplies and associated networks.

Eastern-Midlands Region Waste Management Plan 2015-2021

- 6.4.4. Policy E1 Future authorisations of pre-treatment capacity in the region must take account of the authorised and available capacity in the market while being satisfied the type of processing activity being proposed meets the requirement of policy E2.
- 6.4.5. Policy E2 Future authorisation of pre-treatment activities by local authorities over the plan period will be contingent on the operator demonstrating that the treatment is necessary, and the proposed activities will improve the quality and add value to the

- output materials generated at the site. Pre-treatment is noted to be vital in extracting and generating high-quality outputs for onward treatment. Consideration of authorised and available capacity may reduce the scale of development of new greenfield sites.
- 6.4.6. Section 16.4.5 deals with thermal recovery activities where the principal use of the waste is as a fuel to generate energy and it is noted that these sit on the other recovery tier of the waste hierarchy and include incineration (waste to energy), coincineration (cement kilns), pyrolysis and gasification. These facilities typically operate on a national market basis excepting waste from all parts of Ireland. Progress is made in achieving Ireland's policy to become self-sufficient in relation to the recovery of municipal waste. A significant quantity of residual waste which is being exported is poor use of a valuable resource from a self-sufficiency perspective.
- 6.4.7. The need for future treatment capacity requires careful consideration and must take into account predicted waste growth, growing recycle rates, future targets and the continued move from landfill and conversion of pending capacity into active treatment. Future thermal recovery facilities will be viewed as national facilities addressing the needs of the state and not defined by regional markets alone.
- 6.4.8. Policy E15a is to support the development of up to 300,000 tonnes of additional thermal recovery capacity for the treatment of non-hazardous waste nationally to ensure that there is adequate and competitive treatment in the market and the State's self-sufficiency requirements for the recovery of municipal waste are met. This capacity is a national treatment need and is not specific to the region. The extent of capacity determined reflects the predicted need of the residual waste market up to 2030 at the time of preparing the waste plan. Authorisations above this threshold will only be granted if the applicant justifies and verifies the need for the capacity and the authorities are satisfied it complies with national and regional waste policies and does not pose a risk to future recycling rates. All proposed sites for thermal recovery must comply with the environmental protection criteria set out in the Plan.
- 6.4.9. Policy E15b states that the plan supports the need for thermal recovery capacity to be developed specifically for the on-site treatment of industrial process wastes and were justifiable the treatment of such wastes at merchant thermal recovery facilities.

6.4.10. Policy E16 states that the plan supports the development of up to 50,000 tons of additional thermal recovery capacity for the treatment of hazardous wastes nationally to ensure that there is adequate active and competitive treatment in the market to facilitate self-sufficiency needs. The capacity is a national treatment need and not specific to a region.

6.5. Local Planning Policy

Meath County Development Plan 2021-2027.

- 6.5.1. This plan came into effect on 3 November 2021. A ministerial directive applies to certain provisions, none of which are relevant to the proposed development or the Duleek area.
- 6.5.2. Duleek the vision is to promote the sustainable growth of Duleek consolidating and enhancing its rich, historic town centre and promoting its role as a self-sustaining town and a local service centre. The R150 travels to the town centre resulting in significant volumes of traffic and traffic calming and traffic management proposals have been prepared to improve the public realm in the short term and these will be implemented during the lifetime of the plan. In the longer term there is a need to divert heavy traffic from the town centre with a new bypass link to the south-west a possible option DUL OBJ 8 is the objective to examine the feasibility and progress the provision of the R150 bypass. DUL OBJ 9 sets out specific local objectives including relating to the provision and upgrading of footpaths and junctions.
- 6.5.3. INF POL 61 is to facilitate implementation of waste legislation and national and regional waste management policy and the circular economy.
- 6.5.4. INF POL 63 is to encourage the development of waste infrastructure in appropriate locations as deemed necessary in accordance with the requirements of the Eastern Midlands region waste management plan and the draft waste facility siting guidelines 2016 when finalised.
- 6.5.5. INF POL 65 is to adopt the waste management hierarchy and implement policy under waste management plans. All prospective development shall take account of the provisions of the regional waste management plan. Account shall also be taken of the proximity principle and the interregional movement of waste.

- 6.5.6. INF POL 66 as to ensure that hazardous waste is addressed to an integrated approach of prevention, collection and recycling.
- 6.5.7. INF OBJ 54 is to facilitate the transition from waste management economy to a green circular economy.
- 6.5.8. INF OBJ 59 is to seek to ensure that waste management facilities are appropriately managed and monitored to maximise efficiencies to protect human health and the natural environment.
- 6.5.9. INF OBJ 60 relates to high quality sustainable waste recovery and disposal infrastructure including anaerobic digesters.
- 6.5.10. INF OBJ 71 and 72 relates to air and noise monitoring including the collation of data in support of a regional air quality and greenhouse gas emission inventory.
- 6.5.11. Chapter 5 sets out transport policies and objectives. Under section 5.8.2 it is noted that the RSES indicates that long-term protection shall remain for the outer orbital route and that the NTA Strategy for the GDA 2016-2035 notes that while this project is not planned for implementation during the period of the strategy, the finalisation of the route corridor and its protection from development intrusion is recommended.
- 6.5.12. MOV POL 23 is to support the delivery of the Leinster Orbital Route which is considered to comprise important infrastructure development and when finalised to protect the route corridor free from developments which could interfere with the provision of the project.
- 6.5.13. RPO 8.10 identifies specific projects to be delivered and states that in addition long-term protection shall remain for the Leinster Outer Orbital Route.
- 6.5.14. MOV OBJ 49 is to support public road infrastructure including bypasses of local towns and villages and national road schemes and where necessary to reserve corridors of any such routes free of development. Table 5.1 sets out a non-exhaustive list of road schemes which includes M1 Junction 8 Duleek and the possible upgrading of this junction to improve capacity and references local bypasses/relief roads identified on map 5.2 which are to be examined in terms of feasibility and to be progressed where appropriate Duleek is one of a small number of identified for proposed bypass/relief roads.

Meath Climate Action Strategy 2019-2024

6.5.15. Relevant provisions have been incorporated in the adopted development plan.

7.0 Planning Assessment

The Planning Assessment is presented under the following headings:

- Policy Framework and Project Need
- Risk of Major Accidents and Disasters
- Roads and Traffic
- Landscape and Visual
- Air and Climate
- Flood Risk and Wastewater
- Other Issues
- Conclusions.

7.1. The Policy Framework and Project Need

- 7.1.1. I propose to consider the project need and the relevant policy context in respect of the significant elements of the proposed development:
 - additional thermal recovery capacity of up to 15,000 TPA of hazardous waste (to provide for a total of up to 25,000 TPA hazardous waste intake –10,000 TPA already permitted) and an increase in annual total thermal recovery capacity to 250,000 TPA (from a permitted 235, 000 TPA)
 - the development of an aqueous waste tank farm
 - the generation and storage of hydrogen at the site
 - the development of a bottom ash storage building for the storage of up to
 5,000 tonnes of bottom ash produced on site
 - additional waste acceptance capacity and infrastructure for the acceptance of up to 30,000 TPA of third-party boiler ash and flue gas cleaning residues and other residues for treatment in the existing ash pre-treatment facility

- development of a warehouse, workshop and emergency response team
 (ERT)/office building to support existing maintenance activities
- new concrete yard and parking area for up to 10 trucks, tankers or containers
- demolition and rebuilding of the existing singular office modular building.

7.1.2. Additional thermal recovery capacity of up to 15,000 TPA of hazardous waste with a total intake of up to 250,000 TPA

- 7.1.3. It is clearly identified under the description of this aspect of the proposed development in section 4.5.2 of the EIAR that the proposed additional 15,000 TPA and the increase from 235,000 TPA to 250,000 TPA is to provide for an increased intake of hazardous or non-hazardous waste in a manner which provides flexibility and thereby allowing for appropriate management of the facility.
- 7.1.4. The permission granted under ABP-302447 on 3 April 2019 allowed for intake of up to 235,000 TPA on a permanent basis. The cap on the hazardous waste intake of 10,000 TPA was imposed. Therefore, the proposed development involving an additional 15,000 TPA would facilitate a total intake of up to 25,000 TPA of hazardous waste.
- 7.1.5. <u>Proximity Principle</u> Observers have identified issues relating to the source of the proposed additional 15,000 TPA of hazardous waste, noting that the submissions during the pre-application consultation referenced in particular the Cork Pharma sector. On that basis the selected location is deemed by the observers to be contrary to accepted policy and principles.
- 7.1.6. The authorised intake of 10,000 TPA of hazardous waste dates originally to 2013 and the permission under PA0026 and later made permanent in 2019. Under PA0026 there were no restrictions in relation to the source of the hazardous waste in contrast to the requirements for intake of non-hazardous waste, which was to be mainly sourced in the region. It was therefore established that a limited amount of hazardous waste (10,000 TPA) sourced from the national market can be treated at this WtE.
- 7.1.7. In the interim there have been changes to policy and a growing emphasis at international and national level to minimise the generation of waste including hazardous waste. There are policies in place encouraging on-site treatment for

- industries. Various Irish policy documents which I have referenced above and provided extracts from support these changes.
- 7.1.8. Notwithstanding the policy shift to the focus on the circular economy I consider that there remains very strong support for the development of additional capacity for treatment of hazardous wastes, including at the existing WtE facility. I consider that a grant of permission would assist in realising objective 14(ii) of the NHWMP which sets the objective of increasing Ireland's level of self-sufficient with regard to the treatment and management of hazardous waste. The prevailing planning context including the NHWMP establishes that hazardous waste management should be considered on a national and all-Ireland basis in terms of capacity planning and it is therefore reasonable to conclude that the location of the facility is acceptable in principle.
- 7.1.9. With respect to the focus on waste reduction I note the reporting in policy documents of measures undertaken by industry and others to reduce the generation of waste. This was reiterated in the 2018 Progress Report, which calls for increased efforts in this area. Notwithstanding this requirement and the current thinking on waste which is emanating from the circular economy I consider that there is strong support in policy provisions at a national level for the development of additional hazardous waste capacity in Ireland.
- 7.1.10. At a regional level there is support for the proposed development under objective E16 of the EMRWMP. This identifies a requirement for the development of up to 50,000 tonnes of additional thermal recovery capacity for the treatment of hazardous wastes nationally to ensure that there is adequate treatment and to facilitate selfsufficiency. The stated capacity is explicitly identified to be a national treatment need and is not specific to the region.
- 7.1.11. The EMRWMP sets out policy provision relating to new facilities and the regional pattern of facilities as quoted below.

The spatial distribution of facilities nationally is potentially imbalanced, with all active and pending facilities located in one region. Despite the strong road network linking regional urban centres to the capital, there is a need to consider the spatial distribution of thermal recovery capacity in the state when authorising future facilities.

- 7.1.12. I take this statement to be relevant to new facilities only and I do not consider that there is any provision in national or regional policy documents which would specifically preclude a relatively minor (15,000 TPA) expansion of the existing WTE facility at this site.
- 7.1.13. I am satisfied from my review of the planning history and taking into account all the submissions of observers and the applicant that a grant of permission for the additional capacity of hazardous waste intake at this site is fully supported by national and regional policy.
- 7.1.14. Non-hazardous waste option Of the 15,000 TPA maximum hazardous waste and the overall total capacity increase from 235,000 to 250,000 TPA there is the possibility that some of the additional 15,000 TPA capacity increase could be utilised for non-hazardous waste. This justification is set out in the context of the possible drop in the calorific value of the residual municipal waste entering the facility as well as the acceptance of additional aqueous liquid wastes. I consider it reasonable that the operator be facilitated with the flexibility to adjust the overall calorific value of the inputs to the facility to ensure effective and efficient processing. I accept the applicant's submission on this issue. I consider that the main driver for the project relates to the intake of the hazardous waste and in the context of the proper functioning of the plant I am satisfied that the option of additional non-hazardous waste intake should be facilitated.
- 7.1.15. In terms of policy relating to thermal treatment of non-hazardous waste I note that there is a requirement identified under the EMRWMP 2015-2021 for an additional thermal recovery for 300,000 TPA on a national level. This is to ensure self-sufficiency up to the year 2030. Regarding the 300,000 TPA requirement I would reference the fact that the potential future increase of non-hazardous waste intake as proposed under the current application is not of significant volume. I note the recent grant of permission by the Board for 90,000 TPA increase in intake at Poolbeg WtE. No information has been presented by observers to suggest that the 300,000 TPA need established under policy E15a has been met and my investigation of publicly available information did not uncover anything to support such a conclusion. Furthermore, in the context of my earlier comments relating to the effective operation of the plant and the need for operational flexibility, the proposed increase in the

- intake of waste is acceptable for the reasons stated and accords with national and regional policy provisions.
- 7.1.16. I conclude that the increased intake of up to 250,000 TPA is in accordance with relevant policy.
- 7.1.17. Other comments on Waste Types The waste types set under the conditions of PA0026 were restricted to be in accordance with the European Waste Catalogue Codes as listed in Table 2.1 of the Board's Order. The Board may wish to consider if such a restriction is relevant in this case. Waste is classified as being hazardous when it displays one or more of the hazardous properties listed in the Second Schedule of the Waste Management Act as amended. The applicant's submissions include a broad description of the nature of the hazardous wastes, which will be a mix of solid and aqueous wastes. Having considered the matter and following a review of the planning history, I consider that any limitation on the types of waste is a matter for the IE licence.
- 7.1.18. I note and accept the statement of the applicant that in terms of the waste hierarchy the classification of the existing facility as an R1 recovery facility will not be affected by the treatment of additional hazardous waste. This is a relevant consideration in terms of the consideration of policy for waste management.
- 7.1.19. I would further note a key relevant provision in the EPA technical guidance in the management of MSW. This guidance requires that MSW delivered to a waste to energy facility must first have been collected through a source separated system and that mechanical treatment for the extraction of metals and other marketable recyclables must be applied to the bottom ashes that are generated following combustion. All of these requirements for the existing WtE facility ensure that it operates in accordance with relevant policy and the waste hierarchy.
- 7.1.20. <u>Conclusion</u> I conclude that it is appropriate to facilitate the increased 15,000 TPA of waste at the facility bringing the total to 250,000 TPA. The additional capacity (whether utilised to treat hazardous waste thereby avoiding export or as a means to increase operator flexibility) will meet an identified requirement for additional indigenous treatment capacity for the recovery of wastes.

7.1.21. Aqueous waste tank farm

- 7.1.22. A significant component of the proposed development is the tank farm and associated bunding which is planned for the storage and processing of aqueous hazardous wastes. The existing storage of aqueous wastes is in a mobile unit. The capacity of the facility for hazardous aqueous waste is stated to be about 8,000 TPA and the provision of the tank farm will ensure that this can be increased up to 20,000 TPA. That 20,000 TPA would be part of the overall maximum intake of 25,000 TPA of hazardous waste and the overall intake of 250,000 TPA as set out on table 4.4 of the EIAR.
- 7.1.23. The design of the tank farm as described in the EIAR provides for acceptance, handling and storage systems for hazardous aqueous waste which are considered to be in accordance with the relevant BREF reference documents. Associated elements of the proposed development include upgrades to tanker unloading and better access methods for sampling of intake to ensure its suitability prior to acceptance. The option of direct injection to the furnace will be maintained including for use in periods of maintenance at the tank farm. At all times only two of the three tanks will be used for storage of aqueous waste, the third being retained for use during boiler maintenance.
- 7.1.24. The proposed aqueous waste tank farm and the associated works would provide enhanced facilities and cater for the potential increased intake of liquid hazardous wastes. The proposed development through the provision of additional thermal recovery capacity for hazardous waste thereby facilitates national and regional objectives. The aqueous waste tank farm and associated unloading are critical aspect of the development in this respect. Its development will contribute significantly to meeting the need for increased indigenous capacity for hazardous waste in accordance with the NHWMP.

7.1.25. Bottom ash storage and intake of third-party boiler ash and residues

- 7.1.26. The EPA Progress Report in 2018 identified the particular importance that the management of significant quantities of hazardous fly ash from waste to energy plants and the associated infrastructural capacity needs are prioritised. The NHWMP specified the need to expand the recovery and treatment capacity for wastes that do not require thermal treatment or landfill.
- 7.1.27. The proposed development incorporates two elements which meet these objectives:

- a bottom ash storage building
- additional waste acceptance capacity and infrastructure for boiler ash, fly ash and other residues in the existing pre-treatment facility.
- 7.1.28. The proposed bottom ash storage building will allow for storage of up to 5,000 tonnes of bottom ash which is produced on the site. Pending the development of bottom ash recycling plants in Ireland this material will be exported in approximately 12 shipments through Drogheda. The likely future use on export may be as an aggregate.
- 7.1.29. The development of infrastructure to enable intake of an additional 30,000 TPA at the existing pre-treatment facility will provide an avenue for recovery of this material. Presently there is significant export (25,000 TPA) of third-party residues to Germany and Norway. The proposed development would require the construction of new silos within the main process building where the residues would be stored prior to processing at the existing pre-treatment plant which has been operational since 2018. Following pre-treatment, the material would be suitable for recovery at an existing facility at a salt mine in Northern Ireland.
- 7.1.30. I am satisfied that both of these elements of the proposed development are in keeping with the provisions of the NHWMP.

7.1.31. Generation and Storage of Hydrogen

- 7.1.32. As an exporter of electricity from the site the applicant reports periods of constraint during which there is no demand for electricity from the facility. With increased growth in the renewable sector these periods of curtailment are likely to become more frequent. The proposed development would utilise electricity generated during periods of constraints to generate hydrogen.
- 7.1.33. Observations submitted included a number of comments relating to the policy basis and feasibility of this element of the proposed development. There is reference in particular to the National Policy Framework Alternative Fuels Infrastructure for Transport in Ireland 2017-2030. As the observers state this document outlines that Ireland has no immediate plans to establish a hydrogen refuelling network.
 Nevertheless, while the document expresses reservations relating to the pace of

- progress I note that it does express strong support for the future of hydrogen in the transport section.
- 7.1.34. Looking to the wider policy provision I note that the NPF and other documents reference WtE facilities as part of a sustainable method for treatment of residual and hazardous wastes noting that they can deliver benefits such as electricity and heat production. Given the location of the existing facility which is remote from a population which would benefit from district heating, I consider that the utilisation of surplus electricity to produce hydrogen is a sustainable option, which is in line with the NPWS and the EMRWMP and is a positive development in the drive to decarbonisation and the move towards a circular economy.
- 7.1.35. The applicant has proposed a number of options for use of the hydrogen produced on site, including injection into the gas network and refuelling on site.
- 7.1.36. In the event of use for refuelling the applicant has referenced the potential future fuelling of waste transport vehicles. To the extent that such vehicles would be visiting the site, I consider that this would constitute a suitable option. The Board may wish to consider whether it would be appropriate to limit any refuelling to vehicles such as waste transport vehicles, which would be on site. That would exclude the possibility for example of buses refuelling at the site, which has been identified as a possible option by the applicant in the context of proximity to the M1. If such occurred, it is stated that it would be under contract with specific operators and not open to use by the public. A development of this nature incorporating a worst-case traffic movement of up to 60 vehicles per week has been incorporated in the traffic scenario. Having regard to the limited scale of this element of the proposed development, the capacity of the road network and entrance and the importance at this time of supporting innovation and developing markets in the context of the move towards decarbonisation, I recommend that no restrictions be placed on such activity.
- 7.1.37. Regarding the ultimate use of hydrogen, the observers have raised a number of issues relating to energy efficiency and sustainability of this element of the development overall. As noted by the applicant there is no likelihood that the hydrogen would ultimately be utilised to generate electricity at a gas turbine generating plant. Instead, if the hydrogen was diverted to the gas network, it would

- replace natural gas used by domestic customers. I consider that the observers arguments relating to the energy efficiency of this proposal cannot be sustained. In the context of the reuse of steam which is produced at an existing facility and for which there may otherwise be no value it is reasonable in my opinion to conclude that this aspect of the proposed development is completely in line with current thinking on the circular economy and with emerging national policy.
- 7.1.38. I note that observers have stated there is a lack of certainty related to the amount of hydrogen which would be produced. I disagree as both the tonnage and pressure are specified. In my opinion there is complete clarity relating to this aspect of the proposed development and I note that the observers' comments appear to be based on consideration of the non-technical summary. I return to this matter later in the context of discussion on major accidents.
- 7.1.39. To conclude, I am in agreement with the applicant's submission that the proposed development of the HGU and the production on site of hydrogen either to the gas distribution network or for use in transportation constitutes an improvement in the energy efficiency and sustainability of the existing facility and accords with the national and regional policy provisions relating to efficient waste management and climate mitigation including decarbonisation of transportation.
- 7.1.40. Other elements of proposed development, including offices.
- 7.1.41. The other elements of the proposed development are:
 - new concrete yard and parking area for up to 10 trucks, tankers or containers
 - a warehouse, workshop and emergency response team (ERT)/office building to support existing maintenance activities
 - demolition and rebuilding of the existing office modular building.
- 7.1.42. For the most part these facilities may be described as ancillary upgrades which do not warrant consideration in terms of the prevailing planning policy. However, objectors state that there has been a failure to justify the office development having regard to the zoning objective. This issue was raised during the pre-application consultation. I consider that the main issue to be determined is that any office uses are necessary for the operation of the proposed development or accord with development plan policy or are otherwise acceptable.

- 7.1.43. I note that the planning authority considers that there is policy support for this element of the proposed development under ED POL 20, which is to permit development for the expansion of existing authorised industrial or business enterprises in the country where the resultant development does not negatively impact on the character and amenity of the area and subject to consideration of traffic generated. In support of this element of the development the Chief Executive's report references internal reports and the suitability of the road network. I would agree with this interpretation if it is demonstrated that the offices are intended strictly in connection with the existing and proposed authorised WtE.
- 7.1.44. It is clearly stated that the warehouse, workshop and ERT / office building are to support existing maintenance activities. This element of the development is described in section 4.5.7 of the EIAR and further considered in the applicant's response to further information under section 2.2.2. The need to relocate the existing warehouse and workshop functions in the new building which will also include additional office accommodation for staff on site, ERT equipment and staff facilities is set out. It will include a small office for the warehouse technician, a mezzanine office for the mechanical maintenance team leader and staff. It is stated that the proposed office and ERT area will accommodate up to 10 additional Indaver staff and include offices and meeting room for both the Indaver staff and permanent contractors on site. I consider that it is demonstrated that the ERT / office building is intrinsically connected with the operation of the WtE plant.
- 7.1.45. In relation to the demolition and rebuilding of the existing modular office building this will have a slightly increased footprint but will accommodate only one additional person (an increase to 23 staff). In the EIAR this element of the development is described as not significant and involving only minimal changes and being in line with the permission granted. I have examined the Inspector's report under PA0026 and note that the main purpose of the offices is described as 'to provide a regular base for contract staff during periods of maintenance and related activities'.
- 7.1.46. As described in section 4.5.9 of the EIAR the proposed wellness centre, locker room, canteen and meeting facilities are intended for Indaver staff and permanent contractors on site. Furthermore, it is stated that the permitted development provides for 22 visiting staff to be accommodated in the building. I would note the more specific description as quoted above from the Inspector's report which references

visits by contract staff during periods of maintenance and related activities. In table 2.3 of applicant's further information response, it is stated that 9 no. staff are visitors and the remainder are based on site. Table 2.4 describes a lot of the development as the provision of like for like facilities.

7.1.47. The information presented by the applicant is that the use of the modular office building includes key personnel such as the site safety manager and process engineer, which appears to be slightly at odds with the stated use under PA0026. However, having regard to the information submitted I am generally satisfied that the intended use of the modular office building is intrinsically related to the running of the existing facility. Having regard to the development permitted under PA0026 and the submissions on file I recommend that these elements of the proposed development be permitted subject to a condition which clarifies the nature of the use.

7.1.48. Conclusions

- 7.1.49. The assessment above has taken into account each of the individual components of the proposed development with a view to assessing compliance with policy. I am satisfied that all of the individual elements comply with prevailing planning policy.
- 7.1.50. I am satisfied that the proposed development will:
 - Make a significant contribution towards the provision of additional thermal recovery capacity for hazardous waste, which has been identified in the NHWMP and assist in meeting the goal of self-sufficiency.
 - Result in the provision of a not significant quantity of municipal non-hazardous
 waste treatment capacity, which will facilitate the operational requirements of
 the site and make a contribution towards meeting the identified needs for
 additional thermal treatment capacity.
 - Through the production of hydrogen from electricity which would otherwise be wasted, will assist in the transition to a low carbon economy and improve the efficiency and sustainability of the existing waste to energy facility.
 - Assist the operator and third parties to secure more local markets for recovery
 of bottom ash, fly ash and other residues and reduce the transport emissions
 and reliance on other markets.

7.1.51. Having regard to the need for significant additional treatment at a national level for hazardous waste and non-hazardous waste and the rationale provided relating to the intake of non-hazardous waste, to the benefits arising from the bottom ash storage building and the intake of third-party waste for pre-treatment and the utilisation of steam to produce hydrogen, I consider that subject to clarification on the nature of the use of the offices that the proposed development is fully in compliance with national, regional and local policy provisions.

7.2. Major Accidents and Disasters

- 7.2.1. The proposed development includes elements which increase the risk of major accidents and disasters at the site, and which might have implications for the proper planning and sustainable development of the area. The issues addressed in this section are considered under the following headings:
 - Whether the site would fall under the COMAH Regulations.
 - The significant accident scenarios.
 - Proposed mitigation measures.
 - Conclusions.
- 7.2.2. The application has been subject of an independent technical review for the Board by Callaghan Engineering on the topic of Control of Major Accidents Hazards. The report of Callaghan Engineering is attached as Appendix 1. The EIAR contains a wealth of relevant detailed information notably in Chapter 17 and Appendix 17.1.

COMAH Regulations

- 7.2.3. The relevant elements of the proposed development for the purposes of this section include the proposed HGU and the aqueous tank farm. The increase in total waste for treatment was assessed in section 3.1.3 of the report of Callaghan Engineering who describe the increase in packaging and aqueous waste fractions under the scenarios assessed by the applicant. The report of Callaghan Engineering concludes that the change in yearly treatment capacity does not change the potential for the site for major accidents.
- 7.2.4. Observers have referred particularly to the HGU element of the proposed development and consider that there is inadequate information presented to

determine the level of risk and whether the proposed development would fall under the COMAH Regulations. The information relied upon as the basis for this claim is the non-technical summary, which <u>is</u> limited in terms of the amount of information, as is appropriate. It is not evident to me that the observers have taken into account the entirety of the EIAR. I consider that there is ample information available to the Board. I note that while the request for further information which was issued included requests relating to some highly technical aspects of the proposed development, there was no need to query the contribution of the proposed development under the COMAH Regulations.

- 7.2.5. An establishment is designated under the COMAH Regulations depending on the quantity of dangerous substances it contains. Appendix 17.1 of the EIAR presents the specialist report of Byrne O' Cleirigh. This deals specifically with the matter of whether the inventory changes associated with the proposed increase of hazardous waste, the new aqueous waste tank farm and the HGU would result in the facility qualifying as a Seveso III establishment. The review undertaken by the Board's consultants considers the nature of the material which will be on site at a given time.
- 7.2.6. The total inventory of relevant substances is assessed and is concluded to be below the level to cause the site to qualify as a Seveso establishment. I accept the conclusion of the Board's consultants.

Significant accident scenarios

- 7.2.7. In its assessment of the nature of the substances on site the Board's consultants note that these fall under the categories of environmental or physical hazards and that none of them would constitute health hazards.
- 7.2.8. As noted in the report of Callaghan Engineering for the Board the EIAR relies on modelling which concluded that any accident associated with the project has no potential for significant consequences off-site. In Chapter 17 of the EIAR the applicant sets out a number of credible accident scenarios. Those which were subject to detailed consideration related to a bunker fire, loss of containment of aqueous ammonia, a fire at the proposed aqueous waste tank farm and a fire/explosion at the proposed HGU. It is the latter two scenarios relating to the proposed aqueous waste tank farm and the HGU which are identified as comprising the worst-case conceivable events.

7.2.9. The accident scenario involving a full bund fire at the proposed aqueous waste tank farm would give rise to high levels of thermal radiation but there would be no impacts off-site. In the event of catastrophic failure of the hydrogen storage vessel there is potential for overpressures to the surrounding area which have been modelled and which do not present a risk to people off-site. The Board's consultants accept the applicant's submissions in this respect and accordingly I accept the expert opinions available.

Mitigation measures

- 7.2.10. In addition to the consultant's report which validates the technical conclusions presented by the applicant, I refer to the adoption of the CEMP which will ensure that the interaction of different activities at the site is managed safely so as not to present unacceptable risks. I note the CEMP will incorporate an Incident Response Plan which will take into account relevant best practice including for the construction period (Section 8/Appendix 5.1/Vol. 3/EIAR). These measures are relevant to ensure that construction activities will not act as an initiator to an accident scenario. Having regard to the above I conclude that the proposed development would not result in accidents which would give rise to consequences for the resident population in the vicinity or the environment by reason of any activities in the construction phase. I am satisfied as a result of the conclusions drawn regarding the modelling undertaken for the credible accident scenarios that the operation of the proposed development would not have any consequences for human beings or the environment in the vicinity and that there are no consequences for land-use planning.
- 7.2.11. The HAZID Report contained within the EIAR sets out measures to prevent incidences and reduce their consequences enabling rapid detection of accidents and protection against risks to human health and the environment. The aim of that assessment by the applicant relates to the reduction of the likelihood of a major accident taking place on site. The report of the Board's consultants notes that the original measures set out were comprehensive. To obtain full assurance that the detailed design will be executed in accordance with current safety legislation however, the consultant recommended further information on technical details. The applicant's response, which was received on 31 May 2021 was deemed to be sufficient to ensure that the risk at the site is controlled to acceptable levels. The

Board's consultants note that the methodology employed in the EIAR provides a great level of assurance that the plant will be safe to operate and that the risk scenarios which may have potential to cause fatalities (with very low probability) within the plant will be adequately addressed.

Conclusion

- 7.2.12. I consider that there is ample information available for the Board to conclude that the proposed development would not give rise to any significant accident scenarios with consequences off site.
- 7.2.13. I recommend two topics for the purposes of planning conditions. The first emanates from the report of Callaghan Engineering and relates to a technical detail of the aqueous tank farm, which I consider is reasonable to adopt. The second matter relates to the recommendation contained in Appendix 4 of the report of Byrne O Cleirigh. In all 6 no. Recommendations of the HAZID taken are presented, including that a fire water retention study be undertaken. I consider it reasonable and appropriate that these recommendations be adopted unless otherwise agreed with the planning authority and pending any revision to the IE licence.
- 7.2.14. I conclude that the development is acceptable with respect to the risk of major accidents and disasters.

7.3. Roads and Traffic

- 7.3.1. Amongst the key concerns expressed in observations is the impact on traffic levels in the area and in particular in the village of Duleek. TII has raised issues relating to the M1 and the planned Leinster Orbital Route.
- 7.3.2. I address Roads and Traffic under the following headings:
 - Construction and operation phase trip generation and distribution.
 - Leinster Orbital Route.
- 7.3.3. Construction and operation phase trip generation and distribution Impact on the M1, on regional roads and on Duleek.
- 7.3.4. The relevant road network comprises:

- Junction 8 of the M1 to the north-east which has an off-ramp from the south which would provide access to the site and to south Drogheda by the R152.
- The R152 south-west of Junction 8 this passes in a south-westerly direction by the entrance to Platin Cement and forms the southern site boundary.
- Travelling in the other direction to the north-east the R152 connects the site with Drogheda south - joining the R132 in the town centre at Shop Street.
 This junction is relevant to the export of bottom ash.
- South of the site the R152 connects with the R150 at a staggered cross known as New Lanes Cross.
- The western leg of New Lanes Cross the R150 passes into Duleek, forms
 the main street of Duleek and provides an onward route to the N2 and Navan.
- The eastern leg of New Lanes Cross the R150 passes under the M1 to Julianstown.
- Operational HGV deliveries to and from the site are required to avoid traversing through the village of Duleek and this restriction will operate in the construction period. Car traffic is not subject to this requirement.
- The R152 at the site entrance widens to 10m and contains a ghost island for vehicles turning right and a deceleration land for vehicles turning left.
- 7.3.5. In the EIA section of this report, I refer to the traffic assessment findings. I consider that the submitted information substantiates the conclusions presented and constitute a suitable basis for the Board's decision.
- 7.3.6. The peak construction period will occur in phase 2 at which time phase 1 will be operational. The assessment of this period takes into account the combination of operational HGV and personnel traffic as well as existing and permitted development and sets out assumptions for the flows of HGVs and the arrival and departure times of workers. The assessment for the AM and PM peaks for the opening year of phase 1 is that collectively there would be a negligible impact on the local road network with typical increases of 0.3% to 1.3%. The latter figure excludes the construction workers whose arrival would be outside peak traffic hours. Table 7.14 of the EIAR refers. Increased traffic levels at the site entrance are considerably higher but the site entrance has been demonstrated to have considerable spare capacity. Outside

- of the AM and PM peaks there will be locally significant increases in traffic volume in the order of 7% (related to construction workers) and this is considered acceptable as traffic levels at those times will be low.
- 7.3.7. The analysis undertaken for the opening year +5 scenario and also for 2037 is that the additional operational HGVs and vehicles associated with the completed development would collectively have a negligible impact on the local road network.
- 7.3.8. The capacity of one particular junction warrants particular focus, that is New Lanes Cross junction. The analysis shows that in 2022 and 2027 the junction has sufficient reserve capacity during all relevant time periods with minimal queueing. By 2037 the New Lanes Cross junction is predicted to be experiencing capacity issues on a number of arms but predominantly on the entry arm on the R150 from Duleek in the morning and evening peak and the southbound arm on the R152 in the evening. The applicant's statement is that these results are indicative of a tidal flow pattern which is related to accessing the motorway. As such the factors are external and not directly related to the proposed development. Having regard to the information presented relating to the absolute numbers of vehicles resulting from the proposed development and the distribution of that traffic over the network and during the day, I accept this conclusion.
- 7.3.9. I note that the EIAR has separated out the traffic related to the export of bottom ash to Drogheda port, which would take place every month for a two-day period and would involve additional HGV movements in a town centre location at the junction of two regional roads. The analysis undertaken involved development of a separate model for the signalised junction at the R132 and Shop Street which concluded that the impact is minimal. I consider that the information presented substantiates this conclusion.
- 7.3.10. TII in their submission recommends that consideration be given to the preparation of a revised TA including a full analysis of potential impact to junction 8 and the recommendations arising be incorporated as an amendment to the application or as conditions of the permission. In the response to further information the applicant notes that the TII AADT data shows average daily flows of 36,595 and assuming that all 110 daily two-way traffic movements to and from the site came from this direction there would be a negligible increase in daily traffic flow of 0.3%. Furthermore,

assuming that all of the additional 34 two-way vehicular movements to and from the site during the AM and PM peak periods routed by way of the M1 there would be a 1.2% maximum increase. Even in these unlikely scenarios therefore it is the applicant's position that the proposed development would have a negligible impact on the M1. I consider that the applicant's analysis of this matter is robust. It is clear that even in the highly unlikely scenarios described, the increased traffic at the M1 junctions would not come close to the 5% threshold set in the 2014 guidance to trigger a requirement for assessment. For this reason, I consider that there is no requirement for a revised transport assessment. I also am satisfied that given the relatively low levels of traffic increases there would be no significant impact on the M1 and that its function as an important strategic link would not be undermined.

- 7.3.11. Observers have expressed concern relating to the impact on the village of Duleek in the absence of a bypass. The need to divert heavy traffic from the town centre is identified in the recently adopted Meath County Development Plan wherein a new bypass linked to the south-west is described as a possible option. There is also the specific objective to examine the feasibility of and to progress the provision of the R150 bypass. I note that the impact of the proposed development on the village is limited to additional movement of cars and other small vehicles as companies are instructed to avoid Duleek village and this requirement would also apply in the construction phase. The applicant acknowledges that from time to time there is a requirement for rerouting of HGV traffic for specific reasons. It is appropriate that the proposed Construction Traffic Management Plan would incorporate the requirement that HGV traffic generally avoid the village and I have address this below in a recommended planning condition.
- 7.3.12. I consider that the levels of traffic generated by the development is acceptable and apart from the avoidance of Duleek village and the adoption of the CTMP there is no requirement for any other conditions.

7.3.13. Leinster Orbital Route

7.3.14. The subject site is within the line of the Leinster Orbital Route, previously known as the Outer Orbital Route, planned between Drogheda and Navan. Details of the feasibility study final report issued by the authority in March 2009 are on the TII website. The route is identified for protection in the current RSES for the EMR and

- included in the NTA Transport Strategy for the Greater Dublin Area 2016 2035. The recently adopted development plan for Meath states that this comprises an important infrastructural development whose delivery is supported and sets the objective of protecting the route. The submission of TII notes section 2.9 of the DoECLG guidelines which establish a requirement to protect the alignments of future national road projects. It follows that the protection of the route is an important consideration in this case.
- 7.3.15. TII states that the relationship of the subject site to the LOR may not have been assessed in the documentation and that it is especially important close to major junctions that the identified corridor be protected from development intrusion. However, the most up-to-date information on the likely future progression of this route is as set out by the National Transport Authority in the draft Greater Dublin Area Transport Strategy 2020 2042 wherein it is stated in section 13.3.5 that the LOR project will not be progressed in its existing form. Instead, it is proposed to provide online or mainly online improvements to the existing road network to cater for orbital demands along these corridors. I would stress that this document is at draft stage and that the first round of consultation only closed on 17 December 2021. Although a clear intention is signalled the project is not yet formally abandoned and the formally adopted policy and the TII submission supports the LOR.
- 7.3.16. I have examined the Orbital Route Feasibility Study Final Report March 2009 and note that 6.3 refers to the identification of a route corridor noting that in the area between Drogheda and Navan there are major constraints including cultural heritage, topography and landscape constraints. There is specific mention of several constraints to the south-west of Drogheda formed by 'the Platin cement works and associated quarries, and other industrial sites', which I assume is a reference to the existing WtE facility. No detailed drawings are provided.
- 7.3.17. Regarding the proposed development I note that the site layout incorporates a similar layout to the existing, comprising a largely built-up plot of land with a central reservation line which contains electricity and gas infrastructure. The submission of TII acknowledges the planning history of the overall site. The applicant's response is contained in the RFI document simply states that the proposed development will have no impact on the protection of a route for the LOR. Having regard to the site layout and the nature of the proposed development as well as the existing

- development, I am satisfied that the proposed development would not undermine the development plan objective. I recommend that the Board's Order reference the emerging policy context.
- 7.3.18. In conclusion I consider that the development is acceptable in terms of impacts on roads and traffic.

7.4. Air and Climate

7.4.1. Air

- 7.4.2. This section concerns the potential air quality and climate impacts associated with the proposed development and addresses observers' comments. Some further detail is contained in the EIA section of this report. The proposed development providing for an increase in the overall waste intake and potentially a higher proportion of hazardous waste and the associated traffic generated is assessed below in terms of the potential for increased air impacts, including cumulative impacts. The climate impacts are separately considered including with respect to the overall plant efficiency and the generation of hydrogen.
- 7.4.3. In terms of the potential for **operational phase air quality impacts**, this is amongst the concerns raised by third parties. As set out in the EIAR the facility results in very small ambient concentration variations over the ambient air quality standards. In the preparation of the air quality assessment the applicant has utilised the high-quality baseline information which is available at this licensed site. I am satisfied that the modelling reported in the EIAR is suitable and sufficient. I accept the applicant's submission that the existing facility operates in accordance with its licence requirements and does not give rise to significant ambient air quality impacts.
- 7.4.4. The submitted evidence in the EIAR is that the processing of additional waste at the facility as proposed will not result in significant air quality impacts. The basis for this assessment is an updated version of the AERMOD dispersion model, up-to-date data and which incorporates the building structures associated with the proposed development. The assessment for the purposes of this application is based on an earlier iteration of the modelling. Having considered the information presented and taking into account the observers comments including with respect to the nature of

- the waste intake, I find absolutely no reason to doubt the veracity of the conclusions presented by the applicant.
- 7.4.5. I note that the HSE has raised issues with respect to cumulative impacts and in response the applicant refers to section 8.7.1 of Chapter 8. The latter refers specifically to the potential for cumulative dust emissions associated with the Irish Cement Flue Dust Portland Cement Silo and that cumulative dust effects could also arise as a result of construction of the Irish Cement Alternative Fuels project. The HSE specifically refers to the total environmental loading and there is a need for this to be assessed rather than undertaking an assessment of the individual compounds in the assessment of the proposed development. I note that the concerns of the HSE were not shared by the conclusions drawn in the Chief Executive's report and that the recommended conditions incorporate standard requirements. The report of the Environment Section of Meath Council addresses each of the individual elements of the proposed development and has no objection to any of the elements. Having regard to the limited potential additional air quality effects which would be associated with the proposed development, to the permissions and licences regulating existing facilities and the proposed facilities and the assessment of baseline/background and cumulative effects, I am satisfied with the applicant's approach and the conclusions drawn.
- 7.4.6. I note the associated call for the establishment of an office by the EPA in the region.

 I do not consider that this matter is relevant to the Board's determination in this case.
- 7.4.7. On the issue of transport related emissions in both the construction and operational phases I consider that the applicant has presented sufficient information to demonstrate that the requirement for detailed assessment under DMRB does not arise in this case. Having regard to the existing traffic load and taking into account the pattern of development including the nearby sensitive receptors and the adjacent regional road, as well as the traffic volumes to be generated, I agree with the applicant that there are no likely significant air quality impacts related to the additional trips.
- 7.4.8. I conclude that the proposed development would not give rise to exceedances of air quality standards including with respect to dust, traffic emissions and licensed parameters and taking into account the cumulative impacts. The development would

meet the relevant air quality standards and on that basis it may be concluded that there would be no significant impacts on the environment and on nearby receptors.

7.4.9. **Climate**

- 7.4.10. In terms of the climate impacts the applicant's assessment presented in Chapter 9 of the EIAR includes quantification of the potential greenhouse gas emissions from the facility noting the contribution from the waste to energy facility. I have examined above the principle of expansion of the waste processing capacity of the WtE to cater in particular for additional hazardous waste. I have clearly set out above that this development is strongly supported in principle. In terms of the climate impacts I would note that the avoidance of export not only promotes Ireland's sustainability but also reduces transport related emissions. I consider that these benefits are significant. I note that the additional waste intake is shown in the EIAR to give rise to an increased contribution to the national greenhouse gas emissions, but I would again refer to the likely avoidance of such emissions occurring on continental Europe in the event of continuation of export of that waste. I also consider that this increase would not be described as significant.
- 7.4.11. With respect to the source of the waste and the observers' comments relating to emissions avoidance if waste was recovered within the region, I would refer to policy supports for an all-Ireland approach and I reiterate my opinion that the avoidance of export is hugely significant including with respect to greenhouse gas emissions avoidance.
- 7.4.12. HSE requests that the applicant promotes sustainable modes of travel to offset transport emissions. Notwithstanding that the use of hydrogen in transport is an emerging technology, I consider that this aspect of the proposed development complies with the spirit of the HSE submission. In addition, I have had regard to this issue in the consideration of the use of the proposed offices. My recommendation to restrict the nature of the office use is relevant in this respect as it aims to discourage unnecessary and unsustainable patterns of commuter traffic.
- 7.4.13. Observers have raised issues with respect to the efficiency of the facility and its position on the waste hierarchy. I have noted earlier that the facility will retain its status as a recovery facility.

- 7.4.14. In relation to the generation of hydrogen in particular and the efficiency of this aspect of the development I note the applicant's comment that there is no likelihood that the hydrogen generated would be utilised in a gas-powered electricity generator as described.
- 7.4.15. I consider that the utilisation of excess electricity for the purposes of generating hydrogen constitutes innovative practice which will contribute to the emerging technology and the growth of markets.
- 7.4.16. I conclude that it may be concluded based on the information presented that the overall climate effects would not be significant.

7.5. Landscape and visual impact

- 7.5.1. The subject site is located generally within an area of gently rolling topography between 35 m and 70 m OD. The site itself is of relatively even gradient with a high point in excess of 39 m OD at the eastern corner. In the wider area but close to the site is the M1 motorway which runs 2 km east of the site and the Platin quarry and plant. The Platin quarry site is extensive in area and the cement works contains vertical structures which are prominent visual features. The existing Carranstown WtE facility has an industrial character and a large scale and buildings largely occupy the lower parts of the site. The site has been subject of extensive screen planting which was provided as visual mitigation for the main facility. The mature planting in particular is effective in screening views from the R152 and nearby vantage points. In terms of their height and mass the significant buildings are towards the rear of the site.
- 7.5.2. I agree with the applicant's submission that the construction phase would not give rise to significant landscape in visual impacts and that the main potential sources of impact would be those resulting from the height, scale and mass of the proposed structures.
- 7.5.3. The proposed development includes some buildings which in themselves are significant in terms of height and mass, notably the ash storage building. However, the siting of the larger structures proximate to the main cluster of buildings on the site ensures minimal impact. In addition to the screening provided by existing structures, the location selected for the proposed buildings is behind the existing tree planted berms thereby ensuring screening from the regional road and nearby

- houses. There are proposals to further increase the site screening at the relevant borders, which I consider will enhance the site landscaping and improve the visual amenities of the area.
- 7.5.4. I concur with the overall conclusion that the impacts on landscape and visual amenity are unlikely to be significant given the small scale of the proposed development in the context of the existing facility and also the presence of the nearby cement works. In this context I note also that notwithstanding the proximity of the site to a number of residential receptors, the observation submitted do not indicate significant concern relating to the proposed development in this regard.
- 7.5.5. Regarding the location of the site in a landscape, which is designated under the development plan as being of 'high-value' I consider that assessment of the proposed development in this respect has to take into account the context of the Platin site and the existing WtE in this regard I do not consider that the landscape designation would be materially affected.
- 7.5.6. To conclude, I am satisfied that the proposed development is acceptable in terms of landscape and visual effects.

7.6. Flood Risk and Wastewater

- 7.6.1. For the purposes of this Planning Assessment, I consider that the only other substantive issues of relevance relate to Flood Risk Assessment and wastewater treatment.
- 7.6.2. A site-specific Flood Risk Assessment has been undertaken (Appendix 15.1/Vol.3/EIAR). The FRA identifies a risk of pluvial flooding, which is very low, and which affects only very small pockets of the site but no risk of related damage. I consider that the flood risk map for the Cruicerath Stream supports the FRA conclusion that there is no risk of fluvial damage. The groundwater level is 30m below existing ground and there is no risk of groundwater flooding. The site infrastructure includes a drainage network and an existing attenuation pond. A flow control device limits surface water discharge from the site as specified under the IE licence. The site drainage is designed to be self-cleaning and therefore prevents potential flooding relating to blockage. Having regard to all of these factors, I consider that there is no significant risk of flooding.

- 7.6.3. Concerns were raised by HSE relating to the layout of a proposed percolation area near the bottom ash storage building. Referring to the EPA Wastewater Treatment Manual for Small Communities the applicant references Table 4, which sets out recommended minimum distances to be used as a guide in order to avoid odour and nuisance. I accept the applicant's submission relating to the infrequent occupation of the relevant building. In addition, the applicant has confirmed that the detailed design will be undertaken by an appropriate specialist. I accept the applicant's proposals in relation to the arrangements for wastewater treatment at this location and in general. I consider that sufficient information has been presented by the applicant and I do not consider that there is a need for a specific planning condition.
- 7.6.4. As a follow on from the above I reference the comments of HSE relating to faecal coliforms levels recorded in groundwater. The applicant's response to further information presents the results of long-term monitoring. This shows that there was a once off and significant spike in results but that the groundwater monitoring down gradient of existing on-site facilities do not indicate any cause for concern. I accept the applicant's explanation for the origin of this event.

7.7. Other Issues

- 7.7.1. The adequacy of the community gain fund has been raised by observers who state that the amount has devalued. The relevant conditions governing the amount of the fund and the administration of the fund by the Community Liaison Committee relate to the original permission for the WtE facility. The amount payable is related to the tonnage of waste intake. In the circumstances I do not recommend any change in this respect. My recommendation below refers has taken into account the conditions of the parent permission. This would ensure that the increased intake would be reflected in the community gain fund.
- 7.7.2. Regarding the request for an oral hearing which was made by a majority of the observers, the Board decided based on my recommendation that there was no requirement for an oral hearing in this case.
- 7.7.3. I consider that a ten-year permission is acceptable having regard to the nature and scale of the proposed development.
- 7.7.4. I note the recommendation in the report of the Chief Executive of Meath County Council which sets out detailed requirements relating to the measures to be

contained in the CEMP. I consider that the detailed agreement with the planning authority on these matters is appropriate.

7.8. Conclusion

7.8.1. I conclude that the proposed development which is strongly supported by policy provisions at national and regional levels, and which would not give rise to significant land use impacts is in accordance with the proper planning and sustainable development of the area.

8.0 Environmental Impact Assessment

8.1.Introduction

- 8.1.1. The application submissions include an Environmental Impact Assessment Report entitled Site Sustainability Project Environmental Impact Assessment Report.
- 8.1.2. This section of the report comprises an assessment of the likely significant effects of the proposed development. It addresses compliance with legislation, describes and assesses the likely significant direct and indirect effects of the development against the factors set out under Article 3(1) of the EIA Directive 2014/52/EU. It considers cumulative effects and interactions and the vulnerability of the proposed development to major accidents and disasters.
- 8.1.3. Except where otherwise explicitly stated all of the statements below reflect my own conclusion which were reached following consideration of all documentation with particular reliance on the EIAR and all submissions.

8.2. Compliance with Legislation

- 8.2.1. The legislation relevant for the purpose of considering whether the information contained in the EIAR is adequate is A94 of the Planning and Development Regulations 2001, as amended, and the provisions of A5 of the EIA Directive 2014.
- 8.2.2. The EIAR is in three volumes. Volume 1 comprises the non-technical summary. Volume 2 is the EIAR (Main Text). Volume 3 comprises the appendices.

- 8.2.3. Following examination of these documents I consider that the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental factors:
 - (a) population and human health;
 - (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;
 - (c) land, soil, water, air and climate;
 - (d) material assets, cultural heritage and the landscape and equally considers the interaction between factors referred to in points (a) to (d).
- 8.2.4. In accordance with article 5 and Annex IV, the EIAR provides a description of the project comprising information on the site, design, size, characteristics and other relevant features. It also provides a description of the likely significant effects of the project on the environment and a description of the features of the project and/or measures envisaged in order to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment.
- 8.2.5. The EIAR provides a description of the evidence used to identify and assess the significant effects on the environment and the guidance which has been taken into account in its preparation. The EIAR provides an adequate description of baseline information used to identify and assess the significant effects on the environment. I consider that the documents presented are suitable and that the submitted detail of information in relation to the nature of the proposed works and the manner in which the development will be constructed and operated provides a good basis for understanding and for assessment of likely significant impacts. Any difficulties which were encountered in compiling the required information are identified.
- 8.2.6. I note that an observer states that the environmental impact procedures have been undermined including by reason that the documentation presented is insufficiently detailed and fails to assess relevant issues with respect to the principal of the development and energy efficiency. The observer's submission however primarily references the non-technical summary and appears to have relied significantly on that document and does not provide any detailed examples to support the alleged deficiencies.

- 8.2.7. Regarding the adequacy of the EIAR I consider that it is based on high-quality data and relies on and uses recognised guidance and assessment methodologies. I am satisfied that the EIAR has been prepared by competent experts (Appendix 1.2/Vol.3/EIAR). I consider that the EIAR complies with legislative requirements and is sufficiently comprehensive and is up to date.
- 8.2.8. My assessment below is based on the information provided by the applicant, including the EIAR and the submissions made in the course of the application. The response to the requested further information has also been considered. The Board's consultants have reported on the specific matter of risk of major accidents and disasters and the full report is attached to this report as Appendix 1.
- 8.2.9. I am satisfied that the information provided in the EIAR is adequate for the purposes of the Environmental Impact Assessment to be undertaken.

8.3. Alternatives

- 8.3.1. There is a requirement under the 2014 EIA Directive that an EIAR include a description of alternatives studied by the developer and an indication of the main reasons for the selected option must be given. In the submitted EIAR alternatives are addressed in Chapter 3. A do-nothing scenario is provided in each of the chapters which describe relevant environmental impacts and likely significant effects.
- 8.3.2. With respect to the selection of the site observers state that the extent to which the existing facility is well located and designed to align with current and future thrust of energy policy has not been assessed adequately including with reference to the source of waste and options for use of excess energy. I note the applicant's submissions relating to the nature of the proposed development, the planning history, the existing waste management processes and the availability of excess electricity and economic considerations. I have addressed these matters earlier under the planning assessment.
- 8.3.3. An overview of the site selection criteria considered in the EIAR is in section 3.3.4 which addresses the environmental rationale, technical criteria and infrastructure and economic criteria. I would have regard to the existing licensed facility, the capacity at the site including the existing workforce and established regulatory processes. In addition, the applicant references the fact that an extension of activities at the site provides an economy of scale that cannot be replicated at an alternative site, which

- appears to me to be reasonable. I have addressed matters related to the nature and sourcing of waste and to the options for use of excess electricity under the planning assessment. I accept the overarching conclusion set out in the EIAR that there are no reasonable alternatives to the existent Carranstown site.
- 8.3.4. An observer states that costs should not be an obstacle to relocation of the facility and this option should be assessed. It is however a fundamental element of the national policy provisions that the waste market be economically efficient. I therefore reject the observer's suggestion. With respect to the suggestion to investigate the suitability of a district heating system in Duleek this has been addressed by the applicant who considers that it is not feasible.
- 8.3.5. With respect to alternative locations within the site for the three main elements namely the tank farm, the HGU and the ash storage building, as set out in chapter 3 these were subject to an assessment of available locations within the site taking into account likely potential environmental effects. I consider that this matter has been adequately considered in the EIAR.
- 8.3.6. With respect to alternative processes these are described in section 3.4 of the EIAR. It stated in the EIAR that the use of existing processes is the optimum method to efficiently treat up to 25,000 tonnes of hazardous waste annually and that there is no reasonable alternative for hazardous waste treatment in this context. An observer states that the applicant previously described the facility as being unsuitable for hazardous wastes and states that this matter was raised in a previous case but was ignored. I have reviewed the previous Inspector's report and note that the types of waste including hazardous wastes to be accepted were outlined. The Board accepted the suitability of the facility for that purpose and the EPA licensing facilitates and regulates hazardous waste treatment. I consider that the principle of treatment of hazardous wastes at this facility has been established and I accept the applicant's submission that processes utilised in the treatment of hazardous and aqueous waste are deemed to be safe and efficient.
- 8.3.7. Regarding additional intake of 30,000 TPA pre-treatment of boiler ash and flue gas residues the only required works is the addition of two storage silos within the main process building and a small unloading area. The processes are stated to be suitable in relation to treatment of boiler ash and flue gas cleaning residues generated on

- site. I consider that no substantive case has been made to undermine this statement. Regarding flue gas residues it is noted in the EIAR that there is presently no market for aggregate which could be produced and that end of waste status would also be required, which is not presently in place.
- 8.3.8. Regarding alternatives explored for utilisation of waste stream or the resultant waste electricity the options investigated over a period of 5 to 7 years are listed in the EIAR. With the exception of hydrogen generation, the applicant states that no options provided a viable technical or economic case for further investigation. Regarding storage of waste electricity on the site the applicant states that it cannot be released back onto the electricity grid when grid restrictions are released due to constraints in the export line.
- 8.3.9. A number of observers have raised the issues relating to the use of steam in a district heating system for example and on this basis consider that the intensification of use of this site is inappropriate. Allied with this observers have made comments opposing the generation of hydrogen on the basis of inefficiency and policy. The applicant acknowledges the environmental advantages and energy efficiency associated with direct use of steam instead of its conversion into electricity. All parties would agree that there is not enough local heat demand for a district heating system. Nevertheless, I do not agree with the observers that this fact undermines any case for an intensification of use of this site. I submit that there is likely to remain a demand for electricity from this facility for the foreseeable future and I am also of the opinion that the use of excess electricity for hydrogen production is appropriate, feasible and in line with policy provisions.
- 8.3.10. As a follow up to the above conclusion I note that the applicant references the method of hydrogen production and acknowledges that the energy efficiency associated with an alkaline electrolysis unit is lower than storage solutions which are described. Nevertheless, there is a strong case for this clean non-carbon-based fuel in the context of climate change. Alkaline electrolysis is 60% efficient at converting the electricity input into a hydrogen fuel and is technically possible and feasible. I accept the applicant's submission that the selected process is reasonable and that the matter of alternatives has been sufficiently considered.

- 8.3.11. Regarding an alternative to bottom ash storage for off-site treatment the applicant states that the only alternative that could be considered is full treatment to recover remaining residual metals and produce an aggregate material. I accept the applicant submission that this would not be a reasonable alternative for the 40,000 tpa bottom ash produced in view of the space requirements and scale of investment. It appears to me to be reasonable that this activity take place at facility already established.
- 8.3.12. Regarding alternative designs consideration was given in the EIAR particularly two the aqueous waste storage tanks in terms of the type and size of tanks. These alternatives are stated to be in accordance with applicable BAT guidelines. The decision to use tall and thin tanks, which increased potential for visual impact was related to the desirability of fabrication on site and space requirements.
- 8.3.13. In terms of the principal of development of additional hazardous waste treatment at the site, it is clear that the state will continue to rely on export of aqueous waste and hazardous ash to mainland Europe. I also consider that the applicant has made a reasonable case relating to the development of the HGU to avoid energy loss. In the absence of the bottom ash storage building the applicant states that the option to export bottom ash for recovery may not be economical or possible due to reliance on third parties for storage of 3,000 tons in advance of an export shipment. I agree that the development of the ash storage building provides a safeguard in this respect.
- 8.3.14. To conclude, I consider that the EIAR provides a comprehensive account of the alternatives which were considered. I am of the opinion that the information provided not only complies with the legislative requirements but also supports some of the conclusions drawn earlier in the planning assessment section.

8.4. Public participation.

- 8.4.1. I have summarised earlier the observations received in response to this application. The submissions of observers and the HSE raise issues relating to the nature and extent of public participation, which I address below. There have also been a number of requests for an oral hearing.
- 8.4.2. Having regard to its status as a prescribed body I consider that the contribution of HSE on this topic constitutes a key issue requiring a response. The submission point is essentially that a public consultation process could not be located, and that meaningful public consultation is recommended. The legal requirements arising

- relate to the publication of notices and other matters including the presentation of the EIAR on the portal and the availability of documentation. I am satisfied that all of these requirements have been undertaken.
- 8.4.3. As set out in the EIAR the applicant's approach to public consultation extended beyond the minimum legal requirements. There was targeted consultation prior to the making of the application involving various consultations with the Indaver Community Liaison Committee as well as prescribed bodies and other interested parties such as Irish Cement and Gas Networks Ireland.
- 8.4.4. On the broader issue I note that on foot of the pre-application process the application was referred to various prescribed bodies for the purposes of eliciting specialist knowledge. The contribution of Meath County Council presented includes the specific contributions of the elected members as well as presenting the Chief Executive's Report and the individual officers' technical assessments. I note the further information from the applicant which responds to the observers comments. In the preparation of my report I have had regard to the relevant submissions relating to the views expressed on the proposed development. I am satisfied that a wide range of inputs have been received.
- 8.4.5. It is indicated in the EIAR that engagement with the local community will continue including in the form of communications described in the Communications Strategy (Appendix 5.1/EIAR). This will be particularly relevant to address any issues which arise during construction and to give prior notice of events which are more likely to impact local residents and road users. Allied to this is the proposal for a monitoring schedule which will be prepared by the Site Environmental Manager who will be responsible for initiating and reporting on any corrective action required.
- 8.4.6. In the circumstance of the proposed development involving a modification to an existing licenced facility and the nature of the proposed amendments as well as the legislative requirements relating to consultation, all of which have been met, I do not consider that there is major substance to the comments of HSE.

8.5. Environmental Impact Assessment Overview

8.5.1. The issues arising can be addressed under the following headings:

Population and Human Health

Biodiversity

Land, Soils, Geology and Hydrogeology

Hydrology

Air & Climate

Noise and Vibration

Archaeology, Architectural and Cultural Heritage

Landscape and Visual

Material Assets

Major Accidents and Disasters

Interactions, Transboundary and overall cumulative effects.

8.5.2. In considering the assessment below the Board should have regard to previous sections of this report.

8.6. Population and Human Health

8.6.1. In consideration of population and human health under the EIA section below I present an overview of the existing environment, the impacts arising and relevant mitigation. Population and human health are assessed in chapter 6 of the EIAR. The assessment relies on information presented in other chapters in relation to potential effects on population and human health arising from traffic, visual effects, natural amenity, nuisance, built and natural heritage, air and noise emissions and climate change. In determining the approach to and scope of the assessment of health impacts regard has been had to relevant guidance including Environmental Protection Agency, European Commission, World Health Organisation and Institute of Environmental Management and Assessment publications. The assessment of health protection is based on a health based standard approach. The adopted standards for air emissions and noise and vibration are set out in section 6.2.4.

Existing Environment

8.6.2. The information presented in the EIAR is that the population in the Duleek electoral division has increased faster than the county and national population increases. The age profile in the electoral division is young relative to county and state levels. The

principal potential receptors in the environs of the facility are residential homes and industrial premises including Irish Cement Platin. There are nine dwellinghouses within 200 m of the site boundary and four primary schools within 2.5km. Presently the existing facility employs 60 persons at the plant. Duleek is a secondary tourist attraction under the development plan and contains high quality built heritage and historic buildings and Duleek Heritage Trail.

Potential Impacts

- 8.6.3. Observations submitted include some comments which I consider may be described as a principled opposition to the existing waste to energy facility and its extension including the broad references to adverse health effects and impacts on agricultural activity including milk production. The cumulative impacts combined with the nearby platin facility is a further relevant theme in the observations which is relevant to the area of potential health effects, as is the specific reference to incidents at the existing facility and to black and other emissions from the stack.
- 8.6.4. For the purposes of identifying potential significant effects on human health a literature review was performed and is presented in section 6.5. This addresses a number of reviews undertaken over the last few decades and summarises the provisions of the Waste Incineration Directives, now superseded by the Industrial Emissions (IE) Directive. The basis of the air emission limits specified is to prevent, or limit as far as is practicable, negative effects on the environment and the resulting risks to human health. I consider that the literature review presented is balanced. It acknowledges areas where studies showed links between adverse health effects and incinerators, mainly attributed to the nature of those facilities. In support of its case that well-run and regulated modern facilities are not associated with adverse health effects information is presented from Public Health England in 2015, a UK Small Area Health Statistics Unit Study from 2018 and WHO.
- 8.6.5. The likely significant effects on population in the construction phase are set out in section 6.6.2 and include additional employment opportunities with up to 120 construction workers on site at peak, secondary economic benefits, potential indirect effects associated with disruption to residents and road users and potential indirect effects from air quality due to localised dust and noise from construction activities. It is considered that local residents are unlikely to be significantly disrupted due to

- traffic subject to the implementation of a robust Construction Traffic Management plan.
- 8.6.6. As described in section 6.6.2.2, construction noise and dust are considered to be the greatest potential effects on human health. Dust minimisation measures to be implemented as described in chapter 8 will ensure effects on air quality will not be significant and will be short-term in duration. Similarly, as described in the relevant chapter the residual effect of noise will be intermittent and temporary and the effects on air quality will not be significant in terms of human health subject to the mitigation measures in chapters 8 and 10. Annoyance from the temporary effects of the construction phase will be very limited and is not in itself a health effect.
- 8.6.7. In the operational phase the proposed development is stated to have no direct or indirect significant negative effects. Positive effects on the wider economic environment in the locality and nationally will benefit the population. In the operational phase the potential for impacts on human health mainly relates to potential air and noise emissions. The facility will comply with the licensed emission limit values and maximum flue gas flow rate and therefore the increased annual tonnage of waste of up to 15,000 tonnes of additional hazardous waste will not have a significant impact on air quality. The facility will continue to be in compliance with licence requirements. No significant negative effects are predicted on water quality as a result of stormwater, wastewater or fire water management and therefore no adverse effects on human health from water contamination is predicted.

Cumulative impacts

8.6.8. Cumulative effects related to other projects are considered in section 6.7. The identified projects are the planned cement silo and alternative fuels at Irish cement, the 110 kV transmission substations and a solar farm. I have reviewed the planning history and conclude that these are the main projects of relevance for the purposes of cumulative effects. Having regard to the scale and location of the planned developments and the nature of potential effects the submission in the EIAR is that the potential for significant cumulative direct or indirect effects can be excluded. I accept the assessment presented in the EIAR in relation to these projects and the reasons set out by the applicant as the basis for concluding that no significant direct

or indirect cumulative effects on population or human health are predicted during the construction or operation phases.

Mitigation

8.6.9. The EIAR sets out the construction phase mitigation measures relating to the environmental factors (traffic and transportation, air quality and noise and vibration) which might give rise to population and human health effects. The operational phase mitigation measures relating to environmental factors which might give rise to population and human health effects are set out in the relevant chapters relating to traffic and transportation, noise and vibration and major accidents and disasters. I agree with the applicant's conclusion that no further mitigation measures are warranted with respect to population and human health.

Residual Impacts

8.6.10. In the construction phase there will be short-term effects on population and human health from increased dust, noise and traffic. In the operation phase the potential for effects would mainly relate to possible noise and air emissions. The relevant standards for air pollution, noise and vibration which will be adhered to have been set taking into account the possible effects on human health. Subject to mitigation as described in the relevant chapters dealing with these environmental factors, I consider that there is no likelihood that the standards will be exceeded. As such it may be concluded there would be no significant residual effects on population and human health.

Transboundary Effects

8.6.11. There is no likelihood of transboundary effects on population and human health.

Conclusion

- 8.6.12. I have taken into account the contents of the EIAR and the submissions on file and on that basis, I am satisfied that potential effects on population and human health would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.6.13. I conclude that following mitigation there would be no significant direct, indirect, cumulative or transboundary effects on population and human health.

8.7. Biodiversity

8.7.1. In assessing the topic of biodiversity, which is reported in chapter 11 of the EIAR the information relied upon included surveys of the site carried out in September 2019 and April 2020. Separately I note the submission of an NIS and the Appropriate Assessment section of this report.

Existing Environment

- 8.7.2. The habitats on site include some immature woodland and recolonising bare ground are of low ecological value at a local level and no rare plant or mammal species were recorded during site surveys. The site drainage system includes an attenuation pond, which will not be affected by the proposed development which contains a population of smooth newt. As shown on figure 11.5 the site drainage system discharges to a seasonal drain and then to Cruicerath stream and onto the River Nanny. Nationally protected habitats in the area include Laytown Dunes / Nanny Estuary pNHA, which is an Important Bird Area. No high-impact invasive species were identified during site surveys.
- 8.7.3. Six bat boxes were installed at the site and surveys conducted in 2008 and surveys in 2012 and 2015 indicated low usage in four boxes, the proposed development areas deemed to be of low to negligible value for bats. The Cruicerath stream does not support fish and would therefore be of negligible value for otter. Otter may occasionally forage for Common Frog or Smooth Newt in pond habitat on site. The site is home to a stable population of Irish hares.
- 8.7.4. The majority of birds using the proposed works area are common in the area and overall, the site is of local value for terrestrial bird species.
- 8.7.5. Regarding species of note which may be present Kingfisher and Grey Wagtail, could potentially use the attenuation pond and Herring Gull. No wading birds were recorded on or near the site and there is no suitable habitat within the site. There is a rookery in ash trees along the R152 close to the site entrance and other breeding birds were recorded in hedgerow habitat outside the site boundary.

Potential Impacts

8.7.6. The extension of screening berms along the southern boundary of the site will impact on a small portion of immature woodland and broadleaf woodland growing on the

- existing berm. Some lower value habitat types such as ornamental shrub and recolonising bare ground within the site will also be impacted. Indirect effects due to dust would not be significant having regard to mitigation measures and the low value of the habitats. It can be concluded that there would be no significant direct or indirect impacts on habitats terrestrial including from spread of invasive species.
- 8.7.7. There is potential for impacts on water quality and aquatic ecology from suspended solids or inadvertent spillages during construction. The risk is low as ditches within and adjacent the site are often dry. Furthermore, the Cruicerath Stream, which is also seasonal is 130 m from the site boundary. The risks in the local water quality and downstream receptors during operation is deemed to be imperceptible as the existing surface water system, which is currently functioning effectively and preventing significant water quality impacts, has the capacity to deal with any surface water from the expanded operation.
- 8.7.8. As the air quality modelling indicates that the facility will continue to be in compliance with its licence requirements and no significant impacts to ambient air quality are predicted, the effect on fauna will be imperceptible.
- 8.7.9. Habitats which will be directly affected may form part of territories of various mammals including Irish Hare resulting in a slight, short-term impact on mammal populations. No potential bat roosting sites are within the works area and the native hedgerow along external boundaries is to be retained and no significant changes in lighting levels proposed and the overall impact on feeding habitat for bats is not significant. Mammals present would be expected to be habituated to ongoing disturbance within the facility. The impact on otter, if they utilise the site, would be not significant and in the long term would be imperceptible.
- 8.7.10. There will be some loss of seminatural habitats used by a range of common bird species. During construction there will be increased noise and disturbance which will impact terrestrial birds, which is considered to be a short-term not significant impact. The use of the pond as a feeding habitat for Kingfisher is deemed to be improbable and the pond is outside the works area.
- 8.7.11. If wading birds were to use agricultural lands in the vicinity of the proposed development site these birds would be already habituated to noise and disturbance

from the existing facilities and should continue to use these fields during and after construction.

Mitigation

- 8.7.12. A range of mitigation measures is proposed to ensure protection of habitats during construction including fencing off and earmarking habitats, providing for natural regeneration where habitats are damaged or disturbed, protection of tree root systems and replanting of disturbed wood lands.
- 8.7.13. Water quality and surface water management measures involve mitigation and monitoring to minimise effects on aquatic habitats. The requirement relating to surface water discharge which will continue to be monitored is that it not change from the current situation. A CEMP including emergency response procedures will be maintained and the document is provided in appendix 5.1. An incident response plan is included as part of the CEMP. Provisions relating to the prevention of spread of non-native invasive species as recommended by the Heritage Officer of Meath County Council can be addressed by condition.
- 8.7.14. The project design incorporates detailed controls to deal with sanitary services, prevention of accidents and spillages, unloading of aqueous liquid wastes and management of fire water and transport of bottom ash and flue gas residues.
- 8.7.15. Measures to ensure noise and vibration effects are mitigated will be undertaken.

 Adherence to legal requirements relating to removal of vegetation in the breeding season will be undertaken. I recommend that this be reinforced by condition having regard to the recommendation of the Heritage Officer of Meath County Council.

Cumulative impacts

As reported earlier I agree with the applicant's assessment of cumulative effects in terms of the list of projects identified. In the event of concurrent construction of any of the significant permitted developments potential cumulative effects will not be significant given the distances involved and the absence of significant emissions to air or water.

Residual Impacts

The residual effects are as set out in table 11.12. No adverse effect on designated sites or their conservation objectives will occur and effects on habitats will be on

those that are primarily of low value. The residual effects predicted include indirect impacts on water quality and aquatic ecology which will be localised, short-term and not significant during construction and imperceptible in the long term. Such effects could impact otter, Kingfisher, other birds and mammals in the unlikely event that they would be present during construction in particular.

Transboundary

8.7.16. There is no likelihood of any significant transboundary effects on biodiversity.

Conclusion

- 8.7.17. I have taken into account the contents of the EIAR and the submissions on file, particularly the submission of NPWS and I am satisfied that potential effects on biodiversity would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.7.18. I am satisfied that the proposed development would not have any significant direct, indirect, cumulative or transboundary effects on biodiversity.

8.8. Land, Soils, Geology and Hydrogeology

8.8.1. These environmental topics are addressed in Chapter 14 of the EIAR. In accordance with IGI guidance a Conceptual Site Model has been prepared as the basis for assessment of likely significant effects (Section 14.3.4/Vol.1/EIAR and Figures 14.8 and 14.9 Appendix 15/Vol.2/EIAR). The baseline environment was assessed with site-specific investigations including boreholes and geophysical investigation and a review of previous studies and data including information from nearby Platin.

Existing Environment

8.8.2. The site overlies boulder clay where there is potential for sand/gravel lenses. This overburden overlays are limestone bedrock and depth to bedrock across the site varies from 10 m to 15 m bgl. Water levels are over 30 m bgl and groundwater flow direction is to the north-west towards Platin. The site is characterised as a manmade dynamic hydrogeological environment with nearby quarrying activities below the water table. Features of geological and hydrogeological importance are the bedrock (due to aggregate potential) and the aquifer (regionally important with multiple well fields including Kiltrough water supply). The groundwater source

protection zone for Kiltrough PWS does not overlap with the PDS. There are two production wells within the site with a sustainable yield of 600m3/day and current abstraction of 216m3/day. The site overlies Bettystown groundwater body the status of which under the Water Framework Directive is poor due to over abstraction - abstraction from Platin quarry on average is stated to be 17,500m3/day. Groundwater quality results from three on-site monitoring boreholes show total coliforms and faecal coliforms present in the majority of samples.

8.8.3. No sites of geological interest or karst features are relevant. There are no groundwater dependent habitats or other ecological areas with direct pathways to the PDS. There is no evidence of soil contamination within the PDS.

Potential Impacts

- 8.8.4. The proposed development will involve works which are relevant to land and soil including topsoil stripping, regrading and placing of fill and construction of earth retaining berms and the creation of additional hard surface.
- 8.8.5. The potential significant impacts on soils, geology and hydrogeology in the construction phase relate to potential minor local permanent change to aquifer vulnerability and potential localised contamination of groundwater in the event of accidental spillages and leaks. The base of excavation would be up to 2m bgl and excavation of bedrock or dewatering is anticipated.
- 8.8.6. The potential impacts on soils, geology and hydrogeology in the operational phase are stated to be unchanged from the existing situation and comprise a risk of accidental spillage of potentially polluting substances. Aqueous wastes unloading areas and the tank farm will be within concrete containment bunds. Other new paved areas to be developed will have a contained drainage system and surface drainage will be released when there is confirmation that there is no contamination. The water demand for operation of the HGU will be approximately 25% of the existing abstraction from the PDS and is negligible in comparison with the abstractions in the region. HSE has raised issues relating to the operation of wastewater treatment facilities, which I have considered under the planning assessment section above and concluded that matters can be addressed by condition.

Mitigation

- 8.8.7. The relevant construction phase mitigation measures include regulatory compliance with the requirements of statutory bodies and completion of the construction in accordance with the CEMP. A contingency plan for pollution emergencies will be developed. Implementation of the CEMP will be monitored.
- 8.8.8. Mitigation measures relating to excavation works, stormwater and foul water management, materials storage, site hygiene, waste management and monitoring are described in summary in section 14.7.1 (Vol. 1/EIAR) I would describe these as standard measures. I note the use of geotextile lining in soak pits and the monitoring measures which include monitoring of weather forecasts to inform programming of earthworks and stockpiling. I have referred earlier to the temporary arrangements for foul effluent. There is stated to be no likelihood of encountering contaminated lands.
- 8.8.9. In the operation phase the continued monitoring of groundwater quality as part of the EPA licence is proposed.

Cumulative

- 8.8.10. I have reviewed the permitted projects in the vicinity in terms of the potential for cumulative effects on land, soils, geology and hydrogeology.
- 8.8.11. There is no significant cumulative loss of overburden having regard to the location of the development within the PDS, which has already been developed as an industrial facility.
- 8.8.12. Subject to my recommendation relating to the detail of the proposed wastewater treatment system, I consider that the impact on the bedrock aquifer in combination with existing and planned development is not significant.
- 8.8.13. No significant cumulative effect on groundwater abstraction is anticipated as the additional abstraction associated with the HGU is very small.

Transboundary Effects

8.8.14. No transboundary effects are predicted.

Residual Impacts

8.8.15. Subject to the implementation of the mitigation measures I consider that there will be no significant residual effects on land, soils, geology and hydrogeology.

Conclusion

- 8.8.16. I have taken into account the contents of the EIAR and the submissions on file and on that basis I am satisfied that potential effects on land, soils, geology and hydrogeology would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.8.17. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on land, soils, geology and hydrogeology.

8.9. Hydrology

8.9.1. This topic concerns the potential effects on water quality, drainage and flooding. The topic is addressed in Chapter 15 of the EIAR. The information relied upon included a range of listed site investigations and previous studies and the Flood Risk Assessment report (Appendix 15.1/Vol.3/EIAR). I have separately addressed under the Planning Assessment section of this report matters relating to groundwater impacts and flood risk.

Existing Environment

- 8.9.2. The site falls within the Nanny-Devlin catchment and the Nanny is 2km south of the site. The Cruicerath Stream flows approximately 200 m to the west of the site and the Platin Stream approximately 500 m to the east. The river water quality status for the nanny is poor to moderate and the water body is 'At Risk' of not achieving good status. The key elements of the on-site surface water drainage collection include an attenuation pond of volume 2,887m³, which is significantly in excess of the volume required to serve the existing development for a 1 in 100-year storm event. The site discharges to this feature following collection and monitoring. The monitored outfall point from the pond is to an external drainage ditch and onto the Cruicerath Stream. If water quality does not meet required standards at the monitoring points it is not passed onwards.
- 8.9.3. The surface water monitoring is under the EPA licence and the stormwater system is stated to be fully in compliance with the licence requirements. No observer has made any comments to the contrary.

8.9.4. The Flood Risk Assessment indicates that the risk of flooding at the site is minimal or non-existent.

Potential Impacts

- 8.9.5. The potential for adverse water quality effects arises from spillages of substances utilised as part of the construction and from excessive siltation entering the watercourse. The construction phase includes elements which could temporarily alter the water quality.
- 8.9.6. As set out in the Planning Assessment above I agree with the applicant's conclusion that the proposed development will not increase flood risk during operation. In the operation phase there would be increased hardstanding areas and new drainage infrastructure in the form of an attenuation tank under a concrete slab area will be required to deal with a particular site constraint regarding levels.
- 8.9.7. HSE has raised issues relating to the duration of storage of water in the new attenuation tank on the disposal route and also to the frequency of diversions of stormwater in the existing system. Regarding the frequency of diversions of stormwater in the existing system, I note that this is subject of the IE licence and do not consider that this detail of information is necessary for this planning application. The applicant has clarified that the tank drainage will be pumped to the existing attenuation pond which has sufficient capacity. I consider that this clarifies the matter raised.
- 8.9.8. The Environment Section of Meath County Council has raised more extensive matters relating to the surface water calculations for the site drainage system. I recommend the attachment of the Board's standard condition in this respect which would allow for any required upsizing to be provided if necessary.
- 8.9.9. The design of the proposed development includes provision to retain fire water, if required, within the bunker, within the fire water retention tank or within the tank farm prior to removal of site <u>or</u> treatment in the furnace. Based on the assessment, it may be concluded that there are no potential hydrological impacts associated with fire water. However, I note the recommendation to review this matter, which I consider is reasonable and which can be subject of agreement with the planning authority.

Mitigation

- 8.9.10. Mitigation measures presented in the EIAR address the potential construction phase surface water quality effects. The primary construction phase surface water management measure will be to facilitate infiltration to ground by way of silt traps and managed soak ways. Separate measures are proposed for areas where fuel may be stored including paving and bunding. I consider that the proposed measures are sufficiently described including in section 5.6.3 of chapter 5 and in the context of the soils and geology. I consider that the proposals are adequate. Further measures are proposed when working adjacent to or in the vicinity of ditches or streams. Surface water run-off from the construction works area, where permitted, will be monitored as described.
- 8.9.11. The primary plans relevant all aspects of construction include the CEMP, which is a live document, and which incorporates an Incident Response Plan. These provide for preventative and corrective measures and are aided by a monitoring schedule.
- 8.9.12. I am satisfied that the mitigation measures set out are appropriate and sufficient to address the potential impacts identified.
- 8.9.13. Relating to the operational phase the applicant's proposal is to rely on the existing water monitoring. The applicant also notes that under the IE licence surface water monitoring which is carried out will continue. I accept the applicant's conclusion that no additional mitigation measures are required for the operational phase.

Cumulative

- 8.9.14. The construction of the proposed development could give rise to cumulative effects with nearby developments and the planned and permitted developments in the vicinity of the facility are described. I accept the nature of the assessment undertaken the general trust of which includes that the nearby developments have all been assessed as resulting in significant or imperceptible hydrological effects in the construction and operation phases and for this reason there would be no cumulative impact. I am satisfied that there would be no likely significant cumulative hydrological effects even in the event of a temporal overlap in construction. I am also satisfied that there is no potential for significant cumulative hydrological effects including related to flood risk in the operation phase.
- 8.9.15. No significant cumulative effects on water and hydrology are envisaged in the construction, operation or decommissioning phases.

Transboundary Effects

8.9.16. No transboundary effects are relevant to surface water.

Residual Impacts

8.9.17. No significant residual effects on water and hydrology are envisaged in the construction, operation or decommissioning phases.

Conclusion

- 8.9.18. I have taken into account the contents of the EIAR and the submissions on file and on that basis, I am satisfied that potential effects on hydrology would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.9.19. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on population or hydrology.

8.10. Air and Climate

8.10.1. The environmental topic of air is addressed in Chapter 8 and climate is in chapter 9 of the EIAR. I consider that the assessment utilises recognised methodology and assesses the effects relative to standard air quality criteria and that the relevant climate issues are suitably addressed.

Existing Environment

- 8.10.2. Local air quality is assessed based on the location of the site in Zone D noting that it is directly on the boundary of Zone C, which has been factored into the assessment. The baseline air quality has been assessed as reported in section 8.3.2 following a review of EPA data and baseline monitoring survey information. Monitoring surveys have found that levels of all pollutants, NO2, SO2, PM 10, PM 2.5, HCl, HF, PCDD/PCDFs, PAHs, Hg, Cd, Tl and heavy metals were well below the relevant limits for the protection of human health. It is noted in addition that the continuous, quarterly or biannual monitoring under the licence requirements for the facility ensures that pollutant concentrations remain in compliance with the limits and do not add significantly to concentrations in the ambient environment.
- 8.10.3. Regarding climate the current predictions are that Ireland will exceed its greenhouse gas emissions reduction targets for certain sectors including electricity. At the site

level the calculation of the net contribution to greenhouse gas emissions of the proposed development has been calculated and compared against 2020 targets. The existing facility recovers thermal energy which is converted into electrical output and is available to the National Grid. From time to time (and increasingly) there is no market for this electricity and the intention is to utilise spare electricity for the purposes of generating hydrogen. The assessment undertaken takes into account that the electricity generated at the facility would be likely to displace alternative generation based on gas.

Potential Impacts

- 8.10.4. The EIAR reports potential air quality impacts related to construction dust emissions, construction and operational phase traffic emissions and the increase in the amount of hazardous waste accepted from a maximum permitted 10,000 TPA to a maximum of 25,000 TPA. The proposed development does not require any significant changes to the processes at the facility or any changes to the licensed parameters. The submission of the EPA notes the review of the licence may be needed. The applicant submission is that the facility will continue to operate within its licence requirements.
- 8.10.5. Construction phase dust emissions may give rise to potential nuisance dust. There are a small number of sensitive receptors within 50 m of the site boundary where the majority of dust deposition would occur. The change in traffic levels is not of significant magnitude to require an air quality assessment under the screening criteria which are described in section 8.2.3.2. Traffic-related air quality impacts during construction would be short-term and imperceptible.
- 8.10.6. Operational phase air emissions from the facility are addressed in section 8.5.3. The majority of the additional waste intake will be aqueous wastes. The treatment of these wastes is and will continue to be regulated by licensed emission limit values and maximum flue gas flow rate and there will not be a significant impact to the ambient air quality according to the applicant. To support this statement the applicant refers to the detailed modelling undertaken as part of the original application for the facility and it's revision to incorporate the proposed development. I consider that the applicant has demonstrated the suitability of the selected model and note the incorporation of measures to address building downwash (Appendix 8.1/Vol.3/EIAR). As summarised in table 8.6 for each of the relevant compounds the predicted

- environmental concentration at ground level relevant to the proposed development would give rise to very low variations when considered as a percentage of the ambient limit and as compared with the original 2009 modelling undertaken.
- 8.10.7. The potential climate impacts of the proposed development relate to traffic emissions, the increase in amount of waste and the development of the hydrogen generation unit.
- 8.10.8. The potential construction phase vehicles and generators may give rise to CO₂ and NO₂ emissions which are unlikely to be a significant source of pollutants and based on IAQM guidance do not require a detailed assessment and would not be significant in the context of the national greenhouse gas emissions. The increased road traffic in the operational period is not of sufficient magnitude to warrant a detailed assessment as per DMRB screening criteria and are long-term, negative and imperceptible. I accept these conclusions. I note in addition the avoidance of emissions due to the reduction in export of hazardous waste.
- 8.10.9. The operational phase greenhouse gas emissions related to incineration activities would be the dominant source of CO₂ and NO₂ emissions. There is potential for the emissions to increase with the increased tonnage of hazardous waste accepted at the facility but the volume flow rates and emission concentrations have been modelled to remain unchanged and to be in compliance with the licensed limits. The assessment presented in table 9.3 and table 9.4 and section 9.5.3 is that the increase in annual waste throughput to 250,000 TPA will result in an increase of 0.03% of Ireland's 2020 greenhouse gas emissions target. The development of the HGU is assessed as offsetting an equivalent amount of 0.003% of the national 2020 target.
- 8.10.10. The generation of hydrogen will aid in the goal of decarbonisation of the transport sector (or possibly the heating sector). Curtailment at the existing facility in 2021 was 1157 hours and has steadily increased from 91 hours in 2013.

Mitigation

8.10.11. Dust deposition measures will be undertaken throughout the development and are presented in the EIAR and CEMP (Appendix 5.1/V2). The measures presented in the CEMP include standard best practice to minimise the generation of dust and suppress and control dust.

8.10.12. There are no significant air or climate impacts and hence no requirement for mitigation.

Cumulative

8.10.13. The construction of the proposed development could give rise to cumulative effects on air quality and climate with nearby developments and the planned and permitted developments in the vicinity of the facility are described in section 8.7 (air) and 9.7 (climate). I accept the nature of the assessment undertaken the general trust of which includes that the nearby developments have all been assessed as resulting in insignificant or imperceptible air quality and climate effects in the operation and for this reason there would be no cumulative impact. I am satisfied that there would be no likely significant cumulative construction stage dust emissions even in the event of a temporal overlap in construction.

Residual Impacts

- 8.10.14. There will be no adverse residual effects related to elevated air emissions during construction or operation. There would be no breaches of the air quality standards. The impact of the proposed development on air quality is assessed in the EIAR as imperceptible. I agree with this conclusion, which I consider is supported by suitable assessment based on accepted methodologies and utilising high-quality baseline information.
- 8.10.15. The development will result in a permanent but not significant adverse impact on climate as a result of the additional contribution of the facility to the national emission of greenhouse gases. There are positive but not significant residual impacts related to the avoidance of generation of transport emissions in the export of hazardous waste and by the utilisation of electricity to produce hydrogen. The proposed HGU however is relatively innovative at this time and would serve as a model for the transition to a low carbon economy and is significant in this respect.

Transboundary Effects

8.10.16. No significant adverse air or quality transboundary effects are predicted.

Conclusion

8.10.17. I have taken into account the contents of the EIAR and the submissions on file and on that basis I am satisfied that potential effects on air quality and climate would

be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.

- 8.10.18. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on air quality and climate.
- 8.10.19. I conclude that following mitigation the significant effects on Air and Climate are as described below.

Significant construction phase impacts which can be mitigated by measures to minimise air emissions as set out in the EIAR and subject to implementation of a Construction Environmental Management Plan.

Positive impacts on climate from the use of electricity generated on site for the production of hydrogen, which will assist in the transition to a low carbon circular economy.

8.11. Noise and vibration

8.11.1. The assessment of noise and vibration follows the requirements of the EPA Draft EIA Guidance and references other approved guidance for the purposes of quantifying of impacts and consideration of the construction phase (BS 5228-1, IEMA, TII and DMRB). The assessment follows a review of noise monitoring data from annual noise monitoring surveys. Additional monitoring at the closest noise sensitive locations was undertaken.

Existing Environment

- 8.11.2. Operations are largely contained within the existing WtE building and the noise contribution from the existing site is described as relatively low. There are nine residential locations within 200 m of the PDS and one of these is 20 m to the southeast of the site boundary.
- 8.11.3. The existing facility operates on a 24/7 basis with site traffic restricted to daytime hours. Under the IE licence the noise emission limits for the daytime period is 55dBLaeq (30 minutes) and 50 and 45 dBLaeq (30 minutes) for evening and night.

- 8.11.4. The annual noise monitoring results for 2019 presented in table 10.3 (Vol 2/EIAR) indicate exceedances of the specified limits at noise receptors to the south and east (close to the R152) but not at the monitoring point adjacent the existing site attenuation pond. The latter location is stated to be influenced by the plant activities and the other three are heavily influenced by road traffic related noise. As reported in section 10.3.3 the LA90 parameter for night-time is considered to reflect more accurately the specific noise contribution from the facility. On that basis the applicant's position as represented in chapter 15 is that use of the LA90 parameter representing the steady background noise levels confirms that the facilities operate within its licence limits for all survey locations. The applicant acknowledges that activities from the existing facility are audible at low level during quieter night-time and evening periods during lulls in road traffic particularly.
- 8.11.5. The licence does not specify operational vibration limits.

Potential Impacts

- 8.11.6. The highest potential noise and vibration impacts are associated with site clearance, demolition, excavation and construction works, which have the potential to generate high levels of noise at the nearest sensitive receptors. Construction traffic to and from the site is also identified. Vibration impacts will be limited to ground excavation and building foundation works.
- 8.11.7. The assessment of construction noise as presented in section 10.5.5 (Vol 2/EIAR) is based on an estimated schedule of 16 months (phase 1) and 12 months (phase 2). Utilising the methodology set out in BS 5228 1 typical noise levels for construction related to the proposed development and the impact on the nearest noise sensitive locations are described. There is potential for significant construction phase noise which has been modelled for the worst-case scenario for the main construction activities and taking into account attenuation and reflection effects and the periods of operation of the plant. The nearest noise sensitive locations include houses as close as 30 m from the works, which will be affected by noise associated with berm reshaping. The modelling undertaken which assumes simultaneous operation of all plant is described as a highly worst-case scenario and the calculated noise levels at 200 m and 90 m are presented and are well within the construction noise limit of 70dBLAeq during daytime periods.

- 8.11.8. Peak construction phase traffic flows will occur in phase 1 and an additional 100 HGV movements per day as well as 86 staff vehicle movements are predicted. The modelling undertaken predicts an increase of no more than 0.3dB.
- 8.11.9. Operational noise sources of significance will derive from use of equipment to serve the tank farm and new buildings, vehicle movements within the site and to and from the site. The noise sources will include pumping at the tank farm, a fan at the bottom ash storage building and noise from the HGU. To assess potential operational phase noise impacts at 3D noise model of the facility was developed. The package utilised takes account of various factors which affect the propagation of sound and the nature of the modelling main sources selected as inputs are described in section 10.5.4 (Vol.2/EIAR). In terms of the operation of the facility including the new components a worst-case scenario is taken, assuming for instance continuous operation and maximum loading and unloading by HGVs.
- 8.11.10. The modelled results for operational phase noise from new sources are presented in table 10.14 and the combined noise levels are presented in table 10.15. All of the results are shown to be within the daytime limit values set by the existing licence based on use of the LA90 figures for the baseline information.
- 8.11.11. Regarding the additional traffic on the surrounding road network, its contribution to noise and vibration is assessed as being imperceptible to not significant, with resulting increases in noise levels in the order of 0.1dB.
- 8.11.12. Construction phase vibration will be minimal as there is a minimal level of intrusive work required. There will be some parts of the site where foundations will need to be piled. The tank farm foundations will be constructed using augured piles which generate the lowest levels of vibration and this phase will take place for approximately three weeks. Taking into account information from BS 5228 -2 it is concluded that the range of vibrations are below a level which would cause any disturbance to occupants of the nearest off-site sensitive buildings. Vibration during the construction phase is not expected to pose any difficulties in terms of building damage or human perception and any impacts would be of imperceptible significance.
- 8.11.13. There are no anticipated operational vibration impacts.

Mitigation

- 8.11.14. Best practice noise and vibration abatement measures will be undertaken to comply with the relevant recommendations of BS 5228. This commitment is made by the applicant notwithstanding that the criteria for noise and vibration during construction are likely to be met. As such, I consider it reasonable to conclude that the EIAR measures will be highly effective in preventing significant noise or vibration impacts on nearby residences and their occupants. The additional measures which are described referred to selection, use and maintenance of plant and use of attenuators and acoustic enclosures. Limiting hours of work, liaison with the public and noise monitoring are further measures. All of these are set out in the environmental management strategy which will be adopted and implemented, and which is presented in summary in the CEMP. The CEMP will be finalised by the contractor following undertaking of construction noise predictions and design of suitable noise control measures.
- 8.11.15. The key operational phase mitigations for noise include closure of the roller shutter doors of the ash storage building, switching off of engines and best practice measures relating to the specification of new items of plant, the siting of new plant and their operation and the use of acoustic attenuators and enclosures. Under the terms of the licence annual noise monitoring will be undertaken and results submitted to the EPA for review.

Cumulative

8.11.16. I note and accept the statement to the effect that a review of projects listed for potential cumulative impacts leads to a conclusion that none of the proposed developments are close enough or include any significant noise sources to result in cumulative noise impact. This conclusion is also valid in relation to vibration.

Transboundary Effects

8.11.17. No transboundary noise or vibration effects will result.

Residual Impacts

8.11.18. There will be temporary noise effects at residences near the PDS, which will be of short duration and which will not exceed the adopted construction noise limits which are based on relevant guidance. There will be no perceptible level of vibration at the nearest sensitive locations.

- 8.11.19. The operation of the development will result in a slight to moderate negative effect at the closest receptor but will remain within the EPA limits.
- 8.11.20. There are no residual noise or vibration effects in the operational phase.

Conclusion

- 8.11.21. I have taken into account the contents of the EIAR and the submissions on file and on that basis I am satisfied that potential effects on noise and vibration would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.11.22. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on noise and vibration.
- 8.11.23. I conclude that following mitigation the significant effects on Noise and Vibration are as described below.
 - Construction phase noise impacts which can be mitigated by measures set out in the EIAR and subject to implementation of a Construction Environmental Management Plan.

8.12. Archaeology, Architectural and Cultural Heritage

8.12.1. These environmental topics are assessed in Chapter 12 of the EIAR. It reports on the full suite of architectural, archaeological and cultural heritage resources in the area and assesses the likely significant impacts. The study is based on accepted methodology and the desktop study was supplemented by field surveys.

Existing Environment

- 8.12.2. There are no RMP sites within the PDS and there are no protected structures or buildings, or gardens listed on the NIAH within the PDS or within the 1.5 km study area. The closest RMPs are 150 m or more to the south-east and include a ring fort and other enclosures. Previous archaeological investigations in 2009 did result in identification of five features of archaeological potential within the site.
- 8.12.3. The site of the main development areas includes lands which have been previously subject to archaeological monitoring in 2009. Only at the location of the proposed

office rebuild area and HGU were any archaeological features previously identified – this was a single pit of late Neolithic date which was fully resolved by excavation.

Potential Impacts

- 8.12.4. The majority of works will be on previously developed land but some are on undisturbed land. The proposed development has the potential for archaeological effects in the context of the requirement for ground disturbance and site preparation. The 2009 archaeological investigations at the site over a period of five months identified only the single feature referred to above. The author noted three areas which would require further on-site archaeological supervision if they were to be disturbed by future development. These areas include land under the high-voltage power line and under the berms and limited sections of these areas will be impacted by the proposed development as described in section 12.5.1 (Vol.2/EIAR). The works within the powerline corridor comprises an area of only 50 m x 2 m width but is close to the previously encountered pit feature. Within the area under the berms where the proposed ash storage building and concrete yard will be developed, the majority of this area has been subject of previous monitoring and no features were identified. At both locations there is a possibility that hitherto unknown subsurface archaeological material will be uncovered.
- 8.12.5. I agree with the EIAR conclusion that there would be no significant visual effects including with respect to the World Heritage Site Bru na Boinne. In this respect I note that the proposed development does not include any structures at the height of the 79 m stack which is already present on the site and that the matter of air emissions and its visibility has been previously determined to be insignificant. It follows from my assessment of the air quality impacts culminating in a conclusion that there would be no significant change in the emissions that the proposed development would not result in any change in this respect. These comments are relevant also to other features in the area including the Battle of the Boyne site and the ecclesiastical centre of Duleek.

Mitigation

8.12.6. Having regard to the above I agree that there is a requirement for construction phase archaeological monitoring as described in section 12.6 (Vol. 2/EIAR). This includes the possibility of preservation in situ of any archaeological material covered and

relocation of the element of the proposed development on the area of archaeological sensitivity. In the context of the location of the proposed development within a major facility I am satisfied that there would be no significant planning consequences from such mitigation. Preservation in situ would be best practice and I support the mitigation measures proposed.

Cumulative Effects

8.12.7. I note that the EIAR concludes that the combination of various projects may have a cumulative effect on the archaeological landscape in the vicinity.

Transboundary Effects

8.12.8. There are no transboundary effects.

Residual Impacts

8.12.9. The applicant concludes that with the implementation of archaeological mitigation measures no significant residual effects on archaeological, architectural and cultural heritage is predicted. I agree with this conclusion.

Conclusion

- 8.12.10. I have taken into account the contents of the EIAR and the submissions on file and on that basis, I am satisfied that potential effects on archaeological, architectural and cultural heritage would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.12.11. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on archaeological, architectural and cultural heritage.

8.13. Landscape and Visual

8.13.1. A Landscape and Visual Impact Assessment is incorporated in Chapter 13 (Vol.2/EIAR) as supplemented by photomontages presented in Appendix 13.1 (Vol.3/EIAR).

Existing Environment

8.13.2. The receiving environment includes the existing facility on the site, which is located in an area which includes major infrastructure including roads and railway and major facility at platin. In the immediate vicinity the surrounding lands are generally rural and agricultural lands predominate. Existing berms and buildings cover much of the site and screen views. Extensive screen planting carried out in and around the facility has matured and provides an effective partial screening including from the regional road. Views listed in the development plan include a view 4 km from the site which includes a view to the existing plant. The landscape is designated as being of high value.

Potential impacts

- 8.13.3. The focus in the EIAR is on views on visual amenity in the vicinity of the PDS. I consider that this is appropriate. Regarding the World Heritage site, I consider that there are no potential impacts. I note the listed view to the west and given the separation distance of 4 km and the view to the PDS in the context of Platin as well as the nature of the proposed development I accept the conclusion in the EIAR that the principal views potentially yielding visual impacts are from the regional road. An additional viewpoint is stated to have been included at the request of a local resident.
- 8.13.4. I accept the accuracy of the photomontages and the suitability of the selected 5 no. viewpoints. I agree with the applicant's submission that the construction phase would not give rise to significant landscape in visual impacts and that the main potential sources of impact would be those resulting from the height, scale and mass of the proposed structures.
- 8.13.5. Regarding listed view number 66 which is essentially the same as the view under the updated development plan, this is noted as including the existing WtE plant, I note and agree with the comment in the EIAR that this view is already very compromised by industry and urbanisation. In the context of the existing buildings, I accept the applicant submission that there would be no perceptible impact on this view.
- 8.13.6. Regarding the location of the site in a landscape, which is designated under the development plan as being of 'high-value' I consider that assessment of the proposed development in this respect has to take into account the context of the Platin site and the existing WtE in this regard I do not consider that the landscape designation would be materially affected.

- 8.13.7. In terms of the height, scale and location of the proposed development I consider that the most significant structures in terms of potential impacts are the tank farm, the ash storage building and the HGU, which are 24 m, 14 m and 11 m in height.
- 8.13.8. In terms of the potential impacts of significance I consider:
 - Significant impacts are restricted to the operational phase construction phase impacts would not be deemed to be significant.
 - Apart from the tank farm and some of the smaller elements of the proposed development, the elements including the proposed HGU, and the ash storage building are of standard industrial appearance, are clad in Kingspan and similar materials and are of a scale, massing and height which will ensure that they can be assimilated into the existing complex of structures.
 - The location of the proposed tank farm in the north-west of the site ensures
 that this 24 m high element of the development is screened by the existing
 facility and is not visible from the regional road or any sensitive receptors.

I concur with the overall conclusion that the impacts on landscape and visual amenity are unlikely to be significant given the small scale of the proposed development in the context of the existing facility and also the presence of the nearby cement works. In this context I note also that notwithstanding the proximity of the site to a number of residential receptors, the observations submitted do not indicate significant concern relating to the proposed development in this regard.

Mitigation

- 8.13.9. I consider that the significant mitigation measures described in the EIS include:
 - The consideration of the most appropriate locations for the larger structures in order to minimise potential visual impacts.
 - The proposed extension in length and height of planted berms to further assist screening from identified key viewpoints.
 - The adoption of external finishes to match the existing facility where possible.
- 8.13.10. The mitigation measures for the construction phase include measures to prevent dirt and to maintain a tidy site. The operational phase measures described

are effectively the in-built design measures. I consider that the design detail in the landscaping will reduce any visual impact.

Cumulative

8.13.11. Cumulative effects are considered in the EIAR and I agree with the conclusion presented that there is no potential for significant negative direct or indirect impacts. I consider that this conclusion is reasonable given the nature scale and location of the proposed development and the landscape mitigation measures which are part of the development as well as the separation of the PDS from other projects.

Transboundary Effects

8.13.12. There are no transboundary landscape or visual effects.

Residual Impacts

8.13.13. The residual impacts are described in section 13.8 (Vol.2/EIAR). There are no residual landscape effects as the development will effectively not be visible from the public realm and will not change the perceivable landscape. Regarding the visual impact on the key viewpoint selected the proposed development will in most cases be screened behind intervening built elements, landforms or existing screen planting. Where the development would not be screened only a very small portion of the overall development would be visible. I agree with the conclusion drawn that the impacts from the selected locations will be imperceptible or not significant on the basis of the significance criteria set down in the draft EPA EIA guidance.

Conclusion

- 8.13.14. I have taken into account the contents of the EIAR and the submissions on file and on that basis, I am satisfied that potential effects on landscape and visual resources would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.13.15. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on landscape and visual resources.

8.14. Material Assets

8.14.1. Based on the draft EPA guidance the topic of material assets as assessed under chapter 16 focuses on services and infrastructure, roads and traffic and waste management. In relation to roads and traffic impacts there is more targeted consideration of this topic under chapter 7. I have considered roads and traffic under the Planning Assessment section of this report and relied on the information contained in the EIAR and there is an overlap between these two sections which should be cross referenced.

Existing Environment

- 8.14.2. It is stated that the developed parts of the site represent approximately 3.5 ha of the 10 ha PDS. The site is traversed by three wayleaves which relate to the natural gas transmission line and underground powerlines. The site is equipped with a range of facilities and services including a surface water management system.
- 8.14.3. Key features of the relevant road network include Junction 8 of the M1 to the north-east, the R152 at the southern site boundary, New Lanes Cross and the village of Duleek. The site entrance is served by a deceleration lane and a right turn lane.

Potential Impacts

- 8.14.4. There will not be a requirement for diversions of services to facilitate the development but there will be a need for extensions to power and water supply and to foul and surface water drainage. No significant effects on these infrastructural elements are anticipated. There would be no impact on existing way leaves.
- 8.14.5. The HGU will use 10 MW of electricity that would otherwise be wasted and produce 160 tons of hydrogen annually. Use of this fuel which is currently wasted for the production of carbon free fuel will have a significantly positive effect on material assets. The application for connection to input hydrogen to the gas network by way of the proposed AGI appears to be outstanding.
- 8.14.6. The increased water usage associated with the HGU and the use of other raw materials in the waste to energy process are not significant in terms of material assets.
- 8.14.7. The development will result in additional traffic and use approximately 0.5 ha of grassland habitat and other land.

- 8.14.8. There would be no significant effects on the capacity of the road network.
- 8.14.9. The proposed development in terms of material assets will involve additional raw material inputs and additional residues after waste processing. The processing of up to 10,000 tonnes of hazardous waste will divert this amount from export to thermal treatment within the state. Similarly, the figure for additional hazardous residues recovered as a result of the proposed development is 30,000 tonnes.
- 8.14.10. As a result of the construction of the development there will be some surplus material removed from the site the applicant states that where possible this will be avoided. The estimate provided in the EIAR is that 31,000 m³ of surplus material will have to be removed either for reuse, recovery or disposal. Recovery and disposal options would constitute a slight negative effect on waste resources. By suitable regulation however there will be no adverse environmental impacts associated with this activity, which is incorporated into the applicant's traffic assessment. Importation of materials in the amount of an estimated 2,300 m³ of engineering fill and crushed stone will not have a significant effect on the resources of construction materials.
- 8.14.11. General waste management will be in accordance with a Construction Waste Management Plan incorporated in the CEMP. Details of anticipated waste levels are reported and it is noted that there is no likelihood of contaminated lands being encountered. Proposals for the management of construction and demolition waste which are presented are in keeping with the waste hierarchy (Appendix 5.1/Vol.3/EIAR). The management of general waste for this reason will not have a significant effect on waste resources.
- 8.14.12. The applicant has presented detailed consideration in section 16.5.3.10 of bottom ash. Bottom ash residues from the plant are currently characterised as non-hazardous. In the event of bottom ash recovery being put in place within the state this would be an alternative to the current options involving sending the material to a licensed landfill and alternatively for export for recovery. Any facility accepting this material would be subject of significant regulatory control. Nearby Knockharley is a possible destination and the additional truck movements have been modelled into the applicant's traffic assessment. Bottom ash export to recover aggregates would be facilitated by the bottom ash storage building. This would take place by way of Drogheda port and is incorporated in the traffic assessment.

- 8.14.13. The applicant's calculation is that the proposed development will result in the production of 600 tonnes of additional flue gas cleaning residues annually which when pre-treated will amount to 917 TPA. An additional 39,000 tonnes per annum of pre-treated residues will be produced at the existing on-site pre-treatment facility. In all 30,000 tonnes of boiler ash, flue gas cleaning residues and similar material from third parties will be accepted as part of the proposed development – this will be similar to the boiler ash and flue gas cleaning residues from the existing facilities and the additional pre-treated residues from the WtE plant and from third parties will be sent for recovery to specifically licensed salt mines. The recovery of this material by backfilling in salt mines will not have a significant negative effect on the environment. A facility in Northern Ireland will be used but from time to time this may be unavailable in which case export to Germany is an option. All of these facilities would be regulated and have been subject to EIA and subject to the requirements of the Waste Framework Directive and therefore the potential treatment of the boiler ash and flue gas cleaning residues is not likely to have a significant negative effect on the environment.
- 8.14.14. In line with existing practice the proposed development will incorporate provision for appropriate waste management and for the recovery of ferrous and nonferrous metals.

Mitigation

- 8.14.15. The operation of the facility will rely on efficient power systems, water conservation and recycling or recovery of wastes. This will include seeking a beneficial use for the bottom ash and metals recovery from the bottom ash as well as pre-treatment of additional boiler ash and flue gas residues.
- 8.14.16. The primary mitigation measures for roads and traffic include scheduling of construction start/finish hours so as to avoid peak traffic periods on the local road network and to undertake similar arrangements in the operational period. In the construction phase impacts of construction traffic will be minimised under a Construction Traffic Management Plan (Appendix 5.1/Vol.3/EIAR). Traffic management will be aided by signage, avoidance of peak times and avoidance of a route through Duleek village. These measures will be contractual obligations and will be enforced including by recording of vehicle registration numbers and monitoring.

Further strategies detailed include communications with local authorities and the local community.

8.14.17. No additional mitigation measures for the construction phase are required other than the adoption and implementation of the CEMP and appointment of a Construction Waste Coordinator to implement a Construction Waste Management Plan.

Cumulative

- 8.14.18. In the event that another major project is being constructed at the same time as the proposed development efforts will be made to coordinate to ensure traffic build-up is avoided.
- 8.14.19. No significant cumulative effects would be anticipated.

Transboundary Effects

- 8.14.20. If bottom ash is characterised as hazardous or if there are constraints in local markets for this material then export for recovery is likely, with resulting potential for transboundary effects. Similarly, the export of pre-treated residues would have potential for transboundary effects.
- 8.14.21. A transfrontier shipment licence would apply to exports and this would ensure that waste is tracked and properly handled. In addition, information has been presented in the EIAR with respect to the limited likelihood of accidents based on experience and the nature of some of the material being exported which would consolidate on contact with water.
- 8.14.22. Given the regulatory environment which the relevant sites operate under and the previous consents which would have been obtained there is no significantly likelihood of environmental impacts related to these activities.

Residual Impacts

- 8.14.23. There will be no resultant effect on the local, regional or national road network as a result of the proposed development.
- 8.14.24. The increased capacity in the hazardous waste sector is a positive impact on material assets.

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8.14.25. There would be no significant residual impacts on other material assets.

Conclusion

- 8.14.26. I have taken into account the contents of the EIAR and the submissions on file and on that basis, I am satisfied that potential effects on material assets would be avoided, managed and mitigated by the measures which form part of the proposed scheme, the proposed mitigation measures and through suitable conditions.
- 8.14.27. I am satisfied that the proposed development would not have any unacceptable direct, indirect, cumulative or transboundary effects on archaeological, architectural and cultural heritage.
- 8.14.28. I conclude that following mitigation the significant effects on Material Assets are as described below.

Significant construction phase impacts on the public road network and the environment which can be mitigated by measures to manage construction traffic as set out in the EIAR and subject to implementation of a Construction Environmental Management Plan incorporating a Construction Traffic Management Plan.

Positive environmental impacts on material assets during the operational phase by the increase in national capacity to treat hazardous waste and reduce dependency on export.

8.15. Major Accidents and Disasters

I refer to my earlier consideration of this topic under the Planning Assessment.

The proposed development has been considered in terms of the potential for major accidents and disasters. A number of credible accident scenarios have been identified and assessed. There would be no impacts off site.

There are no developments sufficiently proximate to the PDS to trigger any accidents on site and no potential for cumulative impacts. There is no potential for significant transboundary effects related to the transportation of bottom ash or residues.

Having regard to the identified likely significant effects and mitigation measures I consider that there are no significant residual effects.

8.16. Interactions, transboundary and overall cumulative effects.

Interactions of the Foregoing

- 8.16.1. I consider that the main interactive impacts arising from the proposed development are adequately addressed in the EIAR. I note the collaborative effort to minimise potential for significant interaction which I consider in the context of the operating facility is likely to be successful. The potential for interactions between the relevant environmental topics as set out in the summary matrix in table 18.4 and the potential interactions are described in section 18.4.2. I note that the identified potential interactions include some which are relevant to issues raised by observers including with respect to health impacts and the suitability of the selected site location.
- 8.16.2. With respect to traffic and transportation and climate interactions I agree with the conclusions drawn with respect to greenhouse gas emissions and I note in particular that the proposed development will avoid the need for export of hazardous waste.
- 8.16.3. With respect to population and human health and air quality I consider that having regard to the nature and scale of the proposed development and governing EPA IE licence conditions, which will be adhered to there are no likely significant impacts to air quality during operation.
- 8.16.4. Regarding major accidents and disasters and population and human health, the construction phase interactions are typical to any construction site. In the operation phase the risks associated with the identified accident scenarios have been shown to be as low as reasonably possible.

Transboundary

8.16.5. Regarding transboundary effects these relate *inter alia* to the possibility that bottom ash may be exported and also to the export of boiler ash and flue gas cleaning residues to Northern Ireland. If bottom ash is exported by way of Drogheda port to a licensed facility in the UK, Netherlands or Belgium for use as an aggregate it will be subject to the requirements of the transfrontier shipment arrangements. I am satisfied that the shipment of bottom ash to continental Europe is not likely to have significant negative effects on the environment and therefore significant transboundary effects will not arise.

- 8.16.6. With respect to the transport of boiler ash and flue gas cleaning residues to Northern Ireland or possibly to continental Europe I note that the continental European route has operated and that recovery to the salt mine facility in Northern Ireland now appears likely. Both facilities would have obtained consent to the relevant planning consent processes including with respect to environmental impact assessment. The transport would also be subject to the transfrontier shipment of waste processes and the TFS is in place for both Northern Ireland and for Germany. This will ensure safe handling. If untreated boiler ash and flue gas cleaning residues come into water they will solidify. The history of a major shipping operator is provided to support the conclusion that there is very limited likelihood of containers falling overboard. I support the conclusion presented that the potential treatment of boiler ash and flue gas cleaning residues is not likely to have a significant effect on the environment and that no significant transboundary effects arise.
- 8.16.7. I note that the proposed development will give rise to additional volumes of ferrous and nonferrous metals and that these will be sent for recovery in Ireland and mainland Europe in line with existing practices. I agree with the conclusion that significant transboundary effects will not arise as a result of this activity.
- 8.16.8. My overall conclusion is that transboundary effects would not be significant.

Overall conclusions with respect to potential cumulative impacts

8.16.9. The applicant provides an integrated / summary presentation of the information relating to cumulative impacts (Chapter 18/Vol. 2/EIAR). This confirms the conclusions set out under the individual topic chapters. A useful summary chart of potential cumulative effects on environmental factors is set out in section 18.3.2. Following a review of the planning history and consideration of the applicant's submissions, I am in agreement with the conclusion drawn in the EIAR namely that the proposed development would not result in significant cumulative impacts. I consider that this conclusion is valid having regard to the assessment process involved in obtaining planning consent, the details of the relevant permitted developments and the regulatory control to which the relevant developments would be subject. In addition, I have taken into account the nature of the subject projects, as well as the distance to the PDS and nature of the receiving environment.

- 8.16.10. To support the overall conclusion presented above I consider it relevant to comment on issues related to cultural heritage and to respond to the observers' concerns relating to cumulative air quality effects. There is potential for impacts on hitherto unknown subsurface archaeological finds or features and the risk that there will be a requirement for preservation by record. The evidence suggests that any impact would be slight and on that basis may be concluded there would be no overall cumulative impact. With respect to the specific issue raised by observers and the HSE in terms of cumulative effects relevant to air quality and consequences for human health, I agree with the conclusion presented by the applicant that the potential cumulative effects are not likely to be significant given the scale of the proposed development and taking into account the information presented on the specific topic of air quality.
- 8.16.11. I conclude that there is no potential for significant adverse cumulative impacts.

8.17. Conclusion

8.17.1. I conclude that the main significant direct and indirect effects of the proposed development on the environment are, and will be mitigated, as follows:

Significant construction phase impacts on the public road network and the environment can be mitigated by measures to minimise air and noise emissions and to manage construction traffic as set out in the EIAR and subject to implementation of a Construction Environmental Management Plan incorporating a Construction Traffic Management Plan.

Positive environmental impacts on material assets during the operational phase by the increase in national capacity to treat hazardous waste and reduce dependency on export.

Positive impacts on climate from the use of electricity generated on site for the production of hydrogen, which will assist in the transition to a low carbon circular economy.

9.0 Appropriate Assessment

9.1.Introduction

- 9.1.1. The requirements of Article 6(3) as related to Appropriate Assessment of a project under Part XAB, Sections 177U and 177V of the Planning and Development Act 2000 (as amended) are considered fully in this section. The areas addressed in this section are as follows:
 - Compliance with Article 6(3) of the EU Habitats Directive.
 - Documentation and Proposed Development
 - Screening for Appropriate Assessment.
 - Appropriate Assessment of implications of the proposed development on the integrity of each European site.

9.2. Compliance with Article 6(3) of the EU Habitats Directive

- 9.2.1. The Habitats Directive deals with the Conservation of Natural Habitats and of Wild Fauna and Flora throughout the European Union. Article 6(3) of this Directive requires that any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects shall be subject to Appropriate Assessment of its implications for the site in view of the site's conservation objectives. The competent authority must be satisfied that the proposal will not adversely affect the integrity of the European site before consent can be given.
- 9.2.2. The proposed development is not directly connected to or necessary to the management of any European site and therefore is subject to the provisions of Article 6(3).

9.3. Documentation and Proposed Development

9.3.1. The applicant has submitted a Screening Report and Natura Impact Statement entitled Stage 1 Screening Report and Stage 2 Natura Impact Statement (NIS) Indaver Meath Site Sustainability Project.

- 9.3.2. The basis for the NIS includes information contained in various sections of the EIAR particularly chapters relating to biodiversity, air quality, noise and vibration, CEMP, water, land and soils and traffic and transportation. I consider that the NIS has been prepared by professionals who are experienced in ecological assessment and has regard to the relevant regulatory context and guidance.
- 9.3.3. I am satisfied that the information available constitutes the best available scientific information and is sufficient to allow the Board to carry out an Appropriate Assessment. The NIS and the information on which it is based indicates that the nature of the proposed development is well understood and that the detailed design is well advanced and that there is ample information on the baseline environmental conditions including the ecology and the design and operation of the existing facility and associated infrastructure. The fact that there is an operating licenced facility at this site ensures the availability of long-term and high-quality information relating to water quality, air and noise.
- 9.3.4. The significant elements of the proposed development include the proposed increase in waste intake including hazardous waste, the construction of the proposed aqueous waste tank farm, hydrogen generation unit and bottom ash storage building and the increase in the acceptance of ash, flue gas and other residues for pretreatment and storage prior to recovery in Northern Ireland.
- 9.3.5. Associated with the substantive elements of the proposed development are a range of infrastructural works including for the management of stormwater runoff during construction, the operational phase site drainage, firewater management and measures to deal with foul and process effluent. These works largely involve modifications to existing infrastructure. New facilities include small scale on-site wastewater treatment services.
- 9.3.6. The facility will operate under the IE licence which will be reviewed by the EPA and the proposed development will fall under the relevant BREFs. In the event of decommissioning of the site and under the terms of the IE licence the closure, remediation and aftercare management plan will be implemented.

9.4. Appropriate Assessment- Screening

Introduction

- 9.4.1. The requirements of Article 6(3) as related to screening the need for Appropriate Assessment of a project under part XAB, section 177U of the Planning and Development Act 2000 (as amended) are considered fully in this section.
- 9.4.2. Stage 1 of the Appropriate Assessment process is the screening stage whereby it is determined whether the project is likely to have a significant effect, either individually or in combination with other plans and projects on European sites in view of the sites' conservation objectives.
- 9.4.3. The Stage 1 Screening Report and Stage 2 Natura Impact Statement (NIS) Indaver Meath Site Sustainability Project includes a screening for Appropriate Assessment. The screening assessment determines the potential for the development to have an adverse effect on European sites in the absence of mitigation and is based on potential impact pathways. The screening assessment conclusion is presented below.

Potential impacts, though improbable, have been identified for the River Boyne and River Blackwater SAC, River Boyne and River Blackwater SPA and the River Nanny Estuary and Shore SPA. Screening conclusions with regard to the qualifying species and habitats for these Natura 2000 sites is provided in Table 7. No significant effects on the conservation objectives for the Boyne Coast SAC and Boyne Estuary SPA will occur.

9.4.4. Having reviewed the documents and submissions I am satisfied that the information allows for a complete examination and identification of any potential significant effects of the development, alone, or in combination with other plans and projects on European sites.

Screening for Appropriate Assessment - Test of likely significant effects

- 9.4.5. The project is not directly connected with or necessary to the management of a European Site and therefore it needs to be determined if the development is likely to have significant effects on European sites.
- 9.4.6. The proposed development is examined in relation to any possible interaction with European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) and the qualifying interests to assess whether it may give rise to significant effects on any European site.

Submissions and Observations

- 9.4.7. Meath County Council notes that the Board is the competent authority in relation to Appropriate Assessment. The report of the Heritage Officer notes that a source pathway receptor link exists to one of the Natura sites within 15km of the PDS, that is to the River Nanny Estuary and Shore SPA. The report recommends that all mitigation measures outlined in the NIS (and its appendices) and the CEMP should be fully implemented. It concludes that based on the scientific data provided and the construction methodology, mitigation measures and controls proposed, there will be no significant effects (direct or indirect) on the qualifying interest of any Natura 2000 sites, either individually or in combination with other plans or projects.
- 9.4.8. Darren O Rourke TD states that potential impacts have been identified for the River Boyne and Blackwater SAC, River Boyne and Blackwater SPA and River Nanny Estuary and Shore SPA and for flora and fauna, which is a very serious matter. The NIS does not include an assessment of the proposed development in combination with other plans and projects and for example the landfill and cement works are not mentioned he states. For these reasons the observer states that there is insufficient information available to the Board to undertake Appropriate Assessment.
- 9.4.9. None of the prescribed body submissions raise matters relevant to this section of this report.
- 9.4.10. No other observations or submissions raised issues relevant to appropriate assessment.

European sites with potential pathways to proposed development

- 9.4.11. The PDS is not in or immediately adjacent to any European site. The European sites which are within 15km of the proposed development were considered by the applicant to be appropriate for consideration and these sites, their qualifying interests and potential impacts are set out in Table 7 of the NIS.
- 9.4.12. I note that in the undertaking of the screening exercise the approach presented in the documentation includes screening of qualifying interests and considering whether or not to take forward certain qualifying interests to Stage 2. I am not satisfied that this approach is optimal, and I recommend that the approach adopted by the Board rely solely on the screening of the European sites in their entirety I utilise that approach in undertaking an Appropriate Assessment. Notwithstanding

- my reservations about the approach undertaken in the documentation it is not necessary for the documentation to be revised as the Board is the competent authority on this matter and the available information is sufficient for the Board to exercise its functions. My reservations relate solely to the placing of information within the document rather than its nature and extent.
- 9.4.13. In relation to the availability of information with respect to cumulative impacts I note that the applicant's response to Deputy O' Rourke's submission refers to Table 15 of the NIS which does in fact list the Irish Cement facility including recently permitted alterations which are to be undertaken. I accept the point made by the applicant that the relevant developments are included in this table and I consider that the developments which are relevant are all included. I note that the Heritage Officer of Meath County Council did not raise any concerns with respect to the NIS including the manner of consideration of the potential cumulative impacts. I am satisfied that this matter has been sufficiently addressed.
- 9.4.14. A summary of European Sites that occur within 15 km of the proposed development is presented in the table below and the location of these site relative to the PDS is on Figures 5 and 6 of the applicant's report. Where a possible connection between the development and a European site has been identified this is referenced and the relevant pathway of potential impact is described in the table below. Where there is no pathway the European site can be eliminated from further consideration and this is noted.
- 9.4.15. To support the conclusions presented in summary in the table below I have considered the characteristics of the proposed development in terms of its location and the scale of works. I have considered the potential pathways in terms of implications for possible significant effects (PSEs) on European sites and my conclusions are as follows:
 - Potential direct and indirect effects including from the spread of invasive species could give rise to habitat loss or fragmentation. The nearest European site is 3.2km from the PDS and therefore there is no potential for direct effects on European sites due to habitat loss. Buddleja is the only non-native invasive species that was recorded within the PDS and this was not found in the works

- area and is not a high-risk species and for these reasons there is no risk of significant effects from this potential pathway.
- Airborne noise and disturbance could lead to short-term disturbance of
 qualifying species in the construction period or by way of in-combination
 effects. There is potential for construction phase noise effects to be relevant to
 mobile species which are qualifying interests or special conservation interests.
 As the modelling indicates no significant increase in noise there is no potential
 for noise or disturbance effects in the operational phase.
- Hydrological impacts to water quality in the construction phase could affect European sites to which there is a pathway. The operational phase effects would not be relevant as there are no process emissions and the site will continue to be regulated by an IE licence.
- Air quality effects from the increased waste tonnage will not be significant in terms of the ambient air quality and can be excluded as a source for potential significant effects on nearby European sites.
- The transport of boiler ash and flue gas cleaning and other residues will be regulated and as the material is already pre-treated and in a solid monolithic form there will not be a significant effect on the environment which might be relevant for appropriate assessment. I agree with the conclusion presented by the applicant that there is low risk of accidents and no impacts possible on Natura sites as the residues would solidify on contact with water and the bottom ash is inert.

Table - Location of European sites, potential pathways and conservation objectives.

Site Name	Conservation Objectives and	Location / distance to	
and Site	Qualifying Interests (Habitats and European site and		
Code	Species)	Potential Pathways	
River Boyne and River	To maintain or restore the favourable conservation condition of the habitats or species for which the SAC has been selected.	This European site is 3.2 km north / north- west of the PDS and	
Blackwater	Alkaline fens [7230]	there is potential for	

SAC (002299)	Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae) [91E0] Lampetra fluviatilis (River Lamprey) [1099] Salmo salar (Salmon) [1106] Lutra lutra (Otter) [1355]	disturbance to qualifying species of that site or for water quality effects on mobile species. There is no hydrological connectivity and no other potential impact pathway.
Boyne Coast and Estuary SAC (001957)	To maintain or restore the favourable conservation condition of the habitats and species for which the site has been selected which is defined by a list of attributes and targets 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 Salicornia and other annuals colonizing mud and sand 1330 Atlantic salt meadows (Glauco-Puccinellietalia maritimae) 1410 Mediterranean salt meadows (Juncetalia maritimi) 2110 Embryonic shifting dunes 2120 Shifting dunes along the shoreline with Ammophila arenaria ('white dunes') 2130 *Fixed coastal dunes with herbaceous vegetation ('grey dunes')	This is over 7km from the PDS and there is no hydrological connectivity and overall, no potential impact pathway.
River	To maintain or restore the restore the favourable conservation condition of the	This is 3.4km north /
Boyne and River	habitats and species for which the site has been selected	north-west of the PDS and there is potential for
Blackwater	A229 Kingfisher	disturbance to qualifying
		species. There is no
		potential for surface

SPA		water effects to impact
		water effects to impact
(004232)		the special conservation
		interests as there is no
		hydrological
		connectivity.
Boyne Estuary SPA (004080)	To maintain or restore the favourable conservation condition of the habitats and species for which the site has been selected which is defined by a list of attributes and targets A048 Shelduck Tadorna tadorna A130 Oystercatcher Haematopus ostralegus A140 Golden Plover Pluvialis apricaria A141 Grey Plover Pluvialis squatarola A142 Lapwing Vanellus vanellus	This is 6.1km to the north-east. There is a potential source – pathway – receptor link due to potential disturbance to qualifying species. There is no potential for surface
	A143 Knot Calidris canutus	water effects to impact
	A144 Sanderling Calidris alba	the special conservation
	A156 Black-tailed Godwit Limosa limosa A162 Redshank Tringa totanus	interests and no other potential impact
	A169 Turnstone Arenaria interpres	pathway.
	A195 Little Tern Sterna albifrons	
	A999 Wetlands	
River Nanny Estuary and Shore SPA (04158)	To maintain or restore the favourable conservation condition of the habitats and species for which the site has been selected which is defined by a list of attributes and targets A130 Oystercatcher Haematopus ostralegus wintering A137 Ringed Plover Charadrius hiaticula wintering A140 Golden Plover Pluvialis apricaria wintering A143 Knot Calidris canutus wintering A144 Sanderling Calidris alba wintering A184 Herring Gull Larus argentatus wintering A999 Wetlands	This is 8.1km to the east. There is a potential source – pathway – receptor link due to potential disturbance to qualifying species. There is also a hydrological connection between the PDS and this site and potential for water quality related effects.

As there is no potential impact pathway between the PDS and the European site Boyne Coast and Estuary SAC (001957) it is considered that there is no possibility of significant effects and that this site can be screened out from further consideration.

I note that the applicant's screening conclusion screened out the Boyne Estuary SPA. Having regard to the potential for noise and disturbance effects on special conservation interests I do not consider that this conclusion can be supported and that further consideration of the likely significant effects on the special conservation interests of this site is necessary.

I consider that there is potential for significant effects on the other Europeans sites

- River Boyne and River Blackwater SAC (002299)
- River Boyne and River Blackwater SPA (004232)
- Boyne Estuary SPA (004080)
- River Nanny Estuary and Shore SPA (04158).

Mitigation measures

9.4.16. No measures designed or intended to avoid or reduce any harmful effects of the project on a European Site have been relied upon in this screening exercise.

Screening Determination

9.4.17. The proposed development was considered in light of the requirements of 177U of the Planning and Development Act 2000 as amended. Having carried out screening for Appropriate Assessment of the project, it has been concluded that the project individually (or in combination with other plans or projects) could have a significant effect on European Sites No. 002299, 004232, 004080, 004158, in view of the sites' Conservation Objectives, and Appropriate Assessment is therefore required.

9.5. Appropriate Assessment – Stage 2

- 9.5.1. Following the screening process, it has been determined that Appropriate Assessment is required as it cannot be excluded on the basis of objective information that the proposed development individually or in-combination with other plans or projects will not have a significant effect on the following European sites:
 - River Boyne and River Blackwater SAC (002299)

- River Boyne and River Blackwater SPA (004232)
- Boyne Estuary SPA (004080)
- River Nanny Estuary and Shore SPA (04158).
- 9.5.2. The possibility of significant effects on other European sites has been excluded on the basis of objective information and in particular the following European site has been screened out for the need for Appropriate Assessment.
 - Boyne Coast and Estuary SAC (001957).
- 9.5.3. Having reviewed the documents, submissions and consultations, I am satisfied that the information allows for a complete assessment of any adverse effects of the development, on the Conservation Objectives of those European sites alone, or in combination with other plans and projects.

Appropriate Assessment of implications of the proposed development

9.5.4. The following is a summary of the objective scientific assessment of the implications of the project on the qualifying interest features of the European sites using the best scientific knowledge in the field. All aspects of the project which could result in adverse effects are assessed and mitigation measures designed to avoid or reduce any adverse effects are considered and assessed.

European Sites

- 9.5.5. The following sites are subject to Appropriate Assessment:
 - River Boyne and River Blackwater SAC (002299)
 - River Boyne and River Blackwater SPA (004232)
 - Boyne Estuary SPA (004080)
 - River Nanny Estuary and Shore SPA (04158).
- 9.5.6. A description of the sites and their conservation and qualifying interests/special conservation interests are set out in the NIS and in the table above.
- 9.5.7. I have also examined the Natura 2000 data forms as relevant and the conservation objectives supporting documents for these sites available through the NPWS website (www.npws.ie). There are site specific conservation objectives for Boyne Estuary SPA (004080), River Nanny Estuary and Shore SPA (04158) and River Boyne and

River Blackwater SAC (002299) and generic conservation objectives for River Boyne and River Blackwater SPA (004232). The site-specific conservation objectives for and River Boyne and River Blackwater SAC (002299) were published on 3 December 2021 and I have examined the contents of the document and taken them into account.

Aspects of the proposed development.

- 9.5.8. The proposed development could adversely affect the conservation objectives of European sites as follows:
 - Through disturbance or displacement during construction of the proposed development
 - As a result of emissions to water during construction.

The potential for impacts on the qualifying interests of the relevant European sites is considered below.

River Boyne and River Blackwater SAC (002299)

As there is no hydrological connection between the PDS and the European site and no potential groundwater impacts there is no potential for impacts on Alkaline fens or Alluvial forests. The distance between the European site and the SAC is over 3km and the Platin quarry is in between. There is no potential for dewatering or other groundwater effects associated with the proposed development which might impact fens. There is no alluvial forest habitat in the vicinity of the proposed development – the site-specific conservation objectives show the location of some of this habitat over 3km north of the PDS and north of the Platin quarry. I am satisfied that there is no potential for effects having regard to the nature of the habitat, the distance and the intervening development.

As there is no hydrological connection between the PDS and the European site there is no potential for water quality effects on river lamprey or salmon.

As otter is mobile there is potential for use by the species of lands on or near the PDS and that noise and disturbance could impact on this qualifying interest. The species is known to occur in the River Nanny, but the nearby Cruicerath Stream would not support any prey which would attract otter. The stream is very small and was recorded as dry in April 2020 and I consider that the conclusion that it would not

support fish is reasonable. The NIS does identify the potential prey (common frog or smooth newt) within the attenuation pond on site. This area is very visible within the site. The site surveys did not record any evidence of use of PDS by otter. If the species was frequently using the attenuation pond for feeding it is likely that it would have been witnessed nearby the pond or that evidence of use of these lands would have been found in the ecological surveys. I accept the conclusion drawn in the NIS that any use of the attenuation pond by otter for feeding would be likely to be sporadic on the basis that there are no clear linkages which would be used as clear commuting routes to attract otter to this area. If the species does use the pond for feeding, then it is reasonably concluded in the NIS that such usage would be sporadic and not a critical food resource. Taking into account the known adaptability of otter to habitualise to noise and disturbance and the fact that the attenuation pond is located in a busy part of the site I agree with the conclusion drawn in the NIS that potential impacts on this due to noise and disturbance would not be significant adverse effects.

River Boyne and River Blackwater SPA (004232)

The special conservation interest for which this site has been selected is kingfisher. The bird is known to frequent the River Nanny. The limiting factors for its presence or absence is the availability of suitable nesting banks and water availability and prey. Similarly, to the analysis for otter the NIS indicates the potential use of the onsite attenuation pond for feeding. I agree that this is unlikely given the pattern of development and lack of a significant hydrological pathway or commuting route between the PDS and the Nanny. The drains within and near the PDS and the Cruicerath Stream would not support a permanent fish population. I agree with the conclusion presented in the NIS that due to the high level of activity around the attenuation pond there would be existing displacement effects and disturbance of the species and that the pond would not be likely to be a critical resource. The adoption of the CEMP and the measures relating to the control of noise during construction further reinforces the conclusion that there would be no significant effect on this special conservation interest.

Boyne Estuary SPA (004080)

The special conservation interests are shelduck, oystercatcher, golden plover grey plover, lapwing, knot, sanderling, black-tailed godwit redshank, turnstone, little tern and wetlands.

There is no suitable habitat on site or in the vicinity of the site for these wading birds. There is no hydrological connection between the PDS and the SPA and therefore no potential impacts on the habitats on which these birds are dependence and on the special conservation interest wetlands. None of these bird species were recorded in the bird surveys undertaken on 30 September and 22 April. I note the assessment in the NIS Screening which is that if wading birds were to utilise agricultural lands in the vicinity of the PDS they would be likely to be habituated to noise and disturbance associated with the existing facility. I also note the noise impact assessments undertaken. I agree with the conclusion drawn in the applicant's documents that there would be no significant effect on the special conservation interests of this European site.

River Nanny Estuary and Shore SPA (04158)

As there is a hydrological connection between the PDS and the SPA there is potential for water quality effects during construction as a result of inadvertent spillages. I agree with the information in the NIS relating to the low likelihood that spillages, should they occur, would affect the SPA as the working will not take place in the immediate vicinity of a watercourse and the nearest watercourse, the Cruicerath Stream (which may be dry) is 130m from the PDS. In addition, it is relevant to note the 11km distance to the SPA downstream. Nevertheless, there is potential for water quality related effects which could result in significant adverse effects on the special qualifying interests oystercatcher, ringed plover, golden plover, knot, sanderling, herring gull and wetlands. Any such contamination events could affect the prey availability for the wading and estuarine birds and also the conservation objective wetlands. The significant dilution effect in a large estuary is a mitigating factor.

Regarding herring gull this is the only special conservation interest which has been recorded in the vicinity of the PDS. This species is known to travel long distances and to forage widely. The species would be habituated to any noise and disturbance in the area and has significant other suitable and available land to utilise if disturbed.

There is no likelihood of significant adverse effects on this special conservation interest.

Potential in-combination effects on the European Sites

- 9.5.9. Table 15 of the NIS sets out a list of developments near the site which are considered to have potential for in combination effects. I have reviewed the information provided and considered the recent planning history relating to lands in the vicinity of the site. I note the developments listed and I have reviewed the planning history and confirm that the list is comprehensive.
- 9.5.10. In the absence of suitable controls and measures there is the possibility that the construction and/or operation phases of the above developments could give rise to in combination effects related to water quality. The governing consents for these developments include licenses and permissions which have been formulated to impose strict limits and meet water quality standards and ensure implementation of good practice standard construction environmental measures. All of the listed projects will be constructed and implemented following an assessment of potential impacts to relevant European sites. On that basis and given adherence to the relevant consents and implementation of best practice construction no significant in combination effects are anticipated on the qualifying interests of the Boyne Estuary SPA, River Nanny Estuary and Shore SPA, the River Boyne and River Blackwater SAC and River Boyne and River Blackwater SPA.

Mitigation

The NIS outlines in summary the mitigation measures which are incorporated into the project design for the purpose of avoiding impacts on the qualifying interests and conservation objectives for European sites. I note that in my earlier consideration of the individual qualifying interests no particular matters arose which would warrant bespoke or targeted mitigation. The nature of the mitigation measures presented by the applicant may be described as standard and frequently utilised mitigation measures including adherence to relevant construction guidance. The relevant measures include measures to address the protection of watercourses during construction including the adoption of a CEMP and IRP, measures relevant to surface water and foul water management and to noise and vibration. I am satisfied that these measures are appropriate and sufficient to ensure that there would be no

adverse effects on the conservation objectives relating to the European sites. Furthermore, I consider that the nature of the measures set out is such that there can be confidence in their successful implementation including by reason of the monitoring measures proposed.

Appropriate Assessment Conclusion

9.5.11. I consider it reasonable to conclude on the basis of the information on the file, which I consider is adequate in order to carry out a Stage 2 Appropriate Assessment, that the proposed development, individually or in combination with other plans or projects would not adversely affect the integrity of the Boyne Estuary SPA, River Nanny Estuary and Shore SPA, the River Boyne and River Blackwater SAC and River Boyne and River Blackwater SPA, or any other European site, in view of their conservation objectives.

10.0 Recommendation

10.1. I recommend that the Board approve the proposed development subject to the reasons and considerations and the conditions set out in the draft order below.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

European legislation and policy, including of particular relevance:

Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive).

Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives).

Directive 2018/851 amending Directive 2008/98/EC (Waste Framework Directive).

Directive 2010/75/EU (Industrial Emissions Directive).

Closing the loop - EU Action Plan for the Circular Economy (COM/2015/0614).

EU Hydrogen Strategy – A hydrogen strategy for a Climate Neutral Europe (COM/2020/301).

National legislation and policy, including of particular relevance:

National Planning Framework 2018-2040, which supports the development of hazardous waste management facilities to avoid the need for treatment elsewhere.

National Development Plan 2021 – 2030, which supports the provision of additional capacity in waste to energy facilities including for hazardous waste.

Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020 – 2025, which supports the development of adequate and appropriate treatment capacity at indigenous facilities.

National Hazardous Waste Management Plan 2014-2020 and associated documentation which highlight the need for increased self-sufficiency in the treatment of hazardous wastes.

Climate Action Plan, 2021, which notes Ireland's success in diverting waste from landfill.

Regional planning and related policy, including:

Eastern-Midlands Region Waste Management Plan 2015-2021 and in particular policies E15a and E16, which supports the development of additional thermal recovery capacity for non-hazardous and hazardous waste.

The local planning policy including:

Meath County Development Plan 2021-2027 including INF OBJ 59 to ensure that waste management facilities are appropriately managed and monitored.

The following matters:

- (a) The nature of the proposed development including the intake of additional hazardous waste.
- (b) The established nature of the existing licenced Waste to Energy facility, which is authorised to accept hazardous wastes.

- (c) The environmental benefits arising from the development of a bottom ash storage building and the aqueous waste tank farm and their role in facilitating appropriate treatment and recovery of wastes.
- (d) The production of hydrogen, which results in a beneficial use of electricity which would otherwise be lost through curtailment.
- (e) The need for operator flexibility, which it is considered is established.
- (f) The design, layout and landscaping of the proposed development.
- (g) The increased traffic predicted in the construction and operation of the proposed development.
- (h) The emerging policy provisions relating to the Leinster Orbital Route.
- (i) The stated purpose of the offices which is related to the operation of the facility.
- (j) The range of proposed mitigation measures set out in the submitted in the documentation lodged including the further information submitted, the Environmental Impact Assessment Report, and Natura Impact Statement incorporating Appropriate Assessment screening.
- (k) The submissions made in relation to the application.
- (I) The report and recommendation of the Inspector and the Board's consultant.

Appropriate Assessment

The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the River Boyne and River Blackwater SAC (Site Code 002299), the River Boyne and River Blackwater SPA (004232), the Boyne Estuary SPA (004080), the River Nanny Estuary and Shore SPA (04158) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, the response to further information and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Site,

namely the River Boyne and River Blackwater SAC (Site Code 002299), the River Boyne and River Blackwater SPA (004232), the Boyne Estuary SPA (004080), the River Nanny Estuary and Shore SPA (04158) in view of the sites' conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- ii. the mitigation measures which are included as part of the current proposal, and
- iii. the conservation objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the screening and the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Site, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' conservation objectives.

Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development taking account of:

- (a) the nature, scale, location and extent of the proposed development,
- (b) the Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application, including the further information submitted.
- (c) the submissions received from the prescribed bodies, and
- (d) the Inspector's report and the report of the Board's consultant.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development, and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the examination, set out in the Inspector's report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

Significant construction phase impacts on the public road network and the environment can be mitigated by measures to minimise air and noise emissions and to manage construction traffic as set out in the EIAR and subject to implementation of a Construction Environmental Management Plan incorporating a Construction Traffic Management Plan.

Positive environmental impacts on material assets during the operational phase by the increase in national capacity to treat hazardous waste and reduce dependency on export.

Positive impacts on climate from the use of electricity generated on site for the production of hydrogen, which will assist in the transition to a low carbon circular economy.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be acceptable.

Proper planning and sustainable development:

It is considered that subject to compliance with the conditions set out below the proposed development would accord with European, national, regional and local planning, transportation, waste and related policy, would not have an unacceptable impact on the environment including water and ecology, would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 4th day of June 2021, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. In default of agreement, the matters in dispute shall be referred to An Bord Pleanála for determination.

Reason: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be ten years from the date of this order.

Reason: Having regard to the nature and extent of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

- 3. Waste to be accepted at the facility shall not exceed a total of 280,000 tonnes per annum as follows:
 - an additional 15,000 tonnes per annum of waste for treatment,
 which may be hazardous waste and
 - up to 30,000 tonnes per annum of third-party boiler ash and flue gas clearing residues and other residues for pre-treatment.

Reason: In the interest of clarity and to ensure compliance with policy provisions.

4. The mitigation measures and monitoring commitments identified in the Environmental Impact Assessment Report shall be implemented in full.

Reason: In the interests of clarity and the proper planning and sustainable development of the area.

5. The mitigation measures contained in the Natura Impact Statement submitted with the application shall be implemented in full.

Reason: In the interests of clarity and the proper planning and sustainable development of the area and to ensure the protection of European Sites.

6. (a)The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan which shall be submitted to and agreed in writing with the planning authority prior to the commencement of the development.

(b) The CEMP shall:

cover all aspects of the construction phase and incorporate measures to avoid, minimise and mitigate potential effects on the environment.

incorporate a Construction Traffic Management Plan

incorporate a Waste Management Plan

incorporate measures to prevent the introduction and spread of nonnative invasive species

incorporate measures to deal respond to incidents

be otherwise in accordance with the requirements of the planning authority.

- (c) The implementation of the CEMP shall be in accordance with a programme of monitoring commitments which shall be incorporated in the plan and which shall include surface water monitoring.
- (d) The plan shall be updated at regular intervals.
- (e) A Complaints Register shall be maintained during the construction stage.

Reason: In the interests of public safety and residential amenity.

7. Save where strictly necessary and subject to obtaining prior written agreement of the planning authority no HGV traffic associated with the construction or operation of the proposed development shall pass through Duleek.

Reason: In the interest of clarity.

8. Save where otherwise agreed with the planning authority the following shall be reviewed for incorporation in the detailed design:

- (a) The applicant shall design the tank farm catering for the fire case scenario as part of the design criteria, including the provision of adequately sized emergency relief venting and any other safety measures deemed appropriate to mitigate risk.
- (b) The recommendations of the HAZID&RA Team which are presented in Appendix 4 of Appendix 17.1 of the EIAR particularly with respect to the fire water retention study.

Reason: In the interest of the protection of the environment.

9. Surface water management shall be in accordance with the detailed requirements of the planning authority.

Reason : To ensure a proper standard of development and in the interest of water quality and the management of surface water.

10. A comprehensive landscaping plan, prepared by a suitably qualified person, shall be submitted to and agreed in writing with the planning authority, prior to the commencement of the development.

Reason: In the interests of visual amenity.

11. Details of the materials, colours and textures of all external finishes to the proposed buildings shall be submitted to, and agreed in writing with the planning authority, prior to commencement of the development.

Reason: In the interests of visual amenity.

12. The use of the offices shall be restricted to use solely in connection with the operation, management and development of the existing Waste to Energy facility, including during periods of construction and maintenance.

Reason: To avoid unnecessary employment related commuting and to ensure that the development accords with the development plan policy.

13. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist on the site. In this regard, the developer shall-

- a. notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) in relation to the development,
- b. employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works.
- c. provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

14. Trees and hedgerows not to be removed during nesting season in accordance with Wildlife Act (as amended).

Reason: In the interest of biodiversity.

15. The developer shall pay a sum of money to the planning authority, either annually or in such manner as may be agreed, towards the cost of the provision of environmental improvement and recreational or community amenities in the locality. The identification of such projects shall be decided by the planning authority having consulted with the community liaison committee as provided for under the original permission PL17.126307, governing the development of the site. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of such agreement shall be referred to the Board for determination. The amount shall be index linked in the case of phased payment. The developer shall consult with the planning authority in this regard prior to the commencement of the development.

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental, recreational or community amenities which would constitute a substantial gain to the local community.

16. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to planning authority, to secure the satisfactory reinstatement of the site and delivery route upon cessation of the project, coupled with an agreement empowering the planning authorities to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authorities and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site.

17. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authorities may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authorities and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Mairead Kenny
Senior Planning Inspector
31 December 2021

External Report – Callaghan Engineering

Callaghan Engineering

Consulting Engineers Project Managers

REVIEW OF THE INFORMATION SUBMITTED BY THE APPLICANT ON THE TOPIC OF MAJOR ACCIDENTS IN RELATION TO PLANNING APPLICATION REF: ABP-304433-20

REPORT

DOCUMENT NO.	N/A	STATUS	N/A	
DOCUMENT TITLE	REPORT			
DISCIPLINE	☐ ELEC ☐ MECH ☒ PROC ☐ INST			
ORIGINATOR	PEDRO RIVERA	DATE	8 JULY 2021	
PROJECT TITLE	INDAVER PROJECT ASSESSMENT		An Bord Pleanala	
PROJECT NO	21-006			
CLIENT	AN BORD PLEANÁLA			
CLIENT SITE	N/A			

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APPROVAL			
COMMENT			
ENQUIRY			
TENDER			
PURCHASE			
CONSTRUCTION			
☐ INFORMATION			

REV	DATE	REVISION DETAILS	PREPARED	CHECKED	APPROVED
Α	9 JULY 2021	ISSUED FOR INFORMATION	PR	DOC	DOC
В	16 JULY	RE-ISSUED FOR INFORMATION	PR	DOC	DOC

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1 **EXECUTIVE SUMMARY**

Callaghan Engineering (CE) have been commissioned by An Bord Pleanála (ABP) to collaborate on an inspection at the Indaver site at Carranstown Co. Meath and to complete an independent technical review of the information submitted in the application for permission for the Site Sustainability Project submitted to ABP on 25th June 2020 and referred to by ABP as Case Number: ABP-307433-20. The scope of this application is summarised as follows:

"Increase in annual total waste for treatment from currently permitted 235,000 tonnes to 250,000 tonnes, increase in annual amount of hazardous waste from currently permitted 10,000 tonnes to 25,000 tonnes, development of an aqueous waste tank farm, hydrogen generation unit, bottom ash storage building, development of a single storage warehouse, new concrete yard, weather canopy, demolition and rebuilding of an existing single storey modular office and ancillary site works. Carranstown, Duleek, County Meath".

The focus of the CE assignment was to provide an additional technical review of the above application on the topic of Control of Major Accidents Hazards Involving Dangerous Substances Regulations 2015, otherwise known as the "Seveso III" directive, as implemented in Ireland under S.I. 209 of 2015.

From the site visit completed and the review of the information submitted by the applicant, CE is of the opinion that the information submitted in terms of control of major accidents is accurate and valid. CE concurs with the applicant that the changes in the inventory of substances caused by additional storage of aqueous wastes containing solvent and the proposed hydrogen generation development would not cause the site to qualify as a Seveso III establishment.

The analysis completed by the applicant reveals two worst cases for potential accidents. These are the potential for a full aqueous waste bund fire and the potential for a hydrogen explosion. The modelling completed indicates that both worst-case scenarios are not expected to constitute a major accident with consequences offsite. Nonetheless, the risk to personnel operating at the facility exists and needs to be carefully managed. In this regard CE has recommended a condition that the fire case in the tank farm is assessed during the detailed engineering design and resulting implications are incorporated into the design.

It is CE's opinion that the clarifications and commitments given by the applicant in relation to risk management during the detailed design process provide sufficient assurances that the fire and explosion risks will be adequately managed in accordance to the Safety, Health and Welfare at Work (General Applications) Regulations 2007 (SI No 299 of 2007) Part 8 Explosion Protection.

2 INTRODUCTION

All facility operators have a general obligation to prevent major accidents. Under the provisions of the SEVESO III directive, if dangerous substances are present above certain quantities defined in the directive, there is also a requirement to notify the Local Competent Authority (LCA) designated by the appropriate Minister of Government and draw up a major accident prevention policy (MAPP) setting out the operators approach, measures, and safety management systems for controlling major accident hazards.

This review completed by CE provides an additional independent report to ABP on the adequacy and validity of the information submitted by the applicant in relation to 1/ Compliance with the general obligation to prevent and control major accidents, and 2/ Review of the site inventory of dangerous substances as reported in appendix 17.1 of the EIA report, which concludes that the inventory changes associated with the proposed increase of hazardous waste, new aqueous waste tank farm and the hydrogen generation facility will not qualify as a Seveso III establishment.

3 REVIEW OF THE INFORMATION SUBMITTED

3.1 DESCRIPTION OF CHANGES AND CONTEXT

3.1.1 **NEW HYDROGEN PLANT**

The applicant has described in section 4.5.4 of the EIAR the purpose and main design aspects of the proposed hydrogen generation unit. Indaver has established that for approximately 12.5% of the time, the energy produced by their WtE furnace cannot be used to produce electricity because the national electricity grid cannot accept it. The purpose of the proposed 10MWe hydrogen generation unit (HGU) is to utilise this excess electricity for producing hydrogen from electrolysis of water. This new emerging technology will recover 60 % of the energy currently dissipated as heat to the environment.

The generation of hydrogen and storage of hydrogen as a form to preserve energy has obvious environmental benefits. However, the technology has inherent risks associated with the highly flammable nature of the substance and its low ignition energy. The controls that will take place to mitigate the risk are discussed in section 3.4 of this report.

3.1.2 **AQUEOUS TANK FARM**

The applicant has described in section 4.5.3 of the EIAR the purpose and main aspects of the proposed tank farm for the storage and processing of aqueous liquid wastes currently accepted at the facility in accordance with the site EPA licence. The change is justified by the applicant due to an increase in the demand for this service and to make current operations more robust. CE evaluation of the changes proposed is limited to reviewing the impact of the new installation on the control of major accidents. The controls that will take place to mitigate the risk are discussed in section 3.4 of this report.

3.1.3 INCREASE IN ANNUAL TOTAL WASTE FOR TREATMENT

The increase in annual total waste for treatment is proposed to go from the currently permitted 235,000 tonnes to 250,000 tonnes. This increase relates solely to the increase in the currently permitted annual hazardous waste (packaged / agueous) from the currently permitted 10,000 tonnes to 25,000 tonnes. The packaged fraction currently amounts to 2,000 tonne per annum, and this could increase up to 5,000 tonne per annum if the application is granted. The aqueous fraction currently amounts to 8,000 tonne per annum, and this could increase up to 20,000 tonne per annum if the application is granted. The split between packed and aqueous hazardous waste scenarios is shown in table 4.4 of the EIAR.

This change in yearly treatment capacity does not change the potential for the site for major accidents except for the new hazards associated with development of a new aqueous waste tank farm and hydrogen production and storage facilities.

As the facility is operated in compliance with an industrial emissions license issued by the EPA (industrial Emissions License W0167-03), a review of the licence and the impact of the proposed development changes on the existing licence has not been part of the scope of this review.

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CONTROL OF MAJOR ACCIDENTS 3.2

Indaver Waste-to-Energy (WtE) site was constructed in 2011 and is designed to recover energy from the residual fraction of non-hazardous household, commercial and industrial waste.

All facilities operators have the general obligation to prevent and control major accidents. Given the nature of the Waste to Energy WtE operations already taking place at the site there is a core of information in relation to the existing facility included in Section 17 of the EIAR.

The EIAR included with the planning application provides an estimation of the worst-case consequences of conceivable accidents in the proposed new aqueous facility and hydrogen plant. The consequences modelling completed concludes that any accident associated with the sustainability project has no potential for significant consequences off-site. The two worst-case conceivable events are further detailed below with commentary provided:

A full bund fire at the new aqueous waste facility with no impacts off site.

This scenario involves a major release of aqueous solvent waste, with ignition to give rise to a pool fire on site. The tanks are fitted with shields in place around the perimeter of the tank walls, which will help to minimise the risks associated with a release outside the bund due to, e.g. overjetting or overtopping of the bund wall. In the event of a major release, the size of the resulting pool of liquid will be restricted by the installation of a bund at the tank. In the event of a major release, the risk of ignition is low when compared with other bulk storage facilities, e.g. in solvent or petroleum service, as the materials in the tanks are aqueous solutions, where the water content is in excess of 90%. Nonetheless a scenario involving a bund fire was considered credible and modelling was conducted to determine the impacts to the surrounding area. The modelling results show that, in the credible worst-case event of a full bund fire, there would be no impacts off site. The tank farm is located at the site boundary to the north of the site and so, in the event of a full bund fire, there would be high levels of thermal radiation at the boundary. However, the modelling also shows that heat flux decreases rapidly with distance, to a level of 4 kW/m2 at a distance of 22 m from the bund. There are no vulnerable offsite receptors within this range and therefore has no potential for significant off-site consequences.

A hydrogen explosion causing maximum overpressures at the roadway of the order of 50 mbar not presenting a risk to people outside the plant.

The credible worst-case scenario in this area of the site involves a major release following catastrophic failure of the hydrogen storage vessel, resulting in overpressures to the surrounding area. The hydrogen storage vessel operates at high pressure and so, in the event of an explosion, this would result in high levels of overpressure in the immediate vicinity. The nearest off-site receptor is the R152 road, which runs to the south of the site. At its closest point, this is located at a distance of approximately 85 m from the hydrogen plant. In the worst-case scenario, the maximum overpressures at the roadway would be of the order of 50 mbar. Exposure to this level of overpressure does not present a risk to people off-site.

Therefore, a major accidents prevention review needs to address the two main topics for review:

- Confirm the site does not qualify as SEVESO III establishment (Section 3.3)
- Confirm the facilities will be built in accordance EU/Irish standards and current employment legislation to protect the lives of personnel employed at the site (section 3.4)

3.3 SEVESO III INVENTORY ASSESSMENT

Callaghan Engineering has reviewed the Seveso III inventory assessment included in appendix 17.1 of the EIAR. In accordance with the provisions of the SEVESO III directive 2012/82/EC, dangerous substances have been quantified and classified into: health hazards, environmental hazards and physical hazards to determine if the quantities stored on each category fall under Seveso III establishment provisions.

For each category, there are two qualification thresholds, one of which is used to determine if the site qualifies as a lower tier SEVESO III establishment and another to determine if the site qualifies as a SEVESO III upper tier establishment. If no single material exceeds its threshold, there is an aggregation rule in which the individual ratios (q/Q) for all materials within the same hazard category are added together. There are three possible outcomes from this aggregation process:

- 1. The sum of the individual ratios against the lower tier thresholds for all three hazard types is less than one (1), in which case the regulations do not apply.
- 2. The sum of the individual ratios against the lower combined inventory is greater than the lower tier threshold but less than the upper tier threshold, in which case the site qualifies as a lower tier establishment.
- 3. The combined inventory is greater than the upper tier threshold, in which case the site qualifies as an upper tier establishment.

3.3.1 **HEALTH HAZARDS**

The applicant consultant's report in appendix 17.1 of the EIAR characterises the boiler ash residues, packaged hazardous waste shipments (drums), liquid hazardous waste (tankers). A review of the hazard statements for each shipment reveals that there are no listed carcinogenic substances or health hazards relevant to the Seveso III regulations in the hazardous waste feedstock to the furnace. The information reported has been reviewed leading to confirmation that the conclusions drawn by the applicant are plausible.

3.3.2 **ENVIRONMENTAL HAZARDS**

3.3.2.1 Aqueous Waste

The applicant has identified that some aqueous waste tankers can contain concentrations of active pharmaceutical ingredients (APIs) between 2.5% and 4%, which corresponds to a category chronic 2 mixture, which is a hazard to the aquatic environment as listed in annex I of the Seveso regulations.

The applicant has informed that up to two of these tankers can be on site at any given time. Based on this information the environmental (q/Q) ratio was calculated as follows:

q= Maximum amount of category chronic 2 mixture in tankers is 2 x 27 tonne.

Q= The applicable lower tier Seveso threshold for category chronic 2 mixture is 200 tonnes

(q/Q) for two tankers equal to 54 /200 = 0.270

The applicant has estimated that once the environmentally hazardous aqueous waste is pumped to the large 300 m³ storage tanks the waste is diluted below 2.5% and it is no longer considered an environment hazard for the purpose of the SEVESO III inventory assessment.

3.3.2.2 Packaged Waste

The applicant has identified that circa 14% of the current packaged hazardous waste inventory is environmentally hazardous (E1). Based on worst case daily inventory of 40.72 tonnes, this equates to 5.76 tonnes of environmentally hazardous material. Based on this information the environmental (g/Q) ratio was calculated as follows:

- q= Maximum amount of packaged environmentally hazardous material (E1) in drums 5.76 tonne.
- Q= The applicable lower tier Seveso threshold for category E1 mixture is 100 tonnes
- (q/Q) for two tankers equal to 5.76 /100 = 0.057

The information reported has been reviewed leading to confirmation that the inventory of environmental hazards has been correctly assessed in accordance with Seveso III.

3.3.3 PHYSICAL HAZARDS

Both the aqueous waste operation and hydrogen operations increase the physical hazard quotients for the physical hazards category.

3.3.3.1 Flammable Liquid

The aqueous waste tankers on site (14 x 27 m³ tankers) and the new aqueous waste tanks (2x 300 m³) will contain a mixture of water and flammable solvents. The solvent fraction will be up to 6% and will correspond with category P5c in Schedule 1 of the Seveso III regulations for which the lower tier threshold is 5000 tonnes.

The (q/Q) quotients for flammable liquids category P5c is calculated as follows:

q= Maximum amount of flammable aqueous waste in tankers and tanks= 14 x 27+ 2 x 300 = 978 tonne

Q= the lower tier Seveso threshold 5000 tonnes

(q/Q) quotient 978/5,000 = 0.2

3.3.3.2 Flammables from Packaged Waste

The applicant has identified that circa 38% of the packaged hazardous waste inventory is a physical hazard. Based on worst case daily inventory of 40.72 tonnes, this equates to 15.34 tonne of physical hazardous material. Based on this information the environmental (q/Q) ratio was calculated as follows:

- q= Maximum amount of packaged environmentally hazardous material (p5c) in drums 15.34 tonne.
- Q= The applicable lower tier Seveso threshold for category p5c flammable substance is 5000 tonnes
- (q/Q) for two tankers equal to 15.34 /5000 = 0.003

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3.3.3.3 Hydrogen:

The report identifies the requirement to store 2 tonnes of hydrogen at the site. This is based on the capacity of a 100m³ storage tank operating at 350 bar. Hydrogen is listed in the Seveso III regulations for which the lower tier threshold is 5 tonnes.

The (q/Q) physical calculate as follows:

q= the maximum amount of hydrogen = 2 tonnes

Q= the lower tier Seveso threshold 5 tonnes

(q/Q) quotient 2/5 = 0.4

The information reported has been reviewed leading to confirmation that the inventory of physical hazards has been correctly assessed in accordance with the Seveso III directive.

3.3.4 TOTAL INVENTORY OF SEVESO SUBSTANCES

The quotients (q/Q) calculated for the proposed development were added to the existing quotients for other substances by the applicant and the revised sum of quotients reported in the EIAR, report ref: 462-20X0073, table 12:

Category	Σq/Q _{lower tier}	Σq/Q _{upper tier}
Health	-	-
Physical	0.655	0.067
Environmental	0.886	0.409

It can be observed from this table that the site summation of physical hazards is heavily influenced by the addition of the quotients associated with the proposed aqueous waste and hydrogen storage development which amount to 0.6 out of the 0.655 total. The new summation for the site 0.655 remains well below the lower tier Seveso limit.

It can also be observed that the summation of environmental hazards is influenced by the addition of the quotients associated with the hazardous waste in two aqueous waste tankers containing API and deemed an environmental hazard. The new summation for the site is 0.886 with the new development contribution 0.27. From review of the substances already stored at the site, it was observed that the main contributor for the environment summations is the storage of 54 tonnes of ammonium hydroxide (25%) for which the lower trier Seveso limit is 100 tonne and contributes with a quotient (q/Q) 0.54. The new summation for the site 0.886 remains below the lower tier Seveso limit.

Based on the inventory of substances reviewed, the increases in the inventory associated with the proposed development do not cause the site to qualify as Seveso establishment.

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34 **DESIGN AND OPERATION SAFETY**

3.4.1 RISK IDENTIFICATION AND RISK CONTROL

As the site does not qualify as a Seveso III establishment, a major accident prevention policy (MAPP) is not required. The hazard and risk identification assessment framework (HAZID&RA) employed by the applicant is therefore an appropriate tool to screen hazardous scenarios and assess the risk for the environment and personnel.

The risk elimination / risk mitigation measures proposed by the HAZID&RA team included in the design will necessarily contribute to a reduction in the likelihood of a major accident taking place on site. However, while the measures are comprehensive, the semi-quantitative nature of the assessment and the lack of detailed design information as presented in the original application details do not provide full assurance that the detailed design will be executed in accordance to current safety legislation.

At the request of ABP for additional information, the applicant has provided further information and assurances clarifying that all relevant standards required to quantitatively evaluate and manage the explosion risk will be employed. This additional information provided by the applicant dated 31st of May 2021 is key to ensure the risk at the site is controlled to acceptable levels.

3.4.2 DETAILED RISK ASSESSMENT / FUNCTIONAL SAFETY

Indaver has committed to carrying out a detailed Hazard and Operability study (HAZOP) for the proposed development in conjunction with the suppliers of the plant. This assessment will cover all unit operations at the hydrogen plant and the functional interaction between the unit operations, including the electrolysis unit, scrubber unit, gas holder, compressors, and AGIs, and future de-ox plant and drier, as appropriate.

Indaver has also confirmed a Level of Protection Analysis (LOPA) for the plant will be carried out which will ensure that the relevant Safety Instrumented Systems (SIS) are implemented in accordance with IS EN 61511. This framework allows an evaluation of the required level of protection depending on personnel occupancy in the areas subject to explosion risk.

It is CE's opinion that the above methodology provides a great level of assurance that the plant will be safe to operate and that those risk scenarios, which may have the potential to cause fatalities within the plant, even with very low probability, will be adequately addressed.

3.4.3 **EXPLOSION PROTECTION**

As detailed in the information submitted by the applicant, the two main risks introduced re the proposed development are a full aqueous waste bund fire and a hydrogen explosion. Both worst- case scenarios do not present a risk to people outside the plant but do present a risk to personnel operating the plant.

Invader has confirmed that a hazardous area classification assessment will take place to include the proposed development in accordance with the standard IS EN 60079-10-1. The assessment will drive the ventilation and equipment specification in accordance with the standard.

In relation to the aqueous tank farm, the applicant has confirmed that the tanks will be designed in accordance with API 620 "Design and construction of large, welded, low-pressure storage tanks". This is

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an appropriate standard for the aqueous farm tanks design. While not specifically stated in the submission, it is important that the venting system will cover the bund fire scenario described as anticipated worst case.

The applicant has confirmed that in accordance with the requirements of Part 8 of the Safety, Health and Welfare at Work (General Applications) Regulations 2007 (SI No 299 of 2007. Part 8: Explosive atmospheres at places of work. The site explosion protection document (EPD) will be updated to reflect the proposed development.

REVIEW OF VALIDITY OF CONCLUSIONS 4

CE has reviewed the applicant information in relation to the topic of major accidents. According to the information reviewed, the site does not qualify as a Seveso III establishment and the new sustainability development has no potential to generate major accidents with off-site consequences.

For the review it is also evident that the introduction of flammable aqueous waste and highly flammable hydrogen storage at the site needs to be adequately managed to reduce the risk to personnel working at the site to an acceptable low risk level.

The fire and explosion risk identified can be manged by the applicant and its consultants with the use of current design standards. The replies provided by the applicant to the request for additional information provide a high level of assurance that the detailed design of the facility will adequately mitigate the risk to personnel to broadly acceptable low risk levels.

It is CE's opinion that the clarifications and commitments given by the applicant provide sufficient assurances that the fire and explosion risks will be adequately managed in accordance to the Safety, Health and Welfare at Work (General Applications) Regulations 2007 (SI No 299 of 2007) Part 8 Explosion Protection.

RECOMMENDATION 5

The following planning condition is recommended:

As the risk of an aqueous bund fire is identified as the worst-case credible event for the new tank farm, the applicant shall design the tank farm catering for the fire case scenario as part of the design criteria, including the provision of adequately sized emergency relief venting and any other safety measures deemed appropriate to mitigate risk.

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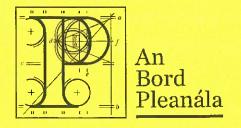
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Board Direction



Board Direction BD-010374-22 ABP-307433-20

The submissions on this file and the Inspector's report were considered at Board meetings held on 11/04/21 and 22/03/2022.

The Board decided to approve the proposed development, generally in accordance with the Inspector's recommendation, subject to the following reasons and considerations, and the conditions set out below.

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

European legislation and policy, including of particular relevance:

Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive).

Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives).

Directive 2018/851 amending Directive 2008/98/EC (Waste Framework Directive).

Directive 2010/75/EU (Industrial Emissions Directive).

Closing the loop - EU Action Plan for the Circular Economy (COM/2015/0614).

EU Hydrogen Strategy – A hydrogen strategy for a Climate Neutral Europe (COM/2020/301).

National legislation and policy, including of particular relevance:

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National Planning Framework 2018-2040, which supports the development of hazardous waste management facilities to avoid the need for treatment elsewhere.

National Development Plan 2021 – 2030, which supports the provision of additional capacity in waste to energy facilities including for hazardous waste.

Waste Action Plan for a Circular Economy – Ireland's National Waste Policy 2020 – 2025, which supports the development of adequate and appropriate treatment capacity at indigenous facilities.

National Hazardous Waste Management Plan 2014-2020 and associated documentation which highlight the need for increased self-sufficiency in the treatment of hazardous wastes.

Climate Action Plan, 2021, which notes Ireland's success in diverting waste from landfill.

Regional planning and related policy, including:

Eastern-Midlands Region Waste Management Plan 2015-2021 and in particular policies E15a and E16, which supports the development of additional thermal recovery capacity for non-hazardous and hazardous waste.

The local planning policy including:

Meath County Development Plan 2021-2027 including INF OBJ 59 to ensure that waste management facilities are appropriately managed and monitored.

The following matters:

- (a) The nature of the proposed development including the intake of additional hazardous waste.
- (b) The established nature of the existing licenced Waste to Energy facility, which is authorised to accept hazardous wastes.
- (c) The environmental benefits arising from the development of a bottom ash storage building and the aqueous waste tank farm and their role in facilitating appropriate treatment and recovery of wastes.
- (d) The production of hydrogen, which results in a beneficial use of electricity which would otherwise be lost through curtailment.

- (e) The need for operator flexibility, which it is considered is established.
- (f) The design, layout and landscaping of the proposed development.
- (g) The increased traffic predicted in the construction and operation of the proposed development.
- (h) Existing and emerging policy provisions relating to the Leinster Orbital Route having regard also to the current use and layout of the overall site.
- (i) The stated purpose of the offices which is related to the operation of the facility.
- (j) The range of proposed mitigation measures set out in the submitted in the documentation lodged including the further information submitted, the Environmental Impact Assessment Report, and Natura Impact Statement incorporating Appropriate Assessment screening.
- (k) The submissions made in relation to the application.
- (I) The report and recommendation of the Inspector and the Board's consultant.

Appropriate Assessment

The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the River Boyne and River Blackwater SAC (Site Code 002299), the River Boyne and River Blackwater SPA (004232), the Boyne Estuary SPA (004080), the River Nanny Estuary and Shore SPA (04158) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

The Board considered the Natura Impact Statement and associated documentation submitted with the application for approval, the mitigation measures contained therein, the submissions and observations on file, the response to further information and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Site, namely the River Boyne and River Blackwater SAC (Site Code 002299), the River Boyne and River Blackwater SPA (004232), the Boyne Estuary SPA (004080), the River Nanny Estuary and Shore SPA (04158) in view of the sites' conservation

objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- i. the likely direct and indirect impacts arising from the proposed development both individually or in combination with other plans or projects,
- ii. the mitigation measures which are included as part of the current proposal, and
- iii. the conservation objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the screening and the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Site, having regard to the site's conservation objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' conservation objectives.

Environmental Impact Assessment

The Board completed an environmental impact assessment of the proposed development taking account of:

- (a) the nature, scale, location and extent of the proposed development,
- (b) the Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application, including the further information submitted.
- (c) the submissions received from the prescribed bodies, and
- (d) the Inspector's report and the report of the Board's consultant.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development, and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the examination, set out in the Inspector's

report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

Significant construction phase impacts on the public road network and the environment can be mitigated by measures to minimise air and noise emissions and to manage construction traffic as set out in the EIAR and subject to implementation of a Construction Environmental Management Plan incorporating a Construction Traffic Management Plan.

Positive environmental impacts on material assets during the operational phase by the increase in national capacity to treat hazardous waste and reduce dependency on export.

Positive impacts on climate from the use of electricity generated on site for the production of hydrogen, which will assist in the transition to a low carbon circular economy.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be acceptable.

Proper planning and sustainable development:

It is considered that subject to compliance with the conditions set out below the proposed development would accord with European, national, regional and local planning, transportation, waste and related policy, would not have an unacceptable impact on the environment including water and ecology, would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

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Conditions

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted on the 4th day of June 2021, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars. In default of agreement, the matters in dispute shall be referred to An Bord Pleanála for determination.

Reason: In the interest of clarity.

2. The period during which the development hereby permitted may be carried out shall be ten years from the date of this order.

Reason: Having regard to the nature and extent of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

- 3. Waste to be accepted at the facility shall not exceed a total of 280,000 tonnes per annum as follows:
 - an additional 15,000 tonnes per annum of waste for treatment,
 which may be hazardous waste and
 - up to 30,000 tonnes per annum of third-party boiler ash and flue gas clearing residues and other residues for pre-treatment.

Reason: In the interest of clarity and to ensure compliance with policy provisions.

 The mitigation measures and monitoring commitments identified in the Environmental Impact Assessment Report shall be implemented in full.

Reason: In the interests of clarity and the proper planning and sustainable development of the area.

5. The mitigation measures contained in the Natura Impact Statement submitted with the application shall be implemented in full.

Reason: In the interests of clarity and the proper planning and sustainable development of the area and to ensure the protection of European Sites.

6. (a)The construction of the development shall be managed in accordance with a Construction and Environmental Management Plan which shall be submitted to and agreed in writing with the planning authority prior to the commencement of the development.

(b) The CEMP shall:

cover all aspects of the construction phase and incorporate measures to avoid, minimise and mitigate potential effects on the environment.

incorporate a Construction Traffic Management Plan

incorporate a Waste Management Plan

incorporate measures to prevent the introduction and spread of nonnative invasive species

incorporate measures to deal respond to incidents

be otherwise in accordance with the requirements of the planning authority.

- (c) The implementation of the CEMP shall be in accordance with a programme of monitoring commitments which shall be incorporated in the plan and which shall include surface water monitoring.
- (d) The plan shall be updated at regular intervals.
- (e) A Complaints Register shall be maintained during the construction stage.

Reason: In the interests of public safety and residential amenity.

7. Save where strictly necessary and subject to obtaining prior written agreement of the planning authority no HGV traffic associated with the

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construction or operation of the proposed development shall pass through Duleek.

Reason: In the interest of clarity.

- 8. Save where otherwise agreed with the planning authority the following shall be reviewed for incorporation in the detailed design:
 - (a) The applicant shall design the tank farm catering for the fire case scenario as part of the design criteria, including the provision of adequately sized emergency relief venting and any other safety measures deemed appropriate to mitigate risk.
 - (b) The recommendations of the HAZID&RA Team which are presented in Appendix 4 of Appendix 17.1 of the EIAR particularly with respect to the fire water retention study.

Reason: In the interest of the protection of the environment.

9. Surface water management shall be in accordance with the detailed requirements of the planning authority.

Reason : To ensure a proper standard of development and in the interest of water quality and the management of surface water.

10.A comprehensive landscaping plan, prepared by a suitably qualified person, shall be submitted to and agreed in writing with the planning authority, prior to the commencement of the development.

Reason: In the interests of visual amenity.

11. Details of the materials, colours and textures of all external finishes to the proposed buildings shall be submitted to, and agreed in writing with the planning authority, prior to commencement of the development.

Reason: In the interests of visual amenity.

12. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist on the site. In this regard, the developer shall-

- a. notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) in relation to the development,
- employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works.
- c. provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological material which the authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

13. Trees and hedgerows not to be removed during nesting season in accordance with Wildlife Act (as amended).

Reason: In the interest of biodiversity.

14. The developer shall pay a contribution to the planning authority, either annually or in such manner as may be agreed, towards the cost of the provision of environmental improvement and recreational or community amenities in the locality. The identification of such projects shall be decided by the planning authority having consulted with the community liaison committee as provided for under condition number 6 of the original permission PL17.126307, governing the development of the site. The amount of the contribution, which shall be based on a payment per tonne of waste accepted for treatment at the site on foot of this permission, and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of such agreement shall be referred to the Board for determination. The amount shall be index linked in the case of phased payment. The developer shall consult with the planning authority in this regard prior to the commencement of the development.

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental, recreational or community amenities which would constitute a substantial gain to the local community.

15. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to planning authority, to secure the satisfactory reinstatement of the site and delivery route upon cessation of the project, coupled with an agreement empowering the planning authorities to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authorities and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure satisfactory reinstatement of the site.

16. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authorities may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authorities and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000 that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Schedule of Costs

In accordance with the provisions of Section 37H(2)(c) of the Planning and Development Act 2000, as amended, the net amount due to be recouped from the applicant is:

EURO 8,650.

Board Member

Date: 28/03/2022

Board Order



Board Order ABP-307433-20

Planning and Development Acts, 2000 to 2021

Planning Authority: Meath County Council

Application for permission under section 37E of the Planning and Development Act 2000, as amended, in accordance with plans and particulars, including an Environmental Impact Assessment Report and Natura Impact Statement, lodged with An Bord Pleanála on the 25th day of June, 2020 by Indaver Ireland of The Highline, 1st Floor, Baker's Point, Pottery Road, Dún Laoghaire, County Dublin.

Proposed Development: 10-year planning permission comprising further development within the existing Carranstown site on a 9.9-hectare of the following:

- Increase in the amount of hazardous waste accepted at the facility for treatment in the waste to energy plant from the current permitted 10,000 tonnes per annum (tpa) up to a maximum of 25,000 tpa.
- Increase the annual total waste accepted at the site for treatment in the waste to energy facility from the current permitted 235,000 tpa to 250,000 tpa.
- Development of an aqueous waste tank farm (up to 625 square metres) and unloading area (up to 310 square metres) including: one by 20 cubic metres (up to eight metres high above ground) and three by 300 cubic metres storage tanks (up to 25.5 metres high above ground) in a bund (up to 320 square metres), a single-bay tanker loading area, ancillary equipment area complete with paved areas, gantries, piperacks and stairs; and an upgrade of the existing unloading area to a three-bay tanker unloading area complete with gantries, piperacks and stairs.

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- Development of a 10-megawatt hydrogen generation unit, single storey, up to 810 square metres and 12.7 metres high above ground, complete with on-site vehicular access road, tanker loading area (for mobile hydrogen transport applications and other potential uses), 100 cubic metre hydrogen storage tank and connection to the natural gas distribution network.
- Development of a bottom ash storage building up to 1,525 square metres and 14.5 metres high above ground for the storage of up to 5,000 tonnes of bottom ash currently produced on site.
- Additional waste acceptance capacity and infrastructure (two by 200 cubic metres and one by 100 cubic metres tanks located inside the existing main process building and a concrete area for tanker unloading of up to 300 square metres located outside) to accept up to 30,000 tpa (bringing the site total to 280,000 tonnes per annum) of third-party boiler ash and flue gas cleaning residues and other similar residues for treatment in the existing ash pretreatment facility on site.
- Development of a single storey warehouse up to 277 square metres and 10 metres high above ground, a single storey workshop up to 182 square metres and 10 metres high above ground with an office mezzanine level of up to 40 square metres, and a two-storey emergency response team (ERT)/office building up to 127 square metres (per storey) and 10 metres high to support existing maintenance activities on the site.
- Development of a new concrete yard (up to 2,200 square metres) complete
 with an underground stormwater attenuation tank of up to 146 cubic metres
 for vehicular access and parking area (up to 530 square metres) for up to 10
 trucks, tankers or containers on the site.
- Demolition and re-building of an existing single storey modular office building on site with a slightly increased footprint totalling up to 615 square metres and five metres high above ground.
- Other miscellaneous site upgrades including: provision of a weather canopy
 up to 210 square metres and 12.5 metres high adjacent to the existing pretreatment plant; weather canopy to a truck maintenance bay up to 75 square
 metres and six metres high; alterations to the hardstands and approach roads
 to the tipping hall (up to 1,100 square metres); provision of a concrete

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hardstand adjacent to the aero condenser structure (up to 250 square metres); site road widening in the vicinity of the proposed tanker unloading area to improve vehicle manoeuvring (up to 165 square metres); extension (increase in length of 25 metres), reconfiguration (increase in height of up to seven metres) and landscaping of two berms on site to improve visual screening characteristics; repurposing of the existing temporary trailer park to a dedicated, permanent contractor's compound (up to 5,350 square metres) complete with fencing (up to 2.5 metres high), vehicle access, personnel site access and welfare facilities (up to 45 square metres and 4.5 metres high) and a new dedicated sewage treatment unit; a permanent personnel access route from the existing main process building to the proposed modular office building, hydrogen generation unit and the contractor's compound via footpaths, security turnstile unit and a concrete staircase (up to 75 square metres); 32 new car parking spaces for staff and contractors in the existing car park area (up to 350 square metres), as amended by the further plans and particulars received by the Board on the 4th day of June, 2021.

All on the existing Carranstown site in the townland of Carranstown, Duleek, County Meath.

Decision

Grant permission under section 37G of the Planning and Development Act 2000, as amended, for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

Determine under section 37H(2)(c) the sum to be paid by the applicant in respect of costs associated with the application as set out in the Schedule of Costs below.

Matters Considered

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included any submissions and observations received by it in accordance with statutory provisions.

Reasons and Considerations

In coming to its decision, the Board had regard to the following:

European legislation and policy, including of particular relevance:

- Directive 2014/52/EU amending Directive 2011/92/EU (EIA Directive).
- Directive 92/43/EEC (The Habitats Directive) and Directive 79/409/EEC as amended by 2009/147/EC (Birds Directives).
- Directive 2018/851 amending Directive 2008/98/EC (Waste Framework Directive).
- Directive 2010/75/EU (Industrial Emissions Directive).
- Closing the loop EU Action Plan for the Circular Economy (COM/2015/0614).
- EU Hydrogen Strategy A hydrogen strategy for a Climate Neutral Europe (COM/2020/301).

National legislation and policy, including of particular relevance:

- National Planning Framework Ireland 2040, which supports the development of hazardous waste management facilities to avoid the need for treatment elsewhere.
- National Development Plan 2021-2030, which supports the provision of additional capacity in waste to energy facilities including for hazardous waste.

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- A Waste Action Plan for a Circular Economy Ireland's National Waste Policy 2020-2025, which supports the development of adequate and appropriate treatment capacity at indigenous facilities.
- National Hazardous Waste Management Plan 2014 2020 and associated documentation which highlight the need for increased self-sufficiency in the treatment of hazardous wastes.
- Climate Action Plan, 2021, which notes Ireland's success in diverting waste from landfill.

Regional planning and related policy, including:

 Eastern-Midlands Region Waste Management Plan 2015-2021 and, in particular, policies E15a and E16, which supports the development of additional thermal recovery capacity for non-hazardous and hazardous waste.

The local planning policy including:

 Meath County Development Plan 2021-2027, including INF OBJ 59 to ensure that waste management facilities are appropriately managed and monitored.

The following matters:

- (a) The nature of the proposed development, including the intake of additional hazardous waste.
- (b) The established nature of the existing licenced waste to energy facility, which is authorised to accept hazardous wastes.
- (c) The environmental benefits arising from the proposed development of a bottom ash storage building and the aqueous waste tank farm and their role in facilitating appropriate treatment and recovery of wastes.
- (d) The production of hydrogen, which results in a beneficial use of electricity which would otherwise be lost through curtailment.
- (e) The need for operator flexibility, which it is considered is established.
- (f) The design, layout and landscaping of the proposed development.

- (g) The increased traffic predicted in the construction and operation of the proposed development.
- (h) Existing and emerging policy provisions relating to the Leinster Orbital Route having regard also to the current use and layout of the overall site.
- (i) The stated purpose of the proposed offices which is related to the operation of the facility.
- (j) The range of proposed mitigation measures set out in the submitted documentation lodged, including the further information response received by the Board on the 4th day of June, 2021, the Environmental Impact Assessment Report, and the Natura Impact Statement incorporating Appropriate Assessment screening.
- (k) The submissions made in relation to the application.
- (I) The report and recommendation of the Inspector and the Board's consultant.

Appropriate Assessment: Stage 1:

The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), the River Boyne and River Blackwater Special Protection Area (Site Code: 004232), the Boyne Estuary Special Protection Area (Site Code: 004080) and the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158) are the only European Sites in respect of which the proposed development has the potential to have a significant effect.

Appropriate Assessment: Stage 2:

The Board considered the Natura Impact Statement and associated documentation submitted with the application, the mitigation measures contained therein, the submissions and observations on file, the response to the further information request received on the 4th day of June, 2021 and the Inspector's assessment. The Board completed an appropriate assessment of the implications of the proposed development for the affected European Sites, namely the River Boyne and River Blackwater Special Area of Conservation (Site Code: 002299), the River Boyne and

River Blackwater Special Protection Area (Site Code: 004232), the Boyne Estuary Special Protection Area (Site Code: 004080) and the River Nanny Estuary and Shore Special Protection Area (Site Code: 004158) in view of the sites' Conservation Objectives. The Board considered that the information before it was adequate to allow the carrying out of an appropriate assessment. In completing the appropriate assessment, the Board considered, in particular, the following:

- the likely direct and indirect impacts arising from the proposed development,
 both individually or in combination with other plans or projects,
- ii. the mitigation measures which are included as part of the current proposal, and
- iii. the Conservation Objectives for the European Sites.

In completing the appropriate assessment, the Board accepted and adopted the screening and the appropriate assessment carried out in the Inspector's report in respect of the potential effects of the proposed development on the aforementioned European Sites, having regard to the sites' Conservation Objectives.

In overall conclusion, the Board was satisfied that the proposed development, by itself or in combination with other plans or projects, would not adversely affect the integrity of the European Sites, in view of the sites' Conservation Objectives.

Environmental Impact Assessment:

The Board completed an environmental impact assessment of the proposed development taking account of:

- (a) the nature, scale, location and extent of the proposed development,
- (b) the Environmental Impact Assessment Report and associated documentation submitted in support of the application, including the further information received by the Board on the 4th day of June, 2021,
- (c) the submissions received from the prescribed bodies and third parties, and
- (d) the Inspector's report and the report of the Board's consultant.

The Board considered that the Environmental Impact Assessment Report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development, and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the examination, set out in the Inspector's report, of the information contained in the Environmental Impact Assessment Report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

- Significant construction phase impacts on the public road network and the
 environment can be mitigated by measures to minimise air and noise
 emissions and to manage construction traffic, as set out in the Environmental
 Impact Assessment Report, and subject to the implementation of a
 Construction Environmental Management Plan incorporating a Construction
 Traffic Management Plan.
- Positive environmental impacts on material assets during the operational phase by the increase in national capacity to treat hazardous waste and reduce dependency on export.
- Positive impacts on climate from the use of electricity generated on site for the production of hydrogen, which will assist in the transition to a low carbon circular economy.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and, subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be acceptable.

Proper planning and sustainable development:

It is considered that, subject to compliance with the conditions set out below, the proposed development would be in accordance with European, national, regional and local planning, transportation, waste and related policy, would not have an unacceptable impact on the environment, including water and ecology, would not seriously injure the visual or residential amenities of the area or of property in the vicinity and would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Conditions

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the application, as amended by the further plans and particulars submitted to An Bord Pleanála on the 4th day of June, 2021, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to the commencement of development and the proposed development shall be carried out and completed in accordance with the agreed particulars. In default of agreement, the matters in dispute shall be referred to An Bord Pleanála for determination.

Reason: In the interest of clarity.

 The period during which the proposed development hereby permitted may be carried out shall be ten years from the date of this Order.

Reason: Having regard to the nature and extent of the proposed development, the Board considered it appropriate to specify a period of validity of this permission in excess of five years.

- 3. Waste to be accepted at the facility shall not exceed a total of 280,000 tonnes per annum as follows:
 - an additional 15,000 tonnes per annum of waste for treatment, which may be hazardous waste, and
 - up to 30,000 tonnes per annum of third-party boiler ash and flue gas clearing residues and other residues for pre-treatment.

Reason: In the interest of clarity and to ensure compliance with policy provisions.

 The mitigation measures and monitoring commitments identified in the Environmental Impact Assessment Report shall be implemented in full.

Reason: In the interest of clarity and the proper planning and sustainable development of the area.

5. The mitigation measures contained in the Natura Impact Statement submitted with the application shall be implemented in full.

Reason: In the interest of clarity and the proper planning and sustainable development of the area and to ensure the protection of European Sites.

- 6. (a) The construction of the proposed development shall be managed in accordance with a Construction and Environmental Management Plan (CEMP) which shall be submitted to and agreed in writing with the planning authority prior to the commencement of development.
 - (b) The CEMP shall:

- cover all aspects of the construction phase and incorporate measures to avoid, minimise and mitigate potential effects on the environment,
- incorporate a Construction Traffic Management Plan,
- incorporate a Waste Management Plan,
- incorporate measures to prevent the introduction and spread of nonnative invasive species,
- incorporate measures to deal with and respond to incidents, and
- be otherwise in accordance with the requirements of the planning authority.
- (c) The implementation of the CEMP shall be in accordance with a programme of monitoring commitments which shall be incorporated in the plan and which shall include surface water monitoring.
- (d) The plan shall be updated at regular intervals.
- (e) A complaints register shall be maintained during the construction stage.

Reason: In the interest of public safety and residential amenity.

 Save where strictly necessary, and subject to obtaining the prior written agreement of the planning authority, no HGV traffic associated with the construction or operation phase of the proposed development shall pass through Duleek.

Reason: In the interest of clarity.

- 8. Save where otherwise agreed with the planning authority, the following shall be reviewed for incorporation in the detailed design:
 - The developer shall design the tank farm catering for the fire case scenario as part of the design criteria, including the provision of adequately sized emergency relief venting and any other safety measures deemed appropriate to mitigate risk.
 - The recommendations of the HAZID&RA Team, which are presented in Appendix 4 of Appendix 17.1 of the Environmental Impact Assessment Report, particularly with respect to the fire water retention study.

Reason: In the interest of the protection of the environment.

 Surface water management shall be in accordance with the detailed requirements of the planning authority.

Reason: To ensure a proper standard of development and in the interest of water quality and the management of surface water.

10. A comprehensive landscaping plan, prepared by a suitably qualified person, shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of development.

Reason: In the interest of visual amenity.

11. Details of the materials, colours and textures of all external finishes to the proposed buildings shall be submitted to, and agreed in writing with, the planning authority prior to the commencement of development.

Reason: In the interest of visual amenity.

- 12. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist on the site. In this regard, the developer shall:
 - notify the planning authority in writing at least four weeks prior to the commencement of any site operations (including hydrological and geotechnical investigations) in relation to the proposed development,
 - employ a suitably qualified archaeologist who shall monitor all site investigations and other excavation works, and
 - c. provide arrangements, acceptable to the planning authority, for the recording and for the removal of any archaeological materials which the planning authority considers appropriate to remove.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation and protection of any remains that may exist within the site.

13. Trees and hedgerows shall not be removed during nesting season in accordance with the Wildlife Act 1976, as amended.

Reason: In the interest of biodiversity.

14. The developer shall pay a contribution to the planning authority, either annually or in such manner as may be agreed, towards the cost of the provision of environmental improvement and recreational or community amenities in the locality. The identification of such projects shall be decided by the planning authority having consulted with the community liaison committee as provided for under condition number 6 of the original permission (case reference number PL 17.126307) governing the development of the site. The amount of the contribution, which shall be based on a payment per tonne of waste accepted for treatment at the site on foot of this permission, and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of such agreement, shall be referred to the Board for determination. The amount shall be index linked in the case of phased payment. The developer shall consult with the planning authority in this regard prior to the commencement of development.

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental, recreational or community amenities which would constitute a substantial gain to the local community.

15. Prior to the commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or such other security as may be acceptable to the planning authority, to secure the satisfactory reinstatement of the site and the delivery route upon cessation of the project, coupled with an agreement empowering the planning authority to apply such security or part thereof to such reinstatement. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory reinstatement of the site.

16. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the planning authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine the proper application of the terms of the Scheme.

Reason: It is a requirement of the Planning and Development Act 2000, as amended, that a condition requiring a contribution in accordance with the Development Contribution Scheme made under section 48 of the Act be applied to the permission.

Schedule of Costs

In accordance with the provisions of section 37H(2)(c) of the Planning and Development Act 2000, as amended, the amount due to be recouped from the applicant is €8,650.

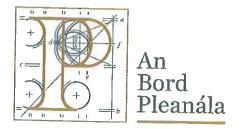
A breakdown of the Board's costs is set out in the attached Appendix 1.

Chris McGarry

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day of

2022



Board Order – Appendix 1 ABP-307433-20

Strategic Infrastructure Development

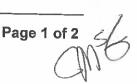
Cost of determining the Application

File Number: ABP-307433-20

Proposed Development: Increase in annual total waste for treatment from 235,000 tonnes to 250,000 tonnes, increase in amount of hazardous waste from 10,000 tonnes to 25,000 tonnes and all ancillary works at Carranstown, Duleek, County Meath.

Costs incurred by An Bord Pleanála in determining the application.

	An Bord Pleanála's Costs	€
(1)	Cost (calculated based on Inspector's time)	
	Inspector 1 (pre-application) - €4,410	€109,800
	Inspector 2 (application) - €87,955	,
	Consultant (application) - €17,435	3
(2)	Total chargeable costs	€109,800
(3)	Application Fee - €100,000	€101,000
	Pre-application Consultation Fee - €1,000	
(4)	Observer fees paid	€150
(5)	Net amount due to be recouped from the applicant	€8,650



Chris McGarry

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day

2022

2. Planning Ref: ABP-302447-18

Inspector's Report



Inspector's Report ABP-302447-18

Development Alteration request to extend current

permission for waste-to-energy facility in perpetuity (application reference

number 17.PA0026)

Location Carranstown, Duleek, Co. Meath

Planning Authority Meath County Council

Planning Authority Reg. Ref.

Requester(s) Indaver Ireland

Type of Application SID Alteration Request.

Date of Site Inspection 29/01/19

Inspector John Desmond

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1.0 Introduction

- 1.1. This report and assessment should be read in conjunction with the Inspector's report of 19/11/18 which contains an overview of the location and description of the site, the legislative context for the decision, the planning history, and addressed the issue of the materiality of the proposed alteration.
- 1.2. Indaver Ireland, the requester, obtained permission from the Board (ref.PA0026) in 2013 for amendments to its existing waste-to-energy (WTE) facility at Carranstown, Duleek, County Meath, which has been operational since 2011, to allow for a permanent increase in waste acceptance by 20,000 tonnes to 220,000 tonnes per annum. Subsequent amendments were permitted by the Board for a temporary increase in waste acceptance by 15,000t to 235,000tpa until 31 December 2019 (ref.PM0004) and for a permanent solidification installation to treat ash / flue residue (referred to as a pre-treatment) prior to transportation off site for disposal (PM0007). The requester proposes to alter the terms of consent ref.PA0026 to allow for the acceptance of waste at the facility to be permitted at 235,000tpa on a permanent basis.
- 1.3. Consequent to the Board's decision that the proposed alteration constitutes a material alteration to PM0026, the Board directed the requester to submit the information specified under Schedule 7A of the Regulations, 2001, as amended, supplemented by the information referred to under 146B(3A) and (3B) of Act, to undertake the public consultation procedures prescribed under 146(8), and advised the requester to consider including a stage 1 Appropriate Assessment Screening Report.

2.0 Requester's submission

2.1. The applicant submitted an *Environmental Report*, a *Report for the Purposes of Appropriate Assessment Screening* and copies of the public notices and letters of notification to appropriate persons / bodies on 18th and 19th of December 2018.

3.0 Environmental Report

3.1.1. The Environmental Report follows a grouped format. The report explicitly addresses the information required under Schedule 7A (*Information to be provided by the Applicant or Developer for the Purposes of Screening Sub-threshold Development for Environmental Impact Assessment*) of the Regulations, relating to the description of the proposed development, of those aspects of the environment likely to be affected and of the likely significant affects, and is compiled, as required, taking account of the criteria set out in Schedule 7 (i.e., the criteria for determining whether development should be subject of EIA). The following points of the report are relevant to the Board's considerations:

3.1.2. Characteristics of the proposed development -

- The proposed alteration comprises an amendment of a condition (no.3(1) of PM0004), which time limited to 31 December 2019 the permitted increase in the waste accepted to the facility to 235,000 tonnes per annum (inclusive of 10,000 tonnes hazardous waste per annum), to allow for the increased tonnage to apply in perpetuity.
- No modifications to the current site layout or the technology used are required.
- No construction works or changes to site operations are necessary the proposed alteration.
- The site has operated efficiently with this waste intake to date in compliance with the EPA IE licence.
- No cumulation with other existing development or any future development as no changes are proposed to site operations.
- No consumption of natural resources will arise as no construction is required.
 Operating at the increased waste intake has not required any significant increase in mains water supply only a small quantity of mains water is used as a potable water supply, with process water taken from ground water well supply on site. No significant increase in waste removal or discharge of foul effluent has arisen with increased waste intake ash and flue-gas residue are taken off site for recovery and the volume is in line with the tonnage of waste intake; process water is evaporated

through its operational use and other water used (e.g. for cleaning) is reused as process water.

• No change in the environment or in nuisance to neighbours as no change is proposed to current operations, or from construction as none is necessary.

Note – The report does not describe the risks of major accidents and/or disasters associated with the project concerned or directly address risks to human health.

3.1.3. Location of the proposed development -

- The general land use of the area is agricultural, with small pockets of scattered residential housing located primarily along the existing road network, but with significant areas of industrial and extractive uses (cement works and stone quarry) immediately to the north and west of the site.
- Under the MDP 2013-2019 the land is zoned E2 General Enterprise and Employment 'to provide for the creation of enterprise and facilitate opportunities for employment through industrial, manufacturing, distribution, warehousing and other general employment / enterprise uses in a good quality physical environment.'

 Under Duleek LDP, for this land use zoned it is the objective CER POL 1 'to promote enterprise creation opportunities and encourage job/employment creation initiatives in line with the sustainable growth of Duleek and on appropriately zoned and serviced land.' The existing development is consistent with the objective of the said plans and the proposed development will not result in any change of land use and will continue to be consistent with same.
- The proposed development does not require additional natural resources above current usage and does not have any significant impact on resources. The plant generates a sufficient quantity of electricity to meet the electrical demands of the facility with excess power exported.
- Regarding absorption capacity, the only emissions are to air (none to ground and only clean stormwater discharges to surface water) and significant modelling and subsequent monitoring (since 2011) has confirmed the effect of air emissions on the receiving environment.

3.1.4. Types and characteristics of potential impacts -

- No impacts from construction as no construction is required.
- Emissions and environmental impact from the 235,000 tonnes operations would continue as current, which operations were shown by the EIA previously submitted to have long term imperceptible impact on the environment with mitigation in place and the model assessments have been confirmed by subsequent modelling, with operations in compliance with EPA IE licence.
- The nature of the impact on the environment is long-term imperceptible, as the plant will continue to operate within the requirements of its IE licence.
- There is no potential for transboundary impacts.
- The impact of operating the plant at 235,000 tonnes is well understood, with results of monitoring over many years demonstrating that emissions are less than the IE licence limits.
- The impact is long-term negligible, as monitoring has shown emissions from operating at this level of tonnage less than the IE license limits. The facility is highly regulated, and the probability of a greater impact is very low.
- The lifetime of the plant is not defined. Upon closure the emissions will cease, with no long-term impact arising from impacts associated with the proposed development.
- As the proposal will not significantly increase air quality of climate impacts in the area, the potential cumulative impact of the proposed development ambient air quality and climate or other environmental factors with the adjacent development (Platin Cement Ltd) is deemed negligible.
- No reduction of impact is required as operation of the plant, which uses the most up to date technology and environmental management procedures, in accordance with the IE licence has shown the plant is compliant and will have a long-term imperceptible impact on the receiving environment.

3.1.5. Summary of specific assessments of potential impacts on receiving environment -

Air and climate

- The licensed emissions (flow rate of 183,700 Nm³/hr under W0167-03) from the facility will not change as part of the alteration; the licensed emission limits are equivalent to the emission limits in Council Directive 2010/75 (The Industrial Emissions Directive).
- No potential for dust impacts on air quality as no development or construction works required.
- Greenhouse gas emissions resulting from the proposed alteration will be insignificant in terms of national CO2 emissions and Ireland's agreed limit under the Kyoto Protocol and the EU Effort Sharing Agreement (20/20/20) targets) and the impact of the proposed alteration on climate is therefore deemed to be negligible.

Biodiversity

- The site is not within a European site; all habitats on site are of low ecological value, with no rare or protected habitats recorded within the study area; there are bats on site, facilitated by bat boxes erected in 2008, as well as Irish hare, and it is unlikely that they would be significantly affected by the proposed development.
- No construction impacts as no construction works or additional land changes are proposed.
- No significant impacts on surrounding habitats are anticipated from operations as there will be no changes to operations. An adverse impact on surface waters is highly unlikely as there is no direct source pathway to a surface waterbody, without attenuation and monitoring, and only occasional discharge to a semi-dry ditch. Given the distance to the River Nanny Estuary and Shore SPA, there would be no significant impact on any European site within the potential zone of impact of the proposed project.
- No significant impact on biodiversity is anticipated.
- Cultural heritage, architecture and archaeology
 - As no construction works are required and the operation of the facility will remain consistent with the activity and buildings in place, there will be no potential impacts on archaeological or cultural heritage.

Land and Material Assets

- There is no potential for impacts on land, material assets or generation of waste from construction as no construction is required.
- The operations will remain consistent with the type of activity and buildings already in place on the site, with no change to the operational phase and therefore no impacts on material assets in the receiving environment, including no significant change in water abstraction, foul water discharge, ash residue production or discernible increase in traffic conditions (such as would give rise to adverse traffic impacts or warrant an EIA on traffic grounds).

Landscape and visual

- As no construction is required and no change or additions to site buildings or to the landscape, there will be no landscape or visual impacts.

Major accidents

- The Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2015, do not apply to this site.

Noise and vibration

- Noise contribution from the existing site, within a mixed agricultural, industrial
 and residential area is relatively low, with key activities associated with
 existing operations involving site traffic, external plant items to the north of the
 main building and the mains stack.
- Annual monitoring at four points on the site boundary as part of the facilities IE
 License (W0167-03) confirm that the operation of the Indaver facility does not
 contribute any significant noise levels to the surrounding environment, which
 is subject to noise emission limits of 55dBL_{Ar(30mins)} daytime, 50dBL_{Ar(30mins)}
 evening time and 45dBL_{Ar(30mins)} night time.
- No construction activities are required, and the operations will continue as current and therefore there is no potential impacts from noise from construction and operational noise impact will continue as long-term imperceptible and would not warrant preparation of an EIA on noise impact grounds.

Population and human health

- Sensitive receptors within the study area include residential homes,
 commercial premises (including Irish Cement Ltd), farmland, a football club,
 pitch and putt course, golf course and four primary schools.
- No potential for construction impacts. Operations will be carried out in compliance with the EPA IE Licence, with waste accepted, stored or processed on site in accordance with emission and operational limits, with no change in stack emissions.
- The air and climate assessment show no impact above acceptable levels outside the facility.
- Operating at 235,000 tonnes p.a. provide continuity of business for staff at Indaver and resultant local economic benefit, in addition to local benefit from Meath Contribution Community fund which is provided at a rate of €1.27/tn to local causes (c.€300,000 p.a.), and corresponding increase in energy production.
- The proposed will not give rise to any adverse human health impacts that would warrant preparation of an EIS on human health grounds.

Soils & geology & hydrogeology

- Soil tested during previous investigations has confirmed there has been no
 exceedences to suggest that soil contamination has occurred on site, and the
 Annual Environmental Reports for IE Licence compliance shows there has
 been no exceedences during biannual monitoring to suggest that groundwater
 contamination has occurred since the plant commenced operation in 2011
 and existing groundwater quality is moderate to good.
- The nearest public supply is outside the cone of influence of GW abstraction on site, which has a yield >600m³/d but current abstraction of c.165m³/d. The site is underlain by Bettystown GW body, a regionally important (diffuse) karstic aquifer utilised for local water supply, of poor status due to over abstraction relating to dewatering at Platin. The nearest wetland in the local area include Duleek Commons c.2.06km west, the Boyne Valley (site code MH011) c.3.41km NW and Laytown to Gormanstown (site code MH008)

- c.6km east, and the River Nanny SPA. As there is no discharge to ground at the site and dewatering is limited to a ground water supply abstraction, there is no risk of impact on same.
- There is no potential for construction impacts on soil or geology as no construction is required and the operations will remain consistent with the type of activity and buildings currently in place.

Hydrology

- The site is within the River Nanny catchment, the watercourse being c.2km to the south. The system is a closed system and there are no proposed changes to the system which is integral to the Project design. The attenuation pond occasionally discharges to a drainage ditch c.130m from Cruiserath stream connected to the River Nanny c.2.2km downstream. River Nanny is classified as Poor to Moderate status and At Risk of not achieving Good status.
- The AER shows that monitoring the stormwater outfall for the IE Licence is in compliance and the site-wide mitigation measures and spill control programme implemented as part of the EMP and IE Licence requirements will continue. Storage and transport routes have a closed drainage system discharging to surface water through a class 1 interceptor system to an attenuation pond to the NW of the site, with undeveloped site areas drained naturally through field boundary ditches for ultimate drainage to the River Nanny.
- The site is within flood zone C, i.e. outside the 1 in 1000-year flood level.
- No potential impacts from construction as none is required. There will be no changes to the operations as part of the alterations and therefore there is no potential for impacts on the receiving hydrological environment or potential for flood impacts.

Traffic and transportation

- The main access routes to the site are from the R152 (site entrance), the N2 (to west) and the M1 (to east), with waste received Monday-Friday 07.00-18.30 and Saturday 08.00-14.30.

- The site generated c.14000 HGV (trucks) accessing the site in 2017, and on an average weekday 53 per HGVs, with the busiest period in the first half hour of opening with trucked required to queue at the weighbridges before the plant is operational, which corresponds with the high number of trucks reported at 08.00.
- Based on 15,000 additional waste tonnage, an additional 1000 truckloads per annum will be generated beyond 2019, or approximately 8no. additional truck movements per day.
- The existing truck movements plus the previously permitted solidification plant result in a combined 15,907 truck movements per annum or 118 truck movements per day.
- The increase is less than 1% of the AADT for the R152, with no discernible impact on traffic conditions. The IHT Guidelines for TIA recommend traffic capacity analysis where increase in traffic is >5% and therefore no further analysis is necessary.
- The proposed alteration will not give rise to any adverse impacts and would not warrant preparation of an EIAR on traffic grounds.

Cumulative effects

- The operation of the Indaver plant at 235,000 tonnes per annum intake has been shown to operate in compliance with its IE licence with only long-term imperceptible effects on receptors. Therefore, no cumulative assessment is required, notwithstanding the adjacent Platin Cement Ltd industrial facility, as the proposed alteration will not significantly increase air quality and climate impacts and the potential cumulative impact of the proposed alteration is deemed to be negligible.

Conclusion

- EIA report is not required in support of the section 146B application.

4.0 Appropriate Assessment Screening Report

- 4.1.1. The project is not directly connected with, or necessary to the conservation management of any European site. The project is not located within or directly adjacent a European site.
- 4.1.2. The report considers all five European sites within 15km of the proposed project. Of those, on the basis that the site has no hydrological connection thereto, it rules out potential for significant effects on the River Boyne and River Backwater SAC (site code 002299; 3.3km), Boyne Estuary SPA (site code 004080; 6.4km), River Boyne and River Blackwater SPA (site code 004232; 3.4km). Although it does not explicitly rule out potential for significant effects on Boyne Coast and Estuary SAC (site code 001957; 7.5km) on the same basis, it does not consider further the potential for significant effects on that European site.
- 4.1.3. The screening report considers the potential for significant effects on the River Nanny and Shore SPA site code 004158 (8.4km) cannot be ruled out as the site is within the catchment of the River Nanny, with occasional discharges of surface water to a drainage ditch discharging to the Cruiserath River c.130m downstream, which in turn discharges to the River Nanny 2.2km downstream, which enters the River Nanny Estuary and Shore SPA c.9.1km downstream.
- 4.1.4. The only potential significant threat to the European site considered in the screening report is from discharges to the hydrological system forming part of the River Nanny catchment.
- 4.1.5. The existing surface water design is a closed system which passes through a class 1 interceptor before being collected in an attenuation pond (of 2,846m³ provided but only 1,0846m³ required including for climate change) occasionally discharging to a semi-dry ditch which leads to the Cruiserath River c.130m to the west, discharging to the River Nanny c.2.2km downstream and entering the River Nanny Estuary and Shore SPA c.9.1km downstream.
- 4.1.6. In addition, stormwater is only released to the main drainage system network after local assessment confirms there is no contamination through two continuous monitoring points (for TOC, pH and conductivity), the first prior to the pond and the second at the outfall. Stormwater must be below the set trigger level before it can

- enter the pond and before it can exit the outfall. The discharges are checked daily by production staff. If it is outside the limits agreed with the EPA it is diverted to an underground storage (firewater) tank and collected for disposal at an authorised facility. Should the tank be full, the overflow is diverted to the attenuation pond and if the second monitoring point detects suspect water the discharge pumps shutdown and water that cannot be discharged is disposed of to a licenced contractor.
- 4.1.7. Site stormwater drainage is designed in accordance with SuDS principles to allow maintenance of original discharge characteristics to the ditches serving the site and to prevent downstream flooding through flash flooding.
- 4.1.8. The screening report also considered the potential indirect effects on European sites through potential impacts on the ecological network supporting Natura 2000 sites, comprising proposed and designated Natural Heritage Areas which support species using European sites through their function as 'stepping stones' between European sites for mobile fauna. Of the 5no. sites considered, only Laytown Dunnes / Nanny Estuary pNHA (site code 000554) was screened in on the basis of biological connectivity with the project site. The pNHA forms an integral part of the River Nanny Estuary and Shore SPA. The Screening Report rules out potential for direct and indirect effects on the pNHA, including effects through surface or ground water contamination or disturbance of protected species.
- 4.1.9. The report concludes that 'Given the project design, including attenuation and monitoring with only occasional discharge to a semi-dry ditch and the distance of removal from the project site to the River Nanny Estuary and Shore SPA, it can be stated with confidence that there would be no significant impact on this European site or on any other European site, within the potential zone of impact of the Project.'

 It has been objectively concluded by Moor Group Environmental Services that:
 - 1. The Project is not directly connected with, or necessary to the conservation management of the European sites considered in this assessment.
 - 2. The Project, alone or in combination with other projects, is not likely to have significant effects on the European sites considered in this assessment in view of their conservation objectives.
 - 3. It is possible to rule out likely significant impacts on any European sites considered in the assessment.

It is possible to conclude that there would be no significant effects, no
potentially significant effects and no uncertain effects if the Project were to
proceed.

It is the view of Moore Group Environmental Services that it is not necessary to undertake any further stage of the Appropriate Assessment process.

5.0 Prescribed Bodies

TII (07/01/19) – The subject proposal does not appear to include any alterations to the extent of the site that would further impact on the feasibility routing options for the Leinster Orbital Route. Regarding the traffic analysis submitted, TII has no specific comment to make in terms of impacts relating to capacity and efficient operation of the national road network in the area.

HSA (24/12/18) – On the basis of the information supplied the HAS does not advise against the granting of permission in the context of Major Accident Hazards.

6.0 **Assessment**

- 6.1.1. In response to the Board's request, the applicant submitted an *Environmental Report* and a *Screening for Appropriate Assessment* report. I consider the submitted information to be acceptable and compliant with the requirements under Section 146B.
- 6.1.2. Following receipt of the information requested under subsection 146B(3)(b)(i) but prior to making a determination (under s.146B(3)(b)(ii)) on whether to make the alteration, make an alternative alteration, or to refuse to make the alteration, the Board is required to determine (under s.146B(4)) whether or not the requested alteration would be likely to have significant effects on the environment having regard to the criteria set out under 146B(7)(a)(i)-(vi), inclusive.

6.2. **Determination under S.146B(4)**

- 6.2.1. **S.146B(7)(a)(i)** the criteria for the purposes of determining which classes of development are likely to have significant effects on the environment set out in any regulations made under section 176 –
- 6.2.2. The relevant classes of development are set out under Schedule 5 (development for the purposes of Part 10) of the Regulations, 2001, as amended. The existing facility constitutes a waste disposal installation for the incineration or chemical treatment of waste, including hazardous waste (i.e. waste to which Directive 91/689/EEC4 applies), a Class 9 development (Part 1 of the schedule) which is without threshold. However, as the proposed alteration does not include any increase in the level of hazardous waste accepted to the facility (limited to 10,000tpa by condition 3(3)) of PA0026), I consider it to fall outside of Class 9 development.
- 6.2.3. The proposed alteration relates to use as a waste disposal installation for the incineration or chemical treatment of non-hazardous waste, a Class 10 development (under Part 1 of the schedule), which is subject to a threshold of *capacity exceeding 100tpd*. No physical alterations are proposed such as would increase the actual capacity of the existing installation for incineration of waste. The proposed alteration would increase the operating capacity of the installation for acceptance of non-

hazardous waste by c.47tpd¹ (15,000tpa) in perpetuity from 1 January 2020. The proposed alteration is therefore subthreshold Class 10 development. As the proposed alteration is subthreshold Class 10 development it cannot fall within the scope of Class 21 development, under the same Part, which relates to 'any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex'. No other class of development under either part of Schedule 5 is relevant.

- 6.2.4. Given the number of applications for consent and alterations to consent relating to the subject installation, the Board must consider possible project splitting within the context of EIA and the overall development on the site. Planning consent PA0026, amending original permission PL17.219721 through increased waste capacity, was subject to EIA. Two subsequent consents amending PA0026, PM0004 and PM0007, were not subject to EIA. The development under PM0004 is the same development as that proposed under the current application, except being subject to a time limit of 31 December 2019, and the requested alteration is effectively for the continuation in perpetuity of those temporary operations from 1 January 2020. PM0004 can therefore be disregarded for the purposes of project splitting.
- 6.2.5. Under PM0007 the Board permitted (April 2016) the development of a solidification plant (ACP residue treatment plant²) to treat flue gas residue and boiler ash on site. This waste is hazardous waste under the European Waste Catalogue. The said facility constitutes a waste disposal installation for chemical treatment³ of hazardous waste (c.10,000tpa⁴ or c.31tpd)⁵, a Class 9 development, notwithstanding the process described in the ER entails mixing water with the ash / residue generated only by the WTE installation⁶. No EIS was submitted with application PM0007. The greater the quantity of waste accepted to the WTE installation, the greater

¹ Based on the incineration facility operating on 7-day basis for 42wpa, although waste is received 5 and ½ working days per week.

² Referred to as pre-treatment by the applicant.

³ Physico-chemical treatment under heading D9 of Annex IIA of the Waste Directive https://eurlex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:31996D0350&from=EN (accessed 31/01/19).

⁴ ER s.2.3.

⁵ The solidification installation would appear to have inbuilt spare capacity to process an additional 30,000tpa (c.93tpd) ash / residue hazardous waste from offsite according to the EIS ch.2 s.2.2.1 to ref.300299 (**WITHDRAWN**).

⁶ According to Indaver's website, the solidification process is a physico-chemic process, however the process it refers to includes the addition of liquid and / or solid additives not proposed under PM0007 - https://www.indaver.com/be-en/installations-processes/secure-disposal/physico-chemical-treatment/ (accessed 28/01/19).

- quantity of bottom ash and flue residue regardless of the level of hazardous waste accepted to the facility remaining constant. Based on the details of the EIS submitted to application ref.300299 (WITHDRAWN), the solidification plant capacity takes account of the higher waste acceptance of 235,000tpa to the WTE installation.
- 6.2.6. As the permitted solidification installation is a separate Class of development, Class 9, from the Class 10 development under consideration, and as that permitted Class 9 development related only to the treatment of by-products generated by the primary Class 9 development onsite through the primary use, the current proposed alteration and the previous alterations under PM0007 and under PM0004 do not constitute project splitting for the purposes of EIA, with reference to Class 21 development, and therefore the proposed subthreshold development, considered together with the said previous permitted development, would not automatically trigger EIA.
- 6.2.7. **S.146B(7)(a)(ii)** the criteria set out in Schedule 7 to the Planning and Development Regulations 2001, including: 1. Characteristics of the project (a)-(h); 2. Location of the proposed development (a)-(c) and; 3. Types and Characteristics of potential impacts.
- 6.2.8. Characteristics of the project 1(a) The proposed alteration comprises the operation of the installation with an increased waste acceptance limit of 15,000tpa (to 235,000tpa) from 1 January 2020. This is in effect an increased intensity of use of less than 7% to that permitted under PA0026. The installation currently operates with a temporary increased waste acceptance limit of 235,000tpa to expire 31 December 2019. No modifications to the current site layout, or to the technology used are proposed and no changes to the site operations are necessary for the proposed development. No significant impacts are anticipated from the size and design of the proposed alteration.
- 6.2.9. 1(b) The ER considered there to be no cumulation with other existing development or future development, however there is potential for cumulative impacts with the existing waste incineration installation and the associated existing solidification installation on site, in addition to the significant industrial operations in the vicinity (Platin / Irish Cement Ltd to the north). There are no cumulative construction impacts as no physical works are required. The primary potential for cumulative impacts at operational stage relate to emissions to air and water and traffic

- generation, with potential for consequential impacts on population and human health and on biodiversity. The existing installation operates under EPA IED licence W0167-03, authorizing the acceptance of 235,000tpa to the installation and which sets limits for emissions from the stack under Schedule B. Subject to compliance with Schedule B and notwithstanding the potential for impacts would change from short/medium term to long term, it can reasonably be assumed that there would be no significant impacts on air (or on population and human health, or on biodiversity) from the proposed alteration taken cumulatively with the existing development on 1 January 2020, or with Irish Cement Ltd (Platin Works) cement production plant to the north which is subject to EPA IED P0030-05 and the associated quarry.
- 6.2.10. Schedule B of the EPA IED licence prohibits process emissions to water or to sewer. Instead, process water is evaporated through its operational use and other waters (for cleaning, etc.) are reused as process water. There is potential for emissions of potentially contaminated storm water runoff from the site to the surface water system. These emissions are indirect, via a Class 1 interceptor and a monitored attenuation pond, which prevents discharge of contaminated water and provides for diversion of contaminated runoff to storage tanks for suitable disposal in accordance with the provisions of Schedule C of the EPA IED licence. Subject to compliance with Schedules B and C, it can be assumed that there would be no significant impacts on water (or on population and human health, or on biodiversity) from the proposed alteration taken cumulatively with the existing development on 1 January 2020, or with Irish Cement Ltd (Platin Works) facility to the north which is subject to EPA IED P0030-05 and the associated quarry.
- 6.2.11. There is potential for cumulative traffic impacts (on material assets comprising road infrastructure, and consequential impacts on population and human health from noise and vibration nuisance and air pollution) from the proposed alteration taken with the existing installation on 1 January 2020 and with the Irish Cement Ltd facility and associated quarry which are also accessed via the R152. The ER calculates that the proposed alteration would result in an additional 1000 truckloads per annum of 8no. additional truck movements (based on the figures this would be 4no. two-way movements), or a total of 118 truck movements from the overall installation inclusive of the solidification plant. This is not significant within the context of 14,000 AADT (<1%) on the R152. The TIA does not include total traffic movements, including staff</p>

- and visitor traffic to the facility, and therefore potentially underestimates the cumulative impact. Although the impact on the staffing and/or visitor traffic to the site is unlikely to be significant. In its observations on file, TII raises no objection to the proposed development on traffic grounds relating to impact on existing or proposed road traffic infrastructure or otherwise. The additional traffic impact would not be significant and would not therefore have significant cumulative impacts or significant consequential impacts on other factors of the environment.
- 6.2.12. 1(c) No demolition works proposed. 1(d) The ER submits that the proposed alteration does not require additional natural resources (including soil, land, water and biodiversity) above current usage. This ignores that the proposed development entails an increase in the level of usage currently authorized for 1st January 2020. It is possible that the higher waste acceptance would require additional use of water resource to drive the steam powered electricity generating turbines, but neither the current ER nor the submissions to PM0004 refer to same. Given the increase in capacity of <7%, it is reasonable to assume a significant increase in water usage would be unlikely.</p>
- 6.2.13. 1(e) The ER does not address the production of waste arising from the proposed alteration. A c.7% increase in waste incineration can be assumed to result in a proportionate level of bottom ash and, presumably, lead to some increase in boiler ash and flue gas residue (a hazardous waste). The operational solidification plant (consent PM0007) processes the ash and flue gas residues produced by the incineration installation, thereby minimizing the risk associated with this hazardous waste, including any increase in same resulting from the proposed development.
- 6.2.14. 1(f) The ER indicates that there will be no change from the current situation in terms of pollution and nuisances. Again, this ignores that the proposed development entails an increase in the level of usage currently authorized for 1st January 2020 Given that emissions to air and water are subject of an EPA IED license, the facility includes significant measures to reduce pollution and nuisances, and the proposed alteration has attracted no third-party objections, it can reasonably be assumed that the proposed alteration, which has been effectively trialled over the last few years (under consent PM0004), would not result in significant pollution or nuisance effects.

- 6.2.15. 1(g) The ER does not address the potential risk of major accidents, and/or disasters relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge, however it does state that the Chemicals Act (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2015 (COMAH, formerly SEVESO), do not apply to this site. In its observations, the HSA raises no objections to the proposed development in the context of Major Accident Hazards. It would seem unlikely that the additional 15,000tpa would have a significant potential to increase risk of major accidents associated with the installation operating at 200,000tpa. Any potential risk is further reduced through condition no.9 of the EPA IED licence addresses accident prevent and emergency response. This site is not located within an area at risk of flooding taking account of climate change.
- 6.2.16. 1(h) The ER does not address the issue of potential risks to human health (for example, due to water contamination or air pollution) arising from the project. As noted above, the issue of air and water emissions and accident prevention and emergency response are subject of conditions of the EPA IED licence for the operation of the installation inclusive of the increase of the increase of 15,000tpa waste acceptance. In addition, I note that the HSA has raised no objections. The increase has been in operation for a number of years (consent received in August 2014) and the neither the EPA, nor the HSE have issued observations on the proposed alteration and there have been no third-party observations. It can therefore reasonably be assumed that there are no significant human health issues arising.
- 6.2.17. 2. Location of the proposed development in terms the environmental sensitivity of geographical areas likely to be affected by the proposed development. (a) The existing land-use on site is industrial, with a predominance of agricultural use surrounding the site, but with significant extractive and industrial installations (Irish Cement Ltd cement works and associated quarry) and residential use (the site is c.1.5km from the edge of zoned Duleek village, but there are dwellings, etc., neighbouring the site) within the close vicinity also. The residential uses in the vicinity are sensitive, however the use of the site is approved and has been operating for largescale waste incineration since 2011 and the surrounding

- residential uses will have become somewhat desensitised to the WTE installation. The MDP Landscape Character Assessment identifies the landscape within which the site is sited as a Lowland Landscape (LCA 6) of High Value (the middle value within a 5-point scale ranging from Low Value to Exceptional Value) and of moderate sensitivity (3-point scale from low to high). I do not consider the location to be particularly sensitive to the alteration proposed.
- 6.2.18. (b) Regarding the issue of relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground, the ER (s.4.4) considers the facility not to have a significant impact on scarce resources. The proposed alteration does not entail use of resources through construction as it only comprises operational changes (intensification). As noted above, emissions to air and water are addressed in the EPA IED license and I do not anticipate the additional use of groundwater resource to be significant.
- 6.2.19. (c) S.4.5 of the ER addresses the absorption capacity of the natural environment' with reference the areas specified (i)-(viii) in the schedule, however I consider the ER to be incorrect regarding its consideration of the following specified areas: (i) The site has source-pathway-connectivity with the River Nanny (Cruiserath River) through indirect stormwater discharges from the attenuation pond to a field boundary ditch connected to the Cruiserath River; (iv) The site has source-pathwayconnectivity via the same indirect route to an area classified as protected under legislation, namely the River Nanny Estuary and Shore (site code 004158); and (vi) The site is connected to the River Nanny which has failed to meet the water quality standards under the EU WFD (rate *Poor* to *Moderate*) and is *At Risk* of deteriorating or being at less than Good status into the future. Furthermore, the site is atop a karstic ground waterbody (Bettystown), which is one of very few groundwater bodies in the state rated as of *Poor* groundwater quality status (2010-2015) and is *At Risk* of deteriorating or being less than *Good* status into the future. It is evident that the Nanny River catchment and the groundwater beneath the site have limited, if any absorption capacity.
- 6.2.20. **3. Types and characteristics of potential significant impacts,** in relation to characteristics of the project and its location, on the factors of the environment

- (under s.171A (b)(i)(I)-(V) of the Act), taking account of (a) magnitude and spatial extent, (b) nature of impact, (c) transboundary impacts, (d) intensity and complexity, (e) probability, and (f) onset, duration, frequency and reversibility, (g) cumulative impact, (h) possibility of effectively reducing impacts. This is addressed under s.5.0 of the ER.
- 6.2.21. (a) The ER does not consider the potential magnitude and spatial extent of the impact to any degree. I do not consider the applicant's assessment of significance of potential impacts against the baseline of current operations (the temporary permitted capacity of 235,000tpa to cease from 31 December 2012) rather than against the permitted capacity of 220,000tpa to which operations would revert to on 1 January 2020 in the absence of a grant of permission by the Board, to be an appropriate or correct approach. However, the increase in operational capacity of 15,000tpa is an increase of less than 7% and therefore, having regard to the character and design of the development and the mitigation measures in place, the magnitude of potential impacts would be unlikely to be of significance. There is nothing to suggest that the spatial extent of impacts would increase over the current situation in terms of the geographical area and population affected.
- 6.2.22. (b) The installation has operated and can be expected to continue to operate within the requirements of the IE licence. The ER asserts that monitoring has shown emissions to have been less than the IED limits whilst the installation has been operating at 235,000tpa on a temporary permitted basis. There has been no submission from the EPA and no submissions or objections from third parties that would indicate that the installation has been having a significant adverse effect on the factors of the environment. There is nothing to suggest that the nature of potential impacts will be any different from the current situation. (c) There is no potential for significant transboundary impacts (the increase in processed ash / flue residue (a hazardous waste) disposed of in Northern Ireland is unlikely to be significant). (d) The potential impacts, subject to the continued implementation of mitigation measures forming part of the installation operations, do not appear to be intensive or complex. (e) The ER submits that the impacts of operating the plant at 235,000tpa is well understood, with emissions lower than the IED limits, within a highly regulated facility, and that the probability of impacts on any of the factors of the environment being above long-term imperceptible being very low.

- 6.2.23. (f) The potential impacts would occur from 1st January 2020 and would be continuous (air and water) except during annual shutdown periods of the incinerator. Traffic impacts would be daily and peaked, as would any associated impacts, except during annual shutdown. The ER submits that there will be no long-term impacts as emissions will cease on closure of the installation, which is reasonable.
- 6.2.24. (g) The ER submits that the potential for cumulative impacts on ambient air and climate with Platin Cement Ltd as the 235,000tpa intake will not significantly increase air quality or climate impacts on the area and traffic impact is negligible.
- 6.2.25. (h) The ER considers no reduction of impact to be required as the IE licence has shown the installation is compliant and will have long term negligible impacts on the environment.
- 6.2.26. Accordingly, I am satisfied that the types and characteristics of potential impacts arising from the requested alteration alone, cumulatively or in-combination, are not likely to be significant, including by reason of the governing of, *inter alia*, emissions to air and water through the terms and conditions of the EPA IED Licence W0167-03.
- 6.2.27. Potential impact on specified sites Having regard to the provisions of S.146B(7)(a)(vi), the site is not located on or within close vicinity to an area the subject of a notice under section 16(2)(b) of the Wildlife (Amendment) Act 2000 (No. 38 of 2000), a designated NHA, land established or recognised as a nature reserve, land designated as a refuge for flora or fauna, a place of ecological interest the preservation, conservation of protection of which is an object of the development plan or LAP (adopted or draft) or a proposed NHA, and therefore no consequential significant direct impacts on those sites are likely to arise. The site is not connected to any of the aforementioned sites other than to (c.8.1km upstream of) Laytown Dunnes / Nanny Estuary pNHA and the River Nanny and Shore SPA site code 004158 via the River Nanny catchment, therefore there is no potential for indirect impacts or effects other than on those two sites. As noted above, the River Nanny and the underlaying groundwater body of Bettystown have limited absorptive capacity and are At Risk of deteriorating or being less than Good status into the future.
- 6.2.28. However as only occasional, indirect, clean water discharges are proposed to

surface water system within the River Nanny catchment via a drainage ditch connected to the Cruiserath stream, it is considered that there is no potential for consequential significant indirect impacts on environmentally sensitive sites the Laytown Dunnes / Nanny Estuary pNHA, or the River Nanny and Shore SPA site code 004158 in view of its conservation objectives, or on any European site as determined in the Appropriate Assessment Screening assessment, below, as part of this S.146B(4) determination.

- 6.2.29. Appropriate Assessment The applicant submitted a stage 1 AA screening report in response to the Board's request for submission of information, which is appended to the Environmental Report. I have summarized the main points of the screening assessment under section 4.0, above.
- 6.2.30. The proposed development is not directly connected with, or necessary to the conservation management of any European site. The project is not located within a European site and there is no potential for direct effects on any European site from the implementation of the proposed alteration of the existing project.
- 6.2.31. There is a source-pathway-receptor from the site, via the Cruiserath River forming part of the River Nanny catchment, to the River Nanny and Shore SPA site code 004158 (8.4km). I am satisfied that potential for significant effects on the River Boyne and River Backwater SAC (site code 002299; 3.3km) and River Boyne and River Blackwater SPA (site code 004232; 3.4km) can be ruled out due to absence of a hydrological source-pathway receptor between the proposed project and those hydrological based European sites. Although there is technically a source-pathway receptor route between the proposed project and the Boyne Estuary SPA (site code 004080; 6.4km) and the Boyne Coast and Estuary SAC (site code 001957; 7.5km), this is indirect, circuitous and would be via coastal waters that would reasonably be expected to dilute any effluent to a negligible level before it could reach and have any appreciable effect on either of the two coastal European sites in view of their conservation objectives.
- 6.2.32. The River Nanny catchment is rated of *Poor* status downstream of Bellewstown, including within the European site, and of *Moderate* status upstream including on the Cruiserath River in proximity to the Indaver WTE site. The entire catchment is *At Risk* of not meeting the WFD objective of achieving *Good* status or better. In

- addition, the groundwater body underlying the European site and the project site is one of very few groundwater catchments within the state that is rated *Poor* status and *At Risk*. The absorptive capacity of the catchment must therefore be regarded as low.
- 6.2.33. The conservation objectives for the said European site are to maintain the favourable conservation condition of the features of interest of the site comprising Oystercatcher, Ringed Plover, Golden Plover, Knot, Sanderling, Herring Gull and Wetlands. The project proposed to be altered is not of a type listed as a threat or pressure on this European site on the Natura 2000 Standard Data Form.
- 6.2.34. Only occasional discharges of clean surface water are made to a drainage ditch discharging to the Cruiserath River c.130m downstream, which in turn discharges to the River Nanny 2.2km downstream, which enters the River Nanny Estuary and Shore SPA c.9.1km downstream. No discharge of process water is proposed (it is prohibited under the EPA IED licence) from the installation, with or without the permitting of the proposed project. Process water is evaporated through use within the installation and other used waters (for cleaning, etc.) is reused as process water within the operations of the installation.
- 6.2.35. No direct discharge of stormwater occurs (it is prohibited under the EPA IED licence) from the existing installation to surface waters (i.e. the River Nanny catchment) and none is proposed through the proposed alteration. The design of the existing installation provides for indirect discharges only to a ditch connecting to the said catchment, through a class 1 interceptor and an attenuation pond of significant excess capacity (capacity of 2,846m³ compared to a requirement of 1,063m³) with two monitoring points, an emergency water storage tank to hold stormwater that may be contaminated, and procedures to dispose of same to an authorised operator; and which prevents any flash flooding occurring from the project site. It is not proposed to amend same through the proposed alteration under consideration.
- 6.2.36. It is reasonable to conclude on the basis of the information on file, or as otherwise available and referred to above, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects, would not be likely to have a significant effect on European site no. 004158 (River Nanny and Shore SPA) in view of the

- site's conservation objectives and a Stage 2 Appropriate Assessment (and submission of a NIS) is not therefore required.
- 6.2.37. **S.146B(4) Determination Conclusion** Based on the foregoing assessment, I am satisfied that the Board may issue a determination under s.146B(4) that the extent and character of the proposed alteration is such that were it to be made it would not be likely to have significant effects on the environment, as per the draft Board Order and reasons and considerations under section 7.0, below.

6.3. Determination under s.146B(3)(b)(ii)

- 6.3.1. In making a determination under s.146B(3)(b)(ii), in addition to the issues addressed above under section 6.2, I consider it necessary for the Board to have regard to the need for the development within the context of current waste policy.
- 6.3.2. **European** The European Commission published its 7th Environmental Action Programme (2013) to guide European policy until 2020, but sets out a vision to 2050 of, inter alia, 'an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected.... [and our] low-carbon growth has long been decoupled from resource use...'. It sets out the following priority objectives for waste policy:
 - To reduce the amount of waste generated;
 - To maximise recycling and re-use;
 - To limit incineration to non-recyclable materials;
 - To phase out landfilling to non-recyclable and non-recoverable waste;
 - To ensure full implementation of the waste policy targets in all Member States
- 6.3.3. The Waste Framework Directive (2008/98/EC) lays down measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impact of resource use and improving the efficiency of such use. It requires the waste legislation and policy of the Member States apply as a priority order the following waste management hierarchy: prevention, preparing for re-use, recycling, other recovery (e.g. energy recovery) and disposal, and sets out the obligations on member states

including the establishment of detailed waste management plans to support the implementation of the Directive and waste prevention programmes covering the entire geographical area of the state. It also introduced the principles of polluter pays, extended producer responsibility, self-sufficiency and proximity in addressing waste. It includes two new targets for recycling and recovery to be achieved by 2020: 50% preparing for re-use and recycling of certain waste materials from households and other origins similar to households; and 70% preparing for re-use, recycling and other recovery of construction and demolition waste.

- 6.3.4. The Directive defines waste 'recovery' 'as any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy' and, sets out a non-exhaustive list of recovery operations under Annex II, which includes *R 1 Use principally* as a fuel or other means to generate energy⁷.
- 6.3.5. **National** The DECLG document *A Resource Opportunity, Waste Management Policy Ireland* (2012) sets out the waste hierarchy in terms of priority in accordance with the Directive and the measures through which Ireland will progress to become a recycling society focused on resource efficiency, with the virtual elimination of landfill for municipal waste.
- 6.3.6. Key relevant measures and actions concerning *recovery* (s.9.2) include, *inter alia*:
 - reform of the waste collection permit system to promote self-sufficiency and to drive a move away from disposal towards recovery;
 - the rigorous enforcement of waste collection permit conditions to ensure source segregated waste for the purpose of recycling is not sent for recovery or disposal;
 - and the design / use of economic instruments to prevent waste being drawn down the waste hierarchy, such as being subject to recovery at a WTE installation rather than being prevented, reused or recycled; and measures to encourage attainment of more ambitious EU recovery targets in specific streams;

⁷ This is subject to a specific minimum energy efficient (0,60 or 0,065 depending on date of permission and operation).

- ensure relevant departments and agencies pursue a coordinated approach in support of development of recovery infrastructure;
- conduct review (EPA) of the existing recovery infrastructure with a view to
 ensuring an adequate provision network of quality waste treatment facilities
 for Ireland, with particular regard to examining the capacity for managing
 municipal waste in conformity with the principles of proximity and selfsufficiency.
- 6.3.7. The document, noting the disappointing progress made in the rollout of the 'brown bin' for separate collection of organic materials, set a priority (s.8.4) to address same through, inter alia, legislation. Significant progress has been made in this regard through the introduction of *Household Food Waste Regulations* 2013 which imposed obligations on waste collectors to provide a separate collection service for household food waste (brown bins), and on households to segregate food waste separate from other non-biodegradable waste, and have it separately collected by an authorised waste collector. Separate brown bin collections for food / organic waste has been gradually rolled out to include settlements as small as 500 persons since 2017.
- 6.3.8. In addition, A National Waste Prevention Programme was established in 2004, with Annual Reports published by the EPA, and continues to address the generation of excess waste.
- 6.3.9. **Regional** The implementation of national policy is through the regional waste management plans, with the Eastern-Midlands Region Waste Management Plan 2015-2021 (EMRWMP) being the pertinent plan to the subject case. The plan places stronger emphasis on preventing waste and on material-reuse activities, strives 'to improve recovery and generation of energy by maximizing the resource value of the materials and energy embodied in residual wastes', and seeks to 'reduce the role of landfilling in favour of higher value recovery options'. It sets three specific targets for waste prevention (reduction of 1% p.a. household waste generation per capita), recycling (50% of managed municipal waste by 2020 and 60% by 2030) and landfilling (reduce to 0% for unprocessed municipal waste from 2016) and aims to make the region self-sufficient in treating wastes generated that are currently exported. Key measures include, inter alia:

- increase source-segregated kerbside collections and ensure a three-bin system is commonplace for household and commercial;
- plan / develop higher quality waste treatment infrastructure including new reprocessing, biological treatment, thermal recovery and pre-treatment facilities;
- support development of the biological treatment sector, in particular composting and anaerobic digestion;
- support the development of thermal recovery in the region to meet the needs
 of the region and the state in reducing export of residual waste for treatment
 abroad.
- 6.3.10. Thermal recovery is addressed under section 16.4.5 of the Plan and it is the policy of the waste authority to support the national development of: thermal recovery capacity (E15a) of 300,000tpa for treatment of non-hazardous waste; (E15b) on-site treatment of industrial process waste and; (E16) 50,000tpa for hazardous wastes to achieve state self-sufficiency and / or adequate active competitive treatment.
- 6.3.11. E15a is informed by an identified need for an additional 300,000tpa thermal recovery capacity, nationally, based on municipal waste generation forecasts taking account of proposed waste generation prevention measures, and having regard to a 220,000tpa capacity of the subject Indaver WTE installation, and a 600,000tpa capacity of Covanta, Poolbeg (permission EF2022); existing / proposed cement kilns (342,875tpa) and pyrolysis (65,000tpa). The Plan does not take account of the temporary increase of 15,000tpa at the subject Indaver WTE installation at Carranstown. Nor could it take account of granting of permission of additional facilities subsequent to the publishing of the Plan: the Indaver Cork WTE permitted under PA0045 (currently subject of judicial review) for 240,000tpa waste capacity (of which, 24,000tpa may be hazardous waste); Platin Cement Works (under PA0050) to use an additional 360,000tpa alternative fuels / raw material⁸. Assuming the latter

⁸ Condition no.3 specified this as an addition 100,000tpa residual Solid Recovered Fuel sourced from municipal solid waste (220,000tpa in total); 50,000tpa hazardous waste; 75,000tpa other waste as per appendix 3.5 of the EIAR; and alternative raw material 120,000tpa. The Inspector clarifies the nature of the 'other waste' as falling within the following categories - <u>Fine solids</u> (no hazardous waste) – Waste categories referred to are mostly plastics, wood, paper, cardboard and textiles and to a lesser extent animal tissue waste; <u>Coarse solids</u> (some hazardous wastes) – Plant tissue, animal waste, forestry waste, waste from spirits distillation, wood waste, acid tars, contaminated or hazardous packaging waste, absorbents and wiping cloths, end of life tyres, waste

- two subject developments are progressed, there would appear to be no need for additional thermal recovery, including thermal recovery of hazardous waste, within the state until after 2030.
- 6.3.12. The previously permitted temporary increase in waste tonnage accepted to the installation per annum under PM0004 was on the basis of the then poor level of segregation of organic / food waste by households which resulted in municipal waste accepted to the facility being of a lower calorific value than anticipated and a greater throughput of waste was necessary to secure operational efficiency in incineration. Furthermore, the increase was suggested as an interim solution to the enforced diminution of landfill capacity under national policy. In deciding not to accept the Inspector's recommendation for a shorter temporary period until 31 December 2016 (as an alternative alteration) to allow the principle of increase waste tonnage to be reviewed within the new policy context for the rationalised waste regions, the Board considered the proposed temporary increase not to be so substantial to influence the development or implementation of regional waste management policy, noting the more substantial volume of residual waste exported for energy recovery; and that the marginal increase would not be likely to influence the successful implementation of the brown bin system for organic water or have significant implications for the classification of the subject facility as a waste recovery facility.
- 6.3.13. Based on progress on waste segregation and the successful rollout of brown bins throughout the state, the original justification for the increases waste tonnage would appear to no longer apply. The application makes no case for the ongoing operation at the higher rate. However, given the relatively small scale of the permanent increase in waste processing acceptance, I do not consider the proposal would be materially contrary to the regional waste management plan.
- 6.3.14. **Local** The Meath County Development Plan 2013-2019 sets out Council policy on waste management under section 7.17, however it is based on the previous regional

from metallurgical processes, waste from waste management facilities containing hazardous substances; Free flowing solids (some hazardous) – Animal and food wastes which are unsuitable for consumption or processing, sludges from the treatment of waste water, waste from shredding of metal containing wastes; Pumpable fluids (many of these are hazardous) – Agrochemical waste, washing liquids, solvents, waste paint, varnish, waste adhesives, sealants, fuel oil and diesel, other fuels, fat and oils; Whole tyres; Raw materials (some of which are hazardous) – Mining waste, waste from agriculture, wastes from wood processing, waste from inorganic chemical processes, waste from thermal processes, construction and demolition waste, waste from waste management facilities.

waste management plan (2005-2010). Under WM OBJ 1, it is the objective of the Council to facilitate the provision of appropriate waste recovery and disposal facilities in accordance with the principles set out in the appropriate Waste Management Plan applicable from time to time made in accordance with the Waste Management Act 1996. Contrary to the details of the applicant Environmental Report, the site is not zoned under the Development Plan, or under the Duleek Town Statement under Volume 5 of the Plan, being outside the boundary for that settlement.

- 6.3.15. **Policy framework conclusion** Based on the capacity requirement assessment for thermal recovery facilities to 2030 under the EMRWMP (2015-2021) and the existing available operational capacity and permitted but pending operation capacity for additional thermal recovery facilities which exceed the projected requirements, the continuation of an increased waste acceptance to 235,000tpa (an additional 15,000tpa) to the facility is not warranted under the Plan. In addition, the original justification for the increased waste acceptance level, on the basis of the poor level of segregation of organic / food waste by households at that time, which resulted in municipal waste accepted to the facility being of a lower calorific value than anticipated and necessitated a greater throughput of waste to secure operational efficiency in incineration, no longer applies and the applicant has provided no other justification for the increased throughput in the request for alteration. However, given the relatively small scale of the permanent increase in waste processing acceptance, I do not consider the proposal to be such as would be materially contrary to the regional waste management plan and I therefore would advise the Board the it would be reasonable to determine to make the alteration requested.
- 6.3.16. **S.146B(3)(b)(ii) Determination Conclusion** Having regard to the determination under s.146B(4) and the assessment of the policy context, above, I am satisfied that the Board may determine to make the alteration requested as per the draft Board Order and associated reasons and considerations detailed under section 7.0, below:

7.0 **DRAFT Board Order**

ABP-302447-18

Planning and Development Acts, 2000 to 2018

Planning Authority: Meath City Council

(Associated application reference number: 17.PA0026)

REQUEST received by An Bord Pleanála on the 30th day of August, 2018 from Indaver Ireland under section 146B of the Planning and Development Act, 2000, as amended, to alter the terms of a strategic infrastructure development described as the Indaver Ireland waste-to-energy facility at Carranstown, Duleek, County Meath.

WHEREAS the Board made a decision to grant permission, subject to conditions, for the above-mentioned development by order dated the 4th day of February 2013, including condition no.3(1) limiting the tonnage of waste accepted for treatment at the facility to not exceed 220,000 tonnes per annum,

AND WHEREAS the Board made a decision on the 1st day of August 2014 under PM0004 to alter the terms of 17.PA0026 through the amendment of condition no.3(1) to allow for the annual tonnage of waste accepted for treatment at the facility to be increased from 220,000 tonnes to 235,000 tonnes for a temporary period until the 31st day of December 2019.

AND WHEREAS the Board has received a request to alter the terms of the development, the subject of the permission,

AND WHEREAS the requested alteration is described as follows:

The alteration to Indaver waste-to-energy installation to allow acceptable of increased tonnage from 220,000 tonnes per annum to 235,000 tonnes per annum on a permanent basis.

AND WHEREAS the Board has determined that the requested alteration would constitute the making of a material alteration to the terms of the development concerned and requested the requester under section 146B(3)(b)(i) to submit to the Board the information specified in schedule 7A to the Planning and Development Regulations 2001, as amended, in respect of the alteration,

AND WHEREAS the Board is required to make a determination under **section 146B(4)**, the Board is satisfied that the alteration requested, having regard to:

- (i) The extent and character of the alteration requested, which is significantly under the threshold in respect of Class 10 (waste installations for the incineration or chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9, of non-hazardous waste with a capacity exceeding 100 tonnes per day) of Part o1 of Schedule 5 of the Planning and Development Regulations 2001 (as amended), and which therefore does not fall within the scope of Class 21 development under the same Part relating to 'any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex';
- (ii) The information submitted by the applicant pursuant to schedule 7A of the Regulations, 2001, as contained in the Environmental Report, inclusive of the Report for the Purposes of Appropriate Assessment Screening appended thereto;
- (iii) The criteria set out in Schedule 7 to the Planning and Development Regulations 2001, as amended, including:
 - (a) The characteristics of the alteration requested which comprises a relatively small-scale alteration to operations from 1 January 2020 entailing c.7% increase in waste throughput, without physical modifications to the installation; the nature of emissions arising, including emissions to air and occasional; indirect discharges of clean water to a drainage ditch within the catchment of the River Nanny to water, which are governed by the provisions of the EPA IED Licence W0167-03; and the relatively low level of additional associated resource use, generation of waste residue, pollution and nuisances and additional traffic movements generated;

- (b) The location of the alteration requested within a rural landscape which has a significant presence of substantial heavy industrial operations, outside of any residential settlement, and which is rated as being of moderate sensitivity to the proposed alteration project under Landscape Character Assessment of the Meath Development Plan 2013-2019; at a distance from any site referred to under S.146B(7)(a)(vi) and with indirect source-pathway-receptor connectivity only to Laytown Dunnes / Nanny River Estuary pNHA site code 000554 (c.8.1m downstream) and to European site River Nanny Estuary and Shore SPA site code 004158 (c.9.1km downstream); and notwithstanding the lack of absorptive capacity of the River Nanny and the Bettystown groundwater which are of *Poor/Moderate* and *Poor* status, respectively, and *At Risk* of not meeting their WFD objectives;
- (c) The types and characteristics of potential impacts arising from the requested alteration alone, cumulatively or in-combination, which are not considered to be significant, including by reason of the governing of, *inter alia*, emissions to air and water through the terms and conditions of the EPA IED Licence W0167-03;

Would not be likely to have significant effects on the environment, including on any European site in view of their conservation objectives,

AND WHEREAS the Board is satisfied, having regard to:

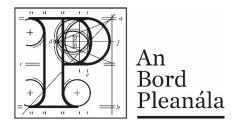
- (i) the nature and scale of the requested alteration taken cumulatively with the existing waste-to-energy installation,
- (ii) the examination of environmental impact, including in relation to Natura 2000 sites, carried out in the course of that application,
- (iii) the waste policy framework context,
- (iv) the submissions and observations received,
- (v) the report and recommendation of the Board's inspector, which is adopted, that requested alteration would not be materially contrary to the provisions of the government's waste policy under *A Resource Opportunity, Waste Management*

Policy Ireland (DECLG, 2012) DECLG, or the Eastern and Midlands Regional Waste Management Plan 2015-2021 in respect of the capacity requirement for thermal recovery facilities to 2030 and would accord with the provisions of the Meath County Development Plan 2013-2019 and with the proper planning and sustainable development of the area.

NOW THEREFORE in accordance with section 146B(3)(b)(ii) of the Planning and Development Act, 2000, as amended, the Board hereby alters the above-mentioned decision so that the permitted development shall be altered in accordance with the plans and particulars received by An Bord Pleanála on the 30th day of August 2018.

John Desmond
Senior Planning Inspector
12 March 2019

Board Direction



Board Direction BD-002723-19 ABP-302447-18

Planning and Development Acts, 2000 to 2018

Planning Authority: Meath City Council

(Associated application reference number: 17.PA0026)

REQUEST received by An Bord Pleanála on the 30th day of August, 2018 from Indaver Ireland under section 146B of the Planning and Development Act, 2000, as amended, to alter the terms of a strategic infrastructure development described as the Indaver Ireland waste-to-energy facility at Carranstown, Duleek, County Meath.

WHEREAS the Board made a decision to grant permission, subject to conditions, for the above-mentioned development by order dated the 4th day of February 2013, including condition no.3(1) limiting the tonnage of waste accepted for treatment at the facility to not exceed 220,000 tonnes per annum,

AND WHEREAS the Board made a decision on the 1st day of August 2014 under PM0004 to alter the terms of 17.PA0026 through the amendment of condition no.3(1) to allow for the annual tonnage of waste accepted for treatment at the facility to be increased from 220,000 tonnes to 235,000 tonnes for a temporary period until the 31st day of December 2019,

AND WHEREAS the Board has received a request to alter the terms of the development, the subject of the permission,

AND WHEREAS the requested alteration is described as follows:

The alteration to Indaver waste-to-energy installation to allow acceptance of increased tonnage from 220,000 tonnes per annum to 235,000 tonnes per annum on a permanent basis.

AND WHEREAS the Board has determined that the requested alteration would constitute the making of a material alteration to the terms of the development concerned and requested the requester under section 146B(3)(b)(i) to submit to the Board the information specified in schedule 7A to the Planning and Development Regulations 2001, as amended, in respect of the alteration,

AND WHEREAS the Board is required to make a determination under **section 146B(4)**, the Board is satisfied that the alteration requested, having regard to:

- (i) The extent and character of the alteration requested, which is significantly under the threshold in respect of Class 10 (waste installations for the incineration or chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9, of non-hazardous waste with a capacity exceeding 100 tonnes per day) of Part 1 of Schedule 5 of the Planning and Development Regulations 2001 (as amended), and which therefore does not fall within the scope of Class 21 development under the same Part relating to 'any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex';
- (ii) The information submitted by the applicant pursuant to schedule 7A of the Regulations, 2001, as contained in the Environmental Report, inclusive of the Report for the Purposes of Appropriate Assessment Screening appended thereto;
- (iii) The criteria set out in Schedule 7 to the Planning and Development Regulations 2001, as amended, including:
 - (a) The characteristics of the alteration requested which comprises a relatively small-scale alteration to operations from 1 January 2020 entailing c.7% increase in waste throughput, without physical modifications to the installation; the nature of emissions arising, including emissions to air and occasional indirect discharges of clean water to a drainage ditch within the catchment of the River

- Nanny to water, which are governed by the provisions of the EPA IED Licence W0167-03; and the relatively low level of additional associated resource use, generation of waste residue, pollution and nuisances and additional traffic movements generated;
- (b) the location of the alteration requested within a rural landscape which has a significant presence of substantial heavy industrial operations, outside of any residential settlement, and which is rated as being of moderate sensitivity to the proposed alteration project under the Landscape Character Assessment of the Meath Development Plan 2013-2019; at a distance from any site referred to under S.146B(7)(a)(vi) and with indirect source-pathway-receptor connectivity only to Laytown Dunnes / Nanny River Estuary pNHA site code 000554 (c.8.1m downstream) and to European site River Nanny Estuary and Shore SPA (site code 004158) (c.9.1km downstream); and notwithstanding the lack of absorptive capacity of the River Nanny and the Bettystown groundwater which are of Poor/Moderate and Poor status, respectively, and At Risk of not meeting their WFD objectives; and
- (c) the types and characteristics of potential impacts arising from the requested alteration alone, cumulatively or in-combination, which are not considered to be significant, including by reason of the governing of, *inter alia*, emissions to air and water through the terms and conditions of the EPA IED Licence W0167-03;

would not be likely to have significant effects on the environment, including on any European site in view of their conservation objectives,

AND WHEREAS the Board is satisfied, having regard to:

- (i) the nature and scale of the requested alteration taken cumulatively with the existing waste-to-energy installation,
- (ii) the examination of environmental impact, including in relation to Natura 2000 sites, carried out in the course of that application,
- (iii) the waste policy framework context,
- (iv) the submissions and observations received,
- (v) the report and recommendation of the Board's inspector, which is adopted,

that requested alteration would not be materially contrary to the provisions of the government's waste policy under *A Resource Opportunity, Waste Management Policy Ireland* (DECLG, 2012) DECLG, or the Eastern and Midlands Regional Waste Management Plan 2015-2021 in respect of the capacity requirement for thermal recovery facilities to 2030 and would accord with the provisions of the Meath County Development Plan 2013-2019 and with the proper planning and sustainable development of the area.

NOW THEREFORE in accordance with section 146B(3)(b)(ii) of the Planning and Development Act, 2000, as amended, the Board hereby alters the above-mentioned decision so that the permitted development shall be altered in accordance with the plans and particulars received by An Bord Pleanála on the 30th day of August 2018.

Board Member		Date:	02/04/2019
	Stephen Bohan	-	

Board Order



Board Order ABP-302447-18

Planning and Development Acts 2000 to 2018

Planning Authority: Meath County Council

(Associated application reference number: 17.PA0026)

REQUEST received by An Bord Pleanála on the 30th day of August 2018 from Indaver Ireland under section 146B of the Planning and Development Act, 2000, as amended, to alter the terms of a strategic infrastructure development described as the Indaver Ireland waste-to-energy facility at Carranstown, Duleek, County Meath.

WHEREAS the Board made a decision to grant permission, subject to conditions, for the above-mentioned development by order dated the 4th day of February 2013, including condition number 3(1) limiting the tonnage of waste accepted for treatment at the facility to not exceed 220,000 tonnes per annum,

AND WHEREAS the Board made a decision on the 1st day of August 2014 under case reference number 17.PM0004 to alter the terms of 17.PA0026 through the amendment of condition number 3(1) to allow for the annual tonnage of waste accepted for treatment at the facility to be increased from 220,000 tonnes to 235,000 tonnes for a temporary period until the 31st day of December 2019,

AND WHEREAS the Board has received a request to alter the terms of the development, the subject of the permission,

AND WHEREAS the requested alteration is described as follows:

The alteration to Indaver waste-to-energy installation to allow acceptance of increased tonnage from 220,000 tonnes per annum to 235,000 tonnes per annum on a permanent basis,

AND WHEREAS the Board has determined that the requested alteration would constitute the making of a material alteration to the terms of the development concerned and requested the requester under section 146B(3)(b)(i) to submit to the Board the information specified in schedule 7A to the Planning and Development Regulations 2001, as amended, in respect of the alteration,

AND WHEREAS the Board is required to make a determination under section 146B(4), the Board is satisfied that the alteration requested, having regard to:

(i) the extent and character of the alteration requested, which is significantly under the threshold in respect of Class 10 (waste installations for the incineration or chemical treatment as defined in Annex IIA to Directive 75/442/EEC under heading D9, of non-hazardous waste with a capacity exceeding 100 tonnes per day) of Part 1 of Schedule 5 of the Planning and Development Regulations 2001, as amended, and which, therefore, does not fall within the scope of Class 21 development under the same Part relating to 'any change to or extension of projects listed in this Annex where such a change or extension in itself meets the thresholds, if any, set out in this Annex',

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- (ii) the information submitted by the requester pursuant to schedule 7A of the Planning and Development Regulations 2001, as amended, as contained in the Environmental Report, inclusive of the Report for the Purposes of Appropriate Assessment Screening appended thereto,
- (iii) The criteria set out in Schedule 7 to the Planning and Development Regulations 2001, as amended, including:
 - (a) the characteristics of the alteration requested which comprises a relatively small-scale alteration to operations from 1st January 2020 entailing a circa 7% increase in waste throughput, without physical modifications to the installation; the nature of emissions arising, including emissions to air and occasional indirect discharges of clean water to a drainage ditch within the catchment of the River Nanny to water, which are governed by the provisions of the EPA IED Licence W0167-03; and the relatively low level of additional associated resource use, generation of waste residue, pollution and nuisances and additional traffic movements generated,
 - (b) the location of the alteration requested within a rural landscape which has a significant presence of substantial heavy industrial operations, outside of any residential settlement, and which is rated as being of moderate sensitivity to the proposed alteration project under the Landscape Character Assessment of the Meath County Development Plan 2013-2019; at a distance from any site referred to under section 146B(7)(a)(vi) and with indirect source-pathway-receptor connectivity only to Laytown Dunnes/Nanny River Estuary proposed Natural Heritage Area (site code: 000554) (circa 8.1 kilometres downstream) and to the River Nanny Estuary and Shore Special Protection Area (site code: 004158) (circa 9.1 kilometres downstream); and notwithstanding the lack of absorptive capacity of the River Nanny and the Bettystown groundwater which are of *Poor/Moderate* and Poor status, respectively, and At Risk of not meeting their WFD objectives, and

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(c) the types and characteristics of potential impacts arising from the requested alteration alone, cumulatively or in-combination, which are not considered to be significant, including by reason of the governing of, *inter alia*, emissions to air and water through the terms and conditions of the EPA IED Licence W0167-03,

would not be likely to have significant effects on the environment, including on any European Site in view of their Conservation Objectives,

AND WHEREAS the Board is satisfied, having regard to:

- (i) the nature and scale of the requested alteration taken cumulatively with the existing waste-to-energy installation,
- (ii) the examination of environmental impact, including in relation to Natura 2000 Sites, carried out in the course of that application,
- (iii) the waste policy framework context,
- (iv) the submissions and observations received, and
- (v) the report and recommendation of the Board's inspector, which is adopted,

that the requested alteration would not be materially contrary to the provisions of the government's waste policy under A Resource Opportunity, Waste Management Policy Ireland (Department of the Environment Community and Local Government, 2012), or the Eastern and Midlands Regional Waste Management Plan 2015-2021 in respect of the capacity requirement for thermal recovery facilities to 2030 and would accord with the provisions of the Meath County Development Plan 2013-2019 and with the proper planning and sustainable development of the area.

NOW THEREFORE in accordance with section 146B(3)(b)(ii) of the Planning and Development Act 2000, as amended, the Board hereby alters the above-mentioned decision so that the permitted development shall be altered in accordance with the plans and particulars received by An Bord Pleanála on the 30th day of August 2018.

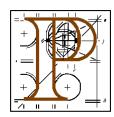
Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day of 2019.

3. Planning Ref: PL.17.PM0007

Inspector's Report

An Bord Pleanála



Inspector's Report

17.PM0007; Application under Section 146B of the Planning and

Development Act 2000, as amended, for alterations to a previously approved planning permission 17.PA0026 for

a Strategic Infrastructure Development.

Planning Authority: Meath County Council

Applicant: Indaver Ireland Ltd.

Location: Carranstown, Duleek, County Meath

Inspector: Derek Daly

1.0 INTRODUCTION.

The applicant Indaver Ireland Ltd obtained permission from An Bord Pleanála in February 2013 (under reference no. 17.PA0026) for development comprising amendments to the existing waste to energy (WTE) incineration facility at Carranstown, in the environs of Duleek, south-west of Drogheda. The facility has been operational since 2011, under the aegis of permissions previously granted by An Bord Pleanala and by Meath County Council in 2007 and 2009 respectively. An alteration to PA0026 is now being sought by Indaver under Section 146B.

2.0 PLANNING HISTORY.

2.1 PL17.126307 (P.A. Ref. 01/4014)

Permission granted, upheld on appeal in 2003 by An Bord Pleanála subject to revised conditions, for a Waste to Energy (WTE) facility based on a throughput of 170,000 tpa of accepted waste. The development permitted at that time was described as a waste management facility, comprising a main process building process of 13,480m² with a 40 metre high stack, and ancillary structures and areas including a community recycling park.

Conditions of note.

Condition no. 3. The proposed community recycling park was omitted from the development, essentially for a traffic related reason.

Condition no. 4: waste for acceptance for incineration and recycling/treatment limited to 170,000 tpa and confined to waste generated and produced in the North-East Region area of counties Meath, Louth, Cavan and Monaghan, in the interest of development control and to ensure that the principles of regional waste management (as set out in the then prevailing Regional Plan) are adhered to;

Condition no. 11: required submission and agreement on a traffic management plan prohibiting traffic associated with the facility using a certain section of the R150 Regional Route (east of Kentstown in the direction of the N2 National Route), for reasons of traffic and pedestrian safety;

2.2 PL17.219721 (P.A. Ref. SA/60050)

Permission granted upheld on appeal by An Bord Pleanála subject to revised conditions in 2007, for a 70 megawatt WTE facility based on a throughput of 200,000 tpa of accepted waste. The permitted development included a smaller main process building (7,218.23 square metres) than that previously permitted in 2003 but never developed; a higher flue stack (65 metres) than previously permitted was also proposed.

Condition of note.

Condition no. 3: waste for acceptance for thermal treatment limited to 200,000 tpa and confined to waste primarily generated and produced in the North-East Region area of counties Meath, Louth, Cavan and Monaghan waste accepted from outside that region to be done so only in accordance with the Proximity Principle and Ministerial Policy as set out in circular WIR:04/05, in order to ensure compliance with national waste management policy and the provisions of the North-East Regional Waste Management Plan.

2.3 P.A. Ref. SAC/901467

Permission granted subject to conditions in November 2009 for amendments and alterations to previously permitted development, under PL17.219721. It is understood the amendments were proposed in order to meet building specification and regulatory criteria arising from receipt of tenders and the issue of the relevant EPA licence. The decision of the Planning Authority in the case was not the subject of any appeal to An Bord Pleanála.

The following conditions may be noted in respect of this case, which is in essence the extant permission under the aegis of which the existing complex has been built and operates, subject also to the limitations imposed by the prevailing EPA licence reference W0167-02:

Condition no. 2: requires compliance with the planning conditions attached to PL17.219721, except where otherwise specified;

Condition no. 11: seeks to prohibit traffic, generated from the complex, from passing through the Bru na Boinne World Heritage Site.

All of the above application were accompanied by environmental impact statements.

2.4 PL17.PA0026.

Amendments to existing waste-to-energy plant at Carranstown, Duleek, County Meath

This was an application to An Bord Pleanála under Section 37(E) of the Planning and Development Act, 2000, as amended by Indaver Ireland Ltd. The development proposed comprised certain physical modifications to an existing, operational waste-to-energy (WTE) plant, and also sought amendments to the terms and conditions of the permission under which the plant operates. The existing plant as initially was designed to generate 70 megawatts of electricity through the recovery of energy by incineration of up to 200,000 tpa of residual municipal waste.

Permission granted by the Board on the 04/02/2013

17.PM0007 An Bord Pleanála Page 3 of 13

2.5 17.PM0004.

This was a request received by An Bord Pleanála from Indaver Ireland Limited at Carranstown under section 146B of the Planning and Development Act, 2000, as amended for amendments to the existing development. The amendments provided for

- (a) To increase the intake tonnage of waste from 200,000 tonnes to 220,000 tonnes per annum.
- (b) To allow the acceptance of some additional types of waste defined as hazardous and non-hazardous in the European Waste Catalogue.
- (c) A number of amendments in respect of the buildings on the site, changes to parking and circulation and provision of additional storage tanks.

Having decided that the proposed alteration would be material and having required public consultation to be carried out, the Board decided to make the proposed alteration of Condition 3(1) of permission reference 17.PA0026 and granted the requested amendment on the 01/08/2014 and amended to condition to permit the increased intake.

2.6 This is an activity covered by a waste licence under prevailing waste management legislation.

3.0 LEGISLATIVE PROVISIONS.

- 3.1 Section 146B of the Act provides alteration by the Board of strategic infrastructure development on request made of it. The procedures adopted are largely determined as to whether it is considered that the proposed alteration constitute a material alteration and may involve a two stage process.
- 3.2 Initially under the terms of section 146B(2)(a) the Board must decide as soon as possible, whether or not the making of a proposed alteration would constitute "the making of a material alteration of the terms of the development concerned". Section 146B(2)(b) provides that "before making a decision under this subsection, the Board may invite submissions in relation to the matter to be made to it by such person or class of person as the Board considers appropriate (which class may comprise the public if, in the particular case, the Board determines that it shall do so); the Board shall have regard to any submissions made to it on foot of that invitation".
- 3.3 If the Board decides that the alteration proposed would not constitute a material alteration, the Board must proceed to alter the permission (Section 146B(3)(a)).

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- 3.4 If, however, as provided for in section 146B(3)(b) the Board decides that the making of the alteration would constitute the making of such a material alteration, it shall then determine whether to,
 - (i) make the alteration,
 - (ii) make an alteration of the terms of the development concerned, being an alteration that would be different from that to which the request relates (but which would not, in the opinion of the Board, represent, overall, a more significant change to the terms of the development than that which would be represented by the latter alteration), or
 - (iii) refuse to make the alteration.
- 3.5 Section 146B(4), however, provides that before making a determination under subsection (3)(*b*), the Board shall determine whether the extent and character of the alteration requested under subsection (1), and any alternative alteration under subsection (3)(*b*)(ii), are such that the alteration, were it to be made, would be likely to have significant effects on the environment.
- 3.6 Section 146B(5) provides that If the Board determines that the making of either kind of alteration referred to in subsection (3)(b) is not likely to have significant effects on the environment, it shall proceed to make a determination under subsection (3)(b), or is likely to have such effects, the provisions of section 146C shall apply.
- 3.7 Section 146C relates to the preparation of environmental impact statement for purposes of section 146B and applies to a case where the determination of the Board under section 146B(4) is that the making of either kind of alteration referred to in section 146B(3)(b) is likely to have significant effects on the environment.
- 3.8 The second stage therefore arises if the Board decides that the proposed alteration would constitute a material change. This decision determines a requirement for a formal consideration of environmental impact within which process there may be a need for the preparation of an environmental impact statement and public notification of same and of the alteration proposed.

4.0 SCOPE OF REPORT.

The main purpose of the report is to consider the initial requirement as set out in section 146B(2) in relation to a determination of the materiality of the proposed alteration.

5.0 PROPOSED ALTERATION.

5.1 The application for an alteration submitted by Indaver Ireland Limited on the 23rd of November 2015 involves two aspects.

- 5.2 The first is for physical alterations to the plant building by providing for an extension to an existing building and construction of an additional building. The proposal provides for an extension to an existing loading bay building by 9.94 metres and construction of a pre-treatment process plant enclosure approximately 120m² in area with a height slightly in excess of 12 metres. The 2 existing conveyor systems will be by extended by approximately 8m.
- 5.3 The second is the amendment of the current process requiring the construction of a pre-treatment process plant see drawing No 25053/PL001 within a new building for the treatment of the flue residues generated (APC residues). Essentially the changes are to alter a specific aspect of the current process where flue residues generated (APC residues) are collected and exported untreated for treatment and disposal in Germany. It is now proposed that the APC residues will be treated on site prior to removal from the site.
- 5.4 In relation to the actual proposed process to be carried out on the site essentially it is to pre-treat APC residues by mixing them with water by placing them in flexible intermediate bulk container bags thereby solidifying the residues. This solidification process is currently applied to the residue of the Carranstown plant in Germany. There are no other significant changes to process or waste handling procedures.

The two existing conveyor systems will be used and the systems will meet above a residue buffer vessel which will accept deposited residue. This material will be entered into a mixer where water is added. The mix is then deposited into flexible intermediate bulk container bags which will be in a mould and which are then filled assisted with air to ensure the bag fills to the full shape of the mould. The displaced air will then pass through a filter. A curing period is provided for. The bags after curing are removed on the site. In effect it is a solidisation process of the residue flue material.

- 5.5 In relation to the disposal of the treated bagged APC residues it is the intention is to export this material to a salt mine in Kilroot, County Antrim, Northern Ireland. Kilroot is currently preparing an EIS in relation to seeking a permit to extend its activities to accept APC residues and currently the Kilroot mine is used as a depository for a cement mix containing pulverised fly ash. Salt mines are considered highly suitable for containing the APC residues and APC residues arising in Carranstown are currently deposited in a similar mine facility in Germany.
- 5.6 In overall terms the documentation submitted includes a review of the 2012 EIS findings submitted with 17.PA0026. The plant generates 10,000 tonnes of APC residues. The submitted documentation also indicates that there is uncertainty in relation to the future use of the German salt mine and there are ongoing costs in exporting the APC residues.

5.7 Such a facility on the island of Ireland it is indicated will contribute to self-sufficiency and it is also indicated that the Carranstown site is ideally suited to pre-treatment rather than Kilroot and carrying out of the proposal would be in line with IED Licence. In this regard I would refer to Appendix A of the applicant's submission and the letter from the EPA dated the 10th of September 2015 that the operation of a waste residue solidification plant is catered for within licence no. W0167-03.

6.0 APPLICANT'S SUBMISSION.

- 6.1 Accompanying documentation includes a summary of the EIS review of the EIS prepared for PL17.PA0026. In the cover letter with the application it is indicated that this review has been shown to have no additional impact on the environment. The submission takes the format of a review of the various chapters of the EIS and also a number of appendices which include an air quality assessment, a traffic assessment and a landscape assessment.
- 6.2 In relation to the proposed alterations it is indicated that no additional input of material is proposed or an increase in waste acceptance over what is currently permitted on the site. Essentially the changes are to amend a specific aspect of the current process where flue residues generated (APC residues) will be treated on site prior to removal from the site rather than the current practice of exporting these residues untreated and to extend and add on additional floorspace to accommodate this.
- 6.3 In relation to human beings other than short term construction impacts no impacts were identified. Other potential impacts in relation to air quality were considered under a different heading.
- 6.4 Specifically in relation to air quality a review of air assessment was carried out as outlined in appendix C assessing possible impacts from dust and particulate emissions arising from the new process using the existing environment as a baseline as the plant has a single process emission point which is the stack at the plant. Cumulative impacts were also considered. No additional impact is identified arising from the new process.
- 6.5 In relation to noise it is indicated that there are noise limits conditioned by previous permissions. The impact of noise specific to the new plant is outlined within one metre of the plant and then in the context of nearest noise sensitive receptors and also cumulatively with the overall plant. The level of impact is determined as insignificant and will not alter the noise emissions from the plant. Noise emissions in the construction phase will adhere to conditions applied for previous construction works at the plant in terms of values and hours of operation.
- 6.6 In relation to soils and geology there are no additional discharges to ground and the amount of ground disturbance and removal is minimal in comparison to other phases of construction carried out on the site. Mitigation measures

- will be carried out in the construction phase in accordance with good construction practice.
- 6.7 In relation to hydrogeology there is no direct discharge to groundwater and the process area is within an internal area with control of any flows and there is provision for containment for subsequent reuse. The site obtains its water supply from an on-site well and additional water demand from the new process is very low anticipated as between 2,750m³ to 4,400m³ per annum which will not impact other water sources in the area. The existing plant operates an overall water management system where excess water and runoff is recycled for reuse.
- 6.8 There is no planned discharge to surface water and any accidental discharge will be contained within the existing surface water system which has sufficient surplus capacity in the attenuation ponds which have been constructed with a sealing membrane should any uncontrolled discharge arise.
- 6.9 In relation to ecology the review has been carried out in the context of the assessment to air and water already referred to and as in the 2012 EIS findings there is no change in the position in relation to direct and indirect impacts on ecology or on protected sites.
- 6.10 In relation to traffic.an assessment was prepared which is outlined in appendix D and which takes into consideration the pre-treatment process. It is indicated that the proposed treatment process will give rise to an additional 265 trucks per annum, which equates an additional daily rate of 1 additional truck accessing the site and that the road network in the immediate area what sufficient capacity to cater for this increase. The additional traffic will if going to Kilroot have a different end destination point but the route near the site remains unaltered.
- 6.11 In relation to visual impact a landscape assessment was submitted and included in the documentation as appendix E. A number of photomontages are submitted with the assessment focussing on impact from the R152 Drogheda to Duleek road. In relation to the actual development it is within the envelope of the buildings of the existing plant and largely screened by these buildings. In relation to visual impact the overall impact in the context of cumulative is indicated as imperceptible/irrelevant given the height, scale and location of the additional buildings.
- 6.12 The site is located in close proximity to a landscape of important archaeological importance the overall site has been the subject of archaeological monitoring and no impact in relation to archaeology is identified.
- 6.13 In relation to interactions there is an overall management system in place for the plant which is monitored in accordance with licencing requirements. Any

- additional impact can be addressed within the current monitoring and mitigation measures required under existing conditions of licencing.
- 6.14 The overall view expressed in relation to the applicant's review of the proposed development is that no significant impact or effects arise and concludes no additional impact on the environment during operation other than currently occurs for the facility will arise. Existing mitigation measures currently operative are more than adequate.

7.0 ASSESSMENT

Consideration of materiality.

- 7.1 Under the terms of section 146B(2)(a) the Board must decide as soon as possible, whether or not the making of a proposed alteration would constitute "the making of a material alteration of the terms of the development concerned". In relation to materiality as indicated previously the alteration proposed involves two aspects which are interrelated.
- 7.2 The issue of materiality is related to 'the terms of the development concerned' which would imply that what is envisaged to be considered is whether there is a material change in the nature or terms of the development approved. In the case of the subject application, it is my opinion, although the additional extension of building floorspace is relatively small 120m² in an approved development with a floorspace of 7,218.23m², the development provides for an additional process, which was not part of the permitted terms of a permission on the site. It is not an alteration of an existing permitted process it is an additional process which was not permitted under any grant of permission and for the treatment of a process residue material not included in a previous permission. Therefore notwithstanding the nature and scale the alteration is, I consider, a material change in the terms of the development.
- 7.3 In these circumstances the proposed alteration, I consider, should therefore be regarded as material within the meaning of section 146B(2)(a) of the act. The board should therefore decide the making of the alteration or otherwise under section 146B(3)(b).
- 7.4 Section 146B(4), however, provides that before making a determination under subsection (3)(b), the Board shall determine whether the extent and character of the alteration requested under subsection (1), and any alternative alteration under subsection (3)(b)(ii), are such that the alteration, were it to be made, would be likely to have significant effects on the environment.

Likelihood of significant effects on the environment.

7.5 I propose to make some initial comment in relation to likelihood of significant effects on the environment based on the information submitted and a review of development permitted on the site.

- 7.6 In relation to the additional building floorspace the buildings are approximately 12 metres in height and for the purpose of carrying on, and for the purposes of an industrial process and are for the installation of additional plant. The buildings are approximately 120m² in area within an overall approved development with a floorspace of 7,218.23m². The additional buildings, which are generally screened from view and are of a relatively minor scale in the context of the overall plant, will not I consider materially alter the external appearance of the premises of the current undertaking. I would agree with the applicant's conclusion that any visual impact will be imperceptible. This is of importance given its location in the Boyne Valley and the historical context of its location.
- 7.7 Aside from the issue of visual impact the physical addition of the buildings would not, I consider, be likely to have significant effects on the environment.
- 7.8 In relation to the alteration sought the proposal also involves an amendment to the current operation of the plant where flue residues generated (APC residues) will be treated on site prior to removal from the site rather than the current practice of exporting these residues untreated. Given the nature of the alteration this section of the assessment will focus on issues on whether it would be likely to have significant effects on the environment.
- 7.9 The process is in effect for the solidification of the residues by adding water and placing the mix in flexible intermediate bulk container bags which will be in a mould and which are then filled assisted with air to ensure the bag fills to the full shape of the mould.
- 7.10 The development does not involve any additional intake of waste or feedstock or amend the nature of waste accepted at the site. The proposal does not alter the process of thermal treatment on the site as it relates to residues arising from existing processes. The proposal does not based on the information submitted involve additional discharges/emissions to ground, water or air. A minimal increase in traffic movements it is indicated in the order of an additional single HGV movement per day will arise. The site and plant is the subject of a current licence and mitigation measures are in place and ongoing monitoring is required and occurs.
- 7.11 No additional combustion or chemical process is indicated other than the addition of water to the flue residue for the purpose of mixing. Subject to proper containment and the application of current measures no additional escape of fugitive particular matter will occur. The excess air arising from the bagging process passes through existing filters. It is also noted that the terms of the existing IE licence for the plant it would appear caters for the operation of a waste residue solidification plant.

- 7.12 It is contended and concluded in the applicant's submission and review of the EIS that there are no significant impacts individually and cumulatively arising from the carrying out of the process.
- 7.13 I would agree with the overall conclusion of the EIS review that there are no impacts arising from the additional process and/or as a consequence be likely to have significant effects on the environment. The development will also not impact on any Natura 2000 in light of any conservation objectives.
- 7.14 In relation to transportation of the material the alteration in this regard would involve is the removal of treated material rather than untreated material off site and out of the state for secure disposal. As it is the current practice the APC residues material will therefore be exported. In relation to the treated material it is proposed to transport the material to Kilroot salt mine rather than the current practice of exporting to Germany where the residues material is deposited in a salt mine after treatment in a similar method to what is proposed on the site. Both current and proposed modes therefore have potential for transboundary environmental effects but in such a case the matter to consider as referred to the Planning and Development Regulations is whether the proposed development to which the application, appeal or application for approval relates would be likely to have significant effects on the environment in a transboundary state within consideration of EIA.
- 7.15 In relation to Kilroot it is indicated that the licence for this mine is currently being reviewed to permit acceptance of APC residues and that an EIS is being prepared as part of this process. The issue of likely to have significant effects on the environment in the transboundary state which in this case would be the United Kingdom would be addressed in the EIS as part of the licence review.
- 7.16 The new development will, it would appear, to be largely contingent on the Kilroot salt mine being granted the necessary amendment to its current licence to accept the treated APC residues. It is unclear if the development would proceed if this does not occur i.e. whether it would be feasible for the material to be treated and then exported to Germany. Irrespective the APC residues will be transported off the site and out of the state as they are currently.

Appropriate Assessment.

7.17 The site is not within or immediately adjacent to any Natura 2000 sites. Section 2.11 of the review of the EIS includes reference to screening and the Appropriate Assessment Statement carried out in the 2012 submission which concluded no direct effects arising and the overall conclusion is that the modifications and alteration proposed will not result in any additional direct effects.

- 7.18 I note the contents of the screening assessment submitted by the first party with the application and the conclusions of that assessment and that there are no direct connections in relation to groundwater and surface water arising from the development in relation to European site.
- 7.19 The making of the alteration would not, therefore, in my opinion be likely to have significant effect on any designated Natura 2000 site in the light of the conservation objectives of the site.

Consultation.

- 7.20 In relation to making a decision as to whether the making of the alteration would constitute the making of a material alteration, section 146B(2)(b) provides that the Board may invite submissions in relation to the matter to be made to it by such person or class of person as the Board considers appropriate and shall have regard to any submissions made to it on foot of that invitation.
- 7.21 Given the overall nature of the development and the level of interest and scale of observations submitted in respect of the previous application 17.PA.0026 and also submissions made by proscribed bodies the Board may, however, reasonably conclude that the public should be afforded the opportunity to make comment on the proposed alteration.

8.0 CONCLUSION.

- 8.1 The proposed alteration should be regarded as material within the meaning of section 146B(2)(a) of the act in the terms of the development on the basis that it introduces a new additional process not previously permitted and therefore would represent a material alteration of the terms of the development concerned.
- 8.2 In relation to characteristics and scale, the scale of the development proposed is relatively small in the context of what was permitted under previous permissions on the site and the scale of building works is very limited.
- 8.3 The nature of the works as a waste residue solidification plant would appear to be provided for within the terms of the current IE licence.
- 8.4 In relation to location the proposed alteration arising from the physical works proposed and the additional process would as an initial assessment not have any additional environmental impacts over and above those arising on foot of the permitted development and that the proposed development would not have a significant adverse impact on any European site.
- 8.5 In relation to the characteristics of potential impacts the magnitude and complexity of any impacts arising are likely to be limited to the site and the immediate and geographical area.

- 8.6 Having considered the alteration proposed, based on the documentation submitted and a review of this documentation, notwithstanding the materiality of the alteration it is not likely to have significant effects on the environment.
- 8.7 The making of the alteration would not, be likely to have significant effect on any designated Natura 2000 site in the light of the conservation objectives of any site.
- 8.8 The alteration proposed will, it would appear, to be largely contingent on the Kilroot salt mine being granted the necessary amendment to its current licence to accept the treated APC residues.

9.0 RECOMMENDATION.

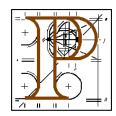
23rd December, 2015.

In view of the above, I recommend that the board is therefore advised-

- make a determination under section 146B(2) of the Planning and Development Acts 2000-2011 that the making of the alteration to which this request relates would constitute a material alteration to the terms of the development concerned,
- make a determination under section 146B(4) of the acts that the making of the alteration to which this request relates would not be likely to have significant effects on the environment, and
- require under section 146B(8), in the manner that the Board considers appropriate, the person who made this request to make accompanying information available to the public and the consultees that were prescribed for the application 17.PA.0026, and to notify them that the information is available and that submissions on the request may be made to the board within a stated period of time.

Further Inspector's Report

An Bord Pleanála



Inspector's Report

(Further report following public notification and consultation on the Proposed Alteration in accordance with section 146B(8) of the Planning and Development Act 2000, as amended).

17.PM0007; Application under Section 146B of the Planning and

Development Act 2000, as amended, for alterations to a previously approved planning permission 17.PA0026 for

a Strategic Infrastructure Development.

Planning Authority: Meath County Council

Applicant: Indaver Ireland Ltd.

Location: Carranstown, Duleek, County Meath

Inspector: Derek Daly

1.0 INTRODUCTION

- 1.1 This report relates to a request from Indaver Ireland Ltd that the board exercise its power under section 146B of the Planning and Development Acts 2000-2011 to alter the terms of the permission granted to a previously approved planning permission 17.PA0026 in relation to a waste to energy facility.
- 1.2 The application for an alteration submitted by Indaver Ireland Limited on the 23rd of November 2015 involves two aspects. The first is for physical alterations to the plant building by providing for an extension to an existing building and construction of an additional building. The proposal provides for an extension to an existing loading bay building by 9.94 metres and construction of a pre-treatment process plant enclosure approximately 120m² in area with a height slightly in excess of 12 metres. The 2 existing conveyor systems will be by extended by approximately 8m.
- 1.3 The second is the amendment of the current process requiring the construction of a pre-treatment process plant within a new building for the treatment of the flue residues generated (APC residues). Essentially the changes are to alter a specific aspect of the current process where flue residues generated (APC residues) are collected and exported untreated for treatment and disposal in Germany. It is now proposed that the APC residues will be treated on site prior to removal from the site.
- 1.4 An initial report on the proposal dated the 23rd of December 2015 recommended that the proposed alterations were material and that the applicant should be requested to publicly give notice the amendment and invite submissions from the public. It was also recommended that certain prescribed bodies should be copied with details of the proposed amendment and invited to make comments.
- 1.5 This report and assessment should also be read in conjunction with the earlier report dated the 23rd of December 2015 which contains an overview of the location and description of the site, the legislative context for the decision, the planning history and details of the request submitted and details of the amendment sought.
- 1.6 The current application has been the subject of formal consideration to determine whether or not the proposed alteration would or would not comprise a material alteration. By order dated the 8th of January 2016 the Board decided that the proposed alteration would constitute a material alteration to amendments to existing development at the waste to energy (WtE) waste management facility at Carranstown, Duleek, County Meath.

- 1.7 The Board also decided to direct the applicant to undertake certain formal and public consultation in accordance with procedures provided for in relevant legislation, specifically under the aegis of section 146B(8)(a) of the Planning and Development Act, as amended.
- 1.8 The Board's direction of the 8th of January 2016 also formally invited the Environmental Protection Agency (EPA) to comment including an update on the current licencing status of the Carranstown facility.
- 1.9 The applicant was also requested to make available for inspection full scale drawings of the proposed physical changes to the building.
- 1.10 Arising from the Board decision on materiality in the case, and the subsequent direction to the applicants to give public notice of the proposed alteration and notify certain prescribed bodies, time was given for submissions or observations on the proposed alteration up to and including the 24th of February 2016.

2.0 SUBMISSIONS TO AN BORD PLEANALA

There have been 4 no. submissions received by An Bord Pleanala arising from the public notification of the currently proposed Alteration. The submissions may be summarised as set down below.

- 2.1 **Transport Infrastructure Ireland** in a submission dated the 22nd of February notes:
 - The subject proposal does not appear to include for any alterations to the extent of the site that would further impact on the feasibility of routing options for a planned Leinster Orbital major traffic route;
 - The submission notes the traffic analysis submitted and has no specific comment to make in relation to the subject development in terms of impacts relating to capacity and the efficient operation of the national road network in the area.
- 2.2 **An Taisce** in a submission dated the 24th of February 2016 states:
 - There is a preliminary onus on the applicant to justify the development of the pre-treatment process plant on the subject site.
 - There is a need to adequately assess site suitability in relation to air quality, ecology and human-residential amenity.
 - All environmental considerations need to be assessed.
 - There should be no additional impacts on the environment.

- The Board should ensure that residential amenity is not adversely impacted from noise and odours arising from the alterations.
- Air pollutants emitted from the facility should be fully in compliance with ambient air standards during both construction and operation times.
- 2.3 **Irish Water** in a submission dated the 24th of February 2016 indicated;
 - Irish Water was notified by Indaver of the application.
 - The principle of the development is established.
 - The applicant has referred to a well on the site from which the water requirements of the site are supplied but it is unclear if it for the construction phase of operational phase.
 - The site is within the East Meath Water Supply Zone which is supplied by both surface and ground waters. There is reference to mitigation measures but Irish Water has not had sight of these measures and requests that mitigation measures ensure that any risks to the East Meath Water Supply Zone are avoided.
- 2.4 The **EPA** submission of the 4th of February 2016 includes the following observations:
 - The most recent licence pertaining to Indaver Ireland for the Carranstown WTE is Industrial Emissions (IE) Licence Register No W0167-03 granted on the 2nd of June 2015.
 - Reference is made to a letter from the Office of Environmental Enforcement in the applicant's Environmental Report and that the changes proposed is catered for by the conditions of W0167-03.
 - As the existing conditions of the licence already cater for the proposed alterations no review of the licence is required.
 - It is noted that no EIS accompanies the application.
 - Should the Board determine an EIS is required and a licence review application be received which address the changes proposed the Agency will require that the EIS associated with the application is submitted in support of the licence review application and be the subject of EIA.

3.0 ASSESSMENT.

3.1 Accompanying documentation by the applicant includes a summary of the EIS review of the EIS prepared for PL17.PA0026. In the cover letter with the application it is indicated that this review has been shown to have no additional impact on the environment. The submission takes the format of a review of the various chapters of the EIS and also a number of appendices which include an air quality assessment, a traffic assessment and a landscape assessment. Details of the applicants submission and a summary of the

- documentation is indicated in section 6 of the original report dated the 23rd of December 2015. The development does not alter in any form the acceptance of waste currently permitted at the facility.
- 3.2 Whether the proposed alteration would be likely to have significant effects on the environment
- 3.2.1 In relation to the proposed alterations it is indicated that no additional input of material is proposed or an increase in waste acceptance over what is currently permitted on the site. Essentially the changes are to amend a specific aspect of the current process where flue residues generated (APC residues) will be treated on site prior to removal from the site rather than the current practice of exporting these residues untreated and to extend and add on additional floorspace to accommodate this.
- 3.2.2 Reference is made in the An Taisce submission to a need to adequately assess site suitability in relation to residential amenity and that the Board should ensure that residential amenity is not adversely impacted from noise and odours arising from the alterations. It is initially noted that the proposed development is within an existing building envelope and also that the site is removed from residential properties.
- 3.2.3 In relation to human beings other than short term construction impacts no impacts are identified and measures to mitigate these impacts are outlined
- 3.2.4 Specifically in relation to air quality and the issue of emissions and odours raised in the An Taisce submission, the documentation as submitted includes a review of air assessment and which was carried out as outlined in appendix C. The review assessed possible impacts from dust and particulate emissions arising from the new process using the existing environment and emissions as a baseline as the plant has a single process emission point which is the stack at the plant. Cumulative impacts were also considered. No additional impact is identified arising from the new process.
- 3.2.5 In relation to noise it is indicated that there are noise limits conditioned by previous permissions. The impact of noise specific to the new plant is initially outlined at within one metre of the plant boundary and then in the context of nearest noise sensitive receptors and also cumulatively with the overall plant. The level of impact is determined as insignificant and will not alter the noise emissions from the plant. In addition noise emissions in the construction phase will adhere to conditions applied for previous construction works at the plant in terms of values and hours of operation. Issues in relation to noise impact I consider do not arise.

- 3.2.6 In relation to hydrogeology, soils and geology the Irish Water submission refers to the site as within was the East Meath Water Supply Zone which is supplied by both surface and groundwaters and requests that mitigation measures ensure that any risks to the East Meath Water Supply Zone are avoided. In relation to the proposal there are no additional discharges proposed to ground and the amount of ground disturbance and removal is minimal in comparison to other phases of construction carried out on the site. There is also no direct discharge to groundwater and the process area is within an internal area with control of any flows arising and there is provision for containment for subsequent reuse. The site obtains its water supply from an on-site well. The existing plant operates an overall water management system where excess water and runoff is recycled for reuse.
- 3.2.7 It is also noted that there is no planned discharge to surface water and any accidental discharge will be contained within the existing surface water system which has sufficient surplus capacity in the existing attenuation ponds which have been constructed with a sealing membrane should any uncontrolled discharge arise. On this basis I conclude no impacts arise.
- 3.2.8 In relation to ecology the review has been carried out in the context of the assessment to air and water already referred to and also in the context of the 2012 EIS finding. The review concludes that there is no change in the position in relation to direct and indirect impacts on ecology or on protected sites and I would agree with this assessment.
- 3.2.9 In relation to traffic.an assessment was prepared which is outlined in appendix D and which takes into consideration the pre-treatment process. I note the submission of Transport Infrastructure Ireland which has no specific comment to make in relation to the subject development in terms of impacts relating to capacity and the efficient operation of the national road network in the area. I consider that the change in relation to on-site treatment may result in a different end destination point but the route movements near the site remains unaltered by the proposed changes in treatment and no additional material is generated to affect the level and quantities of journeys arising to any significant degree.
- 3.2.10 Issues in relation to landscape impact and archaeology do not identify impacts arising and I would agree with the submission of the applicant in this regard.
- 3.2.11 I would also note that as indicated in the EPA submission the existing conditions of the licence already cater for the proposed alterations and no review of the licence is required. In this context any additional impact can be addressed within the current monitoring and mitigation measures required under existing conditions of licencing.

3.2.12 After consideration of the submissions from the parties and an inspection of the site, I would not alter my previous advice to the board that the proposed alteration would not be likely to have significant effects on the environment. The alteration would not authorise any works to land or a change in the use of any land that has not already been authorised in principle by 17.PA0026.

3.0 APPROPRIATE ASSESSMENT.

4.1 The site is not within or immediately adjacent to any Natura 2000 sites. The nearest site is the wider area is the River Boyne and River Blackwater SAC site code 002299 which has two designated habitats and three species directly related to the watercourse. Section 2.11 of the review of the EIS includes reference to screening and the Appropriate Assessment Statement carried out in the 2012 submission which concluded no direct effects arising and the overall conclusion is that the modifications and alteration proposed will not result in any additional direct effects on any site.

4.2 Given that

- there are no physical works proposed other than within the existing building envelope;
- the physical separation between the application site and Natura sites;
- that the direct emissions from the site will not materially change on foot of the proposal;
- that there are no additional emissions in relation to groundwater and surface water arising from the development and
- that any potential increases in traffic volume would not occur within or close to any Natura 2000 site;

It is reasonable to conclude that on the basis of the information on the file, which I consider adequate in order to issue a screening determination, that the proposed development, individually or in combination with other plans or projects would not be likely to have a significant effect on European Site No. 002299, or any other European site, in view of the site's Conservation Objectives, and a Stage 2 Appropriate Assessment is not therefore required.'

5.0 RECOMMENDATION

I therefore recommend that the board make the proposed alteration to the terms of the approval granted under 17.PA0026 as provided for in section 146B(3)(b) in the manner and for the reasons and considerations set out below.

REASONS AND CONSIDERATIONS.

Having regard to the nature of the development which is for an amendment to an existing and permitted development; the provisions of the National Hazardous Waste Management Plan 2014-2020 *A Resource Opportunity – Waste Management Policy in Ireland* which has a stated policy in relation to develop sites in Ireland where hazardous waste can be treated and also for avoidance of exporting of hazardous waste; the terms of the waste licence which governs activity on the site issued by the EPA under Ref. No. W0167-03, and the scale of the development in the context of the permitted development; it is considered that the making of the proposed alteration would be in keeping with current national waste management policies and its obligations under European legislation.

The proposed alteration also would not be likely to have significant effects on the environment or upon any Natura 2000 site. It would therefore be in keeping with the proper planning and sustainable development of the area.

The Board noted that the proposed development is not directly connected with or necessary to the management of a European Site.

In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusion carried out in the Inspector's report in respect of the identification of the European sites which could potentially be affected, and the identification and assessment of the potential likely significant effects of the proposed development, either individually or in combination with other plans or projects, on these European sites in view of the site's Conservation Objectives. The Board was satisfied that the proposed development, either individually or in combination with other plans or projects, would not be likely to have a significant effect on European Site No. 002299, or any other European site, in view of the site's Conservation Objectives.

CONDITIONS.

1. The amendment granted by this order relates to the details submitted by Indaver Ireland Limited on the 23rd of November 2015 and further drawings and particulars submitted by the applicant on the 29th of January 2016 in relation to provide for physical alterations to the plant building by providing for an extension to an existing building and construction of an additional building and for the extension of 2 existing conveyor systems to facilitate the amendment of the current process requiring the construction of a pretreatment process plant within a new building for the treatment of the flue residues generated (APC residues).

Reason: In the interest of clarity.

2. The development shall be carried out and completed in accordance with the plans and particulars lodged on the 23rd of November 2015 and further drawings and particulars submitted by the applicant on the 29th of January 2016.

Reason: In the interest of clarity.

3. All environmental mitigation measures set out in the documentation submitted by the applicant to An Bord Pleanála shall be implemented in full.

Reason: In the interest of protection of the environment.

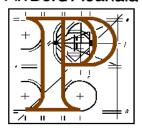
Derek Daly,

Senior Planning Inspector.

30th March 2016.

Board Direction

An Bord Pleanála



Board Direction

Ref: 17.PM0007

Having decided at a meeting of the Strategic Infrastructure Division, held on 8th January 2016, that the proposed alteration would be material, and having required public consultation to be carried out, the Board, at a further meeting held on 8th April 2016, considered the documentation on file, including the submissions received arising from consultation with the public and with prescribed bodies, and the further report of the Inspector of 30th March 2016, and decided as follows:

- that the making of the proposed alteration would not be likely to have significant effects on the environment, and
- to make the proposed alteration.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

- (a) the provisions of Directive 2008/98/EC of the European Parliament and of the Council, including the principle of proximity,
- (b) the provisions of the National Hazardous Waste Management Plan 2014 2020, including the recommendation in relation to north-south cooperation in hazardous waste recovery and disposal,
- (c) the provisions of the North East Region Waste Management Plan 2005 2010, and of the subsequent Review Report (2011) and Evaluation Report (2012).
- (d) the policies and objectives of the Meath County Development Plan 2013-2019, as varied,
- (e) the planning history of the site, including An Bord Pleanála appeal reference number PL17.219721 (planning authority register reference number SA/60050), as amended by planning authority register reference number SA/901467, and by An Bord Pleanála reference numbers 17.PA0026 and 17.PM0004,
- (f) the existing waste-to-energy recovery facility on site,
- (g) the revised licence issued by the Environmental Protection Agency, under which this plant operates (Industrial Emissions Licence register number W0167-03),
- (h) the nature and scale of the alteration proposed,

- (i) the documentation and submissions on file including submissions from prescribed bodies, and
- (j) the reports of the Inspector, including the examination, analysis and evaluation undertaken in relation to the potential for significant effects on the environment.

The Board was satisfied that the information before it was adequate to undertake a screening for appropriate assessment and environmental impact assessment in respect of the proposed alteration.

In conducting a screening exercise for appropriate assessment, the Board considered the nature, scale and context of the proposed alteration, the documentation on file generally, the planning history of the site, the revised licence issued by the Environmental Protection Agency, the submissions on file, and the assessment of the Inspector in relation to the potential for effects on European Sites. In undertaking the screening exercise, the Board accepted the analysis and conclusions of the Inspector. The Board concluded that, by itself and in combination with other development in the vicinity including the development already undertaken at this site, the proposed alteration would not be likely to have significant effects on European Sites.

The Board considered the potential environmental impacts that might arise due to the proposed alteration, including those in relation to transport and water consumption, both by itself and in cumulation with other development in the vicinity, including the existing facility. Having regard to the characteristics of the receiving environment, the characteristics of the proposed alteration, the planning history of the site, the revised licence issued by the Environmental Protection Agency, the limited physical impacts associated with the proposed alteration, the Board is satisfied that the proposed alteration would not be likely to have significant effects on the environment. The Board concurred with the analysis and conclusions of the Inspector in this matter. The Board, therefore, concluded that the preparation of an environmental impact statement is not required.

The Board concluded that, subject to compliance with the condition set out below, the proposed alteration would be compatible with EU, national, regional and local waste management policies, would not seriously injure the amenities of the area or of property in the vicinity, would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

CONDITION

The proposed alteration shall be carried out and completed in accordance with the plans and particulars lodged with the application.

Reason: In the in	terest of clarity.	
Board Member: _	Fionna O' Regan	Date: 12 th April 2016

Board Order

An Bord Pleanála



PLANNING AND DEVELOPMENT ACTS 2000 TO 2015

Meath County

An Bord Pleanála Reference Number: 17.PM0007

(Associated Application Reference Number 17.PA0026)

REQUEST received by An Bord Pleanála on the 23rd day of November, 2015 from Indaver Ireland Limited of 4th Floor, Block I, West Pier Business Campus, Old Dunleary Road, Dún Laoghaire, County Dublin under section 146B of the Planning and Development Act, 2000, as amended, to alter the terms of a strategic infrastructure development, described as alterations to the existing development as follows:

- (a) To increase the intake tonnage of waste from 200,000 tonnes to 220,000 tonnes per annum.
- (b) To allow the acceptance of some additional types of waste defined as hazardous and non-hazardous in the European Waste Catalogue.
- (c) A change in status of the temporary spare parts warehouse building (single storey building 25 metres x 15 metres x 6.7 metres high) to a permanent centralised maintenance depot.
- (d) A change in status of the temporary electrical switchgear building (associated with the above) 4 metres x 2.5 metres x 3.2 metres high from temporary to permanent.
- (e) A change in status of the temporary construction modular office building (single storey building 33 metres x 12 metres x 3 metres high) from temporary to permanent.

- (f) A change in status of the temporary electrical switchgear building (associated with the above) 3 metres x 2.7 metres x 3.2 metres high from temporary to permanent.
- (g) Construction of an access roadway to the modular office building.
- (h) 22 number new car parking spaces associated with the modular office building.
- (i) A new on-site effluent treatment system associated with the modular office building.
- (j) Change in status from temporary to permanent for hardcored areas associated with the spare parts warehouse, construction offices and temporary site car park.
- (k) An additional fuel storage tank (8.7 metres length x 2.7 metres diameter).
- (I) An additional ammonia storage tank (7.15 metres length x 3.5 metres diameter).

All at Carranstown, Duleek, County Meath.

PROPOSED ALTERATION: Proposed alteration to facilitate the pre-treatment process of air pollution control (flue gas and boiler ash) residues on site. The proposed alteration required for such pre-treatment will consist of the extension of the existing ash residue loading bay and the construction of a pre-treatment process plant enclosure at the Waste-to-Energy Facility at Carranstown, Duleek, County Meath.

WHEREAS the Board made a decision to grant permission, subject to conditions, for the above-mentioned development by order dated the 4th day of February, 2013,

AND WHEREAS the Board has received a request to alter the terms of the development, the subject of the permission,

AND WHEREAS the Board considered that the proposed alteration in question would result in a material alteration to the terms of the development, the subject of the permission,

AND WHEREAS the Board invoked the provisions of section 146B(8)(a) of the Planning and Development Act, 2000, as amended, to invite submissions or observations in relation to the matter from members of the public,

AND WHEREAS having considered all of the documents and submissions on file and the Inspector's report, the Board considered that the making of the proposed alteration would not be likely to have significant effects on the environment or on any European Site,

NOW THEREFORE in accordance with section 146B(3)(b)(i) of the Planning and Development Act, 2000, as amended, the Board hereby alters the above-mentioned decision so that the permitted development shall be altered in accordance with the plans and particulars received by the Board on the 23rd day of November, 2015.

MATTERS CONSIDERED

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

- (a) the provisions of Directive 2008/98/EC of the European Parliament and of the Council on waste, including the principle of proximity,
- (b) the provisions of the National Hazardous Waste Management Plan 2014 2020, including the recommendation in relation to north-south cooperation in hazardous waste recovery and disposal,
- (c) the provisions of the North East Region Waste Management Plan 2005 2010, and of the subsequent Review Report (2011) and Evaluation Report (2012),
- (d) the policies and objectives of the Meath County Development Plan 2013-2019, as varied,

- (e) the planning history of the site, including An Bord Pleanála appeal reference number PL17.219721 (planning authority register reference number SA/60050), as amended by planning authority register reference number SA/901467, and by An Bord Pleanála reference numbers 17.PA0026 and 17.PM0004.
- (f) the existing waste-to-energy recovery facility on site,
- (g) the revised licence issued by the Environmental Protection Agency, under which this plant operates (Industrial Emissions Licence register number W0167-03),
- (h) the nature and scale of the proposed alteration,
- (i) the documentation and submissions on file including submissions from prescribed bodies, and
- (j) the reports of the Inspector, including the examination, analysis and evaluation undertaken in relation to the potential for significant effects on the environment.

The Board was satisfied that the information before it was adequate to undertake a screening for appropriate assessment and environmental impact assessment in respect of the proposed alteration.

In conducting a screening exercise for appropriate assessment, the Board considered the nature, scale and context of the proposed alteration, the documentation on file generally, the planning history of the site, the revised licence issued by the Environmental Protection Agency, the submissions on file, and the assessment of the Inspector in relation to the potential for effects on European Sites. In undertaking the screening exercise, the Board accepted the analysis and conclusions of the Inspector. The Board concluded that, by itself and in combination with other development in the vicinity, including the development already undertaken at this site, the proposed alteration would not be likely to have significant effects on European Sites.

The Board considered the potential environmental impacts that might arise due to the proposed alteration, including those in relation to transport and water consumption, both by itself and in cumulation with other development in the vicinity, including the existing facility. Having regard to the characteristics of the receiving environment, the characteristics of the proposed alteration, the planning history of the site, the revised licence issued by the Environmental Protection Agency, the limited physical impacts associated with the proposed alteration, the Board is satisfied that the proposed alteration would not be likely to have significant effects on the environment. The Board concurred with the analysis and conclusions of the Inspector in this matter. The Board, therefore, concluded that the preparation of an environmental impact statement is not required.

The Board concluded that, subject to compliance with the condition set out below, the proposed alteration would be compatible with EU, national, regional and local waste management policies, would not seriously injure the amenities of the area or of property in the vicinity, would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience, and would, therefore, be in accordance with the proper planning and sustainable development of the area.

CONDITION

The proposed alteration shall be carried out and completed in accordance with the plans and particulars lodged with the application.

Reason: In the interest of clarity.

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this 5 day of Amil 2016.

4. Planning Ref: PL.17.PM0004

Inspector's Report

An Bord Pleanála



Inspector's Report

17.PM0004

Application under Section 146B of the Planning and Development Act 2000, as amended, to alter the terms of a permission for a Strategic Infrastructure Development.

Planning Authority: Meath County Council

Applicant: Indaver Ireland Ltd.

Location: Carranstown, Duleek, County Meath

Inspector: Keith Sargeant

1.0 INTRODUCTION

- 1.1 The applicant Indaver obtained permission from An Bord Pleanala in February 2013 (under reference no. 17.PA0026) for development comprising amendments to the existing waste to energy (WTE) incineration facility at Carranstown, in the environs of Duleek, south-west of Drogheda. The facility has been operational since 2011, under the aegis of permissions previously granted by An Bord Pleanala and by Meath County Council in 2007 and 2009 respectively. An alteration to PA0026 is now being sought by Indaver, for a temporary period until 2019.
- 1.2 I have not at this stage visited the site or its environs in the context of the current application 17.PM0004. However it may be noted that the most significant elements of the amendments permitted under PA0026 were:
 - (a) an increase of 20,000 tonnes per annum (tpa) in the quantum of waste allowed to be accepted at the Carranstown facility, and
 - (b) a decision to allow the acceptance of a certain quantum (10,000 tpa) of separately collected hazardous waste.

Other items covered by the permission PA0026 may be characterised as minor physical developments each of lesser consequence than (a) or (b) noted above. The full list of items covered by the permission in the case PA0026 are highlighted (a) - (I) on a copy of the Board Order in that case attached herewith to my report.

- 1.3 The current application under Section 146B of the Act is for an alteration to the terms of the permission granted under PA0026. Specifically the applicants seek an amendment to condition no. 3(1) of that permission, which limits the tpa quantum of waste which may be accepted at Carranstown.
- 1.4 The justification for the proposed alteration is generally stated to be the provision of "additional recovery capacity" for waste in response to diminishing landfill capacity and consequential increasing reliance nationally on the export of municipal waste.
- 1.5 I have reviewed the currently submitted documentation, which includes a Review Report. The thrust of the Review Report seeks to demonstrate that the proposals would not result in significant environmental impacts, arising from which the Board is urged to alter the permission as requested. However I note that the legislation underpinning the "Alteration" process is essentially a 2-stage process, in which comprehensive consideration of environmental

impact may or may not arise. Against this background I will now report as set down below.

2.0 SCOPE OF REPORT

- 2.1 Section 146B of the Act provides for a two stage process to be undertaken by the Board. In the first stage the Board must decide as soon as possible, whether or not the making of a proposed alteration would constitute "the making of a material alteration of the terms of the development concerned". If the Board decides that the alteration proposed would not constitute a material alteration, the Board must proceed to alter the permission. The second stage only arises if the Board decides that the proposed alteration would constitute a material change. This triggers a requirement for certain formal consideration of environmental impact within which process there may be a need for the preparation of an environmental impact statement and public notification of same and of the Alteration proposed.
- 2.2 The main purpose of my report herein is to assist the Board in completing the first stage of the 146B process i.e. determination of the materiality of the proposed alteration viz a viz the strategic infrastructure subject development. This matter is considered in section 3 below. As a follow on to my conclusions in section 3 below, I shall state my preliminary views on matters of environmental impact. However these views should be read without prejudice to objective consideration of environmental impact having regard to such further information and observations as may be obtained in the event of any initial decision that the currently proposed alteration would be material.

3.0 CONSIDERATION OF MATERIALITY

- 3.1 The full list of items covered by the permission in the case PA0026 are highlighted (a) (I) on a copy of the Board order in that case attached herewith to my report. The amendments the subject of 17.PA0026 included an increase of 20,000 tpa waste acceptance (on 200,000 tpa already permitted). Condition no. 3(1) of the permission forming part of a multi-part condition stated:
 - 3(1) The tonnage of waste accepted at the facility shall not exceed 220,000 tonnes per annum.

The reason stated for the attachment of condition no. 3 was to clarify the nature and scope of the permitted development.

3.2 Having regard to:

- the subject matter of the permitted development in PA0026 including an increase of 20,000 tpa;
- the express tpa limitation stated in condition no. 3(1); and
- the fact that the now proposed further increase of 17,500 tpa represents a near doubling of the quantum of waste acceptance the subject of PA0026,

I consider the alteration now proposed to alter condition no. 3(1), even for a temporary period, would be a material alteration.

3.3 If the Board is minded to disagree with my conclusion in 3.2 above, I consider there are other matters which should be considered before proceeding to a determination on materiality. These matters fall generally under the headings of (a) waste management and planning policy; and (b) the integrity of the development consent in place for the Carranstown development and operation.

3.4 Certain Waste Management and Planning Policy Considerations

- 3.4.1 Existing waste management plans for some ten regions are due for review in the context of local government reorganisation which envisages three regions replacing the existing ten. Existing future waste management plans form part of the statutory development plans for the areas to which they relate. Waste management policy is therefore an integral part of planning policy and must be viewed in the context of the established hierarchy of policy ranging from National Spatial Strategy down to local area plans. Accordingly, land use decisions relating to waste management facilities must be taken in the context of the overall statutory planning policy framework. Having regard to the evolving state of waste management policy as outlined, any decision relating to further amendments to the Carranstown complex may be premature pending the making of a new waste management plan for the area, which plan would form part of the relevant statutory Development Plan.
- 3.4.2 The suite of permissions covering the Carranstown complex provide for a WTE waste management facility based on incineration of residual municipal waste, drawn mainly from the North-East Waste Management Region. Part of the justification for the temporary increase in waste acceptance limits, now sought by Indaver, appears to be that the plant can contribute positively towards the diversion of residual waste from landfill disposal to energy

recovery. In this context there is specific mention of impending serious shortfalls in landfill capacity and/or alterative treatment capacity in the North-East Waste Region, in the Dublin Waste Region and nationally. Clearly it is envisaged by the applicants that Indaver can serve a significantly greater geographical area than that envisaged in the planning permissions currently in place. While official policy since 2004 has been to apply "the proximity principle" flexibly, my reading of the planning permissions covering the site is that the applicants/developers are at all times to be cognisant of the application of the proximity principle in the on-going operation of the Carranstown facility.

- 3.4.3 Notwithstanding the planned reduction in the number of waste management regions in Ireland (from ten to three), existing waste management plans prepared in the 2000's remain in force. In the new regional set-up County Meath will form part of a 'Midland/East' waste management region (including Dublin) and it is understood that a new waste plan is not envisaged to be in place for the new region(s) before 2015. The existing waste plan for the North-East Region provides for a balanced integrated waste management strategy within which a certain tonnage of relevant waste would be the subject of thermal treatment. Planning permissions originally granted for Carranstown accepted that 200,000 tpa for incineration in a waste to energy plant would be appropriate. The significant overall increase in waste acceptance limitation at Carranstown may be at variance with official policy. This suggests at least a need for consultation with relevant authorities.
- 3.4.4 An oral hearing was held prior to the Board granting consent in 2013 for an increase in waste acceptance limits at Carranstown. At the oral hearing there were concerns expressed on the implications for "brown bin rollout" in the region arising from facilitating a lowering of calorific value in waste acceptance for incineration at Carranstown. It is understood that recently issued food and bio waste regulations envisage a phased implementation of compulsory food waste segregation, for final implementation by 2016. In this context facilitating increased capacity for low cv waste acceptance at Carranstown until 2019 may have the potential to militate against the imperative of timely implementation of food waste regulations for the area served by Carranstown.

3.5 Integrity of Development Consents for Carranstown

3.5.1 At the oral hearing for PA0026 to which I have referred above, it was indicated by the applicants that if they could be permitted to accept 220,000 tonnes of waste annually this would give them the flexibility required to mix the various wastes received so as to achieve maximum possible electrical output at the WTE plant. Clearly any permission which allows a greater volume of waste

throughout presupposes acceptance of residual waste with lower calorific value (cv), with the potential to undermine the integrity of the WTE facility originally permitted i.e. the incineration process moves more in the direction of a waste disposal facility than an energy recovery facility. It is noted that a third party submission on the current W0167-03 licence review application (EPA website) argues that achievement of the predicted energy conversion ratio for Carranstown (based on 220,000 tonnes throughput) is very marginal. Verification of waste-to-energy ratio compliance would clearly be a matter for the EPA. However failure to achieve the relevant energy ratio would potentially compromise the status of Carranstown as a WTE facility. This would be in conflict with the terms of permissions granted for the site. The alteration proposed in the current application would have the potential to further undermine the optimum waste-to-energy conversion.

3.5.2 It should be noted that the activities at Carranstown are licensable under Waste Management and/or EPA Acts. The existing licence governing the activities is W0167-02, currently under review under ref. W167-03. According to the Annual Environment Report (AER) for Carranstown – prepared under the aegis of W0167-02 – covering the year 2013, the tonnage of waste accepted for treatment at Carranstown in 2013 reached the permitted limit per PA0026 in that year. The licence review process under W0167-03, is ongoing. Amendments to the scope of this licence review were set out in a public newspaper notice etc. in April 2014. The amendments notified include the further 15,000 tpa the subject of the current Alteration Request to the Board. As I understand it there has been no form of public notification of the currently proposed alteration to the planning permission 17.PA0026.

3.6 Conclusion on Materiality

- **3.6.1** As stated in Paragraph 3.2 of my report, above, I consider the proposed alteration to be a material alteration in the context of the subject development of 17.PA0026. In addition, or in the alternative, I consider the points made in Sections 3.4 and 3.5, above, to be worthy of consideration by the Board before determining the issue of materiality.
- **3.6.2** Finally in considering the matter of whether the currently proposed alteration would or would not be a material alteration, please note my observations in Section 4.0 of my report, below.

4.0 CONSULTATION WITH CERTAIN BODIES

- 4.1 Having regard to the foregoing, if the Board does not agree with my conclusions regarding materiality in section 3.0 of my report, above, I consider that before finally determining this materiality issue, the Board should consider exercising its discretion under section 146B(2)(b) of the Act, and invite submissions from:
 - Meath County Council, as Planning Authority;
 - Dublin City Council, in its role as lead Authority for a future planned Midlands/East regional waste body.
- **4.2** Consideration should also be given to informing the public of the Alteration Request and reasonable time given for submissions to An Bord Pleanala.
- 4.3 The consultation procedure which I consider would be appropriate at this stage is provided for under section 146B(2)(b) of the Planning and Development Act 2000 as amended. Such consultation would be absolutely without prejudice to subsequent determination by An Bord Pleanala of whether or not there may be a need for EIA etc.; and/or the due operation of other procedures provided for in section 146B and associated sections.
- **4.4** If my recommendation for action under the aegis of 146B(2)(b) is agreed, I can assist in the preparation of necessary draft letters etc.
- 4.5 Having regard to the potential for duplication of public consultation inherent in the implementation of section 146B of the Act, it may be helpful for the Board to note my preliminary observations in the matter of environmental impact. These observations are set out in section 5 of my report, below.
- 4.6 As a final comment under the heading of preliminary consultation, I wish to add that I believe any feedback obtained under consultation undertaken in accordance with section 146B(2)(b) could be helpful in considering fully matters of environmental impact in this case, as well as eliciting a response on the materiality issue per se.

5.0 CONSIDERATION OF ENVIRONMENTAL IMPACT

5.1 Section 146B(3)(b) of the Act requires that, in the event of the Board deciding that the making of an alteration to the terms of a strategic infrastructure

development would be a material alteration, before determining whether to make the alteration requested (or make a modified alteration), the Board must determine whether the extent and character of such alteration would be likely to have significant effects on the environment. If the Board determines that the making of any alteration (proposed or modified) would be likely to have significant effects on the environment, the Board must request the preparation of an environmental impact statement.

- 5.2 Without prejudice to my observations as set out in Sections 3 and 4 of my report, above, and/or any preliminary decision of the Board in relation to materiality, I have noted the contents of the Review Report presented by applicants (Indaver) in relation to the current alteration application. The thrust of the Report is to demonstrate that there would not be significant environmental impact. The covering letter (20 March 2014) with the Report submits that the content of the Report should demonstrate that the alteration proposed would not constitute the making of a material alteration and would not be likely to have significant effects on the environment.
- 5.3 Insofar as the Review Report confines itself mainly to consideration of direct effects on the environment of the locality in County Meath, I accept generally the thrust of the environmental impact conclusions of the Report. I take this view in the knowledge that the EPA is currently undertaking a composite review of the existing operational waste licence for the site and considering the issue of a revised licence having regard to the updated requirements of the Industrial Emissions Directive. The Board in deciding to grant permission for amendments under 17.PA0026 had regard to the W0167-03 waste licence review application made to the EPA for the then proposed amendments at Carranstown. Beyond the scope of matters falling within the remit of the EPA, I consider the most significant direct change in impact would be under the heading of traffic generation. The Review Report explains that in fact there would be less traffic generated overall arising from the proposed alteration.
- 5.4 My preliminary views in the matter of environmental impact are made only in the context of assisting the Board in objective consideration of the materiality of the currently proposed alteration to the terms of a strategic infrastructure development.

6.0 CONCLUSIONS AND RECOMMENDATION

6.1 Conclusions

- **6.1.1** I consider the alteration proposed should be deemed to constitute a material alteration of the terms of development covered by the permission 17.PA0026.
- **6.1.2** Based on available information I do not consider the alteration proposed would be likely to have significant effects on the environment. This conclusion is drawn without prejudice to consideration of any such further information as may become available arising from relevant procedures provided for in the relevant Section 146B of the Planning and Development Act as amended.
- **6.1.3** Notwithstanding direct environmental impact considerations in the case, I consider the proposed alteration may have implications for waste management and planning policy considerations and the integrity of development consents currently in place.

6.2 Recommendation

I recommend that before making a decision as to whether or not the making of the proposed alteration would or would not constitute a material alteration, An Bord Pleanála should consult as appropriate with certain bodies and the public, as provided for an under section 146B(2)(b) of the Act. Please here refer to Paragraphs 4.1, 4.2 and 4.4 of my report, above.

Keith Sargeant Senior Planning Inspector

21 May, 2014.

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Further Inspector's Report

An Bord Pleanála



Inspector's Report

(Further report following public notification and consultation on the Proposed Alteration in accordance with section 146B(8) of the Planning and Development Act 2000, as amended).

17.PM0004

Application under Section 146B of the Planning and Development Act 2000, as amended, to alter the terms of a permission for a Strategic Infrastructure Development.

Planning Authority: Meath County Council

Applicant: Indaver Ireland Ltd.

Location: Carranstown, Duleek, County Meath

Inspector: Keith Sargeant

1.0 INTRODUCTION

- 1.1 The current application has been the subject of formal consideration by the Board earlier this year, to determine whether or not the proposed alteration would or would not comprise a material alteration. By order dated 29 May 2004 the Board decided that the proposed alteration would constitute a material alteration to amendments to existing development at the waste to energy (WtE) waste management facility at Carranstown, Duleek, County Meath.
- 1.2 The Board also decided to direct the applicant to undertake certain formal and public consultation in accordance with procedures provided for in relevant legislation, specifically under the aegis of section 146B(8)(a) of the Planning and Development Act, as amended.
- 1.3 A third element of the Board's direction of May 2014 was to formally invite the Environmental Protection Agency (EPA) to comment including an update on the current licencing status of the Carranstown facility.
- 1.4 Arising from the Board decision on materiality in the case, and the subsequent direction to the applicants to give public notice of the proposed alteration and notify certain prescribed bodies, time was given for submissions or observations on the proposed alteration up to and including 10 July 2014. Four submissions were received by An Bord Pleanala within the stated period, including a submission from the EPA.
- **1.5** A summary of the submissions validly received by An Bord Pleanala, since the public notification of the currently proposed alteration, is set out in a later section of my report, below.
- A sample copy of the public notification letter sent to prescribed bodies in June 2004, as directed by An Bord Pleanala, is on file see letter to National Roads Authority (NRA) dated 12 June 2014. Please note that in the third paragraph of this letter, the third bullet point refers to further information relating to the 2014 Review Report. This information appears to be provided as an addition to Appendix B of the Review Report as circulated to prescribed bodies, as distinct from being a separate further information document. This addition to appendix B is titled "Updated Air Quality Assessment for Indaver Carranstown Waste to Energy Facility Based on Volume Flow of 183,700 NM³/HR", dated 8 May 2014. It is presented in addition to the original Appendix B assessment dated 1 April 2014 entitled "Air Quality Assessment for Indaver, Carranstown Waste to Energy Facility". In any event this further information does not appear to have been formally notified to An Bord

Pleanala since consideration by the Board of the originally proposed Review Report submitted on 2 April 2014. I make this observation essentially for the information of the Board at this time. It appears that the new (May 2014) Air Quality Assessment in Appendix B supersedes the earlier (April 2014) Air Quality Assessment. For completeness of information the scope and content of the "further information" now embodied in the "Review Report" is identified in an appendix attached herewith to my report. There are minor differences in some of the tabulated results and associated text. However the thrust of conclusions in the Review Report (Appendix B Summary), and in the overall report, remain substantially unchanged. I have also numbered the pages (F.I.1 – F.I.17) in the bottom right-hand corner of each page of the May 2014 document on file.

1.7 One other addition inserted in the Review Report (paragraph 2.16) states that the local community will benefit from each additional tonne of waste accepted and processed by the plant.

2.0 SCOPE OF CURRENT REPORT

- 2.1 The purpose of my current report, herein, is to assess the currently proposed alteration and make a recommendation to the Board on whether or not the alteration should be made, or not, or an alternative alteration made. As part of my assessment, and prior to making a recommendation, I shall address the matter of likely significant effects on the environment and whether there should be a requirement for the preparation of an environmental impact statement (EIS) to underpin assessment and decision in the case.
- 2.2 My original report of 21 May 2014 concluded, amongst other things, that based on then available information, the alteration proposed would not be likely to have significant effects on the environment (relative to the residual effects arising from the SID permission PA0026 of February 2013). However, beyond consideration of environmental impact per se, I concluded that the proposed alteration could have implications for waste management and planning policy considerations and the integrity of development consents already in place for Carranstown.
- 2.3 Having regard to the foregoing, I propose to consider outstanding issues under the following headings, and in the order outlined.
 - Review of submissions to An Bord Pleanala.
 - Waste Management and Planning Policy.

- Environmental Impact Assessment.
- Other Considerations.
- Conclusions and Recommendation.

3.0 SUBMISSIONS TO AN BORD PLEANALA

There have been 4 no. submissions received by An Bord Pleanala arising from the public notification of the currently proposed Alteration. The submissions may be summarised as set down below.

- **3.1** The National Roads Authority (NRA) submission of 20 June 2014 notes:
 - that the subject proposal does not appear to include for any alterations to the extent of the site that would further impact on the feasibility of routing options for a planned Leinster Orbital major traffic route;
 - that the traffic analysis submitted indicates the traffic generation to the site will in effect decrease as a result of a decision not to accept a certain waste type.
- 3.2 The Health Service Executive (HSE) submission of 9 July 2014 includes a report dated 3 July 2014 which states:
 - the HSE Environmental Health Office (Navan) has received no complaints in relation to the Carranstown facility;
 - having reviewed submitted documentation under the headings of traffic, air quality and noise, the Environmental Health Office has no comments to make on the current application.
- 3.3 The Department of Arts, Heritage and the Gaeltacht (DoAHG) submission of 10 July 2014 makes the following observations and recommendations:
 - the main concern of DoAHG would be in respect of potential impacts to the River Nanny, via either surface or ground water: such impacts could have the potential to impact downstream on the river Nanny SPA and/or the Laytown Dunes/Nanny Estuary pNHA;
 - the nearby Duleek Commons NHA a freshwater marsh could be impacted if there were to be any change to its water source;

- An Bord Pleanala should satisfy itself that the current proposal will not have a negative impact on the SPA and NHA's referred;
- An Bord Pleanala should ensure that it has a copy of the applicant's AA screening to aid in determination of the application;
- IFI (Inland Fisheries Ireland) should be consulted with regard to fish species.
- 3.4 The EPA submission of 27 June 2004 includes the following observations:
 - while a waste licence (review) application was made in the first instance, the proposed activity is now an Industrial Emissions Directive (IED) activity under the EPA Act and the application will be processed '....... under the IE licensing regime';
 - the licence review application originally made was for an increase in annual throughput of waste to 220,000tpa: the applicant has informed the EPA of the further proposed tonnage increase (to 235,000 tpa) and this increase will be considered as part of the current licence review application to the EPA;
 - the proposed alteration now before An Bord Pleanala does not substantially change the comments made by the Agency on 1 August 2012 in relation to 17.PA0026.
- 3.4.1 The EPA submission, which I have summarised above, refers to the Board letter of 17 June 2014, which I understand to be An Bord Pleanala letter dated 13 June received by the EPA on 17 June 2014. In this letter the EPA was requested, amongst other things, to include an update on the current licensing status of the (Carranstown) facility. It may be noted that the EPA does not appear to have responded directly to this request, except to state in its submission that the licence application was received in April 2012 and will now include consideration of the additional 15,000tpa waste throughput proposed.

4.0 WASTE MANAGEMENT AND PLANNING POLICY

4.1 Waste management policy in Ireland has until recent years been implemented under the aegis of ten regional waste management plans prepared by regional bodies. Recent Government decisions have led to a reduction in the number of regional bodies from ten to three for waste management purposes. Parallel with this there has been an increased devolution of responsibility for waste management infrastructure provision from public authorities to the private sector. At the moment some ten waste management plans prepared in the 2000s remain technically in place while the adoption of new waste management plans, for the superseding three new larger regions, are not anticipated to be in place until 2015. In the interim, private sector interests must move forward with necessary infrastructural plans in the context of policy laid down in the older extant but ageing waste plans.

- When the Carranstown waste management facility was granted permission in 2007 and 2009, the prevailing North-East Regional Waste Management Plan provided a relatively clear policy backdrop encouraging the delivery of up to 200,000tpa of thermal treatment in a WtE facility or facilities. At the same time the then two neighbouring waste management regions (Midlands and Dublin) had plans for thermal treatment facilities in WtE plants up to a certain scale. The proposed Poolbeg facility in Dublin was granted permission in the late 2000's for up to 600,000tpa waste acceptance but this facility has not been developed. Meanwhile the ongoing operation of waste management services is required to observe the "proximity principle" enshrined in the EU framework for waste management, which also requires the application of the Waste Hierarchy to considerations including collection/treatment/recovery/disposal of waste.
- 4.3 The unique position of the Carranstown complex as a piece of national waste management infrastructure is well illustrated by reference to Table 5 of the recent EPA publication entitled "National Municipal Waste Recovery Capacity" - copy attached as an appendix to my report herein. None of the three waste management bodies or other (third party) front line stakeholders has made submissions to An Bord Pleanala regarding the proposed temporary increase in waste acceptance proposed in the current alteration proposal now before the Board. From this I infer that there is no objection from these quarters to the temporary increase sought until the end of the year 2019. Against this background, and notwithstanding certain observations contained in my original report to the Board in respect of the subject alteration PM0004, I consider the principle of some temporary increase should at least be positively contemplated. However I consider a development consent for the long period proposed would be inappropriate having regard to the considerations set down below.

Implications for Waste Management Policy

4.3.1 The SID permission PA0026 allowed **amendments** to the permission governing the constructed and operational WtE complex at Carranstown.

Additional 10% tpa waste acceptance was permitted for a facility originally permitted under the aegis of a waste management plan which envisaged WtE thermal treatment up to 200,000tpa. Although the waste management plan has been reviewed in 2010 and evaluated in 2012, it remains in force until superseded by a plan now anticipated for 2015. The Carranstown complex will under new arrangements be located in the same waste management region as Dublin. In the meantime the terms of the extant permission at Carranstown (as amended by PA0026) requires ongoing reasonable application of the proximity principle. While Indaver cannot compel other waste service providers to direct their MSW to Carranstown, Indaver is bound by the terms of its permission to accept MSW waste generated primarily from the counties of Meath, Louth, Monaghan and Cavan. During the hiatus caused by the transfer of responsibility for waste management planning, I consider it may be premature to facilitate increase tpa acceptance at Carranstown. Assuming 2015 as the year of adoption of waste management plans, which will supersede existing plans, any temporary permission for 15,000tpa increase in waste acceptance now contemplated should be limited to December 2016, at which date the case for continuing the increased waste acceptance could be reviewed in the context of an up-to-date statutory waste management plan.

- **4.3.2** The justifications put forward for allowing an increase in tpa at Carranstown are mainly two:
 - that in the context of lower than anticipated calorific value (cv) in the waste streams arriving at Carranstown, there is a need for a greater volume of waste to secure operational efficiency in incineration at the plant, and
 - that in the context of enforced diminution of landfill capacity regionally and nationally, Carranstown has the capacity to provide at least an interim service in accepting some waste now denied access to landfill facilities.

One of the reasons for the low calorific value of MSW is a high aqueous content. This occurs for reasons including a high content of biodegradable food waste in the MSW. This in turn is caused by a very low level of "brown bin" rollout in the region primarily served by the Carranstown facility. The low cv argument was advanced by Indaver at the time of the PA0026 SID planning application. Since the granting of permission under PA0026 the Household Food Waste Regulations have been introduced, for implementation on a phased basis nationwide up to and including early 2016. Arguably therefore the cv argument to justify increased tpa acceptance at Carranstown must diminish or decrease significantly once these Regulations

- are in force and the main biodegradable fraction of household waste is removed from the waste streams entering Carranstown.
- 4.3.3 Regarding offering waste management capacity in lieu of landfill, this could only ever be a small contribution to overall regional or national needs. Moreover Carranstown has been permitted as a WtE "recovery" facility for MSW waste. When an appropriate high cv mix of waste is achieved following such as the reduction in food waste content as outlined above, significant waste acceptance above the 200,000tpa originally envisaged could result in much of the accepted waste being disposed via incineration as distinct from being converted to energy. Disposal by incineration is alien to the concept upon which the Carranstown WtE facility was permitted in the first instance. The existing plant at Carranstown has a limited capacity to generate electricity: excessive waste received has the potential to be incinerated without achieving the optimum benefit in conversion to energy. I consider a five year permission to accept an additional 15,000tpa of waste would militate against securing the most appropriate redirection of waste geographically and in the waste hierarchy.
- **4.3.4** Having regard to these considerations, additional waste acceptance until the end of 2016 would in my view be a preferred option to allowing the increase until such a late date as 2019.

Official Planning Policy

- 4.4 Regarding official planning policy, under current arrangements statutory waste management plans automatically form parts of prevailing statutory development plans for their relevant areas. At this time the North-East Waste Management Plan forms part of the current Meath County Plan. At a future date circa 2015 a new Greater Dublin Area Waste Management Plan will form part of the then prevailing Meath County Development Plan. At all times the content of a prevailing statutory development plan for an area is a material consideration for An Bord Pleanala in considering the proper planning and sustainable development of an area.
- 4.4.1 I have referred to the current Meath County Plan prior to preparing my current report herein. There does not appear to be any policy or objective in the Plan which offsets or undermines my views as outlined above regarding the efficacy of a reduced time period consent (until December 2016) instead of the longer period currently sought by applicants (until December 2019).

5.0 ENVIRONMENTAL IMPACT CONSIDERATIONS

Board Assessment in PA0026

5.1 The planning application PA0026 to An Bord Pleanala in 2012 was accompanied by an Environmental Impact Statement (EIS). Assessment of environmental impact was addressed in inspectors' reports underpinning recommendations to the Board in that case. In its decision in that case the Board noted the documentation submitted in support of the application including the Environmental Impact Statement and the Habitats Directive screening statement. The Board considered that the EIS submitted with the application, supported by further information submitted to the Board over the course of the application including the information submitted to the oral hearing, the submissions of prescribed bodies and the Planning Authority and other submissions on file were adequate in identifying and describing the likely significant effects of the proposed development. The Board completed an environmental impact assessment and agreed with inspectors in their assessment of the likely significant effects of the proposed development and generally agreed with the conclusions on the acceptability of mitigation measures proposed and residual effects in relation to the increase in nonhazardous waste capacity.

Review Report for Applicants in Current Alteration Proposal

- 5.2 In the context of the current Alteration proposed, the applicants have submitted a "Review Report" dated April 2014. This report includes a review of "EIS Chapters" contained in the 2012 EIS. The report concludes that the proposed alteration for an additional waste acceptance of 15,000tpa of non-hazardous waste is not considered to have a negative impact on the environment.
- 5.2.1 There are some typing errors in the submitted Review Report, including in respect of dates of the time limit to the alteration proposed. I have marked and queried the typing errors, for information purposes, on the relevant pages in the original copy of the Report received by An Bord Pleanala on 2 April 2014. Although the erroneous dates specified in section 1.0 and section 3.0 may be regarded as significant errors, the correct date is clearly stated in section 2.1; in the Alteration Request letter of 2 April 2014 to An Bord Pleanala; and in the public notices published at the behest of An Bord Pleanala in June 2014. The errors noted should not have misled any interested reader of the overall suite of documentation provided.
- **5.2.2** Some further information relating to air quality assessment was added to the Review Report in May 2014. The further information is/was in effect an

amended Appendix B to the Review Report. Its conclusion has not affected the thrust or conclusions of the Report.

Assessment of Environmental Impact

- 5.3 Arising from my original perusal of the Review Report submitted to An Bord Pleanala in April 2014, I took the view that the alteration proposed would not be likely to have significant effects on the environment. This conclusion was drawn without prejudice to consideration of any such further information as might become available arising from any public consultation etc.
- 5.3.1 Arising from the public consultation process since completed, the only submission of substance relating to environmental impact has been that contained in the DoAHG submission to An Bord Pleanala. This submission raises issues relating to potential impacts on European sites and proposed Natural Heritage Areas (NHA's). Here I wish to refer to the Review report submitted for the applicants in the current case, sections 2.9 to 2.11 (page 9 of Report refers).
 - In section 2.9 it is stated that the proposed change (the alteration) will not result in any direct discharge to groundwater and the existing plant has adequate mitigation measures to cope with any accidental discharge. The proposed alteration will have no impact on the groundwater regime within the underlying water body.
 - Section 2.10 states that the existing surface water management system
 is adequately designed to prevent uncontrolled discharges to the outfall
 ditch. There is reference also to monitoring and controlled discharge
 arrangements. The proposed alteration is concluded to have an
 insignificant impact on the existing surface water environment.
 - Section 2.11 concludes in essence that the findings of the 2012 EIS
 ecology assessment are unchanged by the proposed amendment.
 Accordingly there will be an insignificant impact on the ecology of the
 site and mitigation in place should ensure that any potential impacts to
 flora, fauna and birds are minimised.
 - Section 2.11 also concludes that as the air quality assessment has confirmed that all regulated pollutants emitted from the facility will remain fully in compliance with their ambient air quality standards and there are no additional discharges to receiving waters, there is no need to reconsider the Habitats Screening statement.

- **5.3.2** I wish to add certain additional observations in relation to the subject matters addressed by DoAHG.
 - DoAHG has recommended that An Bord Pleanala should ensure that it has a copy of the applicant's AA screening. Here I refer to section 2.11 of the Review report on the current file, and to further information sought and obtained by An Bord Pleanala in the context of PA0026, the subject application/permission of relevance to the currently proposed alteration. Appendix 7 of the further information submission received by An Bord Pleanala on 30 August 2012 (PA0026) addresses the matter of AA screening, wherein it was concluded that a full Habitats Directive AA Report would not be required. It may be noted that section 3.2 of that Appendix 7 listed ten sites of potential relevance. This list included all of the sites referred in the DoAHG submission in the current Alteration case PM0004. The content of the Appendix 7 document to which I refer was noted by the Heritage Officer for the Planning Authority at the oral hearing on PA0026 in October 2012. Her conclusion was that she concurred with the findings of the screening statement. The inspector's report on PA0026 also accepted the conclusions reached in the applicants' then further information submission (Appendix 7 referred), and agreed with the Planning Authority assessment in the matter of AA. The Board finally concluded in PA0026 that the then proposed development, by itself or in combination with other plans or projects. would not be likely to have a significant effect on any European site. A copy of the Appendix 7 to which I refer has been copied for information as an appendix to my current report herein.
 - Regarding the monitoring of and controlled discharge of surface water referred to in the applicants' Review Report section 2.10, it was a condition of the Board's permission in PA0026 that the terms of the parent permission SA/901467 be complied with in full. That permission includes a planning condition or conditions which place the Planning Authority in a strong position to monitor and intervene as appropriate in the matter of surface water management within the Nanny catchment which contains the Carranstown WtE site.
 - Regarding potential impact on groundwater, the most significant source of impact has been identified previously as on-site domestic wastewater discharge (toilets, canteen etc.) to ground. The Board satisfied itself on this matter prior to granting permission under PA0026 in 2013 – condition no. 5 of PA0026 refers.

- 5.3.3 A further issue raised by DoAHG in the current case is that IFI should be consulted with regard to fish species. Here I must observe that there have been no submissions from fisheries' interests in relation to the Carranstown project at its various stages before An Bord Pleanala. Consideration of surface water matters in the EIS for PA0026 was underpinned by an assimilative capacity study for the River Nanny. The main conclusion was that the river has the capacity to assimilate Indaver surface water discharges.
- 5.3.4 Having regard to the foregoing, I am satisfied that in the context presented the proposed alteration would not be likely to have significant effects on the environment. Moreover, having regard to my observations on waste management and planning policy above, I consider a decision to adopt a lesser time frame for the acceptance of the increased 15,000tpa of MSW at Carranstown, would represent an alteration of lesser extent and character, and would therefore not be likely to have significant effects on the environment.

6.0 OTHER CONSIDERATIONS

I wish to refer briefly to other issues raised in the case, specifically roads and traffic assessment and IED licensing.

- Regarding the roads and traffic issue the NRA submission to An Bord Pleanala notes that the subject proposal does not appear to include for any alterations to the extent of the site that would further impact on the feasibility of routing options for the planned Leinster Orbital Route. This matter was addressed in considering PA0026 in 2012/2013. The current alteration proposal does not involve additional physical development; and the extent of the subject site must remain the same as for PA0026 in order to underpin the integrity of the alteration sought, and any alteration made.
- 6.2 The NRA notes also that the submitted traffic analysis indicates reduced traffic generation, without further comment. From this I infer that the NRA accepts the analysis presented. Here I must observe that, as I read the current alteration proposal by Indaver, there is no formal proposal to An Bord Pleanala to withdraw proposals for certain healthcare waste acceptance as permitted under PA0026. However Indaver has signalled its up-to-date intention not to pursue the acceptance of such waste, and the acceptance of such waste may be excluded from any EPA licence issued. Traffic generation arising from healthcare waste acceptance was raised as a significant issue at the oral hearing on PA0026. So, while the integrity of the current traffic analysis may be undermined by the de facto planning permission(s) in place

for the Carranstown complex, I consider a pragmatic view may be taken having regard to the signalled intentions of Indaver and the temporary alteration sought. However, in a rapidly evolving waste management situation regionally and nationally, I consider this further advances the case for limiting the time for acceptance of the proposed 15,000tpa until December 2016, rather than the proposed December 2019.

Regarding EPA licensing of activities at the Carranstown site, the then ongoing waste licence review application (W0167-03) was a material consideration (k) in granting permission under PA0026 in February 2013. As I read the EPA letter on the current file, the licence review is ongoing. However as noted in my earlier report of May 2014 on the current file, the Carranstown complex is apparently already receiving 220,000tpa, prior to completion of the licensing process. On this basis the current proposal for alteration of condition no. 3(1) may be deemed premature. However the application is in effect for a temporary alteration, and I am recommending a reduced temporary period. During this period the licence decision process relating to 235,000tpa waste acceptance at Carranstown should be complete.

7.0 CONCLUSIONS AND RECOMMENDATION

7.1 Conclusions

- Permission to allow an increase in the tpa waste acceptance at Carranstown would be premature pending the adoption of waste management plans which facilitate thermal treatment in County Meath in a WtE plant in excess of the upper parameter (200,000tpa) specified in the prevailing waste management plan.
- The justifications put forward for facilitating increased waste acceptance until December 2019 are not convincing.
- A five plus year permission for increased waste acceptance to 235,000tpa would militate against the expedition of appropriate MSW waste segregation and redirection geographically and within the waste hierarchy, consistent with the requirements of proper planning and sustainable development.
- The proposed alteration (or alternative alteration as recommended below) would not be likely to have significant effects on the environment in the context presented.

- AA screening relating to the subject proposal is satisfactory. Having regard to the nature, scale, character and extent of the proposed alteration, to the receiving environment, to the Habitats Directive screening statement submitted at further information stage in the application under reference no. PA0026 and to all information on the current file including the Review Report submitted by the applicants, the proposed alteration in itself or in combination with other plans or projects, would not be likely to have a significant effect on any European site.
- Having regard to the ongoing acceptance of waste at Carranstown in excess of the licenced 200,000tpa, and to the reasons and considerations underpinning the grant of permission under reg. ref. PA0026(SID application direct to An Bord Pleanala), any further increase in tpa waste acceptance may be premature.

7.2 Recommendation

Having regard to the following:

- the current and ongoing changes to official waste management planning and related planning policy, with potential implications for the status and function of the Carranstown WtE complex,
- the limited justification put forward by the applicants for the alterations sought;
- the ongoing status of the relevant licence review for the Carranstown WtE complex,

it is considered the making of the alteration sought would not be in accordance with the proper planning and sustainable development of the area. However it is considered that the proposed alteration would not be likely to have significant effects on the environment in the context presented and the proposed alteration by itself or in combination with other plans or projects would not be likely to have a significant effect on any European site, therefore an alternative alteration which is different to the alteration requested can be made as set down below.

ALTERNATIVE ALTERATION

Condition no. 3(1) of the permission PA0026 shall be altered so that it reads as follows.

3(1) the tonnage of waste accepted for treatment at the facility until 31 December 2016 shall not exceed 235,000 tonnes per annum. Thereafter the tonnage of waste accepted for treatment at the facility shall not exceed 220,000 tonnes per annum unless a further permission in this respect is granted,

and the reason for the condition no. 3, of which condition no. 3(1) forms part, shall be altered as follows:

Reason: To clarify the nature and scope of the permitted development and secure the integrity of the existing WtE facility within the framework of existing and future statutory waste management plans.

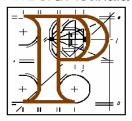
Keith Sargeant Senior Planning Inspector

29 July, 2014.

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Board Direction

An Bord Pleanála



Board Direction

Ref: 17.PM0004

Having already decided that the proposed alteration would be material and having required public consultation to be carried out, at a further meeting held on 31st July 2014, the Board considered the material on file including the submissions received on foot of consultation with the public and prescribed bodies, and the further inspector's report (dated 29th July 2014) and decided as follows:

- That the making of the proposed alteration would not be likely to have significant effects on the environment, and
- To make the proposed alteration of Condition 3(1) of permission reference 17.PA0026

Reasons and Considerations as set out below.

Reasons and Considerations

In coming to its decision, the Board had regard inter alia to the following:

- (a) the provisions of the North East Region Waste Management Plan 2005 2010, and of the subsequent Review Report (2011) and Evaluation Report (2012),
- (b) the site planning history, and the existing waste-to-energy recovery facility on site, which operates under a licence issued by the Environmental Protection Agency,
- (c) the limited additional quantity of municipal non hazardous waste proposed to be accepted for treatment (15,000 tonnes per annum), and the limited period sought for this additional capacity (until the end of 2019),
- (d) the submissions on file, including those from prescribed bodies, and the inspector's report and assessment, and
- (e) the W0167-03 waste licence review application made to the Environmental Protection Agency relating to the proposed development.

The Board considered the potential environmental impacts that might arise due to the proposed alteration, including in relation to transport, air emissions, noise and generation of residues, and took into account the information available from the history file (17.PA0026), the '2014 Review Report' submitted in support of the subject application, and the Inspector's report. Having regard to the characteristics of the proposed alteration, the planning history of the site, the existing performance of the facility vis a vis planning and licence conditions, the limited environmental impacts associated with the proposed increase in waste to be treated and the characteristics of the receiving environment, the Board was satisfied that the proposed alteration would not be likely to have significant effects on the environment, and that completion of an EIA was not required in respect of the alteration sought.

The Board carried out a screening exercise in relation to the potential impacts of the proposed alteration on European Sites, having regard to its nature and scale, to the receiving environment, the Habitats Directive Screening Statement submitted with the previous application (17.PA0026), the submissions on file generally, and to the Inspector's assessment, which is noted, and concluded that the proposed alteration (which has limited physical impacts on the existing operational facility), in itself or in combination with other plans or projects, would not be likely to have a significant effect on any European site.

It is considered that the proposed temporary increase in capacity of 15,000 tonnes per annum would represent an acceptable increase in waste recovery facility at this established treatment facility, would be generally compatible with waste management policy on a regional and national level, and would not have any detrimental impacts on the amenities of the area or of property in the vicinity. The making of the proposed alteration would, therefore, be in accordance with the proper planning and sustainable development of the area.

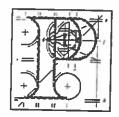
In deciding not to accept the Inspector's recommendation not to make the proposed alteration (or alternatively to make the alteration for a shorter period) the Board considered as follows:

- The limited increase in capacity proposed would not be so substantial as to influence the development or implementation of regional waste management policy, especially given the limited duration of the increase. The Board also noted that a much more substantial volume of residual waste is currently exported from Ireland for energy recovery.
- It was considered that the proposed marginal increase in capacity at the
 facility would not be likely to influence the successful implementation of
 'brown bin' policies for organic waste, or have significant implications for the
 classification of the subject facility as a waste recovery facility.

Board Member:		Date: 1 st August 201	4
	Conall Boland		

Board Order

An Bord Pleanála



PLANNING AND DEVELOPMENT ACTS 2000 TO 2013

Meath County

An Bord Pleanála Reference Number: 17.PM0004

(Associated Reference Number 17.PA0026)

REQUEST received by An Bord Pleanála on the 2nd day of April, 2014 from Indaver Ireland Limited of 4th Floor, Block 1, West Pier Business Campus, Old Dunleary Road, Dun Laoghaire, County Dublin under section 146B of the Planning and Development Act, 2000, as amended, in respect of a strategic infrastructure development described as Amendments to the existing development as follows:

- (a) To increase the intake tonnage of waste from 200,000 tonnes to 220,000 tonnes per annum.
- (b) To allow the acceptance of some additional types of waste defined as hazardous and non-hazardous in the European Waste Catalogue.
- (c) A change in status of the temporary spare parts warehouse building (single storey building 25 metres x 15 metres x 6.7 metres high) to a permanent centralised maintenance depot.
- (d) A change in status of the temporary electrical switchgear building (associated with the above) 4 metres x 2.5 metres x 3.2 metres high from temporary to permanent.
- (e) A change in status of the temporary construction modular office building (single storey building 33 metres x 12 metres x 3 metres high) from temporary to permanent.
- (f) A change in status of the temporary electrical switchgear building (associated with the above) 3 metres x 2.7 metres x 3.2 metres high from temporary to permanent.

17.PM0004

- (g) Construction of an access roadway to the modular office building.
- (h) 22 number new car parking spaces associated with the modular office building.
- (i) A new on-site effluent treatment system associated with the modular office building.
- (j) Change in status from temporary to permanent for hardcored areas associated with the spare parts warehouse, construction offices and temporary site car park.
- (k) An additional fuel storage tank (8.7 metres length x 2.7 metres diameter).
- (I) An additional ammonia storage tank (7.15 metres length x 3.5 metres diameter).

All at Carranstown, Duleek, County Meath.

PROPOSED ALTERATION: Alteration to Condition Number 3(1) of Board Order 17.PA0026, which reads as follows:

The tonnage of waste accepted for treatment at the facility shall not exceed 220,000 tonnes per annum.

WHEREAS the Board made a decision to grant permission, subject to conditions, for the above-mentioned development by order dated the 4th February, 2013,

AND WHEREAS the Board has received a request to alter the terms of the development, the subject of the permission,

AND WHEREAS the Board considered that the alteration of Condition Number 3(1) would result in a material alteration to the terms of the development, the subject of the permission,

AND WHEREAS having regard to the nature of the issues involved, the Board decided to invoke the provisions of section 146B(8)(a) of the Planning and Development Act, 2000, as amended, to invite submissions or observations in relation to the matter from members of the public,



AND WHEREAS having considered all of the submissions/observations and documents on file and the Inspector's report, the Board considered that the making of the proposed alteration would not be likely to have significant effects on the environment or on any European Site,

NOW THEREFORE in accordance with section 146B(3)(a) of the Planning and Development Act, 2000, as amended, the Board hereby alters the above-mentioned decision so that Condition Number 3(1) of its order shall be as set out below and the permitted development shall be otherwise altered in accordance with the plans and particulars received by An Bord Pleanála on the 2nd day of April, 2014:

ALTERATION TO CONDITION NUMBER 3 (1)

- The tonnage of waste accepted for treatment at the facility until the 31st day of December, 2019 shall not exceed 235,000 tonnes per annum. Thereafter, the tonnage of waste accepted for treatment at the facility shall not exceed 220,000 tonnes per annum unless a further permission in this respect is granted.
 - (2) Non-hazardous waste to be accepted at this facility shall primarily be waste generated in the waste region in which it is located. Where non-hazardous waste is accepted from outside that region, it shall only be done in accordance with the proximity principle and Ministerial Policy as set out in Circular WIR:04/05.
 - (3) The tonnage of separately collected hazardous waste accepted for treatment at the facility shall not exceed 10,000 tonnes per annum.

The only hazardous waste types to be accepted for treatment shall be in accordance with the European Waste Catalogue Codes listed in Table 2.1 of the environmental impact statement submitted to An Bord Pleanála with the application on the 30th day of April 2012, as attached in Appendix 1 of this Order.

Reason: To clarify the nature and scope of the permitted development.

MATTERS CONSIDERED

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included the submissions and observations received by it in accordance with statutory provisions.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard, inter alia, to the following:

- (a) the provisions of the North East Region Waste Management Plan 2005 2010, and of the subsequent Review Report (2011) and Evaluation Report (2012),
- (b) the site planning history, and the existing waste-to-energy recovery facility on site, which operates under a licence issued by the Environmental Protection Agency,
- the limited additional quantity of municipal non-hazardous waste proposed to be accepted for treatment (15,000 tonnes per annum), and the limited period sought for this additional capacity (until the end of 2019),
- (d) the submissions on file, including those from prescribed bodies, and the Inspector's report and assessment, and
- (e) the W0167-03 waste licence review application made to the Environmental Protection Agency relating to the proposed development.

The Board considered the potential environmental impacts that might arise due to the proposed alteration, including in relation to transport, air emissions, noise and generation of residues, and took into account the information available from the history file (17.PA0026), the '2014 Review Report' submitted in support of the subject application, and the Inspector's report. Having regard to the characteristics of the proposed alteration, the planning history of the site, the existing performance of the facility vis a vis planning and licence conditions, the limited environmental impacts associated with the proposed increase in waste to be treated and the characteristics of the receiving environment, the Board was satisfied that the proposed alteration would not be likely to have significant effects on the environment, and that completion of an EIA was not required in respect of the alteration sought.

The Board carried out a screening exercise in relation to the potential impacts of the proposed alteration on European Sites, having regard to its nature and scale, to the receiving environment, the Habitats Directive Screening Statement submitted with the previous application (17.PA0026), the submissions on file generally, and to the Inspector's assessment, which is noted, and concluded that the proposed alteration (which has limited physical impacts on the existing operational facility), in itself or in combination with other plans or projects, would not be likely to have a significant effect on any European site.

It is considered that the proposed temporary increase in capacity of 15,000 tonnes per annum would represent an acceptable increase in waste recovery facility at this established treatment facility, would be generally compatible with waste management policy on a regional and national level, and would not have any detrimental impacts on the amenities of the area or of property in the vicinity. The making of the proposed alteration would, therefore, be in accordance with the proper planning and sustainable development of the area.

In deciding not to accept the Inspector's recommendation not to make the proposed alteration (or alternatively to make the alteration for a shorter period) the Board considered as follows:

 The limited increase in capacity proposed would not be so substantial as to influence the development or implementation of regional waste management policy, especially given the limited duration of the increase. The Board also noted that a much more substantial volume of residual waste is currently exported from Ireland for energy recovery. It was considered that the proposed marginal increase in capacity at the facility would not be likely to influence the successful implementation of 'brown bin' policies for organic waste, or have significant implications for the classification of the subject facility as a waste recovery facility.

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this 1 st day of August 2014.

5. Planning Ref: PL.17.PA0026

Inspector's Report

An Bord Pleanála



Inspector's Report

Development:	Amendments to existing waste-to-energy plant at Carranstown, Duleek, County Meath	
Planning Application		
Applicant:	Indaver Ireland Ltd.	
Planning Authority:	Meath County Council	
Type of Application:	Application to An Bord Pleanala under Section 37(E) of the Planning and Development Act, 2000, as amended.	
Observer Submissions:	12. no written submissions (see list overleaf)	
Prescribed Bodies:	3 no. written submissions (see list overleaf)	
Date of Site Inspection:	11 September 2012	
Inspector:	Keith Sargeant	

Observer Written Submissions

Mr. John Woods

Mr. James Rountree

Friends of the Aquifer Limited

Councillor Michael O'Dowd

Louth and Meath Health Protection Group (LMHPG)

Mr. Dominic Hannigan TD

Councillor Ken O'Heiligh

Louth People against Incineration (Mr. Ollen Herr)

Ms. Mary Halpenny

Veolia Environmental Services

Mr. Shane McEntee TD, Minister for State

Louth County Council

Prescribed Body Submissions

National Roads Authority (NRA)

Health Service Executive HSE)

Environmental Protection Agency (EPA)

Other Observer Submission (Oral Hearing only)

Hollywood Residents Association, North County Dublin

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1.0 INTRODUCTION

1.1 Application Context

The development proposed in this case comprises certain physical modifications to an existing, operational waste-to-energy (WTE) plant, and seeks also amendments to the terms and conditions of the permission under which the existing plant operates, all at Carranstown, Duleek, County Meath. The existing plant is designed to generate 70 megawatts of electricity through the recovery of energy by incineration of up to 200,000 tonnes per annum (tpa) of residual municipal waste. This is an activity covered by a waste licence under prevailing waste management legislation (current licence EPA reference no. W0167-02, now under review reference W0167-03).

1.2 Planning History

Relevant planning history spans some 10 years in this case, and may be summarised as set down below.

1.2.1 PL17.126307 (County Meath 01/4014)

Permission granted, upheld on appeal in 2003 by An Bord Pleanála subject to revised conditions, for a WTE facility based on a throughput of 170,000 tpa of accepted waste. The development permitted at that time was described as a waste management facility, comprising a main process building process of 13,480 square metres with a 40 metre high stack, and ancillary structures and areas including a community recycling park.

The proposed community recycling park was omitted from the development, essentially for a traffic related reason (**condition no. 3** of the relevant permission refers). Other notable conditions in the history case included the following:

condition no. 4: waste for acceptance for incineration and recycling/treatment limited to 170,000 tpa and confined to waste generated and produced in the North-East Region area of counties Meath, Louth, Cavan and Monaghan, in the interest of development control and to ensure that the principles of regional waste management (as set out in the then prevailing Regional Plan) are adhered to;

condition no. 6: required the establishment of a "Community Liaison Committee" (composition subject to agreement, within certain parameters), in order to provide for appropriate on-going review of waste disposal/recycling operations in conjunction with the local community;

condition no. 7: required an annual "payment per tonne of waste" financial contribution to the Planning Authority towards the cost of the provision of environmental improvement and recreational/community facility projects in the vicinity of the proposed development, as a reasonable contribution towards mitigation of the impact of the waste facility on the local community, subject

generally to the provisions of section 26(2)(h) of the Local Government (Planning and Development Act) 1963;

condition no. 8: required a financial contribution towards a community recycling park in Duleek;

condition no. 11: required submission and agreement on a traffic management plan prohibiting traffic associated with the facility using a certain section of the R150 Regional Route (east of Kentstown – in the direction of the N2 National Route), for reasons of traffic and pedestrian safety;

conditions nos. 28/29: required site reinstatement following decommissioning, and a related security bond, generally in the interest of amenity and proper planning control.

1.2.2 PL17.219721 (County Meath SA/60050)

Permission granted upheld on appeal by An Bord Pleanála subject to revised conditions in 2007, for a 70 megawatt WTE facility based on a throughput of 200,000 tpa of accepted waste. The permitted development included a smaller main process building (7,218.23 square metres) than that previously permitted in 2003 but never developed; a higher flue stack (65 metres) than previously permitted was also proposed.

Similar planning conditions to those noted in respect of PL17.126307, were attached. However, I draw the attention of the Board to condition no. 3, as summarised below, which may be compared with condition no. 4 attached to the earlier permission (PL17.126307):

condition no. 3: waste for acceptance for thermal treatment limited to 200,000 tpa and confined to waste *primarily* generated and produced in the North-East Region area of counties Meath, Louth, Cavan and Monaghan (my emphasis added): waste accepted from outside that region to be done so only in accordance with the Proximity Principle and Ministerial Policy as set out in circular WIR:04/05, in order to ensure compliance with national waste management policy and the provisions of the North-East Regional Waste Management Plan.

The Board may note also a special financial contribution condition no. 29 which effectively superseded condition no. 7 in the earlier permission PL17.216307:

condition no. 29: special financial contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of environmental improvements and recreational/community facilities projects and also in respect of the provision of an artistic feature in Duleek village.

1.2.3 County Meath SAC/901467

Permission granted subject to conditions in November 2009 for amendments and alterations to previously permitted development, under PL17.219721. It is understood the amendments were proposed in order to meet building specification and regulatory criteria arising from receipt of tenders and the issue of the relevant EPA licence. The decision of the Planning Authority in the case was not the subject of any appeal to An Bord Pleanála.

The following conditions may be noted in respect of this case, which is in essence the extant permission under the aegis of which the existing complex has been built and operates, subject also to the limitations imposed by the prevailing EPA licence reference W0167-02:

condition no. 2: requires compliance with the planning conditions attached to PL17.219721, except where otherwise specified;

condition no. 9: requires quarterly dust deposition monitoring and states limits:

condition no. 10: requires design and construction of wastewater treatment system (serving security gates) in accordance with EPA code of practice;

condition no. 11: seeks to prohibit traffic, generated from the complex, from passing through the Bru na Boinne World Heritage Site.

1.2.4 It may be noted that the three history cases summarised above, were accompanied by environmental impact statements.

1.3 Pre-application Planning Consultation

1.3.1 As provided for under the "Strategic Infrastructure" provisions of the Planning and Development Act, 2000, as amended, Indaver Ireland Limited entered into discussions with An Bord Pleanála in relation to the currently proposed development in November 2011. These discussions followed earlier correspondence between Indaver and Meath County Council, in which the Planning Authority stated that it considered the proposed development to be "strategic infrastructure" within the meaning of the relevant legislation.

By letter dated 26 April 2012 An Bord Pleanála advised Indaver that the Board had decided that the proposed development would be strategic infrastructure within the meaning of the Planning and Development Act 2000, as amended.

2.0 DESCRIPTION OF PROPOSED DEVELOPMENT

- 2.1 The currently proposed development comprises limited additional physical development by way of modifications/extension to the existing complex. More fundamentally it is proposed to increase the tpa throughput of waste; and to accept certain "hazardous wastes". Permission for these changes are sought because the existing operation is covered by planning permission limiting the throughput (200,000 tpa) and the waste characterisation (residual municipal waste).
- 2.2 Description of the proposed development, as publicly advertised in April 2012, may be summarised as set down below.
 - (a) Increase the intake tonnage of waste from 200,000 tonnes (permitted) to 220,000 tonnes (proposed).
 - (b) Allow acceptance of some additional types of waste defined as hazardous and non-hazardous in the European Waste Catalogue (EWC).
 - (c) Convert temporary spare parts warehouse building to a permanent centralised maintenance depot.
 - (d) Convert temporary electrical switch gear building to permanent building [associated with (c) above].
 - (e) Conversion of temporary construction modular office building to permanent building.
 - (f) Conversion of temporary electrical switch gear building to permanent building [associated with (e) above].
 - (g) Construction of access road to (e) above.
 - (h) 22 no. new car parking spaces [associated with (e) above].
 - (i) Additional on-site effluent treatment system [associated with (e) above].
 - (j) Conversion of certain temporary hardcore areas to permanent.
 - (k) Additional fuel storage tank.
 - (1) Additional ammonia storage tank.
- 2.3 Public notices refer to an Environmental Impact Statement (EIS) accompanying the planning application and to a dedicated website www.carranstownamendments.ie The EIS records that in order to operate the waste management facility (existing and proposed), it requires a waste licence

from the EPA. A current waste licence governing the operation of the facility is noted reference W0167-02. The EIS states that there is a waste licence review being sought from the EPA, in parallel with the current planning application. Pages 7/8 and 11 of the non-technical summary section of the EIS summarise the now proposed development and note that the EIS has been prepared for the dual purposes of the current planning application—and the review application to the EPA. Some minor modifications to the EIS were confirmed to An Bord Pleanála subsequent to receipt of the planning application, and published via the dedicated website referenced above (see paragraphs 4.3 and 4.4 below).

- **2.4** Items (c) (l) in the development description schedule above may be cross referenced to submitted drawing no. 21098\CD\003 entitled Proposed site Plan. In this regard, in the interest of clarity, it may be noted that minor development items (d) and (f) are located adjacent to the proposed maintenance building and north-west of the existing entrance security building, respectively. The proposed permanent hardcored areas are coloured coded speckled pink. A colour difference (speckled black) is used to identify existing hardstanding areas. It may be noted also that the proposed fuel and ammonia storage items [items (k) and (l)] are identified on the site plan as "possible future tank locations" (my emphasis added).
- 2.5 Detailed drawings are provided in respect of the proposed maintenance building and associated switch gear structure; and the modular offices and related switch gear structure. The maintenance building is an industrial type structure with a height of 6.64 metres and incorporates a mezzanine floor level within part of the building. The offices are indicated to comprise a 3 metre high flat roof structure.
- 2.6 Drawing no. 21098\CD\003 also includes a 1:1000 scale Site Entrance Elevation. This serves to indicate the height/visibility of the now proposed main structures in the context of the existing complex.
- 2.7 It may be noted that the submitted drawing 21098\CD\002 entitled Existing Site Plan as per Current Planning Permission, does not indicate buildings/areas referred to as temporary (proposed permanent) in the planning application as now described and publicly notified.
- **2.8** Regarding items (a) and (b) in the description of the proposed development, these do not relate to physical development items per se, but they do represent fundamental changes to certain operational aspects of the existing development. Item (a) seeks increased throughput, with resulting increases in traffic and ash for disposal. Item (b) seeks permission to include certain hazardous waste in the accepted waste intake.

The bases for pursuing items (a) and (b) as part of the proposed development are explained in the EIS accompanying the planning application, and may be summarised as set down below.

10% increase in annual throughput.

2.9 It is explained that the existing WTE facility was designed to accept 200,000 tpa of residual municipal waste on the assumption of a certain average calorific value (CV) in the waste. However it is explained that since commencing operations it has been established by the applicants that the average CV of municipal waste arriving at the plant is considerably lower than originally anticipated, specifically 8.0 MJ/kg compared to the anticipated 9.35 MJ/kg (megajoules per kilogram). The effect of this lower average CV in the accepted waste is that a greater volume of waste is needed to produce the required thermal input in the WTE plant.

Acceptance of Certain Hazardous Waste

- 2.10 It is explained that the existing facility is designed to treat certain types of hazardous waste materials. This is necessary because of their incidental/accidental occurrence (in small quantities) in the typical municipal waste profile as currently received at the plant. Examples would include such as used paint cans (empty or containing some paint) and out of date medicines and other healthcare products. In essence the applicants seek to utilise the full incineration potential of the existing WTE facility through the acceptance of a range of "low end" hazardous waste. It is further explained that any "hazardous" wastes now proposed for acceptance are so defined only by reason of their separate collection arrangements at places such as commercial premises and civic amenity sites.
- **2.11** *Amendments to Submitted Planning Application*
- **2.11.1** Certain amendments relating to the proposed hours of waste acceptance and ash disposal were notified to An Bord Pleanála, by the applicants, in a submission dated 8 June 2012, received by An Bord Pleanála on 11 June 2012.
- **2.11.2** Regarding the waste acceptance proposals, the revisions are set out in tabular form below. In essence some 19 ½ hours per week of additional waste acceptance was originally proposed in the application, while it is now by amendment proposed that there would be five hours per week of additional waste acceptance.

Current Hours	Proposed	Amended	Period
	(Application)	Proposal	
08.00 - 18.30	06.00 - 20.00	07.00 - 18.30	Mon – Fri
08.00 - 14.00	06.00 - 14.00	08.00 - 14.00	Sat

Table: Proposed and Amended Waste Acceptance Hours

2.11.3 Regarding disposal of residues and wastes, it was originally proposed that this would be allowed on a 24-hour basis. It is now proposed that the hours of residue disposal would coincide with waste acceptance hours, except that in exceptional circumstances residues/wastes would be allowed depart from the

site outside these hours subject to written notification on the following day to the EPA.

3.0 SITE CONTEXT AND DESCRIPTION

3.1 Site Location

- **3.1.1** The subject site in this case has essentially the same boundaries as that site which was subject to permission granted by An Bord Pleanála in 2007.
- 3.1.2 The site is located approximately 2 kilometres north-east of the village of Duleek and approximately 4 kilometres south-west of Drogheda, on the western side of the R152 Regional Route. Access to the site is directly to/from the R152, where the road has been widened to incorporate a right turning lane related to the development of the original WTE facility. A railway line runs along the western boundary of the site. There are agricultural lands to the north and south, and beyond the public road and railway line to the east and west.
- **3.1.3** The wider area beyond the site is characterised by some clusters of houses and a significant ribbon of development along the R152 to the south. The local landscape is dominated visually by the large structures of the Platin cement works to the north of the site. This particular context is illustrated in some photographs attached herewith to my report.
- 3.1.4 The R152 in the vicinity is a busy regional route, which follows a desire line between Drogheda and the N2 national route north of Ashbourne. Approximately 2.5 kilometres north of the appeal site, the R152 traverses the M1 motorway, a short distance from a motorway junction. This section of the motorway is a tolled road.

3.2 Site Description

- **3.2.1** The site itself has a stated area of approximately 9.7 hectares. The main industrial plant on site occurs in the western part of the site, set far back from the public road. The eastern, more proximate to the public road, part of the site is relatively undeveloped, except at its southern end where there are various single-storey buildings and paved areas associated mainly with the vehicular waste acceptance reception area. Further north within the site there is extensive planting and some mounding which limits the visibility of the complex from the public road.
- **3.2.2** Photographs attached herewith to my report illustrate the existing character and appearance of the site. At the date of inspection (September 2012), there were some temporary structures on site understood to be mainly associated with certain on-site contractor maintenance operations and related. The subject views in the photographs include the locations of the main physical additions now proposed under the aegis of the current planning application.

4.0 ENVIRONMENTAL IMPACT STATEMENT

- 4.1 The submitted EIS is stated to have been prepared in accordance with the (then prevailing) relevant EPA guidelines and advice notes on the preparation of environmental impact statements, which issued in 2002/2003. Section 1.3.1 of the EIS acknowledges the significance of the proposal to process hazardous waste, in terms of environmental impact assessment; but equally it notes that any hazardous wastes proposed to be accepted would be mild forms of hazardous waste.
- **4.2** Notwithstanding the EIS authors' view on the requirement for an EIS as set out in Section 1.3.1 to which I refer above the format of the EIS follows generally the format recommended in EPA advice.
- 4.3 As noted in paragraph 2.3 of my report, above, a preliminary review of the submitted EIS revealed that there were some text errors and omissions. These were drawn to the attention of the applicants, who responded with corrections to the EIS, notably an error identified in Chapter 5. For completion I draw the attention of the Board to the applicants' letter dated 5 July 2012, received by An Bord Pleanála on 6 July 2012. This submission includes a short list of errata. In summary:
 - there is an insert following the original Section 5.1.3 which bridges a gap between 5.1.3 and 5.4;
 - there is a new clarifying table of contents;
 - the amendments do not affect the text of the non-technical summary;
 - the applicants submit that the errata text does not contain any significant data or '... any significant or material new information ...'.
- I have noted the content of the notified errata and have inserted the additional text into the hard copy of the EIS referenced for the purposes of my EIS review. The correspondence relating to the errata has also been copied by the applicants to the dedicated website www.carranstownamendments.ie It should be noted for clarity that disc/digital copies of the submitted EIS received by An Bord Pleanála as part of the submitted planning application package, have not been amended.
- 4.5 The principle of development of the WTE facility was established by the permissions granted in 2007/2009 and subsequently taken up in the construction and commissioning of the plant. Accordingly, I shall confine my summary of the main points of the now submitted EIS to those most relevant to the crucial considerations which arise from the additional development now proposed, including relevant operational changes.

4.6 The EIS notes that the site operates under a waste licence under which only residual, non-hazardous municipal waste may be accepted at the facility. The waste licence is under review. The waste licence review application is accompanied by a copy of the same EIS.

4.7 Consideration of Alternatives

- 4.7.1 Regarding alternatives for the disposal of the extra 20,000 tonnes of waste, the alternatives explored were three: direct to landfill; wrapping/baling followed by export for recovery; mechanical treatment followed by landfill, and/or export for recovery. The direct landfill option is considered unrealistic and inappropriate in the context of official waste policy and EU/national landfill targets, the purpose of which are to further restrict landfill in the future. The mechanical treatment option (followed by landfill and/or export) is dismissed because of the shortfall in treatment capacity now and into the foreseeable future. A medium to long term problem with wrapping/baling and export is that it offends the notion of national self-sufficiency and it is not realistic for the long term because of diminishing capacity outside Ireland in the future, making the cost prohibitive.
- **4.7.2** Regarding alternatives to the disposal of certain hazardous waste at Carranstown here again three options are explored: export for recovery; diversion to existing treatment facilities, or disposal/recovery in such as the planned Ringaskiddy (County Cork) WTE facility. The limitation of each of these options in responding to short/medium term requirements is outlined. It is noted that the proposal now made is for the use of only a limited quantum of hazardous waste.

4.8 Summary of Main Conclusions in EIS

Certain environmental impact conclusions drawn in the various chapters of the EIS may be summarised as set down below.

4.8.1 *Air Quality and Climatic Impact:*

- Changes to volume flow would not result in a significant change to ambient ground level concentrations of potential pollutants: a maximum 2% increase in concentrations over existing emissions represents a tiny fraction/percentage of permitted concentrations per the existing EPA licence.
- Greenhouse gas emissions would represent a 0.05% contribution to total greenhouse gas emissions in Ireland in 2012: This is deemed to be an imperceptible amount in the context of Ireland's obligations under the Kyoto Protocol.

4.8.2 *Noise:*

There is no additional noise or vibration predicted to arise from the operational phase of the development.

4.8.3 *Protection of Water and Groundwater Resources:*

Sections the EIS soils and geology/groundwater on hydrogeology/surface water refer. The proposed additional wastewater treatment system (linked to the modular offices proposal) is stated to be underpinned by percolation testing carried out in accordance with the requirements of the EPA manual of 1999 for small communities, businesses, leisure centres and hotels. The EIS concludes that the existing on-site water management system is designed to prevent uncontrolled discharges. The same system will operate in respect of the now proposed development. Additional bunded areas are proposed (for such as around additional ammonia and fuel storage tanks) and petrol interceptors will be placed in new hardstanding areas.

4.8.4 *Ecology*

- **4.8.4.1** There is one designated Special Area of Conservation (SAC) and there are four Natural Heritage Areas (NHA) located or part located within 5 kilometres of the application site. These include the River Boyne and River Blackwater SAC. It is stated that "Appropriate Assessment" (AA) screening was undertaken which concluded that further stages of the AA process would not be required.
- **4.8.4.2** Regarding the application site itself, the EIS concludes no negative impact on ecology.

4.8.5 *Landscape*

The limited physical works proposed comprising mainly two buildings and three hardstanding areas would not have any significant visual impact. The EIS concludes no significant visual impact and no mitigation measures proposed.

4.8.6 Cultural Heritage

- Regarding on-site archaeological potential, reference is made to work undertaken in 2005 and concludes that it is unlikely that construction now proposed would have any impact on any further archaeological features. However professional archaeological monitoring of soil stripping is recommended.
- In the wider area, the EIS acknowledges the context of the Boyne Valley "Bru na Boinne" World Heritage Site. There is reference to some 2004 work undertaken in an assessment of air quality impact, of the (then proposed) Carranstown Waste Management Facility, at Bru na Boinne and later work in 2006. As there are no significant changes to emissions resulting from the now proposed development, the earlier conclusions are deemed to remain valid.

4.8.7 *Traffic and Transportation*

A traffic impact assessment (TIA) has been carried out and presented as part of the EIS. This notes revised opening hours as proposed in the planning application, and assumes a 100% increase in traffic generated by the proposed development. However, in the interest of robust assessment, extended opening hours are ignored in the technical assumptions and calculations. The main conclusions are to the effect that:

- the existing access junction on the R152 will operate well within capacity under projected traffic conditions;
- the most critical/proximate junctions which would be potentially affected by increased plant traffic generation are the R150/R152 junction and the M1/R152 junction: these will operate well within capacity under expected traffic conditions: the TIA concludes that the R150/152 junction will reach capacity by the end 2013;
- the R152 has sufficient capacity to accommodate relevant construction and operated traffic.

4.8.8 *Material Assets*

The statement under this heading is confined essentially to consideration of property prices, land severance, land access and disruption to current agricultural land use. The EIS concludes no significant impact under this heading.

4.8.9 Construction

This is estimated as a 2-month construction period based on 12 hours per day (0700h-1900h) over six days per week. There would be no Sunday or bank holiday construction works. The EIS concludes no negative impacts would result.

5.0 PRESCRIBED BODY SUBMISSIONS

- 5.1 The prescribed bodies notified of the current planning application, by the applicants in accordance with prevailing procedures relating to strategic infrastructure planning applications, are listed in Section 5 of the submitted planning package. It may be noted that there were 22 no. bodies notified of the planning application. Although this list includes the EPA, this body was separately consulted directly by An Bord Pleanála following receipt and preliminary review of the planning application.
- 5.2 Arising from the applicants' notifications, and the consultation letter with the EPA, there were three written submissions received from prescribed bodies, namely the National Roads Authority (NRA), the Health Service Executive

- (HSE) and the EPA. The salient points of these submissions are summarised below.
- **5.3** NRA Submission (received 22 May 2012).
- **5.3.1** The submission refers to attachments comprising: observations made in the history case SA/901467; and a scoping response to Indaver Ireland at the time of EIS preparation for the current application. The submission states that comments outlined, in the attachments referred, represent the position of the NRA.
- **5.3.2** The main points of relevance in the attachments referred may be summarised as set down below.
 - The site of the proposed development lies partially within an indicative route for the proposed Leinster Orbital Route (LOR). NRA considers that the nature of the intrusion of the proposed development (proposed in 2009) into the indicative corridor, is moderate enough such as not to compromise the feasibility of routing of the LOR in this area.
 - The LOR is included as an objective in the Meath County Development Plan and is a key objective of the Regional Planning Guidelines (RPG's) for the Greater Dublin Area (GDA). The NRA would be specifically concerned as to potential significant impacts which the proposed development would have on any national roads and associated junctions in the proximity of the proposed development.
 - A traffic and transport assessment should be carried out where appropriate if relevant thresholds and criteria apply, or if appropriate in respect of sub-threshold development.

5.4 HSE Submission (received 1 June 2012).

- **5.4.1** The submission is stated to comprise a report commenting on the environmental health impacts of the proposed development and the adequacy of the submitted EIS from an environmental health viewpoint. The main points may be summarised.
 - Noted that the facility operates under a waste licence which is currently under review, it is not proposed to change the process, the facility is not a 'Seveso' site and the entire process at the facility is carried out within an enclosed building.
 - Noted that weekly site assessments are undertaken by the Operations Manager (for the applicant company) to monitor issues such as litter and odour; and an external pest control company is contracted at the site.
 - HSE has received no complaints in relation to the existing Indaver facility.

- Dioxin level results measured under the aegis of the existing waste licence are reported below threshold limit value.
- Dust emissions are deemed negligible. No evidence of dust deposition noted in the environs of the facility during the course of the site visit.
- Faint odour evident outside tipping hall at time of site visit.
- No discernible noise "outside of the process building" at the time of site visit. Noted that noise monitoring is covered by the waste licence and the submitted EIS takes account of cumulative effect of noise having regard to other relevant noise generating developments in the area.
- Concern expressed having regard to WHO Guidelines "Night Noise Guidelines for Europe" regarding proposals for extension of hours of operation and the proposed lifting of restrictions on hours of dispatch. Submitted that there would be adverse effect on night time noise levels on densely populated five main haul routes. Recommendation that hours of operation and dispatch restrictions remain unchanged.

5.5 EPA Submission (received 2 August 2012)

- **5.5.1** The main points included in this submission may be summarised as below:
 - Existing activities at the facility comprise the operation of a Waste Incineration/Waste to Energy Plant for residual non-hazardous waste. The facility is regulated and controlled in accordance with the Waste Incineration Directive (2000/76/EC) and the IPPC Directive (2008/1/EC), under the aegis of Waste Licence reference W0167-02 issued by the EPA.
 - EPA received a waste licence review application in April 2012. Application no. is W0167 03, in respect of which all documentation is available on the website of the EPA.
 - Approach taken in the EIS appears to identify, describe and assess in an appropriate manner the direct and indirect effects of the project on the environment. EPA notes that the EIS indicates that having regard to mitigation measures proposed, relevant parameters are met.
 - In considering the licence review application the EPA will have regard to Reference Document on BAT for Waste Incineration, EC, August 2006.
 - Noted that the EIS states that there will be no material alteration to the emissions to atmosphere from the stack, and no request is being made to increase or change emission limit values (ELV's) for stack emissions.

- Noted that EIS states that concentration of pollutants in untreated flue gases will be affected by proposed variation in waste input but the existing flue gas treatment system is capable of treating the gases so that stack emissions will remain well below relevant ELVs.
- Secondary containment proposals for proposed ammonia and fuel storage tanks noted.
- Proposals to increase the maximum licenced volumemetric flow rate at the stack by approximately 25% are noted. EIS statement that the variation in flow rate does not materially alter the original (2009 EIS) conclusions regarding compliance with air quality standards, noted. The relevant air dispersion modelling undertaken will be subject to a detailed evaluation by the EPA to ensure EIS conclusions drawn are justified and correct.
- EPA considers the proposed development is consistent with officially promoted plans and targets including: renewable energy targets specified in 2009/28/EC; Ireland's obligations under the Kyoto Protocol regarding greenhouse gases; and the Landfill Directive 1999/31/EC targets for diversion of biodegradable waste.
- New wastewater treatment systems should satisfy criteria set out in the EPA's wastewater treatment manuals.
- EPA recently issued revised Noise Guidance Note (NG4) [1]. This is not referred to in the EIS.
- EPA will examine the EPA licence review application having regard to the Industrial Emissions Directive, due for transposition into Irish law in January 2013. This directive has recast a number of directives including the Waste Incineration Directive.
- The EIS addresses the key points in relation to the environmental aspects of the activity. A waste licence may not be granted by the EPA unless it is satisfied that the subject activity will not cause environmental pollution.
- It may be noted that in reviewing the waste licence the EPA will have regard, amongst other things, to:
 - the EC (Waste Directive) Regulations 2011 (SI 126 of 2011).
 - the EU (EIA) (Waste) Regulations 2012 (SI 283 of 2012).
- **5.5.2** The EPA submission is made without prejudice to any future decision of the Agency relating to the proposed development.

6.0 OBSERVER SUBMISSIONS

There were 12 no. written observer submissions made to An Bord Pleanála within the advertised statutory deadline date applicable in the case (26 June 2012). (These are/were submissions made in addition to 3 no. prescribed body submissions summarised in section 5 of my report, above).

The observer submissions raise issues under several headings, notably emissions to air and water and implications for human health; queries relating to the adequacy of on-site infrastructure; waste management policy issues; and matters relating to roads infrastructure and traffic.

The individual submissions may be briefly summarised as set down below.

- **6.1** *John A. Woods, Wintergrass, Bellewstown, County Meath.*
 - Observer suffers breathing problems which he fears will be worsened by the incineration of hazardous waste in the area.
 - Concern expressed on the timing/protocols of inspections relating to emissions.
 - 24-hour removal of "toxic ash" would tend to encourage illegal dumping in the small hours of the morning, with adverse implications for the environment and human health.
 - The presentation of a development intended to burn hazardous waste and pollute the environment as "Strategic Infrastructure Development" appears seriously flawed.

The submission includes, in addition to the above summarised points, some items which I do not consider relevant to consideration of the current planning application by An Bord Pleanála.

- **6.2** *James Rountree, Sellar, Nobber, County Meath.*
 - There are better ways to use/destroy light hazardous materials, such as paint containers, with possible end use for recycled elements in the agricultural and public authority sectors.
 - Thermal treatment of such as paint and paint containers may release cadmium, chromium and mercury into the atmosphere in various forms: these are toxic even in small amounts: particulate filtration below 10 microns is not engineered into the Carranstown plant.
 - Paint in measurable quantities (as distinct from painted surface coatings etc.) has the potential to cause unacceptable spikes in stack emissions.
 - Health statistics for the existing environment in the Strangford Lough –
 Kells Balbriggan triangle are not good compared to any similar size triangle in Ireland.
 - There is a need to review the received wisdom on health statistical parameters relevant to incineration with potential significant local health impact.

- Too much of the available data relating to the plant in operation is/will be presented in "annual average" form, which has the potential to mask unacceptable spikes etc.; moreover such an approach may be inadequate for compliance with the Aarhus Convention.
- The European Court of Justice has been critical of inadequate engagement between the EPA and An Bord Pleanála in assessing projects of the type such as the currently proposed development. A permission in the case may be premature pending the effective implementation of robust consultation procedures between the EPA and the Board.

6.3 Friends of the Aquifer Limited, (FAL).

This submission comprises a typed letter signed by Mary P. Burke on behalf of FAL; and a handwritten letter on behalf of FAL also signed by Mary P. Burke. The FAL address is stated to be Castle House, Lagovoreen, Drogheda.

The thrust of this submission is to query the weight given in past and current assessment to the proximity of the application site development to an important aquifer. It appears to be suggested that the proposed development has the potential for adverse impact on the aquifer arising from emissions to water and emissions to air, the latter in the context of cumulative impact arising from the existence of other industrial plant in the area.

The submission also states that the region (North-East Area) has the highest asthma incidence in Ireland and some of the highest cancer rates.

6.4 Councillor Michael O'Dowd, Balgathern, Drogheda.

- Applicants have failed to adhere to certain advice and direction given by An Bord Pleanála in the context of the formal pre-application consultation relating to the case, specifically:
 - there has been a failure to consult the local authorities from whom waste is proposed to be collected, and
 - it is not clear that there have been any extensive discussions with the HSE in relation to health impact assessment.
- Concern expressed that there has been no baseline health study conducted in relation to "...population and local area". The submission goes on here to recommend that "a condition should be imposed on parameters agreed with the HSE and carried out by an independent body".
- A consideration of An Bord Pleanála in defining the proposed development as SID included that the proposed development would comprise provision of a hazardous waste treatment capacity not currently available in the state. Accordingly it is incumbent on An Bord Pleanála to ensure that, in the context of national waste management policy, the treatment of hazardous waste is based on suitable and appropriate technology.

- Internet referenced research undertaken by the observer suggests that the technology in the proposed development is not the most appropriate for the hazardous waste described including medical waste.
- Arising from the foregoing it is submitted that the local and national interest would best be served by ensuring an incentive remains for the construction of a specific hazardous waste incinerator using the genuinely best available technology.
- Application premature by reference to:
 - the absence of the planned Duleek Village bypass, and
 - the failure of the applicants to comply fully with the requirements of condition no. 9 of permission granted under PL17.219721 (prohibition of traffic generated, on the R150 east of Kentstown village).

6.5 Louth and Meath Health Protection Group

This is an unsigned submission stated to be care of Pat O'Brien, East Commons, Station Road, Duleek.

- Proposal to burn hazardous waste at Carranstown as proposed is a breach of trust held between the local community and the applicants having regard to statements and commitments made at various hearings with the EPA and An Bord Pleanála.
- Extension of permission to facilitate the burning of hazardous waste is totally unacceptable.
- Mixed toxic emissions from incinerators are extremely dangerous and difficult to quantify; moreover health effects are likely to be postponed and long-term.
- Substances emitted from the proposed development have the potential to be absorbed into and persist in the ground with health implications via the food chain, and adverse economic impact through adverse publicity/image.
- Incineration is associated with accidents internationally.
- Development would be premature pending Duleek Bypass.
- Storage of hazardous waste on-site is a threat to the underlying aquifer.
- Ash recovery plans relating to the existing plant are behind target, and need to be moved forward before considering the current application.
- Baseline study is inadequate and Irish health information systems in Ireland cannot support routine monitoring of the health of people living near incinerators.
- An Bord Pleanála should revisit the report of the Society of Ecological Medicine and the WHO (World Health Organisation) report on air pollution presented to An Bord Pleanála by observers (as then appellants) in 2006 [Poolbeg Incinerator case]
- A recycling centre envisaged in tandem with the original application has still not materialised, at any location accessible to the local community.

• Concerns stated on the lack of engagement by the EPA in the planning stage of the proposed development.

6.6 *Dominic Hannigan TD and Ger Nash TD*

- Traffic volume increases, increased emissions from vehicles and hours
 of vehicular movements will adversely impact on the amenities of the
 area.
- Proposed development will increase damage to roads infrastructure in the area.
- There is a need to expedite the construction of the Duleek Bypass.

6.7 Councillor Ken O'Heiligh, Drogheda Borough Town Council.

- Site selection process inadequate.
- Spare parts complex in proposed development implies major gearing up to cater for increased vehicular numbers.
- Financial contribution influence of applicants relating to existing permission is inappropriate.
- Proposed development ignores national and regional waste management plans.
- Road infrastructure is inadequate by reference notably to absence of the Duleek Bypass, for which funding must be doubtful; the substandard nature of the R152 in the vicinity of the proposed development; and the inadequacy of the junction of the R152 with the R150, therefore the development is premature.

6.8 Louth People Against Incineration

This is a submission made care of Ollan Herr, Tur na Gaoithe, Philipstown, Dundalk.

- The project is in conflict with the Stockholm Convention relating to Persistent Organic Pollutants (POP's).
- Addition of any waste containing chlorine or bromine to a fixed licenced quantity already being burned can only increase toxic emissions in the atmosphere.
- Premature pending Action Plan for implementation of Stockholm Convention, due in November 2012 (work of EPA referred).
- Conflict with Aarhus Convention for reasons including that there is not effective capacity to collect enough information on emissions and public health trends locally, which could underpin any legitimate legal challenge by the community.
- If granting permission An Bord Pleanála should condition the availability of adequate funding for small independent health studies.
- In addition to concerns regarding dioxins and furans, the long-term effects of PM2.5 and PM1 on health are a matter of concern.

- If granting permission An Bord Pleanála should direct monies to groups promoting environmental protection consistent with the requirements of the Aarhus and Stockholm Conventions.
- Realistic delivery under Aarhus requires all sample results to be published via Indaver/EPA websites and individual amounts should be presented separately, rather than in a "non-distinctive" way.
- Websites (EPA/Indaver) should have information available without individual requests from members of the public.

Concluding recommendations on availability of information to support "access to justice" are contained within the submission.

6.9 *Mary Halpenny, Clara House, Beanone, Drogheda.*

This observation is presented as a copy of a document circulated to An Bord Pleanála amongst others.

The covering letter signed by the observer states the objection to the proposed development, however the basis of the objection does not appear to be clearly stated or described.

The concerns of the observer are stated to be listed on an enclosure with the covering letter. The enclosure comprises mainly a list of EWC codes which it is alleged the applicants seek to accept as waste at Carranstown. The submission notes that the applicants project application dedicated website has "diluted" the description relative to the actual descriptions in the European Waste Catalogue.

6.10 *Veolia Environmental Services* (VESTS)

This submission runs to some nineteen pages of text, under cover of a letter dated 25 June 2012. The submission is set out in ten sections, within each of which the points made are summarised below.

6.10.1 Introduction

- VESTS is of the opinion that the applicant has not demonstrated adequately the need for the increase in tonnage.
- Applicant has not justified the reason for additional EWC codes.
- The proposal is a "catch all" to allow applicant incinerate large variations in waste types without due consideration to (on-site) infrastructure required.
- No proper site selection survey has been undertaken.
- Potential increase in traffic volumes have not been addressed.

6.10.2 Observer Company Profile

• VESTS parent company processes some 10 million tonnes of waste worldwide including almost 1 million tonnes of hazardous waste.

- As such VESTS understands the critical issues associated with waste handling, combustion, technical operation and environmental performance of non-hazardous and hazardous incinerators.
- VESTS operates a solvent blending plant and hazardous waste transfer and recovery facility at Fermoy in County Cork.

6.10.3 Proposed Tonnage Increase

- Tonnage increase is ostensibly required to raise the calorific value (CV) of waste accepted. However many of the numerous waste streams for the proposed development will in fact reduce the CV of the waste, moreover the EIS indicates that the applicant may in future incinerate waste oil to compensate for low CV waste.
- Incineration of aqueous waste included in the proposed EWC acceptance schedule does not represent a "recovery" operation in the context proposed.
- It is submitted that the incineration of aqueous waste as proposed should be classified as "D10 Incineration on Land", as distinct from "R1 Recovery". The co-existence of D10 and R1 operations is inappropriate.
- The (current) waste licence application review seeks the removal of a tpa restriction on EWC code 19 12 12. It is submitted that a consent to effectively increase the throughput of this category of waste would have the effect of diverting materials from a higher tier on the waste pyramid to a lower tier.
- It is incumbent on the applicant to state the CV range of material which they wish to accept.
- The combination of current requests to increase tonnage throughput and accept hazardous waste would inevitably change the nature of the facility from waste-to-energy recovery operation to an incinerator with a significant disposal function.

6.10.4 Acceptance of Hazardous Waste

- In practice the applicants will not have the ability to adequately exclude contamination of the 'low level' hazardous waste streams proposed. The EWC codes refer to the process from which waste materials arise. Without detailed analysis of waste streams the level of contamination within EWC waste types would not be amendable to effective control.
- A precautionary approach should be adopted and deliberate acceptance of hazardous waste should be excluded.

6.10.5

• The BREF for hazardous waste incineration details several parameters which are not demonstrated as being proposed or achievable in the currently proposed development.

6.10.6 Reprocessing of Flu Gas Treatment Residues.

- The proposal to be allowed accept waste under certain EWC codes so as to facilitate the acceptance of flu gas treatment residues, bottom ash and boiler ash temporarily before being resent for treatment implies existing or anticipated difficulties arising from contaminants in bottom ash, boiler ash, and flu gas treatment residues.
- Additional loadings may have implications for the categorisation of such as bottom ash; and the potential overloading of the flu gas treatment process.

6.10.7 Traffic

• Traffic projections relating to the currently proposed development are flawed by reason of the underestimation of the number of vehicles likely to be utilised in the transport of certain hazardous waste, notably clinical/infectious wastes from hospitals etc.

6.10.8 On-site Infrastructure Proposals

These are inadequate to cater for the proposed development as described by reference to any or all of the following:

- Absence of bunded areas for handling waste.
- Inadequate storage of clinical wastes.
- Inadequate storage areas for pallets of hazardous waste materials.

6.10.9 Site Selection

• Historic/existing use of site as a waste-to-energy facility using incineration has been unreasonably and unduly weighted as a consideration in selecting the site for purposes of hazardous waste treatment.

6.10.10 Conclusions

In this concluding section a refusal of permission is recommended for reasons of inadequate anticipation of changes to process/handling

6.11 Shane McEntee TD, Minister of State at the Department of Agriculture and Food

- Unacceptable to propose dealing with hazardous waste from all regions when original permissions envisaged waste acceptance from mainly the North-East Region.
- Burning hazardous waste would add substantially to risks for agriculture and quality of food production in the area.

6.12 Louth County Council

Concern expressed that acceptance of hazardous waste material at the waste-to-energy plant may increase the risk of adverse environmental effects, for the following reasons.

- (a) Use of incineration to the extent now proposed may become a disincentive to recycling: this would be at variance with a policy objective of the North-East Waste Management Plan.
- (b) Potential hazardous contamination of bottom ash which is disposed at White River landfill, County Louth.
- (c) Impact of hazardous waste materials in process, on airborne stack emissions into County Louth.

6.13 Other Observer Submissions

Other submissions heard only at the oral hearing addressed certain of the issues covered in the written submissions as summarised above. Additional significant issues raised in the additional submissions are noted in section 10 of my report below.

7.0 PLANNING AUTHORITY REPORTS

The formal submission of the Planning Authority, as provided for under the Strategic Infrastructure provisions of prevailing legislation, was received by An Bord Pleanála in July 2012. The submission comprises the Meath County Manager's Report and the Minutes of the Meeting of Elected Members in which members raised a number of issues following consideration of the Manager's Report.

7.1 Meath County Manager's Report

The formal report runs to thirty-one pages of text, set out under the following headings.

- 1. Introduction (page 1)
- 2. Site Description (page 1)
- 3. Development Description (pp1 5)
- 4. Planning History (pp6-7)
- 5. Internal Referrals (page 7)
- 6. Review of EIS (pp7-14)
- 7. Planning and Waste Policy Review (pp14-20)
- 8. Meath County Development Plan (pp20-22)
- 9. Assessment [notated section 7.0] (pp20-29)
- 10. Conclusion and Recommendation [notated section 8.0] (pp30-31)
- 11. Conditions [notated section 9.0] (page 31)

- **7.1.1** In the interest of brevity, I propose firstly to summarise the overall conclusions contained in the Meath County Manager's Report, followed by a bullet point summary of the crucial issues raised in the report.
- 7.1.2 Section 8.0 (pages 30/31) of the Manager's Report essentially recommends that further information be requested in order to facilitate a full assessment of this planning application. The nine points of further information recommended, cover a range of topics relating to calorific value profile of waste; long-term ash strategy and disposal arrangements; waste type volumes and sources; certain implications of facilitating hazardous waste acceptance; new wastewater disposal arrangements; air pollution vis-à-vis the Bru na Boinne World Heritage Site; and "appropriate assessment" screening vis-à-vis Natura 2000 sites.
- **7.1.3** While the Manager's Report recommends that further information be sought, it further recommends in Section 9.0 (page 31) that, in the event of permission being granted, planning conditions should be attached covering matters including financial contributions for roads and environmental education; and in respect of "community gain".
- **7.1.4** The crucial issues raised in the Manager's Report, including as reflected in its further information recommendation, may be summarised as set down below.

7.1.5 Environmental Matters

- If the typical profile of residual municipal waste being received at Carranstown has a CV significantly less than anticipated at original plant design stage, and this profile is attributable to a high biodegradable waste content (as submitted in the EIS), there may be adverse implications for the achievement of officially stated biodegradable municipal waste targets for 2016. Further information is required in relation to the waste stream.
- The proposed development would result in a potential increase in bottom ash arising from the projected 10% increase in the volume of waste accepted. This has implications for the lifespan of the existing White River Landfill in County Louth, to where the bottom ash is disposed. Information required on future disposal arrangements, if/when the White River facility is full.
- Only ferrous metal materials contained within the bottom ash are currently being recovered from the ash in the existing process activities. This results in possibly recoverable material proceeding to landfill. Removal of the non-ferrous material and identification of alternative uses for bottom ash should form part of a long-term ash strategy.
- A public perception that sorted/separated hazardous waste is disposed of in a residual municipal waste incineration plant such as Carranstown could militate against future co-operation from households and SME's in

the drive towards segregation and recycling. If permission is granted the applicants should make a financial contribution towards existing and future enhanced environmental education programmes to minimise and correctly dispose of hazardous wastes.

- It is accepted that while waste infrastructure should serve the region in which it is located, there should be tolerance of inter-regional movement of hazardous waste for reasons of existing limited hazardous waste infrastructure and practical economic considerations. However the volumes of each waste type identified in Table 5.2 of the EIS should be sought and obtained.
- Applicants should also be requested to explain arrangements for the disposal of hazardous bottom ash should this occur.
- The Planning Authority queries the implications for the viable development of a hazardous waste facility at Ringaskiddy of long term receipt of hazardous waste at Carranstown.
- It is noted that, with regard to the proposed wastewater treatment plant, the planning application is not accompanied by a site characterisation report carried out in accordance with the EPA 2009 Code of Practice.

7.1.6 Cultural Heritage

• The application site is in the vicinity of the Bru na Boinne Boyne Valley World Heritage Site. It is noted that predicted levels of pollutants stated in the 2009 EIS do not appear to have been checked against current relevant air quality data. Such information should be sought and obtained.

7.1.7 *Natural Heritage*

• Noted that screening report for "Appropriate Assessment" referred to in the EIS, does not appear to have been provided as part of the planning application package/EIS. The status of the AA screening should be clarified.

7.1.8 *Site Services*

• Certain conditions recommended for attachment to any permission granted in respect of water supply and drainage matters.

7.1.9 Access/Roads/Traffic

Existing access arrangement to complex includes a right-turn lane which
operates satisfactorily. The delineation of this lane has become eroded and
requires refurbishment.

- Noted that applicants are seeking advance warning signs on the Drogheda side of access junction.
- Regarding the planned Duleek By-Pass, this project is currently at "preferred route stage" in the design process, which commenced in 2010 with the appointment of road design consultants.
- No objection to the proposed development subject to a pro-rata (10%) increase in financial contribution for works to be apportioned between the Duleek By-Pass, the R152 and the R150/N2/R153.

7.2 Meeting Minutes of Meath County Council

- **7.2.1** In addition to the Meath County Manager's Report, An Bord Pleanála has been provided with a minute of the Council Meeting of 2 July 2012, as recorded by the Meeting Administrator in accordance with Section 37(E)(6) of the Planning and Development Act 2000, as amended.
- 7.2.2 The Minute records that the elected members of the Meath County Council raised a number of matters following consideration of the Manager's Report. These matters are summarised in bullet point form, running to some 26 no. typically two line observations and/or queries. The 2-page submission may be read in its entirety, however points made which may be considered additional to those raised in prescribed body/observer submissions and in the Manager's Report, may be summarised as set down below.
 - An Bord Pleanála should consider the significant impact the traffic generated has on the village of Duleek.
 - Lorries awaiting access often park overnight causing disturbance to residents and risks to road users.
 - Query on whether up-to-date EPA monitoring data is available.
 - There should be a traffic management protocol routing Indaver traffic to avoid Duleek village.
 - Traffic from the Carranstown facility travelling to the White River Landfill should use the M1.
 - Suggested that recommended (County Manager) €60,000 roads' contribution is inadequate to off-set deterioration in roads used as haul routes.
 - Concerns expressed at intake of medical waste.
 - Concern expressed at perception of proximity to Boyne Valley.

- Query raised on future national policy following the imminent expiry of the National Hazardous Waste Management Plan 2008-2012.
- Query on whether the applicants' quest to take in hazardous waste is linked to their alleged inability to source enough waste to operate the facility profitably.

8.0 FURTHER INFORMATION PROVIDED BY APPLICANTS

- **8.0.1** Arising from a review of submissions received by An Bord Pleanála from the Planning Authority, prescribed bodies and other observers, and further review of the submitted EIS, the applicants were invited to make observations on the submissions received and to respond to certain specific queries. An Bord Pleanála letter dated 7 August, 2012 refers.
- **8.0.2** The applicants responded in a submission received on 30 August, 2012, under cover of a letter of same date. The response is effectively set out in ten sections, comprising a substantive response to the queries raised, followed by appendices (number 1-9) containing information referred in the substantive response.
- **8.1** The main points of additional information provided by the applicants may be summarised as set down below.
- **8.1.1** Regarding the implications of the government publication in July, 2012 entitled A Resource Opportunity Waste Management Policy in Ireland.
 - In the context of official waste management policy, the Meath WTE has been designed as a "Recovery" facility and applicants are confident that this status will be confirmed through validation by the EPA after one year of standard operating conditions. Reference is made in particular to compliance with "R1" criteria as defined in official documentation.
 - Official policy as set out in 'A Resource Opportunity' reinforces the status
 of the waste hierarchy in the decision making process relating to waste
 infrastructure. Applicants note the recognition given in policy to the need
 for the development of infrastructure to treat municipal and hazardous
 waste. Applicants submit that their current proposal is consistent with
 policy.
 - Regarding the proposed rationalisation of waste management regions it is envisaged that there will be a reduction to no more than three regions within Ireland (26 counties) in the future. Applicants submit that an increase in tonnage accepted at the Meath WTE would facilitate predicted growth in municipal waste and provide for rational use of existing waste infrastructure.
 - Regarding hazardous waste management, applicants note continuing official policy of making hazardous waste management planning a

function of the EPA under the aegis of the National Hazardous Waste Management Plan 2008-2012. Applicants submit that the proposed development, including the acceptance of certain hazardous wastes, is consistent with official policy direction to reduce the amount of hazardous waste export out of Ireland.

- Proposed development is consistent with policy to redirect waste from disposal operations and consolidate waste infrastructure investment consistent with a positive contribution to official renewable energy targets.
- The Resource Opportunity seeks to move Ireland away from an unsustainable dependence on landfill as a method of managing its waste. The proposed development is a recovery facility which helps to direct waste up the waste hierarchy away from disposal.
- **8.1.2** Regarding existing and proposed percentages of hazardous waste received at Carranstown.
 - The proportion of hazardous waste proposed to be accepted would be typically 5% excluding incidental hazardous materials contained within accepted mainstream residual municipal waste.
 - Based on operational experience of other grate furnace facilities, the feed ratio of hazardous waste to municipal waste is typically approximately 5%. If the upper limit of 15,000 tpa hazardous waste proposed intake is achieved, it would equate to 6.8% of total throughput which is considered acceptable to the plant.
 - Market fluctuations arising from the evolution of waste classifications and other factors affect the overall profile of waste received. It is considered prudent to seek permission to accommodate the upper limit of 15,000 tpa hazardous waste which is based on a best estimate of the quantity of specified hazardous waste streams requiring treatment annually.
- **8.2** Regarding the matter of notification of the current planning application to local authorities, the applicants decided to notify only the lead authorities in each waste management region for certain reasons as set down below.
 - The lead authority in each waste management region has responsibility for the co-ordination of matters relevant to waste management within its region.
 - It is not possible to identify the specific local authorities from whom waste is proposed to be collected.
 - There is nothing about the proposed development that could affect the area of any local authority within the meaning of article 213(1)(h) of the prevailing Planning and Development Regulations.

The concluding comment on this part of the submission notes that if An Bord Pleanála forms the view that some local authority might have information relevant to the current planning application, the power exists for An Bord Pleanála to invite submissions from relevant persons.

- **8.2.1** Regarding the acceptance of waste from Northern Ireland, the following points are made.
 - The estimate of 15,000 tpa max. for receipt of hazardous waste is based on the market in the Republic of Ireland only.
 - It is not envisaged that substantial quantities of hazardous waste would be sent to the Indaver facility from Northern Ireland.
 - Official policies north and south acknowledge the potential for all island co-operation in the management of hazardous waste.
 - The current EPA Hazardous Waste Management Plan notes that there are no policy or legislative barriers to the movement of waste for recovery or recycling, subject to the caveat that "transfrontier" waste movements are subject to strict EU Regulation.
 - The Waste Management Plan for the north-east of Northern Ireland (ARC 21 region) acknowledges that the development of a WTE facility for hazardous waste is unlikely in that region due to limited waste quantities relative to economic size of facility.
- **8.3** Regarding the matter of health impact assessment, it is submitted that this is overall appropriately addressed in the EIS. Moreover the only substantive issue raised by the HSE in respect of the proposed development has been in relation to hours of acceptance of waste. Applicants draw attention to the scaling back of the hours of waste acceptance proposed as now contained in an amendment to the planning application (NB notified as a modification to the application subsequent to receipt by An Bord Pleanála of the relevant HSE submission).
- **8.3.1** Regarding submissions made by observers/prescribed bodies generally, the applicants indicated that they had received the submissions made and did not have further observations to make, except in respect of matters specifically directed for comment by An Bord Pleanála (An Bord Pleanála letter of 7 August, 2012 refers).

8.4 Applicants Comments on Meath County Manager's Report

- **8.4.1** *Regarding the limited lifespan of the White River Landfill*, where bottom ash is currently disposed:
 - the applicants are in discussion with other landfill operators;

- some landfills are temporarily closed for commercial reasons but there is sufficient landfill capacity available for bottom ash management;
- in the unlikely event of capacity being unavailable in Ireland, there is the option of exporting material to the continent.
- **8.4.2** Regarding the ash strategy for the future, the applicants have regard to EPA Pre-Treatment Guidance (Consultation Draft 2008) which requires that metals and where possible other fractions are recovered. Current practice at the complex provides for screening and return or recycling of oversized metals etc. The current EPA licence requires agreement on a proposal for the recovery of non-ferrous metals from the bottom ash.
- **8.4.3** Regarding the implications for waste separation/recycling by SME's and households, of accepting certain additional waste types at Carranstown, there are certain main points made.
 - Existing initiatives to separate household hazardous waste streams such as batteries, end-of-life vehicles waste and waste electronic equipment etc., would not be affected. They do not form part of the waste streams being targeted by applicants.
 - Promotion of separation of household hazardous waste is important when the final destination is landfill.
 - Revenues from such sources as the Landfill Levy contribute towards an Environment Fund which is used for purposes including promotion of consumer awareness campaigns to encourage recycling and associated good waste management practices.
 - Indaver believe that local authorities should continue awareness campaigns funded from the Environment Fund.
- **8.4.4** Regarding local authority concerns (Counties Meath and Louth) that a public perception of separated hazardous waste being incinerated could undermine efforts to further separate waste etc., the concern expressed is not widespread and attention is drawn to the limited nature and extent and volume of waste the subject of the current planning application.
- **8.4.5** Regarding comprehensive information sought on the types/sources/quantities of hazardous waste materials, proposed for acceptance at Carranstown.
 - Suitable waste streams would be accepted from all over Ireland.
 - If Ringaskiddy WTE becomes operational, the Meath facility would accept suitable hazardous waste streams from "...areas in closer proximity to Meath than to Ringaskiddy".
 - The volumes and sources of waste are subject to change depending on production trends, demand, and other factors.

- Indaver handled 9,700 tonnes of the relevant waste streams in 2011 (Reference Appendix 3A of further information received).
- Identification of precise origin of wastes is compromised by the all island nature of waste collection operations, with waste moved from original collection points to waste transfer stations before dispatch to Indaver etc. Moreover the National Transfrontier Shipment Office (NTFSO) regional origin data is not readily available from their computer system.
- **8.4.6** Regarding any hazardous bottom ash, the following points are made:
 - comprehensive analysis of bottom ash to date has consistently demonstrated that bottom ash is non-hazardous;
 - the incineration process at the plant destroys hazards within existing and proposed waste streams;
 - the screening out of any waste streams which could compromise current/anticipated bottom ash classification is imperative, and as an ongoing measure bottom ash will continue to be monitored in line with EPA requirements.
- **8.4.7** Regarding the application of the 2009 EPA Code of Practice requirements relating to wastewater treatment installations, the proposed treatment plant will be designed and constructed in accordance with the relevant EPA document of 2009. A condition to that effect could be imposed, in the event of permission being granted.
- **8.4.8** Regarding the issue of air quality impact on the Bru na Boinne World Heritage Site, an up-to-date study demonstrates that the impact at the Bru na Boinne site would be insignificant (Reference Appendix 6 of the further information submission).
- **8.4.9** Regarding "Appropriate Assessment" considerations, relevant documentation relating to a screening assessment undertaken is submitted (Reference Appendix 7 of the further information submission).

8.5 Roads and Traffic Issues

- **8.5.1** Regarding the reliability of certain assumptions underpinning the traffic impact assessment, the assumptions have been reviewed and a more realistic scenario demonstrates that the TIA performed in 2012 is representative (Appendix 8 refers).
- **8.5.2** Regarding the issue of prematurity pending the construction and opening of the planned Duleek By-Pass, the applicants have no objection to an additional 10% financial contribution being levied to assist in the development of the Duleek By-Pass. Meanwhile traffic surveys show a decrease in traffic through Duleek Village since 2009, which should offset the very small increase in traffic movements resulting from the proposed development.

- **8.5.3** Regarding compliance with Condition No. 9 of the permission PL17.219721, Indaver submits that there has been compliance (Appendix 9 refers).
- **8.5.4** Regarding planning for the Leinster Orbital Route (NRA submission refers) the applicants submit that the increased traffic on the R152 would be negligible in terms of the implications for the route selection.

8.6 Adequacy of Proposed On-Site Infrastructure

The general thrust of the submission under this heading is to the effect that existing and proposed on-site infrastructure would be adequate for the proposed development.

- **8.6.1** The main points made in the submission are set down below.
 - Indaver have appropriately trained personnel on the sites which generate
 waste going to Carranstown. These personnel support the company
 technical team to ensure adequate characterisation and classification of the
 waste for acceptance.
 - It is not intended to accept any waste streams requiring staging/storage/repackaging/pre-treatment at the Meath site. Indaver has a comprehensive suite of relevant infrastructure including laboratory facilities at its Hazardous Waste Transfer Station at Dublin Port.
 - Routine screening will identify material for rejection before it is received at the Meath plant.

9.0 OFFICIAL PLANS, POLICIES AND GUIDELINES

9.1 Much of the key policy documentation, applicable at the time of considering the 2006/7 plans for the WTE facility at Carranstown, still prevails now. In this regard both the submitted EIS and the Meath County Manager's Report refer to principles laid down in key documents, dating back to 2004. These include both general planning policy publications and specifically waste management planning documents. The plans, policies and guidance which are relevant may be summarised as set down below. These are set out in broadly chronological sequence, to help identify the trends and crucial threads of policy as it has evolved.

9.2 Taking Stock and Moving Forward 2004

This publication represented a key official Government policy statement on waste management. The document noted that adopted regional waste management plans provided in most cases for forms of waste-to-energy or thermal treatment technology in overall packages of waste management measures proposed. A strong theme of the policy enunciated at that time was that it acknowledged the role of thermal treatment as one element in an integrated approach to waste management. The document states and restates

that integrated waste management planning cannot reach its proper potential unless all elements in an integrated mix are put in place. In each waste planning region, there would be a need for simultaneous, parallel progress on all elements of any agreed/adopted mix. Taking Stock and Moving Forward also signalled the recognition that inter regional movement and treatment of waste should be provided for in appropriate circumstances: however the need for balance was highlighted in securing adequate waste infrastructure in each region while facilitating practical interregional movement of waste. It noted that the suite of regional waste management plans in place did not reflect the scale and pace of change occurring within the waste sector and as a result did not adequately address planned implementation of infrastructure delivery in a sufficiently comprehensive manner.

9.2.1 The Taking Stock document also acknowledged the emerging practice of applying "community gain" planning conditions to planning permissions for major waste infrastructure development. The document effectively encouraged the practice on the basis that waste facilities must be located somewhere and there should be a mechanism by which some benefit can accrue to the communities in the locations ultimately chosen for facilities.

9.3 DoEHLG Circular WIR: 04/05

This included guidance to the effect that while confirming that one of the fundamental components of waste management policy is the application of the proximity principle, relevant authorities should recognise that the application of this principle should not require an unduly rigid view of waste management planning boundaries, such as to inhibit the practical development of waste infrastructure appropriate to attainment of national waste management policy objectives.

9.4 *National Strategy on Biodegradable Waste 2006*

Acknowledges the role of waste-to-energy thermal treatment of waste in the context of biodegradable waste management. There is a recognition in particular that recovering thermal energy from waste is supported by the National Climate Change Strategy: energy recovered in the form of heat or electricity reduces dependency on fossil fuels and reduces the generation of methane gas from landfills.

9.5 *National Development Plan 2007-2013*

It states that thermal treatment with energy recovery would be the preferred option for dealing with residual waste after the achievement of ambitious targets in waste prevention/recycling/recovery.

9.6 Energy Policy Framework 2007-2020 (Government White Paper)

Acknowledge the place of diversity of fuels used for power generation in achieving a sustainably competitively priced energy supply.

- **9.7** *National Climate Change Strategy* 2007-2012
- **9.7.1** States that National Policy is to regard waste as a resource.
- **9.7.2** Most waste management plans (in 2007) identify thermal treatment with energy recovery as the preferred option to recover useful materials and energy from waste. This is appropriate in the context of large scale diversion of biodegradable municipal waste from landfill combined with high levels of recycling and biological treatment.
- **9.7.3** The Intergovernmental Panel on Climate Change (IPCC) methodology relating to estimation of carbon dioxide (CO₂) emissions from the combustion of biodegradable waste deems such CO₂ to be carbon neutral. Meanwhile the generation of heat and electricity from waste in thermal treatment plants obviates the need to produce a certain quantum of energy from fossil fuels, so displacing CO₂ emissions from such fossil fuel sources. Moreover an indigenous waste energy resource makes a contribution towards national security of energy supply.
- **9.7.4** Official policy for the future will require WTE plants to operate at efficiency levels comparable with conventional power plants.
- **9.8** Regional Planning Guidelines (RPG's)
- **9.8.1** As noted at the time of deliberations on the Carranstown WTE plant in 2007, County Meath formed part of the Greater Dublin Area (GDA) regional planning area but for waste management purposes the county was located in the North-East Waste Management region. At that time RPGs (2004 2016) advised that, from a strategic perspective, the waste management industry (local authorities and private sector) should aim to develop an integrated waste management infrastructure in the GDA region, which infrastructure would include WTE plants.
- **9.8.2** Since 2007 new RPGs have been published entitled Regional Planning Guidelines for the Greater Dublin Area 2010-2022. The document includes statements and guidance including as set down below. (At the time of preparing my report herein the GDA boundaries and the North East Waste Management region boundaries remain as were in 2007, however all such boundaries must be deemed under review in the context of the recently published local government reform document Putting People First).
 - Section 6.7 of RPGs 2010–2022 notes that there has been considerable investment in all types of waste management infrastructure, with appreciable increases in recycling rates across all sectors within the GDA (since 2004). It advises that the direction of waste policy needs to be continually reviewed through waste management plans for each waste management area in order to secure increased competitiveness and efficiencies across the GDA (RPGs note that the GDA incorporates and/or overlaps with four waste management areas, specifically Dublin/North-East/Kildare/Wicklow).

- There is a call for co-ordination of waste management plans to maximise potential economies of scale. There should be high standard options for treatment (including commercial energy recovery options) and final disposal of waste within the GDA. Integrated waste management should be considered from the perspective of the GDA as one singular functioning economic and spatial unit.
- Need for expansion of treatment capacities and options to reduce the quantity of organic materials entering the waste stream. A strategic recommendation is to actively provide or support biological treatment facilities and home composting.
- RPGs call for expansion in policies to promote and support waste source reduction and reuse, and improved quality of recycling infrastructure. There is a specific strategic recommendation that large development proposals and local area plans should incorporate such as bring banks in pursuit of sustainable development and optimal rates of recycling.
- **9.9** *North-East Regional Waste Management Plan*
- 9.9.1 The currently prevailing waste management plan for the North-East Region was written to cover the period 2005-2010. It was adopted in May 2006 and more recently statutorily extended to cover a period up to the end of 2012 pending the outcome of any new arrangements following reform of local government. At time of preparing my report herein, although plans for local government reform have been announced and generally outlined, the existing (2005-2010) Waste Management Plan applies until replaced by an alternative plan. It may be noted also that under prevailing legislation, an adopted Waste Management Plan forms part of the statutory development plans for the area to which the waste plan relates.
- **9.9.2** The Waste Management Plan for the north-east region, covering counties Louth, Cavan, Monaghan and Meath, sets out broad targets for the desired profile of waste comprising 43% recycling; 39% energy recovery and 18% disposal. Thermal treatment including waste-to-energy recovery incineration is recognised as a critical objective. The Plan states that the revision of thermal treatment capacity in the region should form part of integrated arrangements in which there is no artificial disincentive to recycling.
- **9.9.3** The Regional Waste Management Plan also refers to the National Hazardous Waste Management Plan, which identifies a need for at least 2 no. hazardous waste engineered landfill cells nationally within a planning framework of an integrated approach of prevention, collection, recycling and industry led producer responsibility schemes.

- **9.10** Regional Waste Management Plan Review
- 9.10.1 I draw attention to a formal review of the 2005/2010 North-East Waste Management Plan, undertaken and published in 2010. The provisions of the prevailing 2005 Waste Management Plan would have been actively considered by An Bord Pleanála in assessing the 2006/2007 WTE plans for Carranstown. Notwithstanding the statutory position, as outlined above, I consider it appropriate now to highlight certain points contained in the North-East Review document to which I refer, as well as acknowledging key factors of relevance in the still prevailing 2005/2010 waste plan. These are as set down below.
 - Increase in municipal waste arising for the region noted at 23% for the period 2003-2009.
 - Increase in recovery rate 14% over same period.
 - Commercial waste arisings have increased by 67% over the period 2003-2009.
 - Commercial recovery rate was 41% in 2009.
 - Dry recyclable collection increased by 135%.
 - Recycling centres increased by 60%.
 - Bring banks increased by 110%.
 - Overall significant steps taken in the provision of waste infrastructure.
 - Additional waste being imported into region.
 - Progress towards Plan recycling objective 43% is 33%. However recycling of hazardous waste at recycling centres dropped significantly between 2003 and 2009 (minus 46%).
 - Review formalises the principle of accommodating waste needs within the region where it arises while allowing movement of waste across boundaries.
 - Energy recovery in the Region is recognised as being partly attributable to the Carranstown facility but also of significance are cement kilns' use of alternative fuels to replace fossil fuels in the cement manufacturing process.
 - Appendix B (paragraph 1.9) of the Review indicates a proposal to review the status of incinerator bottom ash as a hazardous or non-hazardous material.

- **9.11** *Meath County Development Plan*
- **9.11.1** At time of preparing my report herein, the prevailing statutory development plan for the area containing the appeal site is the Meath County Development Plan 2007-2013.
- **9.11.2** There are several policies and objectives which have a direct or indirect bearing on planning for development of the type proposed, including in particular goals stated under the heading of infrastructure (chapter 4); and policies and objectives set out in the same chapter (sections 4.9 Solid Waste/Waste Management and 4.10 Energy). There are also less directly bearing policies and objectives such as those set out under the heading of cultural heritage and landscape protection (chapter 8).
- **9.11.3** Sections of the Meath County Plan of relevance including as outlined above, are highlighted in extracts from the Plan attached herewith to my report.

10.0 ORAL HEARING

- **10.1** The Oral Hearing was held in the Boyne Valley Hotel, Drogheda over the period 1-4 October, 2012.
- 10.2 The full proceedings were sound recorded. A copy of the record is contained in Appendix B to my report, on file. The Appendix also contains a copy of the Agenda/Order of Proceedings followed at the oral hearing. There were some minor changes to the order in the detail of the proceedings, mainly in order to facilitate the satisfactory hearing of all relevant submissions e.g. a planned late sitting on Day 1 was unnecessary but there was a late sitting on Day 3 to facilitate the completion of Module C.
- 10.3 The oral hearing appendix also contains a hard copy of the 4-day key to the recording sequence. For clarity I have cross-referenced the agenda/order of appearance module/item notation onto the hard copy of the sequence schedules e.g. Module B commences c.14.53 hrs on Day 1 and concludes c.1646 hrs on Day 2.
- 10.4 The appendix also includes written copies of oral presentations made by observers in most cases. Some of the written material was circulated, by agreement, in advance of the presentations, in order to facilitate participants' scrutiny of certain presentations e.g. the Meath County Council 4-no. briefs of evidence were circulated at an early stage in the proceedings.
- 10.5 Early in the oral hearing some of the observers requested that the proceedings be adjourned for the time being on grounds of prematurity. I listened to their concerns; and any observations put forward on the matter by representatives for the applicants and for the Planning Authority. Having heard the several

- brief submissions made I declined to adjourn the proceedings. However I undertook to communicate the issues of possible prematurity to the Board as part of my report on the case.
- **10.6** The prematurity issues raised may be summarised as set down below.
- 10.6.1 Mr. Ollan Herr (Louth People Against Incineration) drew attention to the fact that under the provisions of the Stockholm Convention, Ireland has a legal obligation to prepare a National Implementation Plan for dealing with persistent organic pollutants (POP's) in the environment, by November, 2012. He submitted that the oral hearing should be adjourned pending the publication of the agreed Implementation Plan. His understanding is that the relevant plan is currently in draft form. He would be happy to see the oral hearing reconvene at a date after the publication of the Implementation Plan, when the parties and An Bord Pleanála would have had time to study implications arising from that Plan.
- **10.6.2** Mr. Tom Burke (Friends of the Aquifer) submitted that the oral hearing would be premature pending a response by Meath County Council to a Freedom of Information request put by him some years ago (substance unstated).
- 10.6.3 Councillor Michael O'Dowd submitted that the oral hearing would be premature because of procedural inadequacies in the processing of the planning application thus far. In particular he submitted that arising from formal pre-application planning consultations in the case, An Bord Pleanála had specifically decided that, inter alia, the proposed development would have an effect on the area of more than one Planning Authority; and that copies of the planning application should be submitted to each local authority from whose areas waste would be sought or obtained for acceptance at Carranstown. Councillor O'Dowd further submitted that although at further information stage An Bord Pleanála had raised the issue of a failure to consult with all relevant local authorities, he considered the response of the applicants to An Bord Pleanála was wholly inadequate. He further elaborated that by reference to Appendix 3 contained in the applicants' response to An Bord Pleanála at further information stage, it should clearly be possible to identify local authority areas from where waste would be received.
- **10.6.4** Mr. Pat O'Brien (Louth/Meath Health Protection Group) submitted that the proposed development should be deemed premature pending the imminent publication of a revised National Hazardous Waste Management Plan, to replace the current plan (2008-2012). He pointed out that the revised plan must be published by 1 January, 2013.
- 10.7 Early in the oral hearing there was also some discussion around the status and role of the North East Waste Management Region. In the absence of formal representation by the Region per se at the oral hearing, Councillor Ken O'Heiligh considered this should be a further reason for postponing the oral hearing. Meath County Council stated at the opening of the oral hearing that they held no brief to speak on behalf of the North East Waste Management Region. They acknowledged that as lead local authority for the existing North

East Waste Management Region, they had communicated receipt of the current planning application to each of the other local authorities in the region and it had been decided at a meeting of the representatives of the relevant counties that each local authority would make its own submission to An Bord Pleanála if it so desired. Councillor O'Dowd stated that he had information from contacts in the south-east region that the constituent local authorities in that waste management area had had no similar meeting and/or formal invitation to submit comments relating to the planning application.

- 10.8 Following the preliminary discussion and adjudication on the prematurity issues raised, the applicants gave a brief presentation on the up-to-date context for the current planning application. Certain points made in addition to points previously and/or subsequently made in written documentation, included the following:
 - Carranstown would be well placed to serve the GDA for hazardous waste purposes in the event of larger regions being directed by government as envisaged in the recently published Resource Opportunity document.
 - Applicants acknowledge some recent noise and odour problems, which
 are being tackled (note: a photomontage of a proposed odour control
 device which may be proposed was submitted for information at the close
 of the oral hearing).
- **10.8.1** Other points made by applicants are set out in their written submissions circulated at the oral hearing.
- 10.9 As noted on page 2 of my report herein, there was one additional formal observer permitted to make a presentation at the oral hearing, namely the Hollywood residents (Day 1 Seq.25).
- **10.10** There were also oral presentations made under the umbrella of the Louth/Meath Health Protection Group, specifically,
 - Ann Dillon McDonagh (Day 2 Seq.23), and
 - Mr. Michael Halligan speaking for the Kavanagh Family (Day 2, Seq.38).
- **10.11** The additional presentations made may be heard in the entirety, but in summary the points made were generally a reiteration or elaboration of health, air pollution and environmental nuisance issues raised in written observer submissions to An Bord Pleanála. In addition it may be noted:
 - The Kavanagh Family had concerns regarding noise and disturbance and they submitted that the combination of extended hours of operation and receipt of increased waste and hazardous waste would exacerbate existing nuisances. They also expressed concern on the impact on property values including agricultural land property values and adverse effects on tourism.

- Commandant Boyle for Hollywood Residents explained that his submission (written copy of evidence in appendix) was aimed at An Bord Pleanála and the EPA in the context of:
 - the currently proposed development;
 - license application/reviews pending for Carranstown and the hazardous waste site plan by Murphy Environmental Engineering in Fingal County; and
 - the extant permission for the said hazardous landfill, not yet developed.

Commandant Boyle submitted that bottom ash should not be regarded as an inert substance for landfill purposes.

Hollywood residents also expressed concern at the prospect of Carranstown generated traffic impacting on the local environment in the vicinity of the Murphy Environmental site in Fingal, North County Dublin.

11.0 ASSESSMENT

11.1 Principle of Development

- 11.1.1 The proposed development in this case includes relatively minor physical modifications to an established recently operational, large scale industrial installation. However it also includes a request for consent to make two quite fundamental changes to the terms and conditions of the existing planning permission(s) under which the existing installation operates.
- **11.1.2** The application site is not zoned land per se, therefore the permitted established use of the lands should be duly weighted as a consideration in assessing the principle of the now proposed development.
- 11.1.3 Having regard to the now established use of the overall application site as a waste to energy facility utilising residual municipal and commercial waste, I consider there should be some presumption in favour of permitting those elements of the proposed development which are consistent with the reasonable expansion and modification of the existing operation. I consider most of what is now proposed, comprising up to 10% tpa increase in the throughput of waste, and the long term establishment of offices and spare parts facilities relating to the industrial business operations of Indaver Ireland Ltd, to be consistent with such reasonable expansion.
- **11.1.4** However, the proposal to allow acceptance of hazardous waste, at a waste management facility which was purpose designed and constructed for the purposes of residual, municipal waste incineration in a waste to energy facility, could not be deemed to fall into the category of being so obviously acceptable in principle.

11.2 Review of Issues

Having reviewed the current planning application, the submitted EIS, certain amendments to the application and the EIS, further information received from applicants, and all submissions made in writing and heard of the oral hearing convened in the case, I consider the case is best assessed by reference to the issues raised under the headings set down below.

- Planning Policy and Waste Management Planning
- Emissions to Air and Water
- Natural Heritage and Landscape Considerations
- Impact on Cultural Heritage
- Road Access and Traffic
- Other Issues
- Environmental Impact Assessment

11.3 Planning Policy and Waste Management Policy

- 11.3.1 Section 9 of my report sets out a summary of the main policy documents deemed relevant in relation to the current proposals. At the outset I must highlight to the Board the on-going evolution of official waste management policy and its overlap with spatial and land use considerations as embodied in statutory development plans and regional plans. Waste management in Ireland is currently driven strongly by rapidly evolving commercial and legal considerations, both arising from the implementation of EU Directives through Irish law. Meanwhile at the local and regional level there are existing statutory plans in place, intended to have force for particular periods of time. The current plans are the Meath County Development Plan 2007-2013 and Regional Planning Guidelines for the Greater Dublin Area 2010-2022. In County Meath the position is somewhat further complicated by the fact that the county forms part of the north-east region for waste management planning purposes. The other counties in this waste region are counties Louth, Monaghan and Cavan.
- 11.3.2 Here I draw the attention of the Board to the historic planning context of the existing Carranstown WTE facility. In 2003 An Bord Pleanála granted permission (PL17.126307) for a WTE facility at Carranstown, with a waste throughput capacity of 170,000 tpa. The reasons and considerations underpinning the permission in that case included reference to the location of the then proposed development within the North-East Waste Management Region, the waste management plan for which identified the need for certain thermal waste treatment capacity. As noted in section 1.2.1 of my report, above, the condition of that permission confined the operation to the acceptance of waste *exclusively* from the counties of the North-East Waste Management Region only. The relevant planning permission was not taken up.

- 11.3.3 In 2007 An Bord Pleanála granted permission for a similar development based on a throughput of 200,000 tpa of waste generated *primarily* from the counties of the North-East Waste Management Region (planning condition no. 3 of that permission refers). Eventually in 2009 a revised permission was granted by Meath County Council, a condition of which was to honour the conditions attached to the 2007 Board permission.
- 11.3.4 The reasons and considerations underpinning these permissions, and specific conditions attached to each case, clearly emphasise the regional framework within which the permissions were granted. I draw attention also to the fact that the 2007 permission granted by the Board, and the 2009 permission granted by Meath County Council, post-dated the Ministerial Circular WIR 04/05. This circular provided guidance to the effect that, while confirming that one of the fundamental components of waste management policy is the application of the proximity principle, relevant authorities should recognise that the application of this principle should not require an unduly rigid view of waste management planning boundaries such as to inhibit the achievement of national policy objectives.
- 11.3.5 The EIS states that waste management policy has not fundamentally changed since the granting of permissions for the Carranstown WTE in 2007 and 2009. However since receipt by An Bord Pleanála of the current planning application the Department of Environment, Community and Local Government (DECLG) has issued two relevant policy documents, namely a Resource Opportunity Waste Management Policy in Ireland (July 2012) and Putting People First Action Programme for Effective Local Government October 2012). As stated both of these policy documents have been published during the currency of the subject planning application. The Resource Opportunity publication signals the rationalisation of waste management regions, suggesting a lesser number of regions for waste management planning purposes than the ten regions currently in place. Responsibility for the detail of the rationalisation pledged appears to be delegated to local authorities who would work matters out on a co-operative basis.
- 11.3.6 At the oral hearing, the North-East Waste Management Region was not formally represented and representatives from Meath County Council (lead authority for the North-East Waste Management Region) stated that they did not have the authority to speak on behalf of the relevant waste management region. However, in the course of the hearing the representatives for Meath County Council expressed their confidence that any revised regional framework for waste management planning would be clarified in the context of the then upcoming announcements on local government reform.
- 11.3.7 The anticipated reform is now outlined in the Putting People First publication to which I refer. In this document it is envisaged that waste management would be planned for the future in the context of not more than three regions. Putting People First suggests but does not prescribe that such regions would coincide geographically with three regions identified in the publication for

other regional planning purposes. These regions would comprise an Eastern Midland Region, (Leinster less the counties of Carlow, Kilkenny and Wexford); a Southern Region (Munster plus Carlow/Kilkenny/Wexford); and Connacht Ulster (see Appendix Map of Regions: extract from Putting People First).

National Hazardous Waste Management Plan

- 11.3.8 The current NHWMP covers the period 2008-2012. The plan states clearly that Ireland must strive for a greater self-sufficiency in managing hazardous waste within the State. It notes that there is a significant amount of on-site industry generated hazardous waste disposed within the country, notably solvents incinerated on-site at such as many pharmaceutical sites in Munster. However the main stream of other miscellaneous hazardous wastes are exported out of Ireland, following segregated collection arrangements at other industrial, commercial and civic amenity sites.
- 11.3.9 The NHWMP is not prescriptive on the balance to be struck between treatment/disposal of hazardous waste at home and abroad, but it notes the thrust of European policy to have each country, as far as is reasonably practicable, take responsibility with dealing with its own wastes rather than export the burden to other countries. The NHWMP identifies a need for 2 no. hazardous waste landfill cells but it is not otherwise prescriptive on the profile or location of hazardous waste management infrastructure. It states clearly the need for the development of appropriate infrastructure based on a range and network of facilities consistent with the application of the Waste Hierarchy principles of waste management.

Regional Planning Guidelines (RPGs)

- 11.3.10 As indicated in Section 9.8 and elsewhere in my report above, County Meath currently forms part of the GDA for regional planning purposes. Prevailing RPGs for the GDA (2010-2022) devotes at least two pages of text to consideration of waste management planning. In the context of the current planning application, I consider it appropriate to highlight certain points made in the RPGs.
 - section 6.7 notes the considerable investment in all types of waste management infrastructure has been achieved in the (GDA) region since 2004;
 - waste management policy needs continuous review to secure competitiveness and efficiencies across the GDA;
 - co-ordination needed in waste management plans to maximise potential economies of scale;
 - integrated waste management should be considered from the perspective of the GDA as one singular functioning economic and spatial unit;
 - there is need for expansion of treatment capacities and options to reduce the quantity of organic materials entering the waste stream.

- 11.3.11 At the oral hearing there was specific reference to the relevance of the GDA by both applicants and the Planning Authority. Firstly in their substantive submission the applicants referred to the evolving regional framework for waste management planning in Ireland. They suggested that in a scenario of larger, rationalised waste management regions, Carranstown should be ideally placed to service hazardous waste management in the GDA. Later in the oral hearing Meath County Council personnel indicated that the current statutory review of the County Development Plan (now at an advanced stage) takes full account of the provisions of the 2010 RPGs for the GDA. The current County Plan was adopted some years before the much more recent publication of the RPGs in 2010.
- 11.3.12 Notwithstanding the publication of Putting People First, subsequent to the recent oral hearing for the current planning application, it is clear that both applicants and the Planning Authority acknowledge the status at this time of the RPGs and the GDA for relevant planning purposes. At the oral hearing Indaver also confirmed their obligation to receive acceptable residual municipal waste generated within the four counties of the North-East Waste Management Region; their inability to compel such waste to be delivered to their waste management facility; and the advantages of allowing flexible operation in the application of the proximity principle viz-a-viz waste management area boundaries.

County Development Plan

- 11.3.13 At date of preparing my report herein, the prevailing statutory development plan for the area is the Meath County Development Plan 2007-2013. Sections which may be deemed relevant are highlighted on extracts from the Plan attached herewith to my report. The highlighted sections include those referred in the Meath County Manager's Report. The Manager's Report refers also to the advanced stage of the current Development Plan review process. The Report draws attention to one aspect of the current Draft Plan deemed by the Planning Authority to be relevant to consideration of the current planning application, specifically the existence of European sites and NHA's in the vicinity of the application site. Consideration of any environmental implications for these sites is addressed in a later section of my report, below.
- 11.3.14 The most relevant provision of the County Plan is, arguably, the statutory automatic inclusion in the Plan of the prevailing waste management plan for the area including County Meath. At the oral hearing it was explained that whenever a new Development Plan is adopted, its adoption will include the inclusion of then prevailing waste management plan, which will either be the current North-East Waste Management Plan or a replacement plan. Once any replacement waste plan is made, it would supersede the previous waste plan and form part of the then prevailing statutory development plan.
- 11.3.15 At the oral hearing, Planning Authority personnel drew attention also to specific waste management objectives now proposed in amendments to the Draft Development Plan. At the time of the oral hearing it was stated that the

elected members had decided to include the amendments in the further public display of plan amendments, so that it was likely that in effect these amendments would form part of any revised development plan.

11.3.16 The contents of a draft plan should not be a material consideration for An Bord Pleanála in determining a planning application. However, I consider in the context of the rapid evolution of waste management policy to which I have referred, and the imminent adoption of a new statutory development plan and making of a replacement waste management plan, that the Board should have regard to the specific contents of the Draft Plan as well as consideration of the Waste Plan Review to which I have referred. The contents of the Draft Development Plan or the Waste Plan Review may not be determining considerations in the case, however they should be acknowledged as manifestations of waste management policy as currently evolved with any implications for County Meath.

Increase in Waste Throughput

- 11.3.17 At the oral hearing the applicants were queried on whether the simultaneous application for increased waste throughput and for acceptance of hazardous wastes were inextricably linked. The thrust of their response was to the effect that the requests are parallel applications, but there would be considerable benefits in operating the plant at Carranstown, if consent for both waste tonnage increase and certain hazardous waste acceptance could be achieved. Accordingly I consider it appropriate to consider these two elements of the planning application separately.
- 11.3.18 The existing tpa throughput limit applicable to the current operation arises in the first instance from consideration of estimated residual municipal waste arisings generated in the counties Louth, Cavan, Monaghan and Meath in the early 2000's. The Waste Management Plan covering the area then sought a balanced integrated waste management strategy within which a certain tonnage of relevant waste would be the subject of thermal treatment. Planning permissions granted in 2007 and 2009 accepted that the 200,000 tpa for incineration in a recovery plant would be appropriate.
- 11.3.19 The stated need to now increase the throughput is because the applicant company has discovered lower than anticipated CV in municipal waste being received at the plant. The flexibility to accept up to and including an additional 10% throughput would compensate for the CV shortfall and ensure that the WTE electrical output would be achieved as originally planned.
- 11.3.20 The fact that Indaver assumptions on the typical CV of Irish waste have been so compromised, by the reality of the waste received in the first months of operation, seems to me surprising for a project that was in gestation since at least the early 2000s. The EIS attributes the lower than anticipated average CV to a higher than anticipated biodegradable content within the waste. There has been no fundamental argument around this analysis in the context of the current planning application.

- 11.3.21 The consequences of increased tpa throughput, in terms of environmental impact, are set out in later sections of my report. In summary the direct environmental effects are not significant overall. Concern around the acknowledged underlying reason for the low CV high biodegradable content has been expressed in the County Manager's Report. Here it is suggested that if the waste stream is identified as having a high biodegradable content, this raises issues around the ability to meet future biodegradable municipal waste targets as required under the Landfill Directive. At the oral hearing the point made was elaborated as a question to the applicants on exactly what calorific, value and tonnage of waste is required by Indaver to meet the target of 70 megawatts of electricity generation. The thrust of the response for applicants was to the effect that if they can accept up to 220,000 tpa, this would give them the flexibility required to mix the various wastes received so as to achieve the maximum possible (70 megawatt) electrical output.
- 11.3.22 The oral hearing submission for the Planning Authority expressed some confidence that the effective country-wide implementation of the "3-bin system" would effectively raise the CV in the residual (black bin) waste, the implication being that allowing an increase in throughput at Carranstown may be unnecessary in the long term. I acknowledge this point but must observe that the EPA national waste reports indicate that the pace of "brown bin" (biodegradable waste) roll out is behind schedule in many areas. It appears also to be slow in its implementation in the North East Waste Management Region.
- 11.3.23 Arising from these considerations I conclude that firstly there is at least a sound basis for allowing a temporary increase in the overall waste throughput at Carranstown, to allow Indaver flexibility in the operation of the plant so as to achieve the WTE maximum possible electrical output. Secondly there would be a good reason for placing a temporary time limit on any consent to increase throughput, so as to allow future review of the impact of the Carranstown facility on the brown bin rollout in the region which it serves. A possible consequence of increasing the amount of waste accepted at Carranstown could be to disincentivize certain 'brown-bin' rollout, resulting in some unnecessary or inappropriate incineration of biodegradable waste.
- 11.3.24 The EIS acknowledges the possibility of the low CV experienced thus far as a short term phenomenon. The evolving context is noted in particular in Section 2.2.1 of the EIS (eighth paragraph refers). I consider it would be appropriate that An Bord Pleanála extend the capacity of the plant for a period of up to three years.

Hazardous Waste Acceptance

11.3.25 Regarding the proposal to accept certain hazardous wastes, there has been no fundamental compelling reason put forward to allow this departure from the original concept developed for Carranstown through the 2000's. The applicants have identified numerous waste codes from the European Waste Catalogue (EWC) within which there are waste types deemed suitable for incineration at Carranstown under the aegis of its existing design and

- technology. Up to 15,000 tpa of this waste could be put through the Carranstown plant, arising from certain hazardous wastes already handled (and exported) by Indaver, and some other wastes which could be available to Indaver in the future. It is submitted that at the very least this would remove 15,000 tpa from the hazardous waste sent annually for export. It is further submitted that this would complement and not in any way compromise the development of the hazardous waste WTE facility planned by Indaver for County Cork.
- 11.3.26 The applicants have emphasised that they would only accept "low end" hazardous "suitable" waste. At the oral hearing it was explained that permission is required to accept certain specified EWC codes, within which Indaver as a waste management operator would identify the wastes suitable for incineration at Carranstown. Additional on-site facilities would not be needed because Indaver has personnel located at or with access to the various facilities generating waste to Carranstown.
- 11.3.27 Examples of suitable wastes have been described by the applicants at planning application stage, in further information and at the oral hearing. The applicants acknowledged that there would be many unsuitable wastes covered by the relevant EWC codes now sought for acceptance. They emphasise that it would be their intention to receive only suitable wastes. They also drew attention to the fact that the "hazardous" designation given to the wastes being considered by them for incineration only arises from the segregated collection arrangements: many do not pose intrinsic hazards in the context here presented.
- 11.3.28 While it must be acknowledged that definitions of hazardous waste rely on more than simple categorisation under an EWC code, it appears to me that a system of picking and choosing particular wastes within individual codes flies in the face of official trends in sustainable waste management. In particular an essential feature underpinning the application of the waste hierarchy is that individual/household/businesses are encouraged to apply the principles of reuse and recycling through on-going routine segregation of all wastes at source. Their endeavours at the household etc. level are given some financial incentive through differential charging in the bin collection system for those households benefiting from organised collections. However most of the individual/household/SME effort is reliant on voluntary commitment, and discipline arising from education in various spheres. The prospect of this effort and discipline being maintained must be questionable if any public perception develops that recycling efforts would be rewarded by official sanction given to crude incineration of previously segregated hazardous wastes. I use the term crude in the sense that the plant at Carranstown, while recovering energy and ferrous metals, does not recover other potential valuable materials. Concern on this issue generally was signalled in the Meath County Manager's Report in relation to the current planning application (see third and fourth bullet points in sections 7.1.5 of my report, above). The concern was expressed also in the formal submission by Louth County Council Environment Director of Services (see 6.12 of my report above). The concern was formally raised by An Bord Pleanála in a request to the applicants

- for observations/further information in response to the current planning application, arising from which the applicants commented on the matter in their response of 30 August 2012.
- 11.3.29 At the oral hearing the Planning Authority further commented on the response of the applicants in regard to this matter, to the effect that the hazardous waste proposals in the planning application would be likely to disincentivise the use of civic amenity sites through the diversion of household hazardous wastes to the "black bin" residual waste bins within County Meath. It may be noted also that, at further information stage, the applicants submitted that, if the concern expressed by Meath County Council, and echoed by Louth County Council, was deemed to be possibly a more widespread concern, it would be within the power of An Bord Pleanála to enquire into the views of all local authorities in this matter.
- 11.3.30 I refer also to identifiable trends at official level, which discourage the mixing of hazardous and non-hazardous wastes. In particular the separation of hazardous and non-hazardous wastes before landfill has been a convention applied over a long period of time. Most recently I note in the Resource Opportunity publication that it is the intention to use the waste collection permit system to prevent mixing of hazardous and non-hazardous waste. It may be noted also that the applicants at planning application stage highlighted the role of the waste collection permit system as the crucial mechanism for enforcement of on-going waste segregation.
- 11.3.31 The direct impacts of accepting up to 15,000 tpa of hazardous waste, followed by incineration and the disposal of bottom ash, are considered in a later section of my report, below. They are not considered to be significant impacts. However I consider the anticipated undermining of waste segregation efforts by household and SMEs would have a medium or long term pervasive adverse environmental impact in undermining the application of the waste hierarchy; and would be at variance with official policy aimed at the segregation of hazardous and non-hazardous wastes. These problems would not be mitigated by the short and medium term benefits of the proposed Carranstown contribution to national self-sufficiency in the overall management of Irish generated hazardous waste within Ireland. The proposals to accept and incinerate hazardous waste would be contrary to the principles of sustainable waste management and would contravene the prevailing Waste Management Plan and would be contrary to the proper planning and sustainable development of the area.

Physical Development Proposed

11.3.32 From the stand point of planning policy and waste management policy, I do not consider the physical developments proposed on site raise any significant issues of principle. The proposed spare parts maintenance facility would serve an overall Indaver company requirement in Ireland, but its main purpose appears to be ancillary to the WTE facilities on site. Similarly the proposed offices would serve a certain overall company need, but its main purpose is to provide a regular base for contract staff during periods of maintenance and

related activities. Arguably the bulk of this proposed spare parts/office space should have been conceived in the context of the 2007 and 2009 plans. However the reality is that the Carranstown WTE complex is a unique industrial site with the inevitable industrial business requirements of flexibility and ability to adapt to changing needs. The temporary spare parts and offices on site are understood to have being erected in the context of the construction phase of the original development and have remained to facilitate evolving requirements including maintenance in the early stages of operation. The existing structures are unobtrusive in any views from the surrounding area; so too would their permanent manifestation be visually unobtrusive.

- **11.3.33** Electrical switch gear permanent proposals are equally acceptable.
- 11.3.34 Additional storage tanks are ostensibly related to the needs of accepting a greater range of waste including hazardous waste. Even if the proposed hazardous waste acceptance is denied, I consider this possible future development could be permitted in outline subject to conditions as proposed in the Meath County Manager's Report. It is understood greater storage capacity could also give the company greater flexibility in the management of its raw materials including fuels.
- 11.3.35 Proposals for additional on-site waste water treatment arises as a secondary requirement of the needs associated with the proposed spare part centre and offices. From a policy perspective the proposals should be in compliance with prevailing EPA requirements. This has not been achieved in the documentation presented in the context of the planning application. While the principle of providing waste water disposal arrangements consistent with the demands of on-site personnel and the relevant needs of the plant operation is in principle desirable, the matter of satisfactory disposal arrangements is further addressed in a later section of my assessment, below.
- **11.3.36** Finally the additional hard surface areas proposed would be acceptable, subject to conditions recommended in the Meath County Manager's Report, designed to safeguard the amenities of the area.
- **11.3.37** *Conclusions in relation to Official Policy Considerations*
 - Acceptance of an additional 20,000+pa waste throughput acceptable on a temporary basis.
 - Acceptance of hazardous wastes as proposed would undermine principles
 of waste management policy including satisfactory acknowledgement and
 promotion of the waste hierarchy.
 - Physical developments proposed on site do not raise significant issues relating to the principle of the proposed development vis-à-vis prevailing waste management and planning policy.

11.4 Emissions to the Environment, and Public Health

11.4.1 Under prevailing legislation An Bord Pleanála, in considering an application for development consent, is required to have regard to all matters relating to

proper planning and sustainable development, and the effects on the environment of an area. In respect of a development which comprises or is for the purposes of an EPA licensable activity, the Board if granting permission is precluded from attaching planning conditions which are for the purposes of controlling emissions from the operation of the activity including the prevention, limitation, elimination, abatement or reduction of these emissions. However the Board is not precluded from considering the principle of the development and may, in considering an application, decide to refuse permission for a reason or reasons relating to protection of the environment having regard to the proper planning and sustainable development of the area in which the development is to be situated.

11.4.2 Against this background An Bord Pleanála in this case employed the services of Professor Brian Broderick, a civil engineer working in the field of environmental management and Dr. Dan Murphy, a medical doctor specialising in the field of occupational health. Their reports on air quality and related health implications are contained at Appendix A to my report. The content of their reports are relevant to issues of air pollution and related health implications raised in particular by observers in the case. Professor Broderick's report also raises certain issues regarding the adequacy of EIS information relating to baseline data and on-site infrastructure with the handling of hazardous waste. These aspects are included in my assessment considerations now, below.

Air Pollution Issues

- 11.4.3 The Broderick report concludes, based on the assumptions presented in the EIS, that the proposals would not be a significant source of pollution, having regard in particular to the modest scale of increase in waste throughput (10% tpa) and the technical capabilities of the plant to deal adequately with the increased range of wastes proposed.
- 11.4.4 I note that Professor Broderick raises some concerns regarding the reliability of baseline information. However he concludes that any weakness in the baseline information is more than adequately offset by the large gap between predicted emission levels and relevant EPA licence limits relating to emissions. I accept this conclusion in the Broderick report. However I wish to draw the attention of the Board to Professor Broderick's briefly stated similar concerns in his report to An Bord Pleanála in 2007. It is a matter of some surprise to me therefore, having regard to the passage of time since 2007, that the applicants' brief for the EIS authors did not include a requirement for more comprehensive baseline air quality information. However, for the reasons stated by Professor Broderick, I do not consider it necessary to seek further information at this time in the context of the current planning application as presented. I note also the comments contained in the EPA letter to An Bord Pleanála.
- **11.4.5** As noted above the Broderick report also raises some issues relating to the onsite handling of the new range of wastes proposed to be accepted at Carranstown. Here he identifies a shortfall in the information provided in the

EIS and other documentation, all considered having regard to information also presented at the oral hearing. I consider the Broderick report is in accord with the observer submission of VES in respect of their area of concern. At the oral hearing there were many direct questions on how potentially difficult waste, within the relevant EWC codes, might be handled/segregated/stored. The thrust of the applicants' response essentially confirmed their further information response to this query, to the effect that they would not be receiving difficult waste on site.

11.4.6 Regarding the separate handling of potentially infectious clinical wastes i.e. direct to the moving grate because such waste could not be mixed with other wastes in the bunker, any physical structures or apparatus required to achieve this separation (including any necessary storage) have not been detailed in the application. I note that in the EPA licence application it is stated that if the EPA consents to the acceptance of waste covered by the relevant EWC code for this waste stream, details of physical proposals would then be put forward at that stage.

Noise in Operational Phase

- 11.4.7 Chapter 8 of the EIS addresses issues of noise generation from the plant in operation. The EIS states that the noise sources associated with the currently proposed development are the same as those originally identified in the planning application of 2009, under the aegis of which the plant was constructed and now operates. The major noise sources arise from operation of condensers, turbine furnaces, boilers and the discharge stack. Review of the commissioning noise monitoring results presented in the EIS is stated to confirm that the site is operating within the relevant noise limits outlined in the EPA licence for the site. The EIS goes on to conclude that the 10% increase in volume of waste to be handled by the facility is not envisaged as resulting in a significant change and therefore the noise impacts associated with building services plant is negligible.
- 11.4.8 The EIS assessment of noise related to deliveries to the site equally concludes that the site is currently operating within the relevant limits outlined in the current EPA licence. The EIS then goes on to conclude that the proposed increase in the volume of waste is not envisaged to result in a significant change in the situation arising from deliveries to the site. Finally the EIS states that the increase in traffic noise levels along the roads assessed would be imperceptible and it is therefore deemed not significant. No additional noise or vibration mitigation measures are considered necessary in relation to the operational phase of the proposed development.
- 11.4.9 It is not clear to me that the noise section of the EIS has taken account of the new hours of waste acceptance and residues dispatch proposed in the planning application, and subsequently amended. At the date of the planning application, the revised hours of acceptance proposed were stated to be 0600 hours 2000 hours Monday-Friday and 0600 hours 1400 hours Saturday, with unrestricted hours for the dispatch of residues from the site. In June 2012 An Bord Pleanála was informed that arising from discussions with

Carranstown Residents Association, the applicants had decided to amend their application to extend the waste acceptance hours (relative to the existing consents) for a one hour morning period only (Monday to Friday). This alteration to the proposal was publicly notified through the dedicated carranstownamendments.ie website. The net effect of the up-to-date proposal is to extend activities including vehicular movements by one morning hour only Monday to Friday, with no change proposed to existing time limits for Saturdays. This may result in a slight increase in noise in one day-time hour (0700h-0800h) Mondays – Fridays. Although the Carranstown Residents per se did not make any observations on the current planning application, neither were they specifically represented at the oral hearing, this significant modification to the original proposals appears to me to be a reasonable and pragmatic approach to managing the net intensification of activities proposed overall.

- 11.4.10 Operational noise is a matter subject to control under any waste licence for the site. This would be a matter for the EPA. However, from the viewpoint of the proper planning and sustainable development of the area and effects on the environment, I do not consider there to be a basis in principle for opposing a one hour earlier start to operations at Carranstown. I state this without prejudice to the objective assessment of operational noise considerations by the EPA.
- 11.4.11 Under the heading of plant operational noise, the applicants acknowledged at the oral hearing that there has been an occasional noise problem associated with the existing plant, arising from a particular fan. It was indicated that matters are in hand to resolve this issue. The issue did not present generally as a seriously controversial one in written submissions, or at the oral hearing.
- 11.4.12 The Broderick report states the importance of abating any noise nuisance identified. I agree with this view. The regulation of operational noise, in the context presented, would be a matter for the EPA. In the meantime any exacerbation of the noise problem identified would arise only insofar as there would be one additional hour of activity in the morning time Mondays to Fridays.
- 11.4.13 Finally in relation to operational noise, I draw attention to the HSE concluding recommendation that, as noise associated with traffic generation from the proposed development would impact adversely on night time noise levels on the densely populated five main haul routes, the hours of operation and dispatch restrictions should remain unchanged. The HSE submission was received by An Bord Pleanála prior to the amended hours of acceptance notified to An Bord Pleanála and the EPA in June 2012. There was no acknowledgement, of the amended hours proposed, in subsequent HSE correspondence. The HSE did not attend, and was not represented at, the oral hearing. However, having regard to the scale of the proposed development and the fact that the haul routes referred are main roads (motorway/national/regional), I do not consider the HSE recommendation should be upheld. At the oral hearing the Planning Authority personnel indicated that the HSE recommendation would not alter the views expressed in

the County Manager's Report including their assessment of environmental matters.

Construction Noise

11.4.14 Section 8.5.4 of the EIS notes that the construction programme has been established in outline form only, so that it is difficult to calculate the actual magnitude of noise emissions to the local environment. However the EIS does outline mitigation measures for the construction phase. I note that the estimated time period for the construction elements proposed in the application would be a total of two months. On this basis I consider that the construction impacts should be mitigated by the parallel application of a construction management plan and adoption of the mitigation measures set out in section 8.6 and other sections of the EIS. These matters may be covered by way of a planning condition or conditions.

Water Pollution Issues

- **11.4.15** Matters impinging on water pollution considerations are mainly addressed in chapters 9, 10 and 11 of the submitted EIS. I have noted the contents of these sections including proposed mitigation measures and statements of residual impacts.
- 11.4.16 A written observer submission for "Friends of the Aquifer" was broadly repeated in a presentation at the oral hearing. The applicants responded to the issues raised, mainly by reference to the contents of the EIS. Concerns raised on the implications of any significant fire fighting element, for co-lateral damage to the downstream local environment, were robustly answered. Reference was made also to the functions of the EPA Licence and the statutory Fire Certificate applying to the site of the proposed development.
- 11.4.17 The main outstanding issue of concern viz-a-viz water pollution issues is the approach taken to planning the additional wastewater treatment system on site. Section 10.7.2 of the EIS states that this element of the development would be developed in accordance with certain EPA requirements. The Meath County Manager's Report queried the absence of detailed site characterisation information supporting the current planning application. This issue was raised by An Bord Pleanála in the request to the applicants for observations on submissions and certain further information. The text of the response was somewhat unclear, however the applicants concluded their response to the effect that the proposed treatment plant would be designed and constructed in accordance with the EPA document: Code of Practice: Wastewater Treatment and Disposal Systems serving Single Houses (2009), and they submitted that a condition could be imposed to that effect in the event of permission being granted.
- 11.4.18 At the oral hearing the Planning Authority personnel recommended, in commentary on the applicants' further information submission, that the applicants should be conditioned to design and construct the proposed wastewater treatment system in accordance with the EPA Code of Practice

- 2009. In questions, the Planning Authority personnel acknowledged that normal practice in applying the EPA criteria is to seek and obtain the full suite of site characterisation information prior to considering a grant of permission.
- 11.4.19 Having regard to the foregoing, I consider any grant of permission for the physical development now proposed at Carranstown should be conditional upon demonstration of wastewater treatment disposal arrangements to the satisfaction of the Planning Authority, prior to the commencement of physical development. The proposed offices and spare parts development and ancillary developments including car parking should not be permitted unless and until there has been agreement on wastewater treatment proposals to the satisfaction of the Planning Authority.
- 11.4.20 It may be further noted that the proposed offices/spare parts development/ ancillary development are at this time not the critical consideration in progressing the additional wastewater treatment plant at Carranstown. At the oral hearing it was explained that the demands imposed on on-site services by such as maintenance contract personnel and others generate a requirement in any event to provide additional wastewater treatment facilities. Accordingly I consider it would be appropriate, if permission is granted to place an absolute time limit (say six months) for the submission of the necessary site characterisation information complete with plans and cross sections etc. as specified in the EPA 2009 Code of Practice and the Meath County Manager's Report. Such a time limit, by way of planning condition, would be additional and independent of the requirement to have agreement on proposals prior to other physical development being undertaken.

11.5 Natural Heritage and Landscape Consideration

- 11.5.1 These issues are mainly addressed in chapters 12 and 14 of the submitted EIS, with certain other relevant material presented in related chapters e.g. chapters 9, 10 and 11. The current proposals are not controversial viz-a-viz these subject areas, but some issues were raised initially in the Meath County Manager's Report and further addressed in a further information request and response, and at the oral hearing. The main issue of concern raised in the Meath County Manager's Report related to the issue of screening for "Appropriate Assessment" (AA).
- 11.5.2 References to the EIS and the County Development Plan reveal that there are several natural heritage areas and/or Natura 2000 sites within 5 kilometres and the wider area of the proposed development site. Section 12.3 of the EIS states that EIS consultants undertook a screening assessment of the proposed development, following consultation with the National Parks and Wildlife Service. The screening assessment concluded that AA would not be required. An Bord Pleanála sought documentary evidence of the screening undertaken, and this was provided by the applicants in August 2012. A total of ten sites (including three with SAC and/or SPA designation) were included for the purposes of the relevant screening exercise.

- 11.5.3 At the oral hearing the Planning Authority queried some details of the screening work undertaken but concluded overall that the findings of the screening statement were satisfactory. In response to questions the Heritage Officer for the Planning Authority confirmed that the queries raised over certain details noted as inaccuracies in Section 3.5 of the applicants' consultancy report, did not fundamentally detract from the AA screening statement that the proposed development, either alone or in combination with other plans or projects, would have no adverse effects on the integrity of any Natura 2000 site having regard to their relevant conservation objectives.
- **11.5.4** I accept the conclusions reached and agree with the Planning Authority assessment in the matter of AA.
- 11.5.5 Regarding landscape considerations, the EIS concludes that there would be no potential visual impact arising from the proposed development, therefore no mitigation measures are proposed. Photographs included following section 14.6 of the EIS are stated to show that some small areas of planting are not yet complete. The EIS states that it is expected when planting matures, it will be similar to that represented in photomontages (also following section 14.6). I accept generally the conclusions in respect of visual impact.
- 11.5.6 Photographs attached herewith to my report illustrate the context of the existing plant in the local landscape, which is dominated by the structures of the Platin cement works. For completeness I walked to the high ground at the Dowth National Monument on the north side of the Boyne Valley, where the cement works is visible as a distant view (several kilometres), but the WTE plant is not clearly visible because it is in effect screened out of view by the cement works.
- 11.5.7 The other high monuments in the Boyne Valley (Newgrange and Knowth) are further distant from the current application site and inter visibility is prevented by intervening high ground which is generally north-west of Carranstown and south-east of Knowth/Newgrange. There are no plans to raise the height or change the form or colour of the existing WTE complex (including the stack). The main structures now proposed comprise a modest scale spare parts building and a single-storey offices building. Ancillary development proposed would be unobtrusive. Future possible storage tanks proposed are sited towards the rear (western) end of the site, in close proximity to the existing much higher structures already on site.

11.6 Cultural Heritage

- **11.6.1** The main elements to be considered here are potential on-site archaeology, and the Bru na Boinne World Heritage site. Both are addressed in chapter 16 of the EIS.
- **11.6.2** Regarding on-site archaeology, it is proposed in the EIS that any soil stripping be monitored by a suitably qualified archaeologist, although little soil stripping is anticipated. This approach is supported in the Meath County Manager's

- Report. This could be confirmed by way of a planning condition or conditions in the event of any permission being granted in the case.
- 11.6.3 Regarding the Bru na Boinne World Heritage site, the application site is outside Bru na Boinne per se, with existing structures assessed as being visible only from some parts of the southern buffer zone associated with it. There is really no concern under the heading of visual impact, but the Meath County Manager's Report raised the issue of up-to-date information on the potential for possible impacts arising from air borne pollutants. This matter was raised as a query at further information stage, and the response received from applicants was discussed at the oral hearing. Consultants for the applicants concluded that, although there are no defined standards relating to the effects of ambient air pollutants on stonework or historic monuments, the emissions of relevant pollutants would reach at most up to 0.5% of the National Emissions Ceilings in 2010, which is considered to be insignificant. The Conservation Officer for the Planning Authority considered the findings acceptable, and I agree.

11.7 Traffic Impact Assessment

- **11.7.1** Chapter 13 of the EIS comprises the Traffic Impact Assessment for the project. The conclusions of this assessment were to the effect that:
 - the existing priority controlled access point on the R152 will continue to operate well within capacity under expected conditions;
 - the M1/R152 and the R152/R150 junctions will continue to operate well within capacity under the expected traffic conditions;
 - traffic flow at the R150/R152 junction (staggered cross roads) will reach capacity in the year 2013: however the construction of the planned Duleek Bypass will improve traffic flows in and around the village of Duleek including the R150/R152 junction.
- 11.7.2 The EIS states that the increase in traffic flows will not adversely affect the operation of the road. There are no formal mitigation measures proposed. The text of the EIS concludes with a statement that the applicants have held discussions with Meath County Council to improve the signage on approach to the site on the R152 (southbound from the M1), to give improved advanced warning of the access junction.
- 11.7.3 The Meath County Manager's Report did not raise any fundamental issues around the subject of traffic impact. The Report noted the significant flaw in one item of data but went on to comment to the effect that this appeared to be a typographical error: it noted that correct figures were used in calculations. The Report accepted generally the conclusions of the EIS and went on to make certain points:
 - delineation of the right turn lane at the access has become eroded and requires refurbishment;

- planning for the Duleek Bypass is at "preferred route stage";
- if permission is granted there should be a financial contribution levied equivalent to 10% of that levied by way of the original permission.
- 11.7.4 Observer submissions raised some more fundamental concerns relating to traffic impact. VES submitted that the assumption of a percentage increase in traffic pro rata with the increased tpa throughput was seriously flawed by reference to the likely characteristics of hazardous waste transport vehicles: it is/was argued that there would be substantially more than a 10% increase in vehicles. Other observers drew attention to a perceived failure to honour the spirit of existing permission(s) relating to the development of the proposed Duleek Bypass and prohibition of traffic on the R150 through and immediately east of Kentstown village (condition no. 9 of PL17.219721) refers. There was also an issue raised by the NRA in respect of planning the Leinster Orbital Route (LOR).
- **11.7.5** At further information stage the applicants made observations on queries raised regarding traffic impact, including observations as set out below.
- 11.7.6 Regarding alleged underestimation of additional traffic generation, it was submitted that the impact in the worst case scenario put forward by the relevant observer is not significantly different to that assumed in the EIS and would not result in any detrimental traffic impacts at the access or the surrounding roads. The applicants' submission goes on then to present what is termed a "worst case scenario...." (assuming a greater number of smaller loads), which is calculated as generating only 1% more traffic than that predicted in the EIS. At the oral hearing there was not significant controversy around the revised assumptions generally, and I accept the final submission for the applicants under this heading.
- 11.7.7 Regarding the planned Duleek Bypass, the further information submission response was to the effect that a worst case scenario would equate to one extra vehicle per hour being generated into/out of Duleek village. It was submitted that the small increase would be offset by "... the general reduction in traffic volumes recorded passing through Duleek in recent years". At the oral hearing there was further information presented based on a very recent survey to determine the actual number of HGV's associated with the Indaver facility and passing through Duleek. This was submitted to demonstrate that less than half the number of EIS predicted Indaver traffic generated movements in Duleek actually are occurring in reality. The submission also argued that the majority of such Indaver generated HGV traffic is local bin lorries which are "... typically the smaller type HGVs". Councillor O'Dowd pressed the advisers for the applicants on issues relating to the projections showing the R150/R152 junction at capacity in 2013; and the underlying long term trend in background traffic. The applicants defended their conclusion that the EIS and further information submission present "worst case" scenarios which demonstrate that the proposed facility will not result in any significant impacts on the surrounding road network or in Duleek Village. At the oral hearing the

Planning Authority personnel confirmed their satisfaction with the medium term capacity and functioning of the R150/R152 junction. They confirmed their wish to continue planning for the Duleek Bypass with the assistance of a financial levy generated from the 10% increased throughput of waste at Carranstown, if permitted.

- 11.7.8 Regarding the matter of the LOR, the applicant submitted further information to An Bord Pleanála in August 2012, in which this issue was addressed. The submission states that the proposed development would not create additional physical constraints on route selection for the LOR, and would have a negligible traffic impact in terms of the route selection in the vicinity of the R152. The NRA did not attend the oral hearing, although it has noted the submission of the applicants in correspondence on file. There was brief discussion around the issue at the oral hearing. Based on the submissions made and discussion heard, I do not consider the proposed development would have serious implications for the planning of the LOR.
- 11.7.9 Regarding the matter of Kentstown area traffic, at the oral hearing the Planning Authority personnel indicated that there has been substantial compliance with the requirements of condition no. 9 of PL17.219721, wherein a traffic management plan was to be agreed including the prohibition of (Indaver) traffic on a section of the R150 east of Kentstown village. The Planning Authority personnel explained a difficulty in imposing a general HGV ban on the relevant section of road; and noted that signage erected by or on behalf of Indaver had been of a temporary nature, sometimes missing and requiring replacement.
- 11.7.10 Applicants stated at the hearing that they would prefer a permanent form of signage. They doubted any significant volume of Indaver vehicles on the R150 immediately east of Kentstown, but did not submit detailed information to demonstrate this. It was stated that with or without signage, waste lorry drivers were kept informed of the designated haul routes for traffic to/from the complex.
- **11.7.11** In conclusion under this heading I consider the matter of formalising permanent appropriate signage in the vicinity of Kentstown should be addressed by way of a planning condition in the event of permission being granted.
- **11.7.12** Regarding M1 traffic, Councillor O'Heiligh at the oral hearing raised concerns regarding Indaver generated traffic bypassing the tolled M1 road, with consequences for environmental impact in Drogheda and on lesser roads than the M1. A report underpinning his statement to the hearing was presented.
- 11.7.13 The M1 toll issue identified is not specific to Indaver. At the oral hearing the applicants stated that HGV drivers are under strict instructions to use the designated haul routes. Use of the M1 on the haul route north of the plant was obligatory for long distance waste carrying traffic, and returns; and for ash disposal vehicles. Although Indaver does not have its own fleet of vehicles for

any movement of waste or ash, its customers are obliged in their contracts to conform to the practice of using officially designated haul routes.

11.7.14 In conclusion I accept that Indaver generated vehicles could only be a small part of the M1 avoidance issue raised. The issue is primarily one for management and not easily amenable to regulation through such as planning conditions. I accept generally the submissions for the applicants that they will maintain their leverage over customers and drivers to conform to good practice under this heading.

11.8 Other Issues

Other issues which arise may best be addressed under the following subheadings:

- Preliminary Matters
- Prematurity
- Planning Conditions

Preliminary Matters

- 11.8.1 The Meath County Manager's Report notes that the proposed changes to waste acceptance/disposal hours are not referenced in public notices. The Report makes no further comment on this fact. However, I note that the documentation supporting the planning application makes the proposal quite clear under this heading. The specific operating hours proposal was the subject of amendment and appropriate public notification through the relevant dedicated website. The amendment made was stated by the applicants to arise from discussion with Carranstown Residents. The matter of opening hours was discussed at the oral hearing. I do not consider there could have been any disadvantage to a concerned party.
- 11.8.2 A second preliminary matter is the issue raised in a written submission and at the outset of the oral hearing, that there was inadequate notification of the application to local authorities from whose areas waste would be collected. This issue was raised with the applicants at further information stage. I have noted the responses of the applicants to the issue raised. At the oral hearing the concerned observer (Councillor O'Dowd) submitted that the applicants' response in the matter was risible. In my view the matter is one of crucial concern in the context of hazardous waste management planning. Accordingly, if the Board is minded to permit the acceptance at Carranstown of hazardous waste as proposed, I would recommend that serious consideration should be given to directing consultation with, or consulting, all local authorities from whose areas the waste would be sourced. Meath County Council and Louth County Council have raised concerns regarding the implications for waste recycling. This concern may be more widespread, therefore I consider more widespread consultation would be appropriate.

Prematurity

- **11.8.3** In Section 10 of my report, above, I have noted issues raised at the oral hearing under this heading. In summary observers contend that consideration of the current application is premature by reference to four main considerations, in summary:
 - premature pending the imminent publication and due consideration of the National Implementation Plan relating to the provisions of the Stockholm Convention on POP's,
 - premature by reference to an alleged failure of Meath County Council to respond to a Freedom of Information request in the past (substance unstated),
 - premature pending proper consultation with local authorities as envisaged by An Bord Pleanála arising from pre-application consultations in the case.
 - premature pending the imminent publication and due consideration of a new National Hazardous Waste Management Plan, to replace the current plan which expires at the end of 2012.
- **11.8.4** Regarding the first two issues summarised above, there was no material presented at the oral hearing which I would regard as a legitimate precondition to consideration of the current planning application. Please note Professor Broderick's reference to the Stockholm Convention in his report.
- **11.8.5** Regarding wider consultation with local authorities, I consider this would be appropriate if the Board is minded to grant permission for the hazardous waste element of the currently proposed development.
- 11.8.6 Finally regarding the expiry, soon, of the National Hazardous Waste Management Plan, I consider that the status of this plan should be deemed no greater than the statutory development plan for the area incorporating the area (regional) waste management plan. Decisions cannot be held off indefinitely pending the evolution of official policy. I note in particular that while the EPA submission in relation to the current application notes EIS references to the current (2008-2012) Hazardous Waste Management Plan, the submission makes no specific reference to a review or replacement of the plan. From this I infer there is unlikely to be anything in the replacement National Hazardous Waste Management Plan which would significantly change the circumstances in which the Board must make a decision on the current case.

Planning Conditions

11.8.7 On the final day of the oral hearing there was a discussion held on possible conditions to be attached to any grant of permission which there may be in response to the current planning application. In this discussion the main points for consideration which arose may be summarised as set down below, falling under the headings of:

- Roads Infrastructure/Traffic Management/Provision of Recycling Centre
- Financial Contribution towards Environmental Education
- Other Financial Contributions
- Other Planning Conditions
- 11.8.8 Regarding the failure and/or slow pace of progress on delivery of a Duleek Recycling Centre, a Duleek By-pass, and traffic prohibition east of Kentstown, some observers felt that planning conditions and/or the spirit of previous permissions were not being observed. In essence Planning Authority representatives referred to earlier discussion at the oral hearing, indicating progress in the roads/traffic matters; and indicated little or no progress in the matter of a recycling centre. Mr. Griffin for the Planning Authority confirmed compliance with planning conditions in relation to the permission under which the WTE plant has been developed.
- **11.8.9** There was also some concern raised regarding the make-up of the local environment committee. Here Mr. Griffin offered a stout defence and opined compliance with the relevant planning condition.
- 11.8.10 I consider that in the event of any planning permission being granted in the current case, there should be planning conditions attached to cover certain roads/traffic issues. The provision of a recycling centre remains covered by the existing permission(s). It may be noted that the Duleek By-pass is a development plan objective (Duleek LAP), whereas the recycling centre does not appear to be so. Arguably the failure to yet deliver a recycling centre at Duleek could be construed as a breach of the existing permission, however matters do not currently lie firmly in the hands of Indaver. It was confirmed at the oral hearing that Indaver have contributed funds to deliver this project at whatever location may be agreed and progressed by or at the behest of Meath County Council at a future date.
- authority in the North-East Waste Management Region, towards environmental education to offset the behavioural impact of directing segregated hazardous waste to Carranstown, this was strongly contested by the applicants. Although the proposal had been put forward in the Meath County Manager's Report, and commented upon by the applicants at further information stage, the Planning Authority confirmed at the oral hearing that such a condition should be attached to any permission allowing hazardous waste acceptance as proposed. The applicants argued strongly that it should not be the responsibility of the applicants to effectively fund environmental promotions for which there were paid staff responsible in the local authorities. The applicants referred to existing and evolving legal and financial provisions available to local authorities. The legality of the potential imposition of a relevant planning condition was also queried by applicants.
- **11.8.12** It appears that the Planning Authority requirement for the applicants to pay an annual contribution towards environmental education is a *sine qua non* of the Planning Authority agreement to hazardous waste acceptance at the site. The Board should give the consideration to the matter in the event of permission

being granted for the hazardous waste proposal. In my view the environmental education initiative envisaged by the Planning Authority would not adequately mitigate the pervasive environmental impact of facilitating the hazardous waste proposals put forward by the applicants in the case.

- 11.8.13 Regarding other financial contributions' conditions along the lines of those in existing permissions, the applicants queried the use of Section 48 conditions for certain purposes, notably as a mechanism for raising funds for unstated future environmental projects. However the applicants would co-operate in contributing up to 10% more funds on a tpa basis in line with the provisions of the existing permission.
- **11.8.14** Regarding other planning conditions proposed in the Meath County Manager's Report, the applicants indicated that they would have no fundamental difficulty in observing conditions recommended in respect of services etc., in the event of a planning permission being granted in the case.

11.9 Environmental Impact Statement

11.9.1 The proposed development is the subject of a planning application under the strategic infrastructure provisions of the Planning and Development Act, 2000 as amended. The application is presented as environmental infrastructure under Section 37(E) of the Act. Accordingly the planning application is accompanied by an Environmental Impact Statement (EIS). Having read the EIS and noted the appendices accompanying certain chapters of the EIS, also the non-technical summary inserted at the commencement of the EIS document, I am satisfied that the EIS is in general compliance with the requirements of Articles 94 and Schedule 6 of the Planning and Development Regulations 2001, as amended.

Identification of Impacts

- 11.9.2 The proposed development comprises modifications to mainly operational aspects of an established large waste management facility comprising a waste to energy incineration plant located in a rural area characterised by an established and permitted industrial pattern of land use. The site of the development is flanked to the east and west by a main road and railway line respectively. A near neighbouring cement manufacturing works is visually dominant in the local landscape. In the wider area there are features of particular natural and cultural interest, some within 5 kilometres of the subject site.
- 11.9.3 Against this background and having regard to the established/operational nature of the existing WTE plant, and noting the information contained in the EIS, I consider the likely direct effects of the project on the environment (without mitigation) would be limited but falling mainly under the headings of air pollution, water pollution, industrial noise and traffic impacts. I consider it less likely that there would be significant direct impacts under the headings of geology, ecology, landscape or cultural heritage. In each case the impact would be incremental relative to the existing operation.

11.9.4 Potential for indirect impact arises less from any physical works proposed than from proposals to accept a greater tonnage of waste and to accept certain hazardous wastes in addition to the currently accepted municipal waste. The potential indirect effects include increased traffic volume ranging over a wider geographic area and effects on consumer behaviour in the segregation and disposal of hazardous and biodegradable wastes.

Description of Likely Effects

- 11.9.5 As stated the proposed development is in essence an extension/modification of an existing industrial operation. The likely direct effects are acknowledged in the text of the submitted EIS, although the potential for certain pervasive indirect effects are less obvious or clearly identified.
- **11.9.6** The likely effects may be summarised.
 - Air Quality

There would be the potential for limited construction phase dust generation over a confined (2 month) period. The EIS estimates that increased volume flow in the incineration process could result in increases of up to 2% of any ambient air quality standard. The EIS also identifies the impact on air quality of increased traffic generation. This is estimated to be negligible.

- Noise Considerations

These are comprehensively addressed in Chapter 8 of the EIS. Construction phase noise is calculated as occurring within the limits applicable under the terms of Condition No. 18 of the 2007 planning permission. Operational phase noise addressed in the EIS includes consideration of building services plant; deliveries to site; and additional vehicular traffic on roads. The most likely effect overall arising from the operation is the extension of waste acceptance hours. The existing 0800 hours start would be brought back to 0700 hours, with all relevant noise effects extended into that hour.

- Surface Water and Groundwater

Increased hardsurfaced areas proposed, with potential for increased run-off. Increased groundwater is to be sourced for operational purposes. An additional wastewater treatment system is planned, with potential to release contaminants to groundwater.

- Traffic Impact

A minimum of 10% more traffic is envisaged within impacts pro-rata on the haul routes. The effect of this would be off-set by the extended opening hours proposed, if allowed.

- 11.9.7 The assessment of the proposed development having regard to mitigation measures proposed is contained within the previous sections of my assessment herein, above. The potential for significant direct effects of a long-term irreversible nature is offset by mainly design mitigation. As previously stated there are limited physical works proposed and the other modifications comprising changes to opening hours, acceptance of a greater tonnage of waste per annum, and acceptance of hazardous waste would not have significant direct impacts subject to all design measures employed. Some increased use of non-waste raw materials (e.g. lime and ammonia) would be necessary to achieve satisfactory flue gas treatment in the event of a greater range of wastes including hazardous waste being accepted. However other direct effects are mitigated mainly by the existing design parameters of the plant.
- **11.9.8** Construction impacts would be short-term and acceptable subject to proper construction management planning, generally as proposed.
- 11.9.9 Assessment has revealed some shortfall in information relating to the proposals for receipt of hazardous waste. The implications of these inadequacies are referred to in the consultant's report (Broderick) on file. Adoption of a precautionary approach must be recommended in considering proposals for the receipt of hazardous waste.
- 11.9.10 Indirect effects of the proposed development would include any environmental impacts arising from behavioural changes in public adoption and co-operation in the segregation of wastes including hazardous wastes and biodegradable wastes. The Planning Authority has suggested developer funded public education campaigns to mitigate these impacts, notably in the matter of hazardous waste segregation. The applicants/developer in the case are opposed to funding additional public education programmes as recommended by the Planning Authority. I do not consider this mitigation proposal put forward by the Planning Authority to be adequate.

Residual Impacts

- 11.9.11 The EIS concludes in respect of each relevant heading that there would be no residual impacts. Having regard to the modest physical developments proposed and the nature and scope of other modifications sought to the terms and conditions of the existing planning permission, I find these EIS conclusions generally credible and acceptable.
- **11.9.12** Exceptions to the positive conclusions of the EIS occur as noted in previous sections of my assessment, above, in summary:
 - insufficient information has been presented under the heading of site characterisation for the proposed additional wastewater treatment unit;

- it is not clear that the necessary suite of on-site infrastructure has been proposed to deal with the overall handling of hazardous waste, and
- impact on public attitudes and behaviour may have adverse pervasive effects as noted in paragraph 11.9.10 above and earlier in my report.

12.0 CONCLUSIONS AND RECOMMENDATION

12.1 Conclusions

- Proposals for the 10% tpa increase wold be acceptable on a temporary basis.
- Physical developments proposed are acceptable subject to the agreement of the planning authority on additional wastewater disposal arrangements; and other conditions as set out in the schedule to my recommendation below.
- Proposals for the acceptance of hazardous wastes are unacceptable.

12.2 Recommendation

I recommend a SPLIT DECISION, to grant permission for the acceptance of an extra 10% of residual municipal waste, establishment of a permanent spare parts centre and offices and ancillary development, subject to conditions as specified below, for the Reasons and Conditions specified at (1) below and Refuse permission for the acceptance of hazardous waste for the Reasons and Considerations stated at (2) below.

REASONS AND CONSIDERATIONS (1)

Having regard to:

- the site planning history and the established use of the subject site for the purposes of a 70 megawatt waste to energy (WTE) waste management facility;
- the provisions of the current Regional Waste Management Plan for the North-East Waste Management Region comprising counties Cavan, Louth, Meath and Monaghan;
- the policies and objectives of the Meath County Development Plan 2007-2013 which by reason of prevailing legislation is deemed to include the objectives contained in the Regional Waste Management Plan;
- Government plans for the rationalisation and enlargement of waste management regions;
- national strategies on biodegradable waste and climate change;

- the low calorific value of municipal waste currently being accepted at the existing WTE facility since its commissioning in 2011, and
- the desirability of allowing acceptance of the optimum annual tonnage of municipal waste consistent with the design capacity of the existing incineration plant for the purposes of generating 70 megawatts of electricity,

it is considered that, subject to compliance with conditions set out below, proposals for the following:

- acceptance of up to 220,000 tonnes per annum (tpa) of residual municipal waste;
- the establishment of a spare parts warehouse building and modular office building and ancillary development including electrical switch gear apparatus, 22 no. car parking spaces, hardcored areas, access roadway to the modular office building and a new (additional) on-site effluent system, and
- additional fuel storage and ammonia storage tanks,

would not seriously injure the environmental or residential amenities of the area, would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out in accordance with the plans and particulars lodged with the application as amended by the further documentation received by An Bord Pleanála on the 11th day of June, 2012 and the 30th day of August 2012, and in accordance with the provisions of the submitted Environmental Impact Statement including environmental mitigation measures contained therein, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

 Conditions attached to the planning permission Meath Register Reference number SA/901467 shall be fully complied with except where otherwise specified in the following conditions.

Reason: In the interest of clarity.

3. Proposals to allow the acceptance of additional types of waste defined as hazardous in the European Waste Catalogue and Hazardous Waste List, shall be omitted from the development.

Reason: In the interest of clarity, and for the reasons and considerations set out in the attached schedule Reasons and Considerations (2).

4. The permission to accept an additional 20,000 tpa of waste shall apply for a period of 3 years only from the date of this order, unless, prior to the end of the period, planning permission shall have been granted for the continuation of the additional waste acceptance for a further period.

Reason: To uphold the integrity of the waste management hierarchy and the integrated waste management philosophy of the prevailing waste management plan for the area in which the subject site is situate, and to then enable the impact of the development to be assessed having regard to anticipated changes in waste management planning areas and implementation of biodegradable waste management policies and plans.

5. The tonnage of waste accepted for thermal treatment at the facility over the three year period commencing on the date of this order shall not exceed 220,000 tonnes per annum of residual waste.

Reason: In the interest of clarity.

- 6. (1) Prior to commencement of physical development, including establishment of offices, spare parts centre and additional car parking and all related ancillary development, the applicants shall obtain the written agreement of the planning authority to the development of the proposed additional wastewater treatment facility on site. The application for agreement shall be accompanied by a full site characterisation report carried out in accordance with the EPA Code of Practice (2009): Wastewater Treatment and Disposal Systems serving a Single House (P.E. ≤ 10). The applicant shall include full details as to the design of the proposed polishing filter, invert levels, loading rates and cross-sectional drawings of same.
 - (2) Physical developments proposed shall not proceed unless and until the proposed wastewater treatment proposals have been agreed in writing with the planning authority. The agreed treatment unit shall be in accordance with the agreement with the planning authority.

Reason: In the interest of public health.

7. Full details of the proposed wastewater treatment unit shall be submitted for the written agreement of the planning authority within 6 months of the date of the planning permission contained herein.

Reason: In the interest of public health.

8. (1) Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority as set out in the Meath County Manager's Report to An Bord Pleanála received on the 13th day of July, 2012.

(2) The bunding arrangements for the additional fuel storage tank, for the ammonia storage tank and for all oils and other environmentally hazardous materials and potentially polluting substances shall be agreed in writing with the planning authority prior to the commencement of development, and implemented in accordance with the said written agreement.

Reason: In the interest of public health and to ensure a proper standard of development.

9. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2) (c) of the Planning and Development Act 2000 in respect of road improvement works and traffic management measures. The works and measures shall include but shall not be confined to: (i) improved permanent road markings delineating the right turn lane at the access to the site from the R152 regional road; and (ii) permanent signage to assist in the enforcement of the traffic management plan prohibiting traffic associated with the WTE facility from travelling along the regional road R150 between its junction with the Regional Road R153 to the west and the N2 to the east. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination. The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

10. A community gain fund shall be established or maintained to support facilities and services which would be of benefit to the community in general catchment. This fund shall be based on an annual contribution per tonne of waste accepted for thermal treatment at the plant. The annual contribution shall be €1.27 per tonne and shall be updated in accordance with the consumer price index. Details of the management and operation of the community gain fund shall be agreed between the planning authority and the community liaison committee established under condition number 3 of the permission PL17.219721 of 2007 referred to in condition no. 2 of SA/901467 of 2009.

Reason: It is considered reasonable that the operators of the facility should contribute towards the cost of environmental, recreational or community facilities which will be of benefit to the community in the area.

REASONS AND CONSIDERATIONS (2)

- 1. Having regard to the planning history of the subject site, in particular the terms and conditions of the permissions under the aegis of which the existing WTE complex has been developed, it is considered that proposals for the acceptance of hazardous waste from all regions of Ireland, for incineration at a plant which has been conceived, designed and constructed for the purposes of utilising residual municipal waste derived primarily from a regional catchment in the north-east of the country, would undermine the reasonable application of the proximity principle in waste management planning and would, notwithstanding government plans for the rationalisation and enlargement of waste management regions, be contrary to the proper planning and sustainable development of the area.
- 2. Having regard to the principles of waste prevention, reuse and recycling enshrined in the application of the waste hierarchy for waste management purposes, it is considered proposals for the use of segregated hazardous waste in association with residual municipal waste in a WTE facility strategically located to service a regional waste management need, would detract from the integrity of existing and evolving waste management practices nationally and regionally, would militate against appropriate segregation and recycling/reuse of hazardous waste materials and would therefore have a pervasive adverse environmental impact contrary to the objective of the waste hierarchy application nationwide.
- 3. Having regard to proposals for the acceptance of hazardous wastes including clinical wastes, the Board is not satisfied, on the basis of the information received, (including in the EIS as amended, submitted further information and information provided at the oral hearing), that there are adequate detailed proposals for the handling, storage and general management of hazardous wastes on site. The proposed development would therefore be prejudicial to public health and would be contrary to the proper planning and sustainable development of the area.
- 4. The development would be premature pending the establishment of a community recycling park at Duleek as envisaged in condition No. 30 attached to the permission PL219721 granted by An Bord Pleanála in 2007 and referred in condition no. 2 attached to the permission County Meath Register No. SA/901467. The proposal would therefore be contrary to the proper planning and sustainable development of the area.

Keith Sargeant Senior Planning Inspector.

November, 2012.

External Report – Trinity College

INDAVER WASTE TO ENERGY FACILITY CARRENSTOWN, CO. MEATH

ENVIRONMENTAL REPORT on PROPOSED CHANGES TO OPERATING CONDITIONS

prepared by

Professor Brian Broderick Trinity College Dublin

for

An Bord Pleanala

1 Introduction

- 1.1 This report provides an evaluation of the environmental assessments presented by Indaver Ltd in support of proposed changes to their Waste to Energy facility at Carranstown, Co Meath [Ref PA0026]. Its purpose is to provide guidance and clarification on these issues for An Bord Pleanala.
- 1.2 The report has been compiled following a review of the submitted planning application documentation including the EIS, and some further information supplied by the Applicant; review of all other submissions made to An Bord Pleanala, including presentations made at the oral hearing; and of questioning at the oral hearing of the environmental experts who prepared the relevant parts of the EIS.
- 1.3 The following environmental issues are examined:
 - the impacts associated with the acceptance and handling of additional waste types, including hazardous waste types;
 - the impacts associated with the thermal treatment of hazardous waste types in the existing incinerator;
 - the methodology and models employed to assess the air quality impact of increasing the quantity of waste processed at the facility from 200,000 tonnes pa to 220,000 tonnes pa, including up to 15,000 tonnes pa of hazardous waste;
 - the predicted ambient concentrations of air pollutants expected to be emitted from the proposed facility.

- 1.4 The above impacts are evaluated taking into account the EU Reference Document on the Best Available Techniques (BREF) for Waste Incineration, EU Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe and the recently ratified Stockholm Convention on Persistent Organic Pollutants.
- 1.5 The EIS refers to the EU Waste Incineration Directive 2000/76/EC to define stack emission rates. From 2013, a new Industrial Emissions Directive (2010/75/EU) will incorporate and replace several directives regulating emissions from a range of industrial emission sources, including the Waste Incineration Directive (2000/76/EC). The provisions of the Waste Incineration Directive (2000/76/EC) have been largely maintained in the new Industrial Emissions Directive (2010/75/EU), including the maximum allowed emission rates for different air pollutants. For consistency with the EIS, this report also makes reference to the Waste Incineration Directive (2000/76/76).

2 Waste Types

- 2.1. The Indaver Waste to Energy facility at Carranstown is permitted to treat up to 200,000 tonnes of municipal solid waste (MSW) per annum. Indaver have applied to be allowed increase this to 220,000 tonnes pa, and within this amount, to be allowed to burn up to 15,000 tonnes pa of waste not classified as MSW.
- 2.2. The EIS states that motivation for increasing the permitted capacity of the facility to 220,000 tonnes pa is to exploit the full thermal and energy generating capability of the facility, which was designed with a capacity of 70 MW. As the calorific value of the MSW being treated at the facility is lower than anticipated, the facility has the capacity to treat a larger mass of waste.
- 2.3. The environmental benefits of utilizing the full capacity of the facility include a reduced quantity of waste landfilled or exported, more optimum combustion conditions and maximum possible electrical power generation.
- 2.4. The additional non-MSW types for which permission has been sought have been identified in a list of EWC codes presented in the EIS. These include both hazardous and non-hazardous waste. The EIS illustrates these types by giving examples of each. A submission on the application states that these examples omit other forms of waste that are associated with a wider range of hazards. In another submission, Veolia Environmental Services (VES) observe that some of the wastes types covered by the requested additional EWC codes have lower calorific value than MSW, and as such will not contribute to the Applicant's stated aim of utilizing the full thermal capacity of the facility.

- 2.5. At the oral hearing, the Applicant responded to these submissions by clarifying that it is not intended to accept all waste types covered by the additional EWC codes at the facility. In effect, the Applicant plans to process only 'suitable' waste types that are compatible with the safe and optimum operation of the facility. The waste types will be accepted considering (i) their effect on the combustion process and (ii) the existing facility's capacity to accommodate any hazards they present. Further questioning at the oral hearing addressed the waste acceptance criteria to be employed in considering these issues. However the EIS does not contain a comprehensive set of criteria that cover all of these issues, nor was one presented at the oral hearing.
- 2.6. At the oral hearing, the Applicant placed greater emphasis on the opportunity offered by the facility to reduce the amount of hazardous waste being exported for treatment. The Applicant described how some of the hazardous waste types covered by the requested additional EWC codes can be treated using the current facilities and procedures without imposing any additional health, safety or environmental risks. Other waste types, even if included within the requested additional EWC codes, would not be accepted for treatment.
- 2.7. As set out in the EU Reference Document on the Best Available Techniques (BREF) for Waste Incineration, best practice in waste incineration includes designing facilities and their processes so that they are suited to the treatment of the expected waste types, taking account of physical and chemical characteristics. In service, controls over the waste received are necessary to ensure that only suitable material is processed. As the Indaver facility at Carranstown was conceived and designed as a MSW incinerator, it may not have the capability to receive and process many other forms of waste, each of which needs to be assessed on a case-by-case basis. Consequently, the applicant has applied to extend the range of waste processed at the facility to include hazardous waste, but to limit the types of hazardous waste received to those that are suitable for treatment in the facility.
- 2.8. The use of EWC codes does not appear to be a good method of regulating this approach, which may rely excessively on operator judgment and ongoing decision-making by the facility staff. While good practice and training can ensure that only suitable waste types will be generally accepted, the reliability of this approach and the associated risks have not been established. In addition, in the absence of a definitive list of the waste types deemed suitable for processing, or a comprehensive set of acceptance criteria, the associated environmental impacts are difficult to evaluate.

- 2.9. Carefully planned storage and management of waste prior to treatment is required to minimise pollution impacts, including odour releases. At the Carranstown facility, the waste delivery area is enclosed, and this helps avoid odour, noise and emission impacts. If the types of wastes received are diversified beyond the existing restriction to MSW only, then greater waste inspection requirements can be expected. This inspection will need to take place in the enclosed delivery area, and adequate provision will be needed for waste considered unsuitable for treatment following inspection. The Applicant has not provided detailed information on what arrangements will put in place in this regard, but it is unlikely that the current practice of unloading directly from delivery vehicles to the waste bunker will suffice for all the additional waste types received. Operational and safety challenges may also arise due to the mixing of hazardous and non-hazardous wastes in the bunker, as all waste in the bunker will then potentially need to be managed and handled as hazardous waste. Currently, this bunker acts as the principal storage location for waste awaiting treatment.
- 2.10. Clinical waste is included amongst the requested additional waste types. Clinical waste from hospitals or other health care locations may be thermally treated in dedicated facilities or in incinerators which treat a mixture of waste types, such as MSW or other hazardous wastes. However, clinical waste can be associated with specific risks not encountered with other general and hazardous waste types, and well defined and regulated handling and storage procedures are required to manage these safely, especially when infectious waste is being anticipated.
- 2.11. The submission by VES observed that segregated transfer, handling, inspection, container cleaning and storage facilities must be put in place when clinical waste is being processed. Details of these are not included in the planning application documents, but the issue was discussed by the Applicant at the oral hearing, with dedicated facilities for the direct unloading of clinical waste from individual bins into the bunker being envisaged. Although sharp clinical waste is covered by the requested additional EWC codes, the Applicant stated that they do not intend to accept such waste for treatment. Special provision will be made for the loading of infectious clinical waste directly into the furnace, by-passing the bunker.
- 2.12. It seems likely that the acceptance of clinical and some other forms of hazardous waste at the Carranstown facility will require additional facilities for inspection, storage and cleaning that have not been fully described by the Applicant, notwithstanding the intention that most of these activities will be performed off site. The potential environmental impacts associated with these activities include fugitive emissions to air and noise should operations not take place in an adequate

- enclosed space, and contamination of water resources should operations not take place on purpose-built surfaces with controlled drainage.
- 2.13. The proposal to allow waste covered by additional EWC codes to be treated will create a hybrid MSW-hazardous waste facility. Only waste types that the Applicant considers suitable for treatment at the existing facility will be accepted, and consequently few changes to the current operating procedures have been planned. However, examination of some potentially suitable hazardous waste types has identified the need for additional process controls, and it is probable that new facilities will be required for the inspection of received wastes, segregated storage of rejected wastes and cleaning of containers. The potential environmental impacts of these new processes have not been identified or evaluated.

3 Treatment Processes

- 3.1. Two distinct processes are employed to treat waste at the Carranstown Waste-to-Energy facility: thermal treatment which reduces the volume and mass of the raw waste to a smaller quantity of bottom ash, and flue gas treatment which removes most solid and gaseous pollutants from the combustion gases before discharge to the atmosphere. In both cases, the process capacity is sufficient to handle the requested extra 20,000 tonnes of waste, but with proportionate increases in environmental impacts.
- 3.2. With a waste treatment capacity of 200,000 tonnes pa, the Carranstown Waste to Energy facility is a medium-sized MSW facility by European standards. Thermal treatment of waste is performed using a moving grate furnace. As this type of furnace can have the capacity to treat relatively large quantities of waste it is commonly employed for the treatment of MSW. Moving grate furnaces are not commonly employed in facilities where a significant proportion of the waste is expected to be hazardous. In these cases, rotary kilns are favoured because the waste is enclosed and more complete burn-out can be achieved. The waste treatment capacity of rotary kilns is generally less than that of moving grate furnaces, typically in the range 30,000-100,000 tonnes pa.
- 3.3. The proposed treatment of a more diverse range of waste types other than MSW presents a risk to the operating performance of the facility. The combustion and environmental performance of incinerators is generally least good at start-up and shut-down when furnace temperature is variable. These issues were discussed at the oral hearing where the Applicant anticipated that the licencing authority would

- require a programme of test burns to validate the performance of the facility under a wider range of waste treatment mixes.
- 3.4. Hazardous waste incinerators frequently employ special methods for handling waste and residues from the treatment processes. These include particular techniques for loading different wastes into the furnace, furnace design to achieve higher temperatures and incineration times and the extraction of non-ferrous metals. The only such measure proposed for the Carranstown facility is the direct injection of infectious clinical waste into the furnace. This limits the types of hazardous waste that can be processed at the facility, and should exclude some waste types that are covered by the requested additional EWC codes.
- 3.5. Clinical waste (especially non-infectious waste) can be processed in incineration facilities that also process other forms of waste such as MSW. However, the thermal treatment of clinical waste may require longer incineration times to ensure adequate burn-out and to accommodate the reduced calorific value of wastes with high moisture content.
- 3.6. The introduction of hazardous waste into the waste streams being thermally treated in the moving grate furnace could have implications for the classification of the bottom ash produced by the facility. Bottom ash is the principal residue from the waste introduced into the furnace which is either non-combustible or incompletely combusted. In some jurisdictions all bottom ash produced by a facility which treats hazardous waste is itself considered hazardous. In questioning at the oral hearing, the Applicant anticipated that this would not be case in Ireland and that instead a regime of bottom ash sampling and analysis would be established with the licencing authority to demonstrate that the non-hazardous nature of the ash. This regime is likely to be more intense in the initial period after the introduction of hazardous waste.
- 3.7. The Applicant emphasized that as the disposal costs for hazardous bottom ash are so much larger than those for non-hazardous ash, strong commercial imperatives exist for ensuring that hazardous ash is not produced by the thermal treatment process at Carranstown. The primary means of achieving this will be by only accepting suitable hazardous waste types that are known to produce non-hazardous bottom ash. These waste types were not specifically identified in the EIS or at the oral hearing as the Applicant intends to review these on an ongoing basis as potential sources of waste are identified. The interpretation of the likely success of this approach would benefit from a definitive set of waste acceptance criteria.

- 3.8. The existing flue gas treatment (FGT) system will have the capacity to treat the requested additional waste quantity and types. As the combustion products requiring treatment arising from the incineration of hazardous waste are the same as those arising from non-hazardous waste, no modifications to the FGT system will be required. While the quantities of some pollutants including mercury, heavy metals, HCl, HF, SO2 that will be required to be processed by the FGT system can be expected to be greater when some hazardous waste types are introduced, the concentrations of all contaminants discharged through the stack is expected to remain with permitted emission limits established by the Waste Incineration Directive.
- 3.9. The introduction of a wider range of waste types has no implications for the management of the FGT residues. The existing requirements for the storage, transfer and disposal of this material will continue to suffice. The 10% increase in capacity of the facility to 220,000 tonnes pa will imply an increase in the quantity of FGT residue produced by the facility.

4 Environmental Impacts

- 4.1 The environmental impacts of MSW and HW incineration plants include stack and fugitive emissions to air and their effect on air quality, emissions to water and their effect on water quality, residues (including bottom ash, boiler ash and flue gas treatment residues), odours, noise and vibration. These impacts are associated with plant processes and the transport of materials (waste and residues) to and from the plant.
- 4.2 An assessment of the air quality impacts of the increased stack emissions due to an increase in the facility waste treatment capacity to 220,000 tonnes pa is presented in the EIS. This assessment identifies the pollutants expected to be emitted through the stack, assembles data on background air quality from baseline measurements, determines expected average pollutant emission rates and employs dispersion modelling to determine the effect of these on ambient concentrations in the vicinity of the facility. These steps comprise an appropriate air quality assessment methodology for the proposed amendments to the facility operating conditions.
- 4.3 The air pollutants considered in the EIS are those whose emission rates are restricted by the Waste Incineration Directive (2000/76/EC). Supplementary information was presented by the Applicant at the oral hearing to describe the emissions of ultrafine particulates observed in similar facilities in Europe.

Information on the emissions of this pollutant is limited and it may not be possible to determine reliable emission rates or associated impacts. Cllr O'Dowd correctly observed that variations in key operating parameters including furnace temperature imply that emissions from one plant may not be representative of those from another.

- 4.4 The sources of fugitive emissions to air from the facility are not identified in the EIS which only evaluates air pollution emissions through the stack. The Applicant was asked to provide supplementary information on fugitive emissions associated with the receipt of hazardous waste at the facility. In most cases, these wastes will be transported and processed in sealed containers, and no fugitive emissions will arise. However, some hazardous wastes will be delivered as bulk materials in granular or liquid form, with the potential for fugitive emissions to the atmosphere.
- 4.5 Stack emissions at the facility are measured to ensure compliance with licencing conditions and to control treatment processes on an ongoing basis. Concentrations of gaseous pollutants are monitored continuously and concentrations recorded at short intervals. Particulate matter is sampled continuously, and the corresponding concentrations determined and recorded periodically. The stack concentrations of some pollutants of public concern are determined from the sampling and analysis of particulate matter. These include dioxins, chromium and heavy metals. The stack emissions monitoring at the facility follows best international practice, and the results obtained to date confirm that the emissions of all pollutants are within licenced levels.
- 4.6 The primary aim of the air quality assessment described in the EIS is to calculate the expected pollutant concentrations in the ambient air following an increase in facility capacity to 220,000 tonnes pa. These concentrations are then compared with limit (i.e. maximum allowable) values set down in EU Directive 2008/50/EC on Ambient Air Quality and Cleaner Air for Europe. A generally conservative approach is employed, including the use of the maximum emission rates allowed by the Waste Incineration Directive 2006/76/EC to define the stack emission rates used in dispersion modelling.
- 4.7 The introduction of hazardous wastes into mix of waste treated at the facility would not change the chemical or physical characteristics of the pollutants emitted through the stack. The combustion products resulting from the incineration of hazardous waste are the same as those resulting from the incineration of MSW. The more complex waste mix may give rise to increased emissions of some pollutants such as heavy metals, HCl, and SO2, but the

emission rates for all pollutants must still comply with the limit values set down in the Waste Incineration Directive. A third party submission by Mr Rountree anticipated that emissions of chromium VI would increase due to the incineration of some hazardous wastes, including paints. It is very possible that the emission rate for this pollutant would increase in these circumstances and future stack monitoring will need to ensure that emissions do not exceed permitted values.

- 4.8 The new status of the Stockholm Convention on Persistent Organic Pollutants (POPs) within Ireland was raised in a submission by Mr Herr. POPs are toxic substances with a long lifetime. As their environmental and health effects are experienced remote from the point of formation, both in time and space, they are regulated by international agreement. The POPs most associated with waste incineration are PCDDs and PCDFs, commonly known as dioxins. As described above, dioxin emissions from the facility are closely regulated and controlled.
- 4.9 The air quality assessment presented in the EIS is an update of the assessment presented in previous EISs for the same facility. The principal change is the increase in the stack gas volume flow rate to account for (i) the actual flow rates measured during operation of the facility (as opposed to the predicted flow rates used in previous EISs), and (ii) the expected increase in this flow rate due to an increase in facility capacity to 220,000 tonnes pa. These are combined with the maximum licenced emission rates (pollutant mass per unit volume of emitted stack gas) set out in the Waste Incineration Directive to obtain the individual pollutant emission rates (mass per unit time) employed in dispersion modelling. Consequently, the EIS does not seek to quantify the impact of the expected emissions from the facility, presenting instead the estimated maximum impact due to the highest emission rates allowed by the waste licence.
- 4.10 The diversification of processed waste types to include hazardous wastes would introduce more variation into the facility operating conditions, including the combustion gas volume flow rate from the stack. The associated uncertainty in pollutant emission rates reduces the reliability of the dispersion modelling results by a small amount.
- 4.11 The AERMOD model used to perform the atmospheric dispersion modelling presented in the EIS is widely used to estimate the air quality impacts of stack emissions arising from combustion processes. It is the regulatory atmospheric dispersion model specified by the USEPA for this type of application, and complies with the EPA Ireland's guidelines for modelling dispersion from industrial sources. AERMOD has been validated through the comparison of

model results and air quality measurements for a number of test cases that are representative of the conditions at Carranstown.

- 4.12 AERMOD calculates ambient air quality concentrations of pollutants resulting from emissions from elevated point sources. The accuracy of these calculations depends on the quality of input data on emissions, meteorological conditions and surrounding terrain. The model's representation of the plume is an approximation that is intended to capture the average dispersion of the plume expected under given conditions. Responding to questions at the oral hearing by Mr Herr, the Applicant described how during unstable atmospheric conditions the approximated plume shape reflects the possibility of plume grounding close to the stack. The accuracy of this approximation varies, but greatest errors are expected during calm periods.
- 4.13 Inaccuracies in the model results will increase if the meteorological data input to the model do not fully represent local site conditions. The use of local meteorological data collected on site can increase confidence in the model results. Although meteorological data including wind speed and direction have been collected on-site since the opening of the facility, these data were not employed in the dispersion modelling presented in the EIS, which employed meteorological data observed at Dublin Airport. However, as the facility at Carranstown is located reasonably close to Dublin Airport, and in an area of non-complex terrain, the use of Dublin Airport data is reasonable and the benefits of employing locally-obtained data are likely to be limited.
- 4.14 Dispersion models such as AERMOD only predict the increase in pollutant concentrations due to emissions from the source or sources considered. To obtain total ambient concentration values the increment in concentrations due to process emissions must be added to a background concentration, normally quantified using baseline monitoring results. In the EIS, background concentrations are estimated using a combination of historic air quality measurements made in the vicinity of the stack and air pollution levels observed in other rural locations in Ireland.
- 4.15 The air quality measurements in the vicinity of the stack were generally carried out several years ago in the course of a number of different air quality studies in support of previous applications. Their spatial and temporal coverage of air quality in the vicinity of the stack is poor. The Applicant has not supplemented this data by performing air quality monitoring in the vicinity of the facility since its opening. Air quality measurements obtained elsewhere in Ireland have limited relevance in Carranstown due to the presence of the Platin facility nearby.

- 4.16 The absence of a comprehensive air quality survey conducted in the vicinity of the stack means that the EIS does not establish the current standard of air quality in the area accurately. In the EIS, this deficiency is addressed by employing background concentrations considered by the Applicant to be conservatively high. This approach assists with the later interpretation of the predicted ambient pollutant concentrations, but it does not improve the reliability of the assessment itself. However, the associated uncertainty in the existing concentrations of air pollutants is not significant in the context of the relatively small predicted increments in concentrations discussed in the following paragraph of this report, below. A more rigorous background concentration assessment based on a recent and detailed baseline survey would be necessary in the event that greater increases in waste processing capacity and stack emissions were proposed.
- 4.17 The proposed changes in waste processing conditions at the facility would have a relatively small effect on the expected pollutant stack emission rates. In line with predictions made in the previous EISs for this facility, the AERMOD results presented in the current EIS show that emissions from the facility would continue to have only a small impact on ambient air pollution concentrations in the vicinity of the stack. The EIS presents a number of different sets of results based on different estimates of the maximum and average volume rates of polluted air discharged through that stack, but the differences between these are small.
- 4.18 The dispersion model results predict that at the proposed waste processing rate of 220,000 tonnes pa, process emissions will cause the annual average NO_2 concentration to increase by approximately 1 $\mu g/m^3$ at the worst-case location, compared to a limit value of $40\mu g/m^3$. When the assumed background concentration of $20\mu g/m^3$ is included, the expected ambient concentration remains well below the limit value. Similarly, the 99.8^{th} percentile hourly NO_2 concentration will increase by only $19\mu g/m^3$ at the worst-case location, compared to a limit value of $200\mu g/m^3$. When the assumed background concentration of $40\mu g/m^3$ is included, the predicted total ambient concentration is well below the limit value.

- 4.19 Other pollutants are more completely removed from the combustion gases by the flue gas treatment system, and consequently their impact on the surrounding environment is less than that of NO_2 . For example, the predicted maximum annual average and hourly average PM_{10} and $PM_{2.5}$ concentrations due to process emissions increase by less than $1 \mu g/m^3$ at the worst-case locations. These may be compared to limit values in the range 25-50 $\mu g/m^3$.
- 4.20 As previously predicted in the 2009 EIS, non-trivial increases (relative to EU limit values) in the concentrations of cadmium and arsenic are predicted to occur in the vicinity of the facility, but the proposed increase in the waste processing rate to 220,000 tonnes pa does not change these greatly. The resulting annual average ambient concentrations (including estimated existing background levels) of these pollutants are predicted to remain substantially below 50% of their limit values.
- 4.21 For these and all other pollutants considered, the air quality modelling results predict that total ambient concentrations during operation of the facility will remain at levels significantly below 50% of their limit values. This represents a large 'headroom', which when considered with the conservative approach taken to estimate emission rates and background concentrations, strongly indicates that the nearby atmosphere has sufficient capacity to receive the proposed additional air emissions without unacceptable environmental effects. In addition, the margin of safety between the predicted total concentrations and their corresponding limit value is sufficient to overcome any concerns about inaccuracies that may be present in the AERMOD model or the input data employed.
- 4.22 The EIS assesses the impact of emissions from road traffic generated by the facility. The number of vehicles travelling to and from the facility is too small to cause a noticeable effect on air quality on local roads and in local towns, and this would remain the case with the proposed changes in the facility operating conditions.
- 4.23 A number of presentations at the oral hearing observed that there is a persistent and frequently strong odour nuisance from the facility. The Applicant accepted the need for remediation of this problem and has proposed to introduce an activated carbon-based odour removal system to this effect. In the absence of this new equipment, the proposed 10% increase in the quantity of waste being treated is likely to exacerbate the odour nuisance.
- 4.24 There is also an ongoing noise nuisance that the Applicant has associated with a particular mechanical fan. Action is underway to address this problem by

requiring the supplier of the fan to repair or replace the device. If this is not done, the proposed changes to facility's operating conditions will not increase the level of noise, but the changed opening hours could extend the period of the nuisance.

5 Concluding Summary

- 5.1 The EIS for the proposed development at the Carranstown Waste-to-Energy facility identifies the likely environmental impacts of increasing the quantity of waste processed at the facility to 220,000 tonnes pa, and including in this quantity up to 15,000 tonnes pa of non-MSW, including hazardous waste.
- 5.2 The requested extension of the range of waste types permitted at the facility including hazardous wastes may require the introduction of new control procedures for receiving, inspecting, handling, and storing wastes and waste containers. Detailed information on these procedures and the equipment or infrastructure required has not been provided.
- 5.3 The required new procedures and facilities will depend on the nature of the different hazardous wastes being processed. As neither a definitive list of these waste types nor a detailed set of hazardous waste acceptance criteria have been provided, the impacts of the required new procedures cannot be identified. Any additional waste reception procedures should take place inside the Waste Reception Hall or equivalent type dedicated enclosed space operated under negative air pressure, to ensure that noise, odour and fugitive emission impacts are minimized. It not apparent that the logistics required for the routine handling of the now proposed expanded range of waste types, including hazardous wastes, can be reliably accommodated within the existing hall alongside the remaining anticipated volume of MSW.
- 5.4 The Applicant plans to avoid any additional environmental or other impacts due to the introduction of hazardous waste types by carefully limiting the non-MSW types accepted for treatment to a restricted class of suitable wastes. The selection of suitable wastes will be made by the Applicant on an ongoing basis taking into account their knowledge of the operational characteristics of the facility. The method though which this approach will be regulated has not be set out.
- 5.5 Potentially, bottom ash arising from the thermal treatment of hazardous waste along with MSW can itself be classified as hazardous. The Applicant intends that only suitable hazardous wastes which will not give rise to hazardous bottom ash will be treated at the facility, and that this will be confirmed by sampling and analysis of the bottom ash.

- 5.6 The existing flue gas treatment system at the facility has the capacity to successfully treat the combustion products arising from the thermal treatment of an additional 20,000 tonnes of waste per annum. The FGT system treats hazardous and non-hazardous wastes equally well. Stack emissions are expected to remain within permitted values.
- 5.7 An appropriate air quality assessment methodology was employed. The AERMOD model used is appropriate and has been recommended for the source type considered, although as with all dispersion models some degree of inaccuracy should always be expected in its results. The emissions data used in the modelling are based on the maximum emission rates allowed under the Waste Incineration Directive, and have been appropriately updated to include the proposed increase in waste capacity to 220,000 tonnes pa. Model accuracy could have been improved through the use of locally-measured wind speed and direction data and, especially, background concentrations.
- 5.8 The air quality assessment concludes that emissions from the proposed facility, even at maximum operation, will not lead to exceedences of air quality limit values. This conclusion is appropriate based on the results presented in the EIS. The margin between the predicted concentrations and the limit values is large and any inaccuracies resulting from inadequacies in the input meteorological data and background concentrations are not likely to materially affect the above conclusion.
- 5.9 There are ongoing odour and noise nuisances at the facility. Current plans to address these problems should be completed.

Professor Brian Broderick

November 22nd, 2012

External Report – Dr Murphy

Report to An Bord Pleanala following review of submissions and attendance at the Oral Hearing into proposed amendments (PL17PA0026) to the Indaver Ireland waste to energy facility (WTE) at Carranstown Duleek, Co Meath in October 2012

Dr. Daniel L. Murphy M.B, F.F.O.M.

For An Bord Pleanala

Introduction

This report covers the various presentations to the oral hearing on the proposed mixed waste incinerator at Carranstown, including the initial Environmental Impact Statement, presentations by the applicant (and their experts), presentations by third parties, and some of the principles underlying the decision-making process with regard to health problems raised by projects such as this.

Human Health Section of EIS

The Human Health section of the EIS (section 6.2.1) refers to the original 2006 EIS work for the WTE proposal at Carranstown. The EIS notes that the 2006 assessment of potential human health effects was carried out by Dr. Martin Hogan AFOM, FFOMI, a medical doctor specialising in occupational medicine. The now submitted 2012 EIS states: "It is considered that the proposed amendments which do not result in a change to the primary process or significant changes to the nature or characteristics of the emissions, will not result in an impact on human health. This is demonstrated in the findings of the air quality study (as presented in chapter 7). It is therefore not considered necessary to reassess the impacts of the facility on human health. Other potential health impacts regarding the delivery, handling and processing of the proposed new waste types are outlined below". The EIS goes on in subsequent and later sections to highlight relevant features of transport, storage, incineration and ash disposal etc.

Arising from a letter to Indaver from ABP in August 2012, Dr Hogan was consulted regarding the currently proposed development. I have noted his comments which comprise Appendix 2 of the Indaver response to An Bord Pleanala (Hogan letter dated 23 August 2012 refers). Dr. Hogan did not make a formal submission at the oral hearing but intervened on a few occasions to explain some of the basic principles relating to matters such as toxicology and risk assessment. These basic principles are important and dealt with later on in this report.

Observer Submissions/Presentations

James Rountree, a farmer from Sellar, Nobber, Co. Meath, had done extensive research on a number of matters in the area of basic toxicology. In my opinion his approach lacks a basic knowledge of toxicology and the need for absorption by human beings and the dose response relationship. His particular problem appeared to be hexavalent chrome (which can be a potent cause of health problems including, occupational asthma, occupational dermatitis and excess lung cancer when it acts on humans in appropriate doses), and the presence of chrome compounds in paint tins and residual paint. In his closing submission he returned to the question of Cr VI, also called hexavalent chromium. Here he seems to miss the point that hexavalent chromium occur as in many chromate compounds, thus it is much safer to set limits based on total chromium.

Olan Herr, (Louth People against Incineration), an ecological campaigner and consultant on small ecological solutions for waste water treatment, concentrated particularly on the dangers of exposure to dioxins. His presentation focused on how dioxins can affect the foetus in utero. Dioxins are known to be produced by many industrial processes but incineration of municipal solid waste is high on the lists.

Dioxins are mainly absorbed from the food chain, particularly eating fatty foods. Here again to have an effect, the levels of dioxin would have to be considerably more than the limit values stated in this project.

Health Services Executive (HSE)

The HSE carried out a site visit and submitted a report through their Environmental Health Service local office. The report noted the ongoing role of the EPA and certain conclusions stated in the EIS. The HSE report then focussed on the noise issue. While their inspectors were of the opinion that there was not any discernible noise from the process itself, they concluded that the movement of traffic at night as proposed in the EIS would have an adverse affect on "night-time noise levels on the densely populated

five main haulage routes". They went on to say "we recommend that the hours of operation and dispatch restrictions remain unchanged". The HSE did not attend the oral hearing. However I note that the potential for night time noise generation of concern to the HSE should not now occur because of the amendment to the current planning application notified by Indaver in June 2012, subsequent to receipt of the HSE submission by ABP.

Epidemiology

Epidemiology is the study of disease patterns in populations. Where there are significant differences observed in disease patterns, inferences may be drawn. It is a notoriously difficult field where statistics are married to accurate medical information. Nonetheless in the right hands significant advances may be made. In my experience there seems to have been great difficulty with using these studies in the area of disease patterns occurring around municipal solid waste incinerators. The lack of any significant findings has been reviewed by expert groups who have concluded that there is no significant risk. Epidemiology, per se, has not been raised again by observers in the case of the currently proposed development.

Population Health

Although epidemiology was not raised some of the objectors pointed to a need for the HSE to put in place suitable structures to detect significant changes in health that might occur in the future around such incinerators. Here again there is a problem of small populations where the number of occurrences of specific diseases are unlikely to show significant patterns, even if the resources were available to put such structures in place. I checked the data available on the website of the National Cancer Registry of Ireland (ncri.ie). The County of Meath does not have more cancer than the rest of Ireland; in fact it has slightly less.

Risk Perception and Risk Assessment

As is always the case in hearings such as this there would be gaps between risk perception and risk assessment on both sides. The local population feels that there are serious toxicological, and other, threats to their health. These fears are evidenced in the detailed submissions and questions put by James Rountree and Olan Herr. The ideal textbook solution of risk education giving rise to risk literacy, followed by meaningful risk negotiation, is always unlikely to occur. It is evident from the evidence given by these, and other observers, that these fears are going to remain and will surface in the future.

Classical approach To Toxicology and Risk Assessment

The classic approach to risk assessment starts with hazard identification. This includes basic and experimental toxicology and chemical analogy with other toxic substances. It seeks to answer the question "what might be a poison"? Risk analysis now goes on to answer the question "how might this identified poison affect people in this particular situation"?

Acceptance of Recognized Standards

The availability of internationally recognized environmental pollution limit values means that we do not have to go through a detailed step by step risk assessment in all cases, provided we accept these standards. They are derived by international committees of recognized experts in the fields of toxicology, epidemiology and other technical areas. In this case we are applying those which apply by Law throughout the European Union and in this country. Acceptance of such standards has the following advantages;

 Provided it is evident that these standards will be adhered to, argument and debate is resolved before the implementation of the particular project. 5

2. Debate as to who has particular professional expertise and opinion in the assessment is resolved

by the use of appropriate experts at international level in the derivation of the limits.

Waste Streams

I listened carefully to the discussions on the addition of the various waste streams and learned a great

deal during our site visit to the plant on Tuesday the 11th of September 2012. In my opinion there is no

risk to population health with the addition of these waste streams from the point of view of their

transport, storage, and addition to the bunker (or directly to the furnace in the case of infectious

wastes), and, provided the precautions with regard to transport and disposal are adhered to, no

additional population health risk from the transport and disposal of bottom ash or other residues as

proposed.

Summary and Conclusions

Having attended this oral hearing, read the documentation, and listened to the discussion and debate

during the oral hearing. I am of the opinion that the modifications proposed in the application would

not have any significant effect on human health. As my experience has shown the correct approach in

protecting health in projects such as this is strict adherence to the recognized limit values. My review of

the latest literature on this subject has not identified any other new significant evidence in this field

which would lead me to depart from my conclusion given above. My conclusions accord generally with

those of Dr. Martin Hogan as set out in his letter on file dated 23rd August 2012.

Signed:

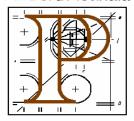
Daniel L. Murphy M.B, F.F.O.M.

Date:

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Board Direction

An Bord Pleanála



Board Direction

Ref: PA0026

At a further meeting of all available Board Members held on 16th January 2013, the Board considered:

- (a) the objections made to the proposed development,
- (b) the report of the Inspector, who held the oral hearing and
- (c) the documents and submissions on file generally.

The Board decided unanimously to grant permission in accordance with the reasons, considerations and conditions set out below.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

- (a) the provisions of the EU Waste Framework Directive, including the waste hierarchy set out in Article 4, which prioritises *energy recovery* over *disposal*, and the principles of *self-sufficiency* and *proximity* set out in Article 16.
- (b) the waste management provisions of the National Development Plan (2007 2013),
- (c) the provisions of the National Hazardous Waste Management Plan 2008 2012, which recommends that Ireland should strive for greater self-sufficiency in hazardous waste management,
- (d) the provisions of the North East Region Waste Management Plan 2005 -2010, and of the North East Region Waste Management Plan 2005 - 2010 Review Report,
- (e) the policies and objectives of the Meath County Development Plan 2007-2013,
- (f) the site planning history, and the existing waste-to-energy recovery facility on site, which operates under a licence issued by the Environmental Protection Agency,
- (g) the limited quantity and types of hazardous waste that would be accepted for treatment,

- (h) the location of the site, and its proximity to a national transport network,
- (i) the documentation submitted in support of the application and at the Oral Hearing, including the Environmental Impact Statement and the Habitats Directive Screening Statement,
- (j) the submissions on file, including those from prescribed bodies, and the inspector's report and assessment, and
- (k) the W0167-03 waste licence review application made to the Environmental Protection Agency for the proposed development.

The Board considered that the Environmental Impact Statement submitted with the application, supported by the further information submitted to the Board over the course of the application, including the information submitted at the oral hearing, the submissions of prescribed bodies and Meath County Council, and other submissions on file, was adequate in identifying and describing the likely significant effects of the proposed development. The Board completed an environmental impact assessment, and agreed with the inspector in his assessment of the likely significant effects of the proposed development, and generally agreed with his conclusions on the acceptability of the mitigation measures proposed and residual effects in relation to the increase in non-hazardous waste capacity. The Board did not share the Inspector's concerns regarding the residual effects of the treatment of hazardous waste (as summarised in Section 11.9.12 of the Inspector's report) for the following reasons:

- (1) Having regard to the level of geotechnical, hydrogeological and hydrological information available on the current file and on the planning appeal history files, the Board considered that any residual concerns in relation to details of the waste water treatment system could be appropriately addressed by means of condition.
- (2) Having regard to the level of information on file relating to the acceptance, handling, storage and management procedures for various waste streams, and to the application to the EPA for a revised waste licence, the Board was satisfied that the details of such procedures would be satisfactorily dealt with by the waste licensing process, and that adequate information was available to inform its decision-making for planning and EIA purposes.
- (3) The Board considered that the availability of an appropriate, licenced treatment facility in Ireland for segregated hazardous waste (as opposed to export abroad) should not necessarily lead to a change in public perception or practice in relation to waste management. Moreover, public communication programmes can respond to changes in attitudes should they arise.

Having completed the environmental impact assessment, the Board concluded that the proposed development would not be likely to have significant adverse effects on the environment.

The Board carried out a screening exercise in relation to the potential impacts of the proposed development on European Sites, having regard to its nature and scale, to the receiving environment, the Habitats Directive Screening Statement submitted with the application, the submissions on file generally, including those from prescribed bodies and from Meath County Council, and to the Inspector's assessment, which is noted, and concluded that the proposed development, in itself or in combination with other plans or projects, would not be likely to have a significant effect on any European site.

The Board considered that, subject to compliance with the conditions set out below, the proposed development would be in compliance with National, Regional and local waste management policies, would not seriously injure the amenities of the area or of property in the vicinity, would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience and would, therefore, be in accordance with the proper planning and sustainable development of the area.

In deciding not to accept the Inspector's recommendation to refuse permission for the acceptance of hazardous waste:

- (i) The Board considered that the acceptance of a limited quantity of specified types of hazardous waste in this existing commercial waste-to-energy plant would provide an alternative to the current export of a significant proportion of such waste, in accordance with the principles of self-sufficiency and proximity as set out in the EU Waste Framework Directive.
- (ii) Point (3) above addresses the reasons for not accepting the Inspector's second recommended reason for refusal.
- (iii) Point (2) above addresses the reasons for not accepting the Inspector's third recommended reason for refusal.
- (iv) The Board noted Condition 30 of Planning Appeal Reference Number PL17.219721, which required the developer to pay a financial contribution in respect of a community recycling park. The Board considered the provision of a community recycling park at Duleek to be a matter for the planning authority.

CONDITIONS

1. The proposed development shall be carried out in accordance with the plans and particulars lodged with the application, as amended by the further information received by An Bord Pleanála on the 11th day of June, 2012 and on the 30th day of August, 2012, as further amended by the information submitted to the oral hearing, and in accordance with the provisions of the submitted environmental impact statement, including environmental mitigation measures contained therein, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

2. Conditions attached to the planning permission granted under planning register reference number SA/901467 shall be fully complied with, except where otherwise specified in the following conditions.

Reason: In the interest of clarity.

- 3. (a) The tonnage of waste accepted for treatment at the facility shall not exceed 220,000 tonnes per annum.
 - (b) Non-hazardous waste to be accepted at this facility shall primarily be waste generated in the Waste Region in which it is located. Where non-hazardous waste is accepted from outside that region, it shall only be done in accordance with the proximity principle and Ministerial Policy as set out in Circular WIR:04/05.
 - (b) The tonnage of separately collected hazardous waste accepted for treatment at the facility shall not exceed 10,000 tonnes per annum.

The only hazardous waste types to be accepted for treatment shall be in accordance with the European Waste Catalogue Codes listed in Table 2-1 of the Environmental Impact Statement submitted to An Bord Pleanála with the application on 30th April 2012, as attached in Appendix 1 of this Order.

Reason: To clarify the nature and scope of the permitted development.

4. The hours of waste acceptance and dispatch of residues/waste shall only be between 07:00 and 18:30 on Monday to Friday, and between 08:00 and 14:00 on Saturday. Waste shall not be accepted or dispatched on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In the interest of the amenities of property in the vicinity and to facilitate the operation of the waste-to-energy facility.

5. Prior to commencement of construction, the applicant shall submit to and agree in writing with the planning authority details of the proposed additional waste water treatment facility on site in accordance with the requirements of the Waste Water Treatment Manual "Treatment Systems for Small Communities, Business, Leisure Centres and Hotels" issued by the Environmental Protection Agency (1999).

Reason: In the interest of public health.

- 6. ArchB preface: In relation to any excavation or ground disturbance...
- 7. Construction stage details for water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority.

Reason: In the interest of public health, and to ensure a proper standard of development.

- 8. ConstHours
- 9. The developer shall pay the sum of € 60,000 (sixty thousand Euro) (updated at the time of payment in accordance with changes in the Wholesale Price Index Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a contribution in respect of public roads improvements to benefit the proposed development. The works and measures shall include:
 - (i) improved permanent road markings delineating the right turn lane at the access to the site from the R152 Regional Road; and
 - (ii) permanent signage to assist in the enforcement of the traffic management plan, which prohibits traffic associated with the WTE facility from travelling along the R150 Regional Road between its junction with the R153 Regional Road to the west and the N2 to the

This contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority and which will benefit the proposed development.

Appendix 1: Table 2-1, "List of Proposed New EWC Codes and Waste Types", Environmental Impact Statement, submitted to the Board with the application on 30th April 2012.

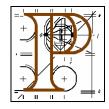
SCHEDULE OF COSTS

In accordance with section 37H of the Planning and Development Act 2000, as amended, the Board requires a reasonable contribution to be paid by the applicant towards costs incurred by An Bord Pleanála and by the Planning Authority in its consideration of the application, as set out in Appendix 2 attached overleaf, as amended in manuscript.

amended in manuscri	pt.	ppendix	2 attached overlear
(please attach Appen	dices 1 and 2 to the electroni	с сору (of the Board Order)
Board Member:	Fionna O' Regan	_ Date:	31 st January 2013

Board Order

An Bord Pleanála



STRATEGIC INFRASTRUCTURE DEVELOPMENT

PLANNING AND DEVELOPMENT ACTS 2000 TO 2011

An Bord Pleanála Reference Number: 17.PA0026

(Planning Authority: Meath County Council)

APPLICATION for permission under section 37E of the Planning and Development Act, 2000, as amended, in accordance with plans and particulars, including an environmental impact statement, lodged with An Bord Pleanála on the 30th day of April, 2012 by Indaver Ireland Limited of 4th Floor, Block 1, West Pier Business Campus, Old Dunleary Road, Dun Laoghaire, County Dublin.

PROPOSED DEVELOPMENT: Amendments to the existing development as follows:

- (a) To increase the intake tonnage of waste from 200,000 tonnes to 220,000 tonnes per annum.
- (b) To allow the acceptance of some additional types of waste defined as hazardous and non-hazardous in the European Waste Catalogue.
- (c) A change in status of the temporary spare parts warehouse building (single storey building 25 metres x 15 metres x 6.7 metres high) to a permanent centralised maintenance depot.
- (d) A change in status of the temporary electrical switchgear building (associated with the above) 4 metres x 2.5 metres x 3.2 metres high from temporary to permanent.
- (e) A change in status of the temporary construction modular office building (single storey building 33 metres x 12 metres x 3 metres high) from temporary to permanent.

- (f) A change in status of the temporary electrical switchgear building (associated with the above) 3 metres x 2.7 metres x 3.2 metres high from temporary to permanent.
- (g) Construction of an access roadway to the modular office building.
- (h) 22 number new car parking spaces associated with the modular office building.
- (i) A new on-site effluent treatment system associated with the modular office building.
- (j) Change in status from temporary to permanent for hardcored areas associated with the spare parts warehouse, construction offices and temporary site car park.
- (k) An additional fuel storage tank (8.7 metres length x 2.7 metres diameter).
- (I) An additional ammonia storage tank (7.15 metres length x 3.5 metres diameter).

All at Carranstown, Duleek, County Meath.

DECISION

GRANT permission under section 37G of Planning and Development Act, 2000, as amended, for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

DETERMINE under section 37H(2)(c) the sum to be paid by the applicant in respect of costs associated with the application as set out in the Schedule of Costs below.

MATTERS CONSIDERED

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included the submissions and observations received by it in accordance with statutory provisions.

REASONS AND CONSIDERATIONS

In coming to its decision, the Board had regard to the following:

- (a) the provisions of the EU Waste Framework Directive, including the waste hierarchy set out in Article 4, which prioritises *energy recovery* over *disposal*, and the principles of *self-sufficiency* and *proximity* set out in Article 16;
- (b) the provisions of the National Development Plan 2007-2013 in relation to waste management;
- (c) the provisions of the National Hazardous Waste Management Plan 2008-2012, which recommends that Ireland should strive for greater self-sufficiency in hazardous waste management;
- (d) the provisions of the North East Region Waste Management Plan 2005-2010, and the North East Region Waste Management Plan 2005-2010 Review Report;
- (e) the policies and objectives of the Meath County Development Plan 2007-2013;
- (f) the planning history of the site, and the existing waste-to-energy recovery facility on site, which operates under a licence issued by the Environmental Protection Agency;
- (g) the limited quantity and types of hazardous waste that would be accepted for treatment;
- (h) the location of the site, and its proximity to a national transport network;
- the documentation submitted in support of the application and to the oral hearing, including the environmental impact statement and the Habitats Directive screening statement;
- (j) the submissions on file, including those from prescribed bodies, and the Inspector's report and assessment, and
- (k) the waste licence review application (Registration Number W0167-03) made to the Environmental Protection Agency for the proposed development.

The Board considered that the environmental impact statement submitted with the application, supported by the further information submitted to the Board over the course of the application, including the information submitted to the oral hearing, the submissions of prescribed bodies and the planning authority, and other submissions on file, were adequate in identifying and describing the likely significant effects of the proposed development. The Board completed an environmental impact assessment, and agreed with the Inspector in his assessment of the likely significant effects of the proposed development, and generally agreed with his conclusions on the acceptability of the mitigation measures proposed and residual effects in relation to the increase in non-hazardous waste capacity. The Board did not share the Inspector's concerns regarding the residual effects of the treatment of hazardous waste (as summarised in Section 11.9.12 of the Inspector's report) for the following reasons:

- Having regard to the level of geotechnical, hydrogeological and hydrological information available on the current file and on the planning appeal history files, the Board considered that any residual concerns in relation to details of the waste water treatment system could be appropriately addressed by means of condition.
- 2. Having regard to the level of information on file relating to the acceptance, handling, storage and management procedures for various waste streams, and to the application to the Environmental Protection Agency for a revised waste licence, the Board was satisfied that the details of such procedures would be satisfactorily dealt with by the waste licensing process, and that adequate information was available to inform its decision-making for planning and environmental impact assessment purposes.
- 3. The Board considered that the availability of an appropriate, licenced treatment facility in Ireland for segregated hazardous waste (as opposed to export abroad) should not necessarily lead to a change in public perception or practice in relation to waste management. Moreover, public communication programmes can respond to changes in attitudes should they arise.

Having completed the environmental impact assessment, the Board concluded that the proposed development would not be likely to have significant adverse effects on the environment.

The Board carried out a screening exercise in relation to the potential impacts of the proposed development on European sites, having regard to its nature

and scale, to the receiving environment, to the Habitats Directive screening statement submitted with the application, to the submissions on file generally, including those from the prescribed bodies and from the planning authority, and to the Inspector's assessment, which is noted, and concluded that the proposed development, in itself or in combination with other plans or projects, would not be likely to have a significant effect on any European site.

The Board considered that, subject to compliance with the conditions set out below, the proposed development would be in compliance with national, regional and local waste management policies, would not seriously injure the amenities of the area or of property in the vicinity, would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience and would, therefore, be in accordance with the proper planning and sustainable development of the area.

In deciding not to accept the Inspector's recommendation to refuse permission for the acceptance of hazardous waste:

- The Board considered that the acceptance of a limited quantity of specified types of hazardous waste in this existing commercial waste-to-energy plant would provide an alternative to the current export of a significant proportion of such waste, in accordance with the principles of self-sufficiency and proximity as set out in the EU Waste Framework Directive.
- 2. Point (3) above addresses the reasons for not accepting the Inspector's second recommended reason for refusal.
- 3. Point (2) above addresses the reasons for not accepting the Inspector's third recommended reason for refusal.
- 4. The Board noted Condition 30 of Planning Appeal Reference Number PL17.219721, which required the developer to pay a financial contribution in respect of a community recycling park. The Board considered the provision of a community recycling park at Duleek to be a matter for the planning authority.

CONDITIONS

1. The proposed development shall be carried out in accordance with the plans and particulars lodged with the application, as amended by the further information received by An Bord Pleanála on the 11th day of June, 2012 and on the 30th day of August, 2012, as further amended by the information submitted to the oral hearing, and in accordance with the provisions of the submitted environmental impact statement, including environmental mitigation measures contained therein, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development and the development shall be carried out and completed in accordance with the agreed particulars.

Reason: In the interest of clarity.

 Conditions attached to the planning permission granted under planning register reference number SA/901467 shall be complied with in full, except where otherwise specified in the following conditions.

Reason: In the interest of clarity.

- 3. (1) The tonnage of waste accepted for treatment at the facility shall not exceed 220,000 tonnes per annum.
 - (2) Non-hazardous waste to be accepted at this facility shall primarily be waste generated in the waste region in which it is located. Where non-hazardous waste is accepted from outside that region, it shall only be done in accordance with the proximity principle and Ministerial Policy as set out in Circular WIR:04/05.
 - (3) The tonnage of separately collected hazardous waste accepted for treatment at the facility shall not exceed 10,000 tonnes per annum.

The only hazardous waste types to be accepted for treatment shall be in accordance with the European Waste Catalogue Codes listed in Table 2.1 of the environmental impact statement submitted to An Bord Pleanála with the application on the 30th day of April 2012, as attached in Appendix 1 of this Order.

Reason: To clarify the nature and scope of the permitted development.

4. The hours of waste acceptance and dispatch of residues/waste shall only be between 07.00 and 18.30 on Monday to Friday, and between 08.00 and 14.00 on Saturday. Waste shall not be accepted or dispatched on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In the interest of the amenities of property in the vicinity and to facilitate the operation of the waste-to-energy facility.

5. Prior to commencement of construction, the applicant shall submit to and agree in writing with the planning authority details of the proposed additional waste water treatment facility on site in accordance with the requirements of the Wastewater Treatment Manual "Treatment Systems for Small Communities, Business, Leisure Centres and Hotels" issued by the Environmental Protection Agency (1999).

Reason: In the interest of public health.

- 6. In relation to any excavation or ground disturbance, the developer shall facilitate the archaeological appraisal of the site and shall provide for the preservation, recording and protection of archaeological materials or features which may exist within the site. In this regard, the developer shall:
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
 - (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:

(i) the nature and location of archaeological material on the site, and

(ii) the impact of the proposed development on such archaeological material.

A report, containing the results of the assessment, shall be submitted to the planning authority and, arising from this assessment, the developer shall agree in writing with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to An Bord Pleanála for determination.

Reason: In order to conserve the archaeological heritage of the area and to secure the preservation (in-situ or by record) and protection of any archaeological remains that may exist within the site.

7. Construction stage details for water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority.

Reason: In the interest of public health, and to ensure a proper standard of development.

8. Site development and building works shall be carried out only between the hours of 08.00 to 19.00 Mondays to Fridays inclusive, between 08.00 to 14.00 on Saturdays and not at all on Sundays or public holidays. Deviation from these times will only be allowed in exceptional circumstances where prior written approval has been received from the planning authority.

Reason: In order to safeguard the amenities of property in the vicinity.

9. The developer shall pay the sum of €60,000 (sixty thousand Euro) (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a contribution in respect of public roads improvements to benefit the proposed development. The works and measures shall include:

- (i) improved permanent road markings delineating the right turn lane at the access to the site from the R152 Regional Road; and
- (ii) permanent signage to assist in the enforcement of the traffic management plan, which prohibits traffic associated with the waste—to—energy facility from travelling along the R150 Regional Road between its junction with the R153 Regional Road to the west and the N2 National Road to the east.

This contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board to determine.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority and which will benefit the proposed development.

SCHEDULE OF COSTS

In accordance with section 37H of the Planning and Development Act 2000, as amended, the Board requires a reasonable contribution to be paid by the applicant towards costs incurred by An Bord Pleanála and by the planning authority in its consideration of the application, as attached in Appendix 2 of this Order.

SCHEDULE OF COSTS

In accordance with section 37H of the Planning and Development Act 2000, as amended, the Board requires the following reasonable contribution to be paid by the applicant towards costs incurred by An Bord Pleanála, the planning authority and by persons who made submissions/observations to the Board in its consideration of the application:

To An Bord Pleanála	€21,045
To Meath County Council	€ 8,260
To Louth and Meath Health Protection Group	Nil
To James Rountree	Nil
To Louth People Against Incineration	Nil

A breakdown of the Boards costs is set out in the attached Appendix 2.

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day of 2013.

6. Planning Ref: PL.17.219721 (SA60050)

Inspector's Report

An Bord Pleanála



Inspector's Report

An Bord Pleanála Ref. No.: PL17.219721 Reg. Ref.: SA/60050 **Planning Authority:** Meath County Council **Proposed Development:** 17 MW waste to energy facility, the realignment of the R152 and a new access and entrance from the R152. **Type of Application:** Permission **Planning Authority Decision:** Permission with attached conditions. Type of Appeal: First party -v- Conditions Third Parties -v- Decision **Appellants:** (a) First party: Indaver N.V. (b) First third party appellant: No Incineration Alliance (c) Second third party appellant: Carranstown Residents Group (d) Third third party appellant: Drogheda Chamber of Commerce

Ward

(e) Fourth third party appellant: Stephen

Inspector:	M. Cunneen
Site Inspection:	4 th and 5 th March 2007

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1. PROPOSED DEVELOPMENT

16.2.06: Application Documentation Receipt by Planning Authority:

The application consists of an EIS and its associated documentation; the associated documentation consists of an application form, copy of conditions of option and sale of the site, an outline specification of the plant, a landscaping specification, and a suite of plans and drawings. The associated documentation states that the proposed development consists of a 70MW waste to energy facility, which will have an annual capacity of 150,000-200,000 tonnes of waste. The facility will consist of:

- A main process building of 7,218.23 square metres (18.5 metres to 40.2 metres high) incorporating a waste reception hall, waste bunker operations building, boiler/grate furnace, ash bunker, flue gas treatment building, associated access galleries and a 65 metre high flue stack.
- Ancillary structures will consist of a AC Turbine Unit and cooler building of 605.16 square metres (27.7 metres high) with associated access galleries, pumphouse building of 155.42 metres square (8 metres high), water storage tank 2,000 metres cube (8 metres high), gate house 27 square metres (3.67 metres high), education centre/workshop/warehouse building of 623.4 metres square (8.9 metres high), transformer compound, contractor laydown area, carparking (46 no. spaces), electrical switch room of 35.89 metres square (2.97 metres high) and an on site puraflo effluent treatment system.
- The realignment of the R152 road along the road frontage of the site.
- Road access will be via a new entrance from the R152, approximately 3 kilometres from Duleek and 4 kilometres from Drogheda.
- The site area is 10.36 hectares of which approximately 4 hectares will be covered in buildings with the remainder of the site being landscaped.
- The floor area of the buildings is 22,493 square metres.
- That it is proposed to service the site by means of private well and public mains water supply and proprietary wastewater treatment system.
- That a waste licence is required for the site.

A more detailed description of the operational aspects of the proposed development is set out in the EIS summary which follows:

2. EIS

An EIS accompanies the application consisting of three volumes and a non-technical summary submitted as a separate volume. Chapters one to four of the EIS provide details of the company background, pre-planning consultations with the Planning Authority, the need for the proposed development, the site selection process, consideration of alternatives both in terms of site location and waste treatment and disposal processes including alternative thermal treatment technologies and finally EU directives, policies and national, regional and local policies and objectives. The remaining chapters of the EIS describe the proposed development, and its associated and potential impacts on the environment, landscape, cultural heritage of the area and on human beings as well as proposed impact mitigation measures.

The salient points of the EIS are as follows:

Chapter 1:

- That the annual capacity of the incinerator is 150,000-200,000 tonnes.
- A community liaison committee consisting of a minimum of eight members to include representatives of Meath County Council, Indaver Ireland, local residents and elected members of Meath County Council will be formed prior to the construction phase and convene at quarterly intervals to address issues regarding the facility.
- That an extensive public information and consultation programme was undertaken prior to submission of application.

Chapter 2:

- The need for the proposed incinerator is justified by reference to Irelands targets for diversion of biodegradable municipal waste from landfill set out under the Landfill Directive 1999/31/EC viz 75 per cent, 50 per cent and 25 per cent of Irelands BMW volumes for the baseline year 1995 only may be sent to landfill in 2006, 2009 and 2016 respectively. Even if all national recycling biological treatment and EU landfill diversion targets are met in 2009, there is still a need for thermal treatment of 641,681 tonnes nationally.
- The adopted Waste Management Plan for the North-East Region (2005-2010) still adheres to the targets of the previous waste plan namely 43 per cent recycling, 39 per cent energy recovery and 18 per cent disposal.
- Re energy recovery the plan states that "it is a critical objective to develop a thermal treatment plant with a capacity of 150,000-200,000 t.p.a (2007/8)".
- The site selection process comprise three stages; Stage 1 comprises the application of a "centre of gravity" model (based upon population

distribution and road distance between waste production centres) in order to determine the centre of waste production for the region. Stage 2 considers the various technical and environmental criteria for those towns with the lowest overall "tonne/kilometre" score namely Drogheda, Ardee and Duleek respectively; Carranstown being located between Drogheda and Duleek (first and third ranked towns respectively) was judged to be close to the centre of gravity of waste production. Stage 3 then examines specific sites within the Carranstown area having regard to site availability and criteria as set out by the WHO, the North-East Region Waste Management Plan of 1999 and the updated Waste Management Plan of 2005-2010. Based on those stated criteria it was considered that Carranstown enjoyed the most favourable rating and was the most suitable site for the proposed development.

Chapter 3:

Examination of alternatives in terms of location, thermal treatment technologies, waste management strategies and energy recovery and gas cleaning systems; in regard to alternative thermal treatment technologies the EIS states that the Grate Combustion System proposed offers a number of advantages over pyrolysis, gasification, waste combustion with energy recovery and combustion of RDF. While there are not any examples of Grate Combustion technology in Ireland, it is widely practised in European countries. In regard to alternative waste management strategies although the developer promotes the recycling of waste (operating community recycling centres on behalf of Meath County Council, and the provision of a paper and waste electrical recycling service in the North-East), the developer states that an absolute zero waste policy is not feasible as it would require the redesign of all products, and a dramatic change in lifestyle; furthermore no country or community has achieved a zero or near zero waste position in regard to landfill - the lowest level in the EU waste hierarchy.

In regard to alternative energy recovery and gas cleaning systems, a number of such were considered, with the developer finally proposing heat recovery by means of a steam boiler, dust removal by means of a baghouse filter, DeNOx by way of selective non Catalytic Reduction, a spray reactor together with a wet scrubbing system to ensure that emissions fall within EU limits and a first stage removal of Dioxins by way of injection of a pre-mix of activated carbon or lignite cokes and lime before the baghouse filter.

Chapter 4:

Sets out EU directives and policy, national, regional and local policy document relevant to the proposed development. Chapter demonstrates how the proposed development complies with those directives and policies.

Chapter 5:

Chapter 5 describes the project operation; it summarises the proposed plant and its process thus.

The proposed plant (which) is based on conventional grate incineration technology...will consist of a 70MW furnace and a state of the art flue gas cleaning system...

The waste is tipped into a bunker prior to being fed into the furnace. In the furnace the waste is incinerated, producing heat, ash and flue gases. The flue gases are cooled, filtered, passed through scrubbers and reheated prior to discharge via the stack. The waste liquid produced by the scrubbers is used in the cooling process and a solid waste is produced rather than an aqueous effluent, thereby eliminating any process water discharge from the facility.

The combustion of waste produces emissions whose maximum limit emission values are regulated by EU Directive on Waste Incineration (2000/76/EC). A combination of treatment systems has been chosen for the...facility to ensure that the emission limit values as set down in the Directive will be met.

Optimal operating conditions for the plant lie within the following range.

- (i) Calorific value of 12.5MW/Kg; operating hours of 7,500 hours; capacity of 150,000 tonnes per annum.
- (ii) Calorific value of 10MW/Kg; operating hours of 8,000 hours; capacity of 199,000 tonnes per annum.

The maximum capacity of the plant will be 200,000 tonnes per annum.

The plant will operate 24 hours a day for an average of 7,500 hours/annum depending on the average calorific value of the waste (a greater quantity of low calorific waste is required to maintain the temperature for the furnace at a minimum of 850 degrees Celsius)

The facility will accept waste between 0800 and 1830 hours Monday to Friday and between 0800 and 1400 hours on Saturday.

The plant will burn non hazardous household, commercial, industrial and other suitable waste which is currently being disposed of to landfill...The incineration process will produce a mainly inert bottom ash, much of which will be suitable for use as fill for road construction or for daily cover of landfill sites. A small quantity of hazardous waste will be produced primarily as a result of the flue gas cleaning process. This will be disposed of to hazardous waste landfill either in Ireland or abroad.

Figures 5.1, 5.2 and 5.3 show the general site layout and schematic diagrams of the incineration process.

The electrical output from the plant is approximately 16MW; approximately 3MW is required for electrical demand within the plant, resulting in a net electrical output of approximately 13MW.

The stack height will be 65 metres; flue gases will be reheated prior to discharge in order to pre-empt the formation of a visible plume from the stack.

The facility is controlled by an interface computer system which incorporates four levels of interlocking; those will be triggered when abnormal operating conditions are present.

The only emissions from the plant will be flue gases and those will be subject to continuous monitoring particularly for Dioxins.

The plant will not produce any process effluent as all such effluents will be recycled for use in the evaporating spray reactor.

The plant will accept residual municipal and industrial waste from a variety of sources, largely from commercial and industrial enterprises and private waste collection companies.

Water will be required mainly for flue gas cleaning, although process water for the steam cycle will also be required as will domestic potable water and water for cleaning; the water will be supplied by ground water abstraction and a small supply of potable water from the local main.

Solid waste residues from the plant will comprise bottom ash, boiler ash and flue gas cleaning residues.

Bottom ash will exit from the furnace and be quenched with water to prevent dust emissions prior to its transfer to an ash bunker; during that transfer ferrous metals will be recovered from the ash. It is anticipated that the bottom ash will be non hazardous and could be used in road construction or as railway ballast following treatment in an ash recycling plant; if bottom ash markets are not available it will be disposed of to a licensed non hazardous landfill site.

Boiler ash will be separately collected and transferred to a silo fitted with filters to prevent dust emissions; approximately one to two per cent by weight of the waste input will be collected as boiler ash; leachate tests will be carried out to determine whether or not such ash should be disposed of to hazardous or non hazardous landfill; should the boiler ash not be suitable for direct disposal to landfill it will be solidified with cement prior to disposal to landfill.

Flue gas cleaning residues will be removed from the baghouse filter by an enclosed conveyor system; it will then transfer to a silo fitted with filters to prevent dust emissions and from thence it will be transferred to a hazardous waste landfill site via a special collection truck with an enclosed container box. The flue gas cleaning residues will also be mixed with cement and water and solidified prior to landfilling.

A site life has not been defined for the proposed development therefore detailed financial, administrative and technical provisions are not presented by way of the decommissioning plan for the site. Decommissioning for the facility will be conditioned under the waste licence and all decommissioning measures will be undertaken to ensure an absence of any environmental impacts from the waste facility.

The plant will export electricity to the local distribution system via 20kv overhead lines to Rathmullen substation approximately 2.5km north of the site. The route of the lines will be determined by the ESB.

A health and safety plan will be formulated which will address health and safety issues from design through to completion of construction and maintenance.

Fire protection systems will be installed at the plant and the site emergency plan will also be prepared prior to operational start up.

The proposed facility is not one to which the Seveso regulations apply.

Chapter 6: Human Beings:

Health and Safety: The EIS provides an assessment of the potential impacts of the proposed development on human health and safety by Employment Health Advisors Limited (EHA). The assessment and conclusions were made in the context of EHA's own knowledge and experience, and evidence from literature in both Ireland and the UK as follows:

Health Research Board report 2003 on Health and Environmental Effects of Landfilling and Incineration of Waste: The report stated that while a number of studies have reported associations between the development of certain cancers and close residents to incinerator sites, the influences of other sources of pollutants and other causes of cancers are hard to separate out and as a result

"the evidence for link between cancer and proximity to an incinerator is not conclusive" therefore "further research...is required to determine whether living near landfill sites or incinerators increases the risk of developing cancer". The report however also went on to state that "Ireland presently has insufficient sources to carry out adequate risk assessment for proposed waste management facilities" and that "Irish health information systems cannot support routine monitoring of the health of people living near waste sites".

The EHA however states that it did not know of any "reliable or valuable form of routine monitoring of health" and suggested rather that it would be "more valuable to monitor exposure..." as exposure "is far more sensitive to potential changes in the environment and gives results before human effects, allowing for prevention".

Support for the EHA position is set out in a 2004 UK Government Report which concluded that

"epidemiology specific to incinerators gives no basis for developing quantitative health impact functions"...and that "a more fruitful approach is to examine the specific substances known to be discharged from an incinerator to model resultant environmental concentrations and to use exposure response coefficients relating to those specific substances to estimate the magnitude of adverse health outcomes".

The EHA states that

- Monitoring of PCDD/F in ambient air in Ireland has been carried out frequently over the last five years in air, over the last 15 years in soil, and over the last 10 years in food, providing data showing the range of concentrations.
- Background soil dioxin and flume concentrations were also sampled for the Duleek area; background soil dioxin-like PCB's were undetectable for all sites samples in the area. Dioxin and furan values measured were well below any of the recorded limits defined in literature and are low by international standards.
- Air modelling carried out as part of the EIA predicted that "levels at the nearest residential receptor would be minor with the annual contribution from the proposed facility accounting for less then 0.6 per cent of the existing background concentration under maximum operating conditions. In addition the most at risk individual someone who has the maximal exposure from the site shows exposure to Dioxins significantly below "safe" levels.

The EHA therefore concluded that "because of the absence of impact on local levels and bearing in mind that most human dioxin exposure is dietary and that the food we eat and the milk we drink usually comes from far and wide, it is a straightforward conclusion that the proposed facility will have no significant effect on dioxin intake either locally or nationally.

The EHA assessment also refers to other population health indicators such as respiratory, reproductive effects and cancer; the EHA concluded that studies failed to show any conclusive evidence of a link between those indicators and modern incinerators; those studies were a UK Department of Health Committee on Carcinogenicity published in March 2000 and a further 2004 UK Government Report.

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Without prejudice to the above findings however a modelling exercise was undertaken by the developers which assessed the potential impact of dioxin and furan emissions from the facility on the conceptual "Maximum At Risk Individual" taking into account the pathways by which the Dioxins will be transferred to the MARI. On the basis of modelling results it was concluded that "the predicted impact of the emissions from the waste to energy facility in terms of dioxin and furan dose to a MARI are not significant, with the dioxin and furan dose predicted to increase from 0.8519pg/kg/bodyweight/day to 0.8889pg/kg/bodyweight/day – well below the EU 14pg/kg/bw/wk limit value set for the protection of human health and the environment; similarly annual worst-case scenario emissions modelled were also well below relevant EU limit values.

Odours:

An odour impact criterion of less than or equal to 3.0 OuE m-3 at the 98th percentile was used for the odour impact assessment; dispersion modelling reveals that all predicted ground level concentrations will be less than the chosen criteria, even during periods of shutdown; data analysis also revealed that emission of odorous material via the 65 metre stack will provide better dispersion and lower ground level concentrations of odours than either bio filtration or carbon filtration. The study recommended no handling or sorting of putrescible waste should take place within the waste reception hall, that all putrescible waste be directly tipped into the bunker area, that during scheduled shutdown a lime layer should be placed over the stored waste within the bunker to prevent any significant odorous emissions, and that all extraction air from the bunker be exhausted via the proposed 65 metre stack.

Chapter 7: Air Quality:

Waste combustion produces a number of emissions including nitrogen dioxide, sulphur dioxide, dust particulates, Dioxins/Furans, and heavy metals; the discharges of emissions are regulated by the EU Directive on Waste Incineration (2000/76/EC).

An air dispersion model – AERMOD – was used to assess pollutant concentrations in emissions from the facility and the conclusions of the air quality study were based on results obtained from the model; data input to the model consisted of detailed information on the physical environment, design details from all emission points on site, and a full year of worst-case meteorological data. The model then predicted ambient ground level concentrations beyond the site boundary for each hour of the modelled meteorological year and then processed the data to identify the location and maximum value of the worst-case ground level concentrations for comparison with relevant limit values. The worst-case concentration was then aggregated with the existing background concentration to give the worst-case predicted ambient concentration; that in turn was compared with the relevant ambient air quality standards for the protection of human health. Input data to the model were based on a worst-case scenario i.e. all emission points were assumed to operate at their maximum level on a 24 hour/365 day/year, all emission points were assumed to be operating at their maximum flow, maximum predicted

ambient concentrations for all pollutants measured within a nine kilometre radius of the site were reported, worst-case background concentrations were used and worst-case meteorological conditions were also used. The AERMOD Dispersion Model used is also used by the USEPA for modelling emissions from industrial and sources in both flat and complex terrain.

Assessment methodology was based on recommendations outlined in Council Directive 2000/76/EC; that Directive requires continuous measurements of NOx, CO, PM₁₀ and PM_{2.5}, HCL and SO₂ as well as biannual measurements of heavy metals, Dioxins and Furans. The baseline monitoring showed that concentrations of total dust, NO₂, benzine, SO₂, and metals were all significantly below the respective annual limit values set out in EU Directives 1999/30/EC, Directive 2000/69/EC and WHO and TA Luft Guidelines. The emission modelling results were then assessed first under the maximum emission limits of the EU Directive 2000/76/EC and secondly under abnormal operating conditions.

The air dispersion modelling demonstrated that "the most stringent ambient air quality standards for the protection of human health are not exceeded either as a result of operating under either maximum or abnormal operating conditions.

The modelling results also found that the maximum ambient ground level concentrations occur at or near the site's north-western to eastern boundaries. Concentrations fall off rapidly away from this maximum and that the short term limit values at the nearest residential receptors will be less then 3.5 per cent of the short term limit values under maximum operations of the site. The annual average concentration has an even more dramatic increase in maximum concentration away from the site with concentrations from emissions at the proposed facility accounting for less than one per cent of the limit value (not including background concentrations) at worst-case sensitive receptors near the site under maximum operations. Thus the results indicate that the impact from the proposed facility is minor and limited to the immediate environs of the site.

In the surrounding main population centres of Duleek and Drogheda, levels are significantly lower than background sources with the concentrations from emissions at the proposed facility accounting for less than 0.5 per cent of the annual limit values for the protection of human health for all pollutants under maximum operations of the site.

The Stockholm Convention on Persistent Organic Pollutants (POP's) entered into force on 17.4.04. Article 5 of the Convention identifies a number of measures to reduce or eliminate releases of POP's (including Dioxins and Furans) from unintentional production; they include the promotion and use of BAT for new sources with a particular initial focus on source categories identified in Part 2 of Annex C. Incineration of municipal waste is defined as a Part 2 source category under the Convention; the proposed facility at Carranstown employs BAT in regard to operational conditions particularly in regard to the use of advanced flue gas cleaning systems and the control of incineration temperatures. Thus the proposed waste management operation at

Carranstown will achieve and promote the objectives of the Convention in terms of recovery, recycling, waste separation, release reduction, process modification and BAT.

Chapter 8: Noise and Vibration:

Anticipated noise and vibration associated with the proposed development was assessed for four noise survey locations in respect of the construction phase of the development and for five dwellings in respect of the operational phase of the development. All locations are identified at Figure 8.1. Noise survey measurements (LAeq) during daytime weekday hours ranged between 65 and 76LAeq for the three roadside locations and measured 47-50LAeq for the fourth location to the north-west; weekend and night time noise levels saw a decrease over daytime levels due to reduced traffic volumes on the adjoining regional road and reduced noise from the adjoining cement works at Platin.

The EIS then identified two sources of noise during the construction phase of the proposed development namely, on site plant machinery and additional vehicular traffic on public roads. Table 8.6 indicates that construction noise arising from the proposed development will not exceed 65dBLAeq except during construction of the earthen bund at the south-eastern corner of the site; in that regard mitigation measures are proposed. In terms of construction traffic noise it is predicted that the noise increase will be negligible at 1dB.

In regard to the operational phase of the development it is predicted that the noise levels at the five most sensitive residential locations are within typical EPA waste licence daytime and night time criteria of 55dBLAeq 30min and 45dBLAeq 30min respectively. In regard to noise generated by operational traffic on the public road the predicted increase in noise levels due to additional vehicular traffic is less than 1dB – a negligible increase.

Re vibration impacts on proposed development from adjoining quarry at Platin, the EIS sates that the IPC licence for Platin specifies a peak particle velocity of 12mm/s for ground borne vibration at the nearest noise sensitive location – a dwelling south-east of the quarry approximately 300 metres from the quarry face. As the proposed turbine hall and condensers at the appeal site lie approximately 300 metres from the nearest face of the quarry it is anticipated therefore that "worst-case vibration levels at the foundations of the proposed buildings will be of the order of 12mm/s (on the assumption that geological ground conditions are consistent between the quarry and receptor locations around the site). Furthermore the EIS states that there is "typically no cosmetic damage to buildings if transient vibration does not exceed 15mm/s at low frequencies. In that context and given also that the proposed development will incorporate appropriate seismic design for the building foundations neither cosmetic nor structural damage to buildings at the appeal site is anticipated even should "worst-case" vibration levels occur. The EIS also states that it is standard practice in regard to vibration sensitive equipment to incorporate suitable vibration isolating systems into the equipment installation.

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Mitigation measures proposed in respect of the south-eastern corner of the site where the earthen bund would be constructed consist of the erection of a 2.4 metre high timber hoarding to obstruct line of sight between the earth moving equipment and the residential property R3; other mitigation measures include restriction on the duration of noisy activities at the site, monitoring of noise during critical periods and sensitive locations, appointing a site representative responsible for matters relating to noise and vibration and establishing channels of communication between the contractor, Local Authority and residents.

Construction work resulting in vibration (for example piling operations) shall only be undertaken in association with appropriate abatement measures.

Chapter 9: Soils and Geology:

The overburden geology consists predominantly of boulder clays which vary in thickness across the site ranging from 5 metres towards the west to an excess of 20 metres towards the centre; sand and gravel lenses are present throughout the clays. Analysis of soil samples indicated concentrations above the Dutch S value (Ref. value for normal uncontaminated soil) for some of the heavy metal; levels of contamination however are slight and reflect agricultural activity within the area.

Percolation tests undertaken to determine site suitability for installation of a proprietary wastewater treatment plant indicated that the site would require to be engineered to meet required specifications for percolation areas.

Potential impacts on soils and geology during the construction phase are associated with spillages of polluting substance and encounter of underground cavities; during the operational phase impacts are limited to accidental spillages of polluting substances; mitigation of potential impacts from spillages is proposed by way of good management practices; encounter of cavities will be pre-empted by a planned site investigation programme which will define the due technical conditions on the site in advance of any building and founding of the structure on different bearing strata, as well as inclusion in the substructure and superstructure of structural joints which will allow sections of the building to act independently of each other in regard to settlement.

There are not any features of geological interest within the site; hence impact on soils and geology will be limited to excavation works; raised steps of excavation will occur within the waste and ash bunker areas where excavation will take place to a depth of 24.0mOD; at that location the rock lies at approximately 15mOD. Should swallow holes or cavities be encountered these can be dealt with by bridging over the area or by grouting where appropriate.

Chapter 10: Groundwater/Hydrogeology:

The limestones below the site form part of the Platin Formation which was classified by the GSI in 2004 as "regionally important, diffuse karst aquifer,

good development potential"; under the GSI classification system the site has been rated as a "Regionally important-moderate" resource protection zone.

The local groundwater regime at the site is determined largely by the Platin Quarry dewatering programme.

The EIS states that groundwater is extensively used by the local community as a source of water supply and hence there are some 22 recorded wells within three kilometres of the site; it is proposed also that the site will be partially serviced by means of well water supply.

The EIS makes the point that in the case of landfill sites, potential pollution of groundwater by leachate would restrict the location of such facilities on limestone deposits; in the current case however as all waste will be handled within a contained building and a water tight bunker which will not allow for the emission of lechate, landfill location criteria do not require to be applied. Furthermore although the waste and ash bunkers will be excavated to a level of 24.0mOD, the rock level lies some 9 metres below that at 15mOD.

The EIS therefore states that the main impacts of the proposed development on the groundwater/hydrogeology of the area are potential spillages of polluting substances during both the construction and operational phases, impacts on groundwater levels and quality of private well water as well as potential impact on regional groundwater quality. Mitigation proposed for potential pollution consists largely of secure storage of polluting substances, deepening of impact at wells and, provision of perimeter monitoring wells with consequent elimination of any contaminant sources.

Chapter 11: Surface Water:

The appeal site lies in the catchment area of the River Nanny which flows through Duleek and discharges to the sea at Laytown; the Nanny is a major tributary off the Boyne.

The proposed development will not impact on the quality of the Nanny River due to employment of a number of mitigation measures namely appropriate treatment of domestic effluent, containment of industrial effluent within the site and its evaporation within the incineration process, management of storm water by means of settlement tanks, petrol interceptors and an attenuation system, collection and safe disposal of all sludges.

Chapter 12: Ecology:

Neither the site nor its immediate surroundings are covered by any scientific or conservation designation or proposed designation as recognised by the NPWS; it is noted however that the River Nanny, into which local water courses feed, supports populations of brown trout.

Despite the absence of any site designation however a habitat assessment was conducted; it identified six habitats ranging from spoil and bare ground,

drainage ditches and hedgerows through to tree lines, improved agricultural grassland and arable crops. The habitats did not contain any rare, threatened or legally protected plant species and are of moderate to low species richness with a low contribution to local biodiversity. Nevertheless mitigation is proposed in the form of retention of hedgerows where possible, and a landscaping programme to improve the amenity and biodiversity value of the site.

The EIS states that the air dispersion modelling analysis shows that the nearest conservation designation site is outside the range of air emission plumes.

Re Fauna, an assessment was carried out by means of a field survey which noted that the site has a low representation of Irish fauna due to the intensive agricultural practice and limited range of habitats on site. The survey concluded that while the site does provide some potential for bat foraging and small roosts the habitat quality is poor for protected species. The survey stated that the principle impacts on fauna include loss of foraging and commuting habitats for bats as well as loss of some potential bat roosts within trees on site; it is therefore recommended that prior to commencement of construction all trees should be surveyed and those which are to be removed should only be felled during the spring or Autumn; bat boxes however should be placed within the site to offset any potential loss of roosts.

A survey of breeding birds both within and outside the site revealed that none of the species recorded are listed in Annex 1 of the Birds Directive or are "red species"; any loss of hedgerows therefore or trees will have negligible impacts as they are used only by common birds. The proposed development is not expected to have any impact on a pair of peregrines which breed in a local quarry as they already contend satisfactorily with a high degree of visual interference and noise levels from the quarry.

Chapter 13: Traffic:

The site is accessed from the R152 at a point approximately 200 metres north of the R150/R152 junction just outside Duleek and approximately 200 metres south of the M1/R152 motorway intersection. The R152 will be widened along its northern margin to accommodate a right turning lane and a deceleration lane for traffic turning left into the site.

Proposed haul routes to the site are based on centres of waste generation and are anticipated to be, from the north via the M1 motorway and the R152, from the east via the R150, from the south via the N2 and R152 and from the west via the R153, the N2 and the R150.

Traffic volumes likely to be generated by truck deliveries of waste are estimated at 58 inbound truck deliveries per day or 13 per am peak hour in an even directional split; truck movements associated with a delivery of raw materials and the removal of residual waste are estimated at 15 truck movements per day or four movements per peak hour in a roughly even directional split; a conservative assessment therefore predicts a total of 17

inbound truck movements during the am peak hour. Waste acceptance will commence at 8a.m.

The impact of the additional traffic generated by the proposed development on the surrounding junctions was assessed using PICADY and ARCADY software; a base year of 2006 was assumed and traffic conditions were assessed for a 20 year time horizon.

R152: Pre-development traffic peak hour flows are estimated at 1108 with post-development peak hour flows rising to 1142 – an increase of three per cent which is not likely to have any impact on the operation of the road. Pre-development AADT levels are calculated at 11080 (based on a ten-fold increase in peak hour flows). Post-development AADT flows are estimated at 11420; the projected increase in AADT flows will still allow the R152 to operate within capacity at level of service E (15,600 vehicle max.).

Table 13.3 sets out predicted traffic flows on the R152 for the base year of 2006 and for the projected year of 2026; in the base year, the increase in AADT equates to 2.89 per cent, reducing to 1.94 per cent in 2026. The EIS states that the assumed cumulative traffic growth over 20 years is much greater than any increase expected from the expansion of Platin.

The EIS modelled traffic flows at the following junctions:

Site access junction: post development the junction operates well with no queuing.

R152/R150 junction to south of site: Pre-development flows at the junction operate within capacity; post-development the junction still continues to operate well within capacity; however saturation capacity at the junction is anticipated by 2013; at that time however it is anticipated that the Duleek Village Bypass will have been completed resulting in a reduction in the number of vehicles using the junction.

M1/R152 junction to north of site: This junction consists of a diamond interchange with each roundabout at the interchange operating as an independent junction. Pre-development traffic flows at the western roundabout show that it operates well within capacity and continues to do so even with the additional traffic generated by the proposed development. For the eastern roundabout ARCADY results show that pre and post development the roundabout still continues to operate well within capacity.

N2/R150 junction at O'Brian's Cross: Traffic from the west (Navan) will access the site via the R153/N2 junction at Balrath Cross, travelling north along the N2 to the R150/N2 junction at Brian's Cross; capacity at Brian's Cross for pre and post development shows that the junction operates well within capacity.

N2/R153 junction at Balrath Cross: Under pre and post development traffic conditions, the junction operates well within capacity.

N2/R152 junction at Kilmoon/Cushinstown: Pre development, traffic flows south through the junction on the R152 are above the desirable maximum during the morning peak hour; however in practice an acceleration lane at the junction allows traffic from the R152 to merge into southbound traffic on the N2 with little delay; post-development, a slight increase occurs at all approaches to the junction but with the only approach of any consequence being from the R152; the increase however generated by the proposed development is so small as to be imperceptible and will not have any adverse impact on the operation of the junction.

Construction traffic: A construction period of 24 months is proposed; construction traffic will consist of HGV traffic, workforce traffic and general construction traffic; total construction traffic flows during the peak am period of 6.00am to 7.00am is 242 vehicular movements; those movements however will not coincide with peak background flows on the R152; were background flows on the R152 at 6.00am deemed to equate to those for the period 7.00am to 8.00am, then the total volume of traffic likely to be generated along the R152 is 1039 vehicles which still is less than peak hour (8.00am to 9.00am) flows of 1108 vehicles.

Duleek village: The proposed development will generate an additional eight vehicles per hour through the village; however when the east-west bypass of Duleek village is completed (confer Meath County Council Development Plan Objective for Duleek) all traffic from the site will be diverted away from the Main Street of the village.

R152 Alignment: The proposed development access achieves a visibility envelope in excess of the 160 metres required for access junctions as set out at TD41/95 of NRADMRB.

Chapter 14: Landscaping and Visual Impacts:

The site slopes from a high point in excess of 39m.O.D. at its north-eastern corner to a low point of less than 30m.O.D at its south-western corner. The site itself is visually unremarkable consisting of small fields with hedgerows; the immediate hinterland of the site is dominated by the industrial complex of the Platin Cement works: an 110kv power line and a 210kv power line cross the site in the north/south direction.

Principal views to the site are from the south-west, and north-west.

The most obtrusive element in the complex will be a 65 metre high chimneystack which will rise to a height of 95.3mO.D. The building fabric has an industrial finish i.e. proprietary profiled metal cladding panels of selected colour.

The proposed development will impact on:

(a) The perceived character of the area.

- (b) The existing views.
- (c) The visual and recreational amenity.

In regard to (a) the EIS states that the landscape is already subject to a significant level of intrusion due to the village expansion of Duleek, the presence of Platin, and the presence of the M1 motorway. Although the development is an industrial complex, the provision of extensive landscape buffering will visually tie the development into the surrounding landscape allowing the complex to finally present as a group of linked industrial building in a heavily planted landscape.

Re (b) above the proposed development will have both a significant and neutral impact on views into the site; although the agricultural landscape will be replaced by a complex of linked industrial buildings, in a heavily planted buffer zone, it will also be juxtaposed against the mass of the adjoining Platin cement works.

The impact on views is described by way of a computer-assisted photomontage which shows views of the site from a number of locations identified on the view location map at Appendix 14.1; photomontages of night views are also provided and show the amount of light spillage that will be visible.

The photomontages reveal that although the proposed development will be clearly visible in near and middle distance views, its impact will not be significant in the context of the adjoining Platin cement works which visually dominate the landscape and which will also dominate the proposed development in terms of height, scale and massing. In long distance views, particularly from features and sites of cultural and heritage importance, (Battle of the Boyne site, Newgrange, Dowth) the proposed development will not be visible due to screening by intervening topography.

Chapter 15: Climate:

Baseline conditions: The EIS states that "the largest share of energy emissions in 2003 is from fuel combustion for power generation (23 per cent of total emissions) and road transport (17 per cent of total emissions). Waste represented three per cent of total emissions in 2003 and is anticipated to represent only 1.5 per cent by 2010. Emissions from waste consist mainly of CH⁴ with small amounts of other greenhouse gases. In order to compare the relative heating effect of different greenhouse gases in the atmosphere, gas emissions are calculated on the basis of their Global Warming Potential (GWP) over a 100 year period; the GWP 100 for CO₂ is 1 whereas for CH₄ it is 21 and for N₂O it is 310; in 1998 CH₄ emissions from waste accounted for 98 per cent of the total GWP from waste.

Predictions of GHG emissions from the proposed development were carried out using emission factors derived from IPCC and from USEPA; prediction of

GHG emissions from landfills was developed using the LandGEM Model and emission factors also derived from USEPA and IPCC. GHG emissions from the proposed development in the absence of power generation will contribute 0.09 per cent of the total GHG emissions in Ireland in 2010; however as the development will produce 13 MW of electricity for export it is estimated that that equates to a 67 per cent reduction approximately in greenhouse gas emissions from the site. Thus the actual contribution to the Total Greenhouse Gas Emissions is 0.030% of the total Greenhouse Gas Emissions in Ireland in 2010.

The impact on climate of the landfilling of 200,000 tonnes of waste over a 25 year period has been calculated using the LandGEM Model; the model indicates that peak production of CH₄ occurs 25 years after opening and that significant quantities of CH₄ are still being produced 50 years after closing; should landfill gas be captured and combusted the resultant CO₂ emissions are not net emissions under IPPC as the primary source of CO₂ derives from the decomposition of organic material derived from biomass; however a contribution of CO₂ to total greenhouse gas emissions in Ireland is in that case 0.25 per cent. Were landfill gas however to be used as a fuel source which would otherwise have been provided by fossil fuels, the annual contribution to total greenhouse gas emissions in Ireland in 2010 is equivalent to 0.042 per cent.

In conclusion the proposed development will contribute only 0.030 per cent of the total greenhouse gas emissions in Ireland in 2010 when energy recovery is taken into account, in contrast to landfill which would contribute to 0.042 per cent of the total greenhouse gas emissions in Ireland in 2010; the overall impact of the proposed development on climate is a net benefit of approximately 0.012 per cent of the total greenhouse gas emissions in Ireland in 2010 - a net benefit which will be imperceptible in terms of Irelands obligations under Kyoto.

Chapter 16: Cultural Heritage:

An Archaeological Impact Assessment of the site was based on field walking and desk based research; although there are not any known archaeological monuments recorded on the site there are four in the vicinity comprising an inland promontory fort, earthworks, a souterrain on the of a castle or church.

The UNESCO-ICOMOS monitoring mission which reported on the site in 2004 found that "there were no grounds for believing that the construction of the proposed incinerator itself would have a direct impact on the outstanding universal value of the World Heritage Site (Boyne Valley); indirect impacts are not predicted.

Visual impacts again were considered in the UNESCO-ICOMOS report which stated that "while the construction of the incinerator stack would be a visual intrusion, the mission considers that it would have an minimum impact on the World Heritage Site compared with the existing cement factory nearby".

Visual impacts from Bellewstown Ridge are not expected to be significant.

Visual impacts on the site of the Battle of the Boyne are unlikely to be significant as the closest point of the site is some three to four kilometres distant from the battle site; the UNESCO-ICOMOS mission also concluded that "the construction of the incinerator would not appear to preclude any possible interpretation of the course of the battle".

Impacts on the ecclesiastical centre of Duleek which is recognised as an important archaeological and historical site where the early ecclesiastical core of the village still survives, will not be direct.

Mitigation and remediation measures are confined to monitoring of top soil stripping of the site and reporting of archaeological discoveries to appropriate authorities.

Chapter 17: Material Assets:

Property prices: The EIS refers to documented research which shows that while property prices fall during the proposal, planning and construction stages for an incinerator, they recover once the facility is operational; research regarding significant long-term adverse effects on property prices within the area of an incinerator have been inconclusive.

Any of the other issues discussed in this chapter are discussed in more detail in dedicated chapters in the EIS.

Chapter 18: Construction:

Construction of the facility will take place in three phases; phase one will include site clearance works, fencing, bulk excavation, regrading, landscape berming and planting as well as haul roads, site roads, temporary car parking and staff facilities (2/3 months). Phase two will consist of the construction of buildings, roads completion, drainage and infrastructural works completion (16 months). Phase three will consist of installation and testing of mechanical and electrical equipment (8 months).

Construction working hours on site will be confined to 7.00 am to 7.00 pm Monday to Saturday inclusive.

During the construction phase domestic effluent will be transported off the site for treatment; spoil material will be reused; solid waste will be stored prior to transfer to and authorised facility for recovery/recycling/disposal.

A Construction Methodology Study was also submitted as part of the EIS; the study described how each phase would be undertaken, what the external impacts to the surrounding environment may be and appropriate mitigation measures.

3. SITE LOCATION

The appeal site lies approximately 2.5 kilometres north of the centre of Duleek village; the village has its origins as an ecclesiastical settlement, remains of which are still visible in the ecclesiastical structures and high crosses in the village.

Approximately 2.5 kilometres to the north of the site the R152 intercepts with the M1 motorway and then continues north towards Drogheda; the southern fringes of Drogheda lie approximately 4 kilometres north of the appeal site. The R152 between the village of Duleek and the junction with the M1 is approximately 6 metres wide, flanked by defined hard shoulders and grass verges; the grass verges in turn are flanked by thorn hedges and tree planting. The R152 between Duleek and the M1 intersection is of reasonable horizontal and vertical alignment although sight lines to the north along the site frontage are restricted due to an extended curve in the road adjacent to the north-eastern corner of the site; a double solid white line therefore defines the centre of the road along the site frontage.

Nearest dwellings to the appeal site are:

A new dwelling which is accessed from the laneway immediately south of the appeal site, a dwelling adjoining the north-eastern corner of the appeal site, and bungalows on the southern margin of the R152 almost opposite the existing field gate entrance to the appeal site. The dwellings are identified at Figure 8.1 on the site layout noise survey location map attached to the EIS.

While the site is located in what is essentially a rural agricultural area, the immediate environs of the site are dominated by the cement works at Platin which consist of twin chimneystacks rising to a height in excess of 100 metres above adjoining ground levels, cement silos and cement manufacturing plant; the vertical scale and overall massing of the cement plant together with its extensive footprint has resulted in it becoming a landmark structure in the wider Meath/Louth area with views of the plant visible even in long distance panoramic views from locations as far away as Skrene and the Hill of Tara some 18 to 20 kilometres distant to the south-west.; views of the cement plant however from heritage sites to the north (Newgrange, Dowth and Knowth) are obstructed by intervening topography.

4. SITE DESCRIPTION

The site comprises three in number agricultural field units and a linear strip of an adjoining field unit at the south-western corner adjacent to the R152. The field units are defined by tree-lined ditches and hedgerows;

Ground levels on site slope downwards in an easterly direction from the north-eastern corner of the site where it adjoins the R152, finding their lowest levels along the north-western site boundary.

A derelict dwelling house/barn fronts the R152 adjacent to the south-eastern corner of the site:

From the north-western site boundary there are clear views westwards towards the railway embankment and northwards towards the Platin cement works.

A BGE gas transmission line crosses the site underground. ESB 110kv overhead power lines also cross the site. There does not appear to be any proposal by the developer to reroute either of the lines.

5. PLANNING APPLICATION PROCESS AND PLANNING AUTHORITY DECISION

Planning Application Process

Prescribed Bodies and Other Consultees:

- BGE: No objection to the proposed development; BGE owns and operates
 a high pressure gas transmission pipeline within a wayleave across the site;
 BGE requests that developer liase with BGE transmission in advance with
 any excavation or construction work within or adjacent to the wayleave
 and that all excavation or construction work be completed in accordance
 with the relevant BGE code of practice.
- NRA: No submission or observation.
- DOEHLG: (Heritage) recommends that predevelopment archaeological survey and testing be included in any condition attached to any grant of permission which may issue.
- An Taisce: The EIS fails to address the different impacts generated by the proposed development and also fails to justify the extent of catchment area sought; the application fails to resolve the conflict between the increased height of the stack required by the EPA and impact on the Boyne Valley World Heritage Site; the EIS has also failed to provide details of trans boundary consultation consultation justified on the proximity of the appeal site to the Battle of the Boyne site; the EIS is deficient in regard to landscaping, assessment of landscaping impacts and lack of rationale for viewpoints chosen for the photomontage; the EIS fails to indicate the developers intentions regarding potential uses for bottom ash and fails to identify the final destination of boiler ash, only noting that that destination is dependant on whether such ash is classified as hazardous or non-hazardous after leachate tests have been carried out.
- ABAILE: Opposes the proposed development on grounds of evidence linking autism to elevated levels of mercury and heavy metals such as lead which are present in incinerator emissions and in high concentrations in the fly ash.
- Newry and Mourne District Council: Objection to the proposed development.

11.4.06:

Further information sought by the Planning Authority on eight issues.

4.7.06:

Further information response received by the Planning Authority.

The requests and responses for S.I. are as follows:

(i)(a) What alternative locations within the site were considered in order to minimise the visual impact of the proposed development?

Response: The consideration of alternative locations for the plant within the site is limited by ground levels on site which slope downwards from the roadside to the rear by approximately 10 meters, by the need to maintain a 7 metre wide wayleave on either side of the gas main which crosses the site and a 10 metre wide wayleave on either side of the 110kv power line which also crosses the site; other constraints were separation distances from nearest noise sensitive receptors, mitigation of visual impacts.

(i)(b) Provide a rationale as to why the main building on site has to be circa 40 metres in height.

Response: The height is informed by the technological processes on site and safety requirements.

(ii)(a) Identification of the location and quantities of waste proposed for treatment at the facility in the context of the North-East Regional Waste Management Plan.

Response: The proposed facility will primarily service the needs of the North-East Region therefore it has been developed at a location and with a capacity which is compatible with the North-Eastern Regional Waste Management Plan; however the waste market is not organised on a county boundary basis but rather on other factors such as location of waste companies premises or logistically efficient routes. In that context the developer refers to legal advice which states that "a planning condition that limits the sources of waste for the proposed facility would present enforcement risks as it would be near impossible for the applicant to verify compliance...and would conflict with express Government Policy on movement of waste and the rational development and use of waste infrastructure...any condition limiting the sources of waste for the proposed facility would fix primary responsibility for compliance on the applicant"... and would be inherently unjust in that it would fix "responsibility on a person that cannot verify compliance"...; furthermore every "waste collector that delivers waste to the facility"... including "any Local Authority that undertakes waste collection within the region would have secondary responsibility for compliance - as an accessory to breach of the condition".

The developer also states that restriction on sources of waste arisings would likely compromise the commercial viability of the plant and hence undermine the objectives of the North-East Regional Waste Management Plan.

In the above context the developer refers to DOEHLG, circular WIR:04/05, para. 2: Movement of Waste which directs that planning conditions which restrict waste acceptance to waste from a particular region only should not be applied to planning consents for waste facilities. That policy was set out in correspondence to the company from the DOEHLG.

The EPA also in a written response to the company referred to circular WIR:04/05 and the 2001 National Waste Database where it was recommended that "the implications of the prohibition on transferring waste between regions, as implemented by An Bord Pleanála and Local Authority planners, should be examined. The inter-regional movement and treatment of waste should be provided for in the revised Regional Waste Management Plan in appropriate circumstances."

In conclusion the developer proposes to build a facility "at the centre of gravity of waste in the North-East region and with a capacity in line with the North-East Regional Waste Management Plan. The proposed facility is therefore in line with the North-East Regional Waste Management Plan and will be constructed to primarily serve the North-Eastern region.

(iii)(a) Revision of the traffic section of the EIS to take into account traffic levels and access point associated with the extant Scottish and Southern Energy Permission granted adjacent to the site.

Response: The traffic generated by the Scottish and Southern Power Energy power station is detailed in the EIS for that project and was used to assess the cumulative impacts of that proposal and the proposed development. The cumulative TIA showed that the construction flow and background peaks of the two developments are not coincidental and that there will be a spread of the peak period. Re the operational phase of the power station, total employment levels are projected at 25 to 30 persons resulting in an additional 15 traffic movements during the am peak period (based on a vehicle occupancy of one) resulting in a 50:50 directional split on the R152.

In regard to capacity of the R152 there will be an increase of 4.4 per cent in traffic flows there as a result of the combined traffic from the two sites, allowing the R152 continuing to operate within LOS E; re junction capacities, even with cumulative traffic flows, the R152/R150 junction and the M1/R152 junction will still operate within capacity.

(iii)(b) Re suitability of R152 alignment.

Response: The developer states that TD9/04 requires forward sight visibility of 160 metres as a desirable minimum for a design speed of 85kph; however in the absence of a junction within the sight lines a one-step relaxation to 120 metres is available. Northerly sight lines at the entrance to the proposed development are reduced to 145 metres

due to a crease curve to the north; however those sight lines are still within the allowable relaxation distance as there are not any existing junctions within that section of reduced visibility. Were the access to the power station at Platin to be constructed the relaxation in the sight lines would not be permitted and therefore realignment of the R152 would be necessary. The developer states however that the impact of the power station on the developer's sight lines is an issue which need only be addressed were the power station to be constructed. The developer therefore proposes that the R152 realignment be omitted from the current application in favour of a new access junction to the facility.

(iv)(a) Whether capacity is available in the public water supply to facilitate the needs of development.

Response: All potable water is to be supplied from a well on site; potable water demand for use by personnel on site is 24m³ (max) per day; 72m³ reflects water requirements for the demineralisation unit of the boiler.

(iv)(b) The proposed development should not compromise the Council's short/medium term strategy to source the water supply for the East Meath Region from the site aquifer.

Response: Mitigation measures are proposed in the form of preemptive and remediation measures such as on site bunding, storage of waste in fully contained watertight structures which will pre-empt leakage to soils, absence of discharges from the incineration process, absence of any significant levels of dewatering or pumping of ground water, attenuation of service water run off, reuse of suspect flows within the process or for transportation and treatment off-site.

(v) Construction design to incorporate a safety factor allowing for vibration potential.

Response: Re vibration impacts from the adjoining quarry the anticipated vibration level is less than 10% of the vibration limit recommended to prevent structural damage.

(vi) Revised ecology section of the EIS required indicating clearly what precisely is to be retained from the viewpoint of flora and fauna

Response: An amended ecological report was provided (confer Appendix 10 of S.I response).

(vii) Describe impacts likely to result should dewatering cease at Platin.

Response: Were dewatering to cease at Platin years would elapse before the water table recovered its pre-quarrying levels. Given the containment measures of the bunkers the risk of leakage from the proposed development entering the groundwater system is virtually nil.

(viii) Details of a base line assessment for each of the wells outlined at Table 10.2 *GSI Well Search*, in order to assess the impact of the groundwater extraction on the surrounding area.

Response: it is not possible to accurately locate the wells recorded in the GSI database in the vicinity of the proposed site due to the coarse nature of the grid coordinate data attached thereto. Information on the location of domestic wells in the vicinity of the site is provided by Platin Quarry and is contained at Figure 4 together with the location of the main pumping wells at Platin Quarry and the Local Authority mains supply; those wells fall within the cone of depression associated with Platin excavations and have been monitored over many years as part of the quarry's planning permission. As the proposed development lies in close proximity to the Platin excavation it is unlikely that the planned ground water abstraction will result in an increase in the overall groundwater abstraction from the aquifer. Rather it is likely that there will be a small reduction in the quarry abstraction as a result of the proposed development and the existing cone of depression is unlikely therefore to be enlarged; the proposed development will not therefore have any additional impact on domestic wells.

(ix)(a) Although the EIS states that bottom ash output (approximately 24% of waste input by weight) can be reused, the EIS does not propose that the ash be reused in the current instance; although recovery plants do not exist for ash recovery in Ireland, they do in other countries; the feasibility of exporting bottom ash for reuse has not been addressed however.

Response: It is not environmentally feasible to export bottom ash to other countries for treatment and reuse as the environmental benefit of recycling ash abroad is small relative to the environmental cost of transporting it oversees; furthermore it is unlikely that other countries will continue to accept that ash, as Ireland currently has excess landfill capacity for such material. Hazardous ash, however will have to exported for treatment and disposal as Ireland does not have any hazardous waste landfill.

(ix)(b) Although ferrous metals can be recovered and recycled from the waste, the developer has chosen not to do so.

Response: the technical processes implored at the plant do not facilitate recovery and recycling of ferrous material – the bottom ash will not be presented in a thin loose layer, it will be wet and cannot easily be spread out and finally the differential in size particles does not facilitate recovery.

Interdepartmental Reports:

Transportation and Road Design: Final Report of 18.8.06

The F.I. was deemed to deal adequately with cumulative traffic impacts particularly as generated traffic figures used are conservative. Meath County Council therefore did not have any objection to the proposed development subject to compliance with a number of recommended conditions; those included contributions towards the cost of the Duleek bypass, the overlay of the adjoining regional roads and improvements towards junctions on those roads as well as provision of public lighting on the R152; it was also a recommendation that the right turn lane be constructed and completed prior to commencement of any site works. The report also stated "assuming waste only arrives from within the region the assumption of 50/50 split is acceptable for traffic arriving at the facility.

HSE: Environmental Health Officer: 14.8.06

The report noted that F.I. in relation to a number of points was not requested by the Planning Authority as recommended by the Environmental Health Officer. Notwithstanding that the report recommended that were permission to be granted for the proposed development a number of conditions be attached; those included conditions regarding visual inspection of waste prior to acceptance in the bunker, a prohibition on outdoor stock piling of waste, remediation of any adverse impact on wells in the vicinity of the site, and other conditions regulating environmental pollution and process operation.

Environment: Final Report 22.8.06

The report states the "the collection permit system under which the collection of all waste in Ireland is authorised is the current mechanism by which the collection of statistics on the movement of waste is carried out. It would seem reasonable that it should be under this system and by the strengthening of same that each region should endeavour to control the movement of waste and help the viability of proposed facilities in their region...

This facility has been designed at capacity to adequately accommodate the projected quantity of waste for thermal treatment arising in the North-East region and its potential for commercial viability should not be infringed by limiting its capacity to react to changes in the waste industry outside the control of the applicant...

Monitoring of wells in the area is already being carried out onto the Platin Quarry planning permission. The quantity of abstraction proposed for this development is unlikely to have a significant effect on the aquifer....

Planning Authority Decision:

Planning officer's report expressed a number of salient points namely.

- It is evident from the policy/guidance documents (Government, Regional, North-East area and Meath County Development Plan) that there has been a notable change of policy with regard to the treatment of waste within regions. In light of the above documents which support interregional movement and treatment of waste the Planning Authority is of the opinion that waste management development in County Meath must be considered not only in the context of (the North-East) waste management region but also in the context of other waste regions and that accepting the waste from other regions should be considered in principle, subject to, inter alia the proximity principle being adhered to.
- A liaison committee should be set up comprising of Meath County Council
 officials, elected members and developer representatives to meet to agree
 on an ongoing basis the origin/source and collection contractors utilising
 the proposed facility, to ensure that waste for acceptance at the facility is
 primarily waste generated and produced in the North-East region area and
 to ensure that regard is had to the Proximity Principle.
- While the visual impact of the currently proposed development would be greater than that proposed on site under P01/4014, the applicant has provided sufficient justification for the siting and scale of the proposed development. Further the development proposed, when taken in conjunction with existing and permitted developments in the area would not add such visual intrusion which would warrant a refusal of the proposed development.
- The R152 realignment should be provided as proposed by the applicant prior to S.I. response. This is a preferred traffic solution to the site.

Permission was therefore granted for the proposed development subject to compliance by the developer with 32 conditions. Of note are conditions

- 3. Waste for acceptance at the facility shall primarily be waste generated and produced in the North-East region and shall be subject to a maximum of 200,000 tonnes per annum.
- 5. Establishment of a community liaison committee.
- 6. A special contribution towards the provision of environmental improvements and recreational/community facility projects in the vicinity.
- 7. A special contribution towards the provision of a community-recycling park benefiting development in the vicinity.
- 8. Realignment of the R152 to include right/left turn lanes and ghost islands.
- 10. Restrictions on haul route.

11.	Restrictions on noise of the development.	emission	levels	during	the	construction	phase

6. FIRST PARTY APPEAL SUBMISSION

6.1 The first party appeals condition 6, 7, 13 and 32 attached to the notification of decision to grant permission.

Condition No. 6:

The developer shall pay an annual sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of environmental improvements (to include artistic feature in Duleek village) and recreational/community facility projects in the vicinity of the proposed waste management facility. This contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

Condition No. 7:

The developer shall pay an annual sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the planning authority as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of a community recycling park (environmental improvement) benefiting development in the vicinity of the proposed waste management facility. This contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

Condition No. 32:

The developer shall pay a sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office) to the planning authority as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of road improvement works facilitating the proposed development. This contribution shall be paid prior to the commencement of the development

or in such phased payments as the planning authority may facilitate. The application of indexation required by this condition shall be agreed between the planning authority and the developer.

Reason: it is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.

6.2 The appellant states that conditions no. 6, 7 and 32 are unreasonable in that

- The conditions specify an amount which is to be agreed between the developer and the Local Authority with no recourse in the event of conflict to another party such as An Bord Pleanála.
- Conditions Nos. 6 and 7 lack clarity in that both conditions require the
 payment of "an annual sum prior to the commencement of development"
 or "payment of an annual sum in such phased payments as the Planning
 Authority may facilitate". The developer suggests that the word "annual"
 be omitted.
- Re Condition No. 6 while the developer is agreeable to an annual contribution, further clarification is sought as to how annual contributions towards an artistic feature could be provided; the developer recommends that a "once off" contribution is sufficient.
- Re Condition No. 7 the same argument applies that a "once off" contribution rather than an annual contribution should be made to the Planning Authority regarding the provision of a community-recycling park.

In the above context therefore the developer suggests a revised text for Conditions Nos. 6, 7 and 32.

6.3 Re Condition No.13, the condition reads as follows:

Condition No. 13:

Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services. The development shall not connect to the public water mains in the area. All water requirements to facilitate the development shall be sourced on site.

Reason: In the interest of public health and to ensure a proper standard of development.

The appellant states that Condition No. 13 lacks sufficient flexibility to provide for alternative arrangements should the situation regarding capacity constraints in the water supply change in the future; the developer therefore suggests a revised text for Condition 13 which will allow for connection to the public water mains only with the agreement of the Planning Authority.

7. FIRST THIRD PARTY APPEAL SUBMISSION: STEPHEN WARD

- 7.1 The developer has insufficient interest in the land to lodge the application.
- 7.2 The appellant queries the developers justification for the proposed WTE facility on the basis that the developer lodged an objection to Register Reference EL/2051 on the grounds of excess landfill capacity in the North-East region and the resultant impact on the proposed WTE facility identified in the North-East Region Waste Management Plan.
- As the proposed development is intended to serve areas outside of the North-East region, the EIS should have, in its consideration of alternatives, considered optional locations outside the North-East region.
- 7.4 The R152 from which the site is accessed has a solid centre white line and poor vertical and horizontal alignment; it is also characterised by an absence of public lighting and footpaths.
- 7.5 The location of the proposed development in a green-belt area is contrary to the aims of the National Spatial Strategy 2002-2020 which seeks to physically consolidate and develop key centres in the hinterland of Dublin.
- 7.6 The proposed development conflicts with the provisions of the 2004-2016 RPG's for the Greater Dublin Area which seek to direct development in the hinterland into development centres and to ensure separation of development centres from each other and from the metropolitan area by green-belts. Given that the proposed development is to serve a catchment well beyond the North-East region the proposed development contravenes national and regional planning policies.
- 7.7 Meath County Development Plan 2001: The plan identified the settlements of Navan, Trim and Kells for future industrial expansion the proposed development location at Carranstown is contrary to that policy and also to the settlement strategy of the plan which sought to direct new development including industrial development into designated centres.
- 7.8 Meath County Development Plan 2007: The proposed development conflicts with the rural settlement strategy of the plan that rural areas should allow for local growth in a manner which is appropriately scaled and that development should be guided to the right locations in rural areas in order to protect natural and manmade assets, and conflicts with the waste management policy of the plan. Finally recycling/waste disposal sites should be developed in appropriate locations not in the open countryside as is proposed here.

The proposed development also conflicts with development plan policy on regional roads – to ensure that all developments which are accessed from the county road network do so at a location and in a manner which would not endanger public safety by way of traffic hazard; the resultant increase in HGV's along the R152 and particularly within the village of Duleek would conflict with that policy.

The proposed development lies within Landscape Character Area 6 which is deemed to have a high landscape value and where it is recommended that such landscape value be maintained by "avoiding development that would adversely effect a short range of views; the height and scale of the proposed development creates conflict with that policy.

- 7.9 The propose haul route and the volumes of traffic likely to be generated by the development along the haul route will create a traffic hazard on a road network which is of poor vertical and horizontal alignment and will further exacerbate the severe negative impacts of traffic on the environmental quality of Duleek village.
- **7.10** In the EIS, the consideration of alternatives was a restricted exercise solely sought to verify the Carranstown site location.
- 7.11 Precedent has been set for refusal of permission at the appeal site by virtue of Register Reference SA/50445; there permission was refused for change of use from a grain store to recycling facility for construction and demolition waste on the basis that the facility was not associated with the needs of the local community, was located within a rural area, was not site specific and would give rise to a traffic hazard.
- **7.12** The proposed development may undermine proposals for recycling of waste in the North-East region.
- 7.13 The proposed development is located within an area of high landscape value where the scale and massing of the plant will be visually intrusive.
- **7.14** The proposed development is not located within the centre of gravity of the North-East region either geographically or otherwise.

8. SECOND THIRD PARTY APPEAL SUBMISSION: DROGHEDA CHAMBER

- **8.1** A refusal of permission on appeal for a similar development at the appeal site was recommended by the Senior Inspector for various reasons.
- **8.2** If waste incineration is permitted it will undermine the development of recycling.
- **8.3** There is adequate landfill capacity in the country to dispose of waste.
- 8.4 Inadequate assessments have been carried out on the resultant risks to health and the environment from the proposed development. The planning officer's report failed to assess the health and environmental impacts of the proposed development under new planning legislation.
- **8.5** The proposed development cannot be monitored and controlled as neither Meath County Council nor the EPA have the capacity to do so.
- 8.6 The original application for development of an incinerator at the site was the subject of nearly 5,000 individual objections to Meath County Council and 48 objections to An Bord Pleanála from not just the North-East region but also from the North and from a spectrum of interests within those areas.
- **8.7** Although supposed to serve the North-East region the developers have requested that they be allowed to take waste from any part of the country.
- **8.8** The proposed development is unnecessary and premature and would undermine the development of the waste management infrastructure.

9. THIRD THIRD PARTY APPEAL SUBMISSION: CARRANSTOWN RESIDENTS GROUP

- **9.1** The proposed development will impact on the health and quality of residents in the area.
- **9.2** The 2004 GSI rating of the underlying aquifer at the site is "extremely and highly vulnerable. That was not taken into consideration by Meath County Council.

10. FOURTH THIRD PARTY APPEAL SUBMISION: NO INCINERATION ALLIANCE

- 10.1 The appellants query the developers' interests in the site as the landowners of the site have objected to the proposed development in breach of their purchase agreement.
- 10.2 The appellants state that the World Health Organisation only considers incineration acceptable when strict criteria are met; those include criteria regarding siting of the facility such as elimination of "areas with limestone deposits, areas with subsurface mining, areas critical for aquifer recharge, areas of high well yield and areas of reservoir watersheds; all of these criteria are present in the current case; the appellants refer in particular to the criteria of "areas critical for aquifer recharge" where the site selection criteria recommends that regionally significant aquifer areas be eliminated from the selection criteria. The developers EIS (Soils and Geology) also acknowledges the fact that "the development site is underlain by karst limestone which by its nature can pose difficulties for building foundations due to the unpredictable occurrence, extent and depth of underground cavities. The facility is located in a wide expansive limestone strata. Furthermore Meath residents already suffer water shortages and to jeopardise therefore a regionally significant aquifer would be insane.

The 2005 Meath Waste Management Plan refers to the vulnerability of natural groundwater in the region and to the implementation of aquifer protection policies which seek to control development within the aquifer zones in a manner as to prevent pollution and contamination of water resources; the location of the proposed development fails to respect that aquifer protection policy.

- 10.3 Drogheda lies downwind of and some 2.5 miles distant from the site in an east-west valley prone to atmospheric inversions which result in a risk of elevated levels of atmospheric contaminants during certain weather conditions. A major population area would therefore lie directly downwind of the proposed development.
- 10.4 Re need for incineration, CEWEP (the European Incineration Company Organisation) has stated that Ireland has sufficient landfill capacity; the proposed incinerator is therefore excessive to requirements.
- 10.5 Under the new suite of Regional Waste Management Plans the concept of regionality has been omitted thus facilitating waste facilities to accept waste from any other area of the country that they so wish.
- 10.6 The incinerator does not have any provision for sorting waste; it will therefore burn recyclables which is cost saving in terms of finance and energy.
- 10.7 The appellants state that "the precautionary principle" should be adopted in the current case i.e. that emphasis should be placed on dealing with the causes rather than the results of environmental damage and that where significant

- evidence of environmental risk exists appropriate precautionary action should be taken even in the absence of conclusive scientific causes.
- 10.8 The appellants refer to the Rio Declaration on the Environment and Development which advocates the integration of environmental considerations into social policy in order to ensure that lifestyle changes are compatible with sustainable living, to the Kyoto protocol and the Stockholm Treaty, none of which have been considered by Meath County Council in assessing the application.
- 10.9 The increased 65 metre high stack height (revised from 40 metres to 65 metres by the EPA) is indicative of the level of pollution which will emanate from the facility to the surrounding area and is an indictment of the developer's ability to provide accurate dispersion calculations.
- 10.10 Re health impacts, the appellants have concerns regarding the ability of the EPA and other statutory bodies including An Bord Pleanála to assess the health implications of the proposed development; in that context the appellants highlight the submissions on their behalf from Dr. Vyvyan Howard and the Irish Doctors Environmental Association; the appellants also highlight the clarification requested by the North-Eastern Health Board.
 - The appellants also refer to recent literature by WHO (2005) and the British Society for Ecological Medicine (Health Effects of Waste Incineration, 2005).
- 10.11 The appellants also attached as part of their appeal submission copies of the objections to the proposed development sent to Meath County Council; among the issues raised were the broad spectrum of opposition within the community to the proposed development, cumulative impacts of the proposed development in conjunction with the cement works at Platin, the potential risks arising from siting an incinerator over fissured limestone substrata and a regionally significant aquifer, the proximity of the proposed development to the local community, undermining of the waste reduction and recycling policy (the appellant notes particularly that recycling is a significantly larger employer than waste incineration), to the inadequacy of health monitoring systems for incinerators as referred to by Dr. Kelly of the EPA, to the adequacy of landfill capacity in the North-East region particularly were aggressive diversion from landfill to be followed through, to the absence of any real time measurement for dioxin emissions in that while an incident may occur it can be smoothed over within a two week monitoring period.

The observations to An Bord Pleanála were also accompanied by a report from the British Society for Ecological Medicine on the health effects of waste incinerators; the forward to the report was written by Professor Vyvyan Howard from the University of Ulster; the report referred to

• The presence of high rates of adult and childhood cancer and also birth defects around municipal waste incinerators with smaller epidemiological studies supporting a causal association.

- Incinerator emissions are a major source of fine particulates, toxic metals and organic chemicals known to cause carcinogens, mutagens and hormone disruptors.
- Many pollutants bio accumulate, enter the food chain, and cause chronic illnesses over time and over a wide geographical area.
- Studies in the states have shown that PM_{2.5}, primarily produced by combustion, causes increased mortality, after adjustment for other factors.
- It is impossible to establish that modern abatement procedures have rendered emissions from incinerators safe especially as rigorous independent health monitoring has not been put in place.

11. APPLICANTS OBSERVATIONS ON APPELLANTS SUBMISSIONS

- **11.1 Re Site Ownership,** the development company has obtained legal advice which states that the company has sufficient *locus standi* to make the application.
- 11.2 Re Landfill Capacity, the developer states that excess landfill capacity which does not comply with regional Waste Management Plans has come about in Ireland; such capacity greatly reduces incentives to promote and achieve alternative waste management options, threatens the development of an integrated waste management system and undermines Ireland's ability to meet landfill diversion targets; the developers concerns in regard to excess landfill capacity are set out in a published report attached to the observations.

11.3 Landfill Levy:

The developer notes the advantages to be derived from landfill levies – that they provide the necessary market conditions for the development of higher in hierarchy waste infrastructure without impacting on available disposal capacity and that they generate revenue which can be channelled into waste minimisation, reuse, recycling and other waste management and environmental protection initiatives, thereby reducing overall costs to the consumer. However when landfill capacity exceeds requirements gate fees drop and therefore increases the financial risk for developers wishing to invest in capital intensive alternative waste infrastructure.

- Re Impact of WTE facilities on alternative Waste Management Strategies, 11.4 WTE forms an essential part of a hierarchy of waste management as outlined in the North-East Region Waste Management Plan; furthermore WTE is compatible with an integrated approach to waste management as confirmed by many of the EU states where high recycling rates coexist with high WTE capacity. The WTE facility will also help to achieve Kyoto targets and promote the objectives of the National Climate Change Strategy in that it will remove material from landfill which would otherwise emit methane; furthermore the WTE facility will generate and export electricity from an non fossil fuelled source. Finally the proposed WTE is designed and sized to a scale only suitable to treat residual waste from which recyclables have been removed upstream (other than ferrous metals which will be recovered from the bottom ash) rather than from the incoming municipal waste stream on the basis that post rather than pre operation removal is a more efficient and cleaner process.
- 11.5 Re impact of proposed development on National and Regional Planning Policy, the developer states that the North-East region Waste Management Plan 2005-2010 identifies the provision of a WTE facility as an integral part of the waste management strategy for the region and therefore that strategy forms part of the Meath County Development Plan.

11.6 Re centre of gravity of waste arising:

A centre of gravity model was used to identify areas suitable for location for the WTE facility; the basis of the model is that waste arising in the region travels the minimum distance to the treatment facility; the model concludes that Drogheda and Duleek rank among the top three locations in terms of minimal tonne/kilometre; Carranstown which is located between Drogheda and Duleek lies close to the centre of gravity of waste production.

11.7 Source of Waste:

Condition 3 attached to the grant of permission by Meath County Council requires that waste accepted at the facility shall primarily be generated and produced in the North-East region and shall have regard to the proximity principle; on the basis of the site selection process the North-East region is the primary catchment area for the proposed facility and the developer agrees with same; in that regard the capacity of the plant has been sized to meet the needs of the North-East region as set out in the 2005 Waste Management Plan; however as waste is not organised on a county or regional boundary basis, the only efficient way to ensure that wastes within the region are dealt with primarily in the region is by regulation of waste collection permits.

- 11.8 Re non compliance with the WHO site selection criteria, the WHO criteria apply only to the siting of hazardous waste management facilities; nevertheless the site was assessed in accordance with WHO site selection criteria; although the assessment found the site to be sensitive in relation to limestone deposits, high well yield and reservoir watersheds, those criteria were ranked as having low applicability to the proposed development.
- 11.9 Re site geology, there will not be any liquid effluent arising from the proposed facility other than treated effluent; it is also noted that the communities of Duleek and Drogheda and their associated activities are located on top of the limestone aquifer. Finally a detailed site investigation programme will be carried out in advance of building works in order to define the geotechnical conditions on the site; the resultant construction will incorporate the findings of that study.

11.10 Impact on Limestone Aquifer:

There will not be any discharge from the incineration process; the only discharge will be from the on site effluent treatment system or accidental spillage of potentially polluting materials; mitigation measures for those are proposed in the form of detailed site investigation, secure storage, maintenance and inspection of underground piping.

11.11 Impacts on Health and Environment:

Chapter 6 of the EIS – Impact on Human Beings – states that there will not be any deleterious effect on human health either in the immediate vicinity or at a distance either short or long term as the WTE facility will not have any significant impact on dioxin or furan intake, no odour will be generated, ambient air quality standards will not be exceeded, construction noise related impacts will be short term and not significant. Noise from the operational phase will not be significant either, nor will there be any adverse impacts on the hydrogeology of the development site or on existing surface water.

- **11.12 Re visual impact,** the proposed development will have significant but neutral impacts on the landscape character of the area; furthermore the extensive landscape buffer will assist in integrating the development within the surrounding landscape.
- **11.13 Re monitoring and control roles of the EPA,** the WTE will be subject to monitoring and control by the Office of Environmental Enforcement; however the proposed facility will also operate to ISO and OHS standards.
- **11.14 Re traffic and road alignment impacts,** traffic from the proposed facility will not result in a changed level of service (LOS-E) for the R152 while the existing junctions will still operate within capacity.
- 11.15 Re previous refusal of permission for development of a recycling facility at Carranstown/Newtown, it is inappropriate to link that decision to the proposed development as the information supplied in the EIS clearly outlines:
 - A need for the scheme as highlighted in the North-East Region Waste Management Plan,
 - The appropriate location of the site in terms of the centre of gravity of waste arisings,
 - The significant but neutral impact likely to be generated by the development on the existing landscape and finally
 - Proposed mitigation measures in respect of the development.

11.16 Accompanying Documentation:

Included a CEWEP report on "excess landfill capacity" which described the impacts of such capacity on the implementation of Irish Waste Policy. The executive summary of the report recognises that while landfill has a role to play in an integrated waste management system, Ireland now has excess long term landfill capacity which will result in Ireland failing to comply with landfill diversion targets and constrain the development of an integrated waste management system; furthermore revised Regional Waste Management Plans which are key players in policy implementation, fail to provide required direction on short to medium term landfill capacity in compliance with diversion targets. The report also refers to the apparent dependence of Local Authorities on landfill income and the likely drop in such income were waste to be diverted from landfill. The report recommends annual assessment of national landfill capacity and its restriction through a permit system that caps tonnage for each landfill according to actual need as well as an increased landfill tax to reflect environmental impacts on landfill and incentivise recycling, composting and WTE.

12. OBSERVATIONS ON FIRST AND THIRD PARTY APPEALS BY STEPHEN WARD

The 2005 Development Management Guidelines at Para. 7.1 clearly state that conditions attached to a grant of permission should be clear, unambiguous and enforceable; conditions attached to the grant of permission by Meath County Council are ambiguous and unenforceable as the Local Authority will be unable to control the geographical area from which waste is to be sourced.

The EIS is flawed particularly in regard to the absence of any consideration of alternative locations outside the North-East region; as the developer proposes to take waste from outside the north-east region locations outside the region should also have been considered.

The developer has failed to take into account a potential co-location site for the WTE at Nevitt in North County Dublin where Fingal County Council are also proposing a landfill site.

13. OBSERVATIONS

Observations received by the Board refer to:

- Failure of site to comply with WHO site selection criteria.
- Site underlain by a regionally significant aquifer.
- Public health hazard having regard to likely emission of pollutants and to prevailing winds.
- Traffic hazard due to increased volumes of traffic on a local road network.
- Western boundary of site is recessed at a greater distance from railway line only to pre-empt any part of the site being classified as having an "extreme" vulnerability as set out in the Codes of Practice Response Matrices.
- Proposed sourcing of waste from outside the North-East Waste Management Region is contrary to EU Regional Waste Management Policy.
- Increased rates of recycling undermine the need for any incinerator in the North-East region.
- The proposed development conflicts with recommendations of the Stockholm Convention namely a reduction in the emission of Dioxins and Furans.
- The proposed development is premature in advance of a recycling and composting network being established in the North-East.
- The emission limit values set down in Directive 2000/76/EC may soon be superseded as the emission limit values laid down by that directive although necessary are not sufficient for compliance with the requirements of Directive 96/61/EC; rather more stringent zero emission limit values for Dioxins and Furans will be required having regard to the Stockholm Convention and the priority attached by WHO to the implementation of that Convention (confer WHO information paper "Public Health Management of Persistent Organic Pollutants in relation to the Stockholm Convention"). Furthermore under the Stockholm Convention Ireland is obliged to produce a national plan for the reduction and elimination of Persistent Organic Pollutants; however the granting of permission for an increase of incineration capacity from 150,000 to 200,000 tonnes per year conflicts directly with the Stockholm requirements to "reduce and eliminate" releases of Dioxins and Furans.
- The observers request that planning Condition No. 6 be amended to ensure that the developer pays €400,000 per annum to the "Health Research

Board" throughout the operational life of the plant in order that the necessary surveys of public health as well as a comprehensive air quality monitoring programme can be carried out and monitored.

- The developer should pay €100,000 per annum each to the NO Incineration Alliance and to the Louth People Against Incineration in order to carry out independent analysis of the surveys.
- The European Dioxin Inventory states that incinerators in Belgium and Europe are the largest contributors to Dioxins; during calm climatic conditions, emissions from the incinerator will give rise to particulates in the air in the greater Drogheda area.
- The observers are critical of the EPA emission Licence Limits which requires measurements only of combinations of heavy metal particulates rather than individual metal particulates.
- The developer's argument that incinerators do not produce Greenhouse or Methane gas, and that hence they comply with the Kyoto Protocol, is artificial given the reduction in biodegradable waste to landfill required by 2020; at that point incinerators will become the largest contributors of Greenhouse Gases.
- The Health Research Board report on the "effects on public health and the environment of landfill and thermal treatment of waste" found that Irish health information systems cannot
 - (i) routinely support monitoring of the health of people living near waste sites and
 - (ii) that there is a serious deficiency of baseline environmental information in Ireland which makes it hard to interpret results of local studies.

In the absence of such systems the proposed development is premature.

• There is already a very high rate of cancer in Louth, while Drogheda has the highest rate of asthma in the country; incinerator emissions are associated with same.

14. NATIONAL PLANS, POLICIES AND GUIDELINES

14.1 Changing Our Ways: 1998 Government Policy Statement on Waste Management

The statement outlines the Governments policy objectives in relation to waste management; it is grounded in an internationally recognised hierarchy of options namely prevention, minimisation, reuse/recycling and the environmentally sustainable disposal of those wastes which cannot be prevented or recovered by thermal treatment and/or landfill.

14.2 Taking Stock and Moving Forward: 2004 Government Policy Statement on Waste Management

The statement notes that the majority of the first wave of Regional Waste Management Plans "envisaged a role for some form of waste to energy or thermal treatment technology in the overall package of waste management measures to be put in place".

The statement went on to acknowledge that "projects of this kind attract considerable opposition, most often because of health concerns and fears that such facilities will prejudice the achievement of recycling objectives". The statement however goes on to allay fears on both fronts referring to findings published by the Health Research Board in 2003 and the experience of other member states which shows how "significant levels of recycling and the use of thermal treatment can comfortably coalesce". The statement concludes in regard to thermal treatment that "it has a role to play as one element in the integrated approach to waste management".

14.3 DOEHLG Circular WIR: 04/05 (May 2005)

The circular states that:

"The policy document *Taking Stock and Moving Forward...*reflects acceptance that facilities provided in a region must deal primarily with waste from that region. However it also recognises that an unnecessarily restrictive approach may not be in keeping with the philosophy underpinning the regional approach to waste management infrastructure...(while) the Minister confirms that one of the fundamental components of policy in regard to the regulation of the movement of waste is the application of the proximity principle...relevant authorities...should recognise that the application of the proximity principle does not entail interpreting administrative waste management planning boundaries in such a manner as to inhibit the development of waste infrastructure which will support the attainment of national waste management policy objectives through the rational development and use of such infrastructure."

14.4 National Strategy on Biodegradable Waste 2006

Chapter 9.5 of the Strategy states that there are two options currently available for residual waste treatment namely thermal treatment and MBT. Neither system should be seen as an alternative to the separate collection and recycling policies set out in the Strategy.

The Strategy goes on to state that:

Thermal treatment with energy recovery is already proposed in six regions for managing municipal waste. This method provides a robust technology for dealing with mixed residual waste and forms a necessary element in the integrated Waste Management Plans of the six regions...

Two facilities (Dublin, North-East) that are in the planning phase will together have a total treatment capacity of approximately 550,000 tonnes/annum. However a significant proportion of this waste will be composed of waste which is not biodegradable. Further facilities are required as outlined in the regional waste management plans to provide certainty of meeting the national targets...

Recovering thermal energy from waste is supported by the National Climate Change Strategy. Energy recovered in the form of heat or electricity can reduce dependence on imported fossil fuels as well decreasing the generation of Methane gas in landfills.

14.5 National Development Plan 2007-2013

The Waste Management Sub-Programme set out at page 143 of the plan states that:

There is a need to continue to reduce reliance on landfill as a method of waste disposal...in line with National Policy on the Integrated Approach to Waste Management, thermal treatment with energy recovery will be the preferred option for dealing with residual waste after achieving ambitious targets in respect of waste prevention, recycling and recovery. This is reflected in the Regional Waste Management Plans for which the Local Authorities have statutory responsibility.

14.6 Government White Paper

Delivering a Sustainable Energy Future for Ireland: 2007 Government White Paper on The Energy Policy Framework 2007-2020.

The forward to the paper states that there are clear synergies between the White Paper and the forthcoming National Climate Change Strategy. The emphasis in the paper is on provision of a reliable, secure environmentally sustainable competitively priced energy supply by way of inter alia enhancing

the "diversity of fuels used for power generation". Chapter 3.4.8 of the White Paper sets out a number of actions to achieve diversity of fuel use including 15% of electricity consumption from renewable sources by 2010 through REFIT scheme projects.

The REFIT scheme was launched in May 2006 and the proposed development would appear to be eligible to participate in same.

14.7 National Climate Change Strategy 2007-2012

Chapter 8 of the Strategy states at page 33 that

"National Policy is to regard waste as a resource. This is reflected in our commitment to developing a recycling society and in the priority given to the diversion of waste from landfill. The implementation of these policies has a positive side effect in reducing Greenhouse gas emissions..."

The Strategy goes on to state at page 34 that

"while substantial volumes of biodegradable municipal waste will be diverted from landfill as a result of high levels of recycling and biological treatment, significant quantities of residual waste will remain. To maximise the recovery of useful materials and energy from residual waste, the *National Strategy on Biodegradable Waste* identifies thermal treatment with energy recovery as the preferred option in most Waste Management Plans adopted by Local Authorities...."

In accordance with the methodologies developed by the Intergovernmental Panel on Climate Change (IPCC), the CO_2 emissions resulting from the combustion of biodegradable waste are considered carbon neutral and are not accounted for the purposes of Kyoto obligations. In addition generation of heat and electricity from waste in thermal treatment plants reduces the need to produce this energy from fossil fuels and will therefore displace CO_2 emissions from the sources. By exploiting an indigenous energy source Waste To Energy plants make a contribution to national security of energy supply.

In the current process of revising the Waste Framework Directive (2006/12/EC) mechanisms are being considered which would encourage Waste To Energy plants to increase efficiency to a level comparable to conventional power plants, thereby allowing the energy content within waste to be transformed into electricity and heat for beneficial use in accordance with Best Available Techniques. The Government supports this approach in the context of the waste hierarchy, which will minimise climate impacts through the sustainable management of waste.

14.8 Regional Planning Guidelines for the Greater Dublin Area 2004-2016

Chapter 8.6.3 – Waste Disposal – states that "From a strategic perspective the waste management industry (which includes Planning Authorities and private operators should aim to develop integrated waste management facilities infrastructure in the G.D.A. This infrastructure includes … waste to energy plants …"

15. NORTH-EAST REGION WASTE MANAGEMENT PLAN: 2005-2010 (made on the 16th May 2006)

The 2005 North-East Regional Waste Management Plan set out some key findings arising from the review of the previous plan; those include the development of additional waste recovery capacity in the region and the urgent requirement of other facilities such as biological treatment and thermal treatment. (Chapter 1.5.1)

The plan also set out a number of policies, objectives and facts of which the most salient to the proposed development are

- Approximately 47 per cent of the household, commercial and industrial waste arisings in the region are disposed of to landfill of which 36 per cent is landfilled within the North-East region. (Chapter 14)
- The North-East Local Authorities will if necessary and/or where appropriate for environmental or other reasons, direct that certain waste streams must be delivered to a certain tier in the waste hierarchy (for example reuse, recycling, biological treatment, energy recovery). This will be achieved by means of the waste collection permit system or other appropriate regulatory or enforcement measures. (Chapter 3.1)
- Currently in the North-East region approximately 31 per cent of household waste generated was uncollected. (Chapter 2.2.1)

Chapter 3.6 states that

The North-East Local Authorities will require that private collectors in the region have the facilities to sort and recover materials collected by the collection system serving households, business and industry. Further Material Recycling Facilities (MRF's) will be required for household, commercial and industrial waste. Waste collectors will not be permitted unless a proper audit trail is available to prove that materials separately collected or sorted and recovered at suitably licensed facilities.

Chapter 3.8 states that

The provision of thermal treatment capacity is a critical objective of the plan to ensure that the requirements of the Landfill Directive (1999) can be met and to provide a more sustainable option for residual waste than landfill...

The plan therefore has an objective the development of

A thermal treatment plant with a capacity of 150,000-200,000 tonnes per annum.

The plan notes however that

It is important that the introduction of thermal treatment does not provide a disincentive to recycling. In this regard the Local Authority's and EPA will use their statutory powers to ensure the delivery of the plan objectives.

Chapter 3.10 of the plan refers to inter-regional movement of waste and states that

The waste plan recognises that there should be flexibility with respect to the movement of waste across regional boundaries. In broad terms the capacity of waste facilities in the region should primarily satisfy the needs of the region whilst not precluding interregional movement of waste and allowing flexibility to cater for the development of required national infrastructure.

Chapter 3.10.1 states that

It is the policy of the Local Authorities in the region to develop possibilities for a cooperation with their counterparts in Northern Ireland. In particular the opportunities of utilising waste recovery facilities to cater for waste generated in the North-East region or Northern Ireland will be examined.

Chapter 3.13.5 sets out guidelines regarding selection of areas suitable for the location of WTE facilities. The chapter refers to absence of any national guidelines regarding site selection for WTE and recommends therefore that a sieving process be undertaken "whereby exclusionary factors which may preclude the siting of a thermal treatment plant should be considered e.g. pNHA's or SAC's, airport exclusionary areas, areas of high amenity or archaeological interest; areas which survive the sieving process may then be looked at again in the context of more detailed criteria.

Chapter 7 of the plan states that the overall targets established in the original plan of 2001 still remain; those are

43 percent recycling, 39 per cent thermal treatment and 18 per cent landfill.

Chapter 13 of the plan states that although the target of 43 per cent recycling by 2014 is on the way to being achieved, there remains a lack of development "in treating key waste for actions such as biodegradable waste and construction and demolition waste which need to be addressed if the regional target is to be achieved.

Chapter 14 states that the North-East region has now four landfill facilities which provide more than adequate capacity for landfill disposal in the region. The plan states also that

As landfill disposal rates decrease the lifespan of the current landfills will be extended considerably and could meet the disposal needs of the region for the next 30-40 years.

Chapter 14.3 sets out the regional position in regard to the quantities of biodegradable municipal waste which may be landfilled in 2009 and 2016; Table 14.5 shows that in 2009 while 203,785 tonnes of biodegradable municipal waste will be generated only 48,908 tonnes will be allowed for landfilling; furthermore in 2016 although 225,086 tonnes of biodegradable municipal waste will be generated, only 29,261 tonnes of that will be allowed for landfilling; that shows a clear requirement for thermal treatment in the region by 2009 to meet EU Landfill Directive targets.

Chapter 15 of the plan states that

It is an underlying ambition to provide sufficient infrastructure as part of the Waste Management Plan for the North-East. The Local Authorities in the region recognise the value of private investment in realising the same. It is also recognised that the private sector will be critical to the development of larger facilities (biological/thermal treatment) over the next plan period.

Finally the Board is referred to Chapter 10.3 of the North-East plan which states that

Since 2004 waste movements into and out of the North-East have begun to change, due to increased landfill capacity becoming available. Hence greater quantities of waste originating outside the region may be accepted and less waste is likely to be exported from the region. It is thought that waste movements into and out of the North-East will continue to change in line with waste infrastructure development within the region.

Waste collection in the North-East region is carried out by a mix of local, regional and national waste collectors and the waste can often be transported across regional boundaries for treatment or disposal in neighbouring regions. There is room for improvement in the reporting of waste collection and movement by contractors – this improvement will be brought about by improved regulations.

16. MEATH COUNTY DEVELOPMENT PLAN 2007-2013

The Development Plan refers to Government Policy Statements on Waste Management published between October 1998 (Changing Our Ways) and 2004 (Taking Stock and Moving Forward) and to the commitment in those policies to the implementation of an internationally recognised waste management hierarchy. The Development Plan also refers to the Regional Planning Guidelines noting that for the purposes of those Guidelines County Meath lies in the Greater Dublin Area; the Plan also refers to the Guidelines Recommendation that facilities should be allowed to perform their required function in one region and also be part of the wider strategy that includes waste management in another region. Finally the Development Plan sets out a number of policies and objectives in relation to solid waste/waste management which largely seek to promote an integrated system of waste management facilities to be operated in accordance with EPA and Waste Management Legislation requirements.

The following Development Plan Policies are relevant to the proposed development:

INF Policy 84: To support national and international initiatives for limiting emissions of greenhouse gases through energy efficiency and the development of renewable energy sources which make use of the natural resources of the county in an environmentally acceptable manner, where it is consistent with proper planning and sustainable development of the area.

INF Policy 85: To encourage the production of energy from renewable sources, including in particular that from biomass, waste material, solar, wave, hydro and wind energy, subject to normal proper planning considerations, including in particular, the potential impact on areas of environmental or landscape sensitivity.

INF Policy 74: seeks "to implement the provisions of the waste management hierarchy and to replace the North-East Regional Waste Management Plans. All prospective developments in the county will be expected to take account of the provisions of the replacement Regional Waste Management Plan and adhere to those elements of it that relate to waste prevention and minimisation, waste recycling facilities and the capacity for source segregation. Account will also be taken of the proximity principle and the interregional movement of waste as provided for under the Section 60 policy direction by the Minister of the Environment, Heritage and Local Government (circular WIR:04/05).

INF Policy 79: To support the development of recycling sites/waste disposal sites or transfer stations and associated developments in appropriate locations, subject to normal planning and environmental sustainability considerations. In assessing applications for these types of development, the Planning Authority will have regard to the Groundwater Protection Plan and appropriate response matrix.

HER Policy 57: To protect important archaeological landscapes incorporation with the appropriate Government Agency.

HER Policy 66: To employ the full extent of legislation to assist in the protection of landscapes of exceptional value and sensitivity in particular Brú na Bóinne.

In regard to Brú na Bóinne the Development Plan states at page 332 that "the assessment of development proposals must also adhere to other policies contained in the Development Plan relating to the protection of the World Heritage Site including the protection of views, prospects, archaeology, and the protection of the heritage setting and amenities of the national monuments in the area. This will include interalia an assessment of the following:

- No intervisibility between the development sites and the national monuments of Newgrange, Knowth and Dowth, up to and including apex of roof level and minimisation of intervisibility between the development site and the other national monuments in the area.
- Retention of existing protected views.
- Development not to impact negatively on the amenity views.
- Landscape setting of the National Monuments.

Appendix 6 of the Development Plan (Landscape Character Assessment) shows the site lying in the central lowlands (LCA6); the central lowlands are described as having a high landscape value, a medium sensitivity and a regional landscape importance.

Volume 1 Chapter 2.19 of the 2007 Meath County Development Plan states that "the existing Written Statement and Detailed Objectives for Towns and Villages inclusive of the accompanying book of maps contained in the 2001 County Development Plan shall remain in force until Individual Local Area Plans have been prepared and adopted for each.

The 2001 Meath County Development Plan (Volume Two) contained a written statement and detailed objectives for Duleek village; the objectives included a relief road for the village linking the R153 to Navan and R150 Kilmoon/Drogheda Roads. The Plan stated that it was "an objective of the Planning Authority to protect this corridor from development which would impinge upon it and to seek to provide this road as and when traffic levels on the Main Street area and associated congestion are considered to be excessive".

The following specific development objectives for Duleek are relevant to the proposed development namely

DK1: To reserve and protect from development the bypass and relief road route to the south-west of Duleek.

DK3: To upgrade and realign the existing junction of the R150 and R152 roads.

DK4: To upgrade the junction of the R150 and Longford Roads.

17. PLANNING HISTORY

Planning 17.126307 comprised a first and third party appeal taken against the decision of the Planning Authority to grant permission for a Thermal Treatment/Recycling Facility at the current appeal site. (Reg. Ref. 01/4014)

The third party appeal was taken against the decision of the Planning Authority to grant permission for the proposed development; the first party appeal was taken against Condition No. 3 attached to the Planning Authority's decision namely that waste for acceptance at the facility shall be restricted to that generated and produced in the North-East region and that the annual tonnage for thermal treatment/recycling should not exceed 172,000 tonnes per annum.

In the subsequent decision by An Bord Pleanála the decision of the Planning Authority was confirmed subject to compliance with a number of conditions; those included the omission of the "community recycling park" (Condition No. 3) a contribution towards the provision of a community recycling park in Duleek (Condition No. 8). Condition No. 4 however endorsed the Planning Authority's decision to restrict waste for acceptance at the plant to that generated and produced in the North-East region, as well as capping the quantities for thermal treatment/recycling at the site to 170,000 tonnes per annum. Of note also is Condition No. 11 which prohibits traffic associated with the facility from travelling along the R150 between its junction with the R153 to the west and the N2 to the east.

The Board's decision was subsequently challenged on a number of grounds by way of Judicial Review in the case of Eric Martin v. An Bord Pleanála, Ireland and the Attorney General; those included the grounds that the "National Legislative Provisions on foot of which the decision to grant planning permission was made were incompatible with the obligations imposed on the State by Council Directive 85/337/EEC of 27th June 1985 on the assessment of the effect of certain public and private projects on the environment as amended by Directive 97/11/EC of the 3rd March 1997". In particular the appellant contended that "by virtue of the statutory division of responsibilities between the Board and the EPA it is not possible for an *Integrated Assessment* of the effects of the project on the environment to take place as required by the Directive…because no one body carries out a global assessment".

Murray J. however in a judgement delivered in May 2007 concluded that "the combination of the assessments carried out by the Board and the EPA together meet the requirements of the Directive with regard to the EIA prior to consent" and dismissed the appeal.

Finally a Waste License for the development permitted under PL17.219721 was granted by the Environmental Protection Agency in November 2005.

The development which is the subject of the current appeal differs from Planning 17.126307 in the following aspects

- *Site Area:* The site area currently proposed is 10.36 hectares an increase of 0.24 hectares over that previously proposed (it should be noted that the previously proposed development did not incorporate the roadside strip at the south-western corner of the site, south of the proposed site entrance). In the previous development the north-western site boundary also lay closer to the railway embankment than currently proposed.
- On-site Layout: The proposed waste facility is now aligned on a north-east/south-west axis across the site and parallel with the road frontage boundary rather than at right angles to it as previously proposed; the main facility therefore will now lie within the single large meadow at the rear of the site and will not extend into the two roadside field units which apart from the weighbridge and staff parking will be given over entirely to landscaping; at its nearest point therefore the proposed process building will lie some 172 metres distant from the site boundary with the R152 as opposed to the 120 metre separation distance previously proposed.
- *Floor Area:* The floor area of the proposed building/structures on site is 22,493 square metres as opposed to the 16,610 square metres of buildings previously proposed.
- *Building Heights:* The proposed flue gas stack now rises to a height of 65 metres approximately above adjoining ground levels (95.5 m.O.D.) as opposed to the 40 metre height (70.3 m.O.D.) previously proposed. The tallest building on site (furnace and boiler) rises to a height of 40 metres above ground level or 70.5 m.O.D. Previously the tallest structure on site (air condenser and turbine building) rose to a height of 30 metres approximately above ground level or 60.75 m.O.D.
- *Electricity Generation:* The proposed plant will produce approximately 16MW of electricity of which approximately 3MW will be used to meet on site requirements, with the remaining 13MW being exported to the National Grid; previously it was proposed that 11MW of electricity would be exported to the National Grid.
- *Waste Tonnages:* The proposed development seeks permission to process 200,000 tonnes of waste per annum as opposed to the 150,000 tonnes previously permitted.
- Recycling: Public recycling facilities are not proposed on site.

18. ASSESSMENT

- 18.1 The issues which arise for assessment in the current appeal consist almost entirely of those contained in both the written and oral submissions by first and third party appellants to An Bord Pleanála. While the majority of those issues refer to the potential impacts of the proposed development on human health, the environment, the landscape and property, the submissions also deal extensively with the issue of "need", as well as querying the justification for the proposed development in the context of Ireland's obligations under International Treaties and Protocols and also in the context of the EU Waste Management Hierarchy.
- 18.2 Although planning permission was granted by An Bord Pleanála in 2003 for a non-hazardous WTE plant with a 150,000 tonne/p.a. capacity, at the appeal site (confer Planning 17.126307), a number of pertinent policy documents of international, national, regional and county status have since issued which may materially impact on the precedent already set by the Boards decision under Planning 17.126307. I therefore propose initially to examine those policy documents to establish what material impact, if any, those may have on the principle of the proposed development as established under Planning 17.126307.
- 18.3 A major objection to the proposed development by the third party appellants The No Incineration Alliance is that the proposed Waste to Energy facility at Carranstown is not a form of energy recovery but is rather waste disposal; on that basis therefore it has a similar ranking to landfill in the European Waste Hierarchy and is not therefore to be preferred over landfill for a number of reasons including the adequacy of existing permitted landfill capacity to the North-East Region.
- (i) In response I note that the Waste Hierarchy first came into being in the 1975 EU Waste Framework Directive 75/44V/EEC (as subsequently amended by Council Directives 91/156/EEC, 91/692 EEC and 96/350/EC). I would refer the Board in particular to Articles 1 (e) and (f) and 3 1(a) and (b) of the amended Directive which state respectively that

Article 1

- (e) "disposal" shall mean any of the operations provided for in Annex II A.
- (f) "recovery" shall mean any of the operations provided for in Annex II B.

Article 3

- 1. That member states shall take appropriate measures to encourage
- (a) Firstly the prevention or reduction of waste production and its harmfulness.
- (b) Secondly,
 - (i) the recovery of waste by means of recycling, re-use and reclamation...or
 - (ii) the use of waste as a source of energy

Annex II A classifies 'Incineration on Land' as a Disposal Operation. Annex 2B however classifies waste which is used principally as a fuel or other means to generate energy as a "Recovery Operation".

The 1998 National Government Policy Statement "Changing Our Ways" reflected the distinction in the above amended Directive by setting out at Figure 1 a model of the Waste Management Hierarchy in which energy recovery was ranked higher in the hierarchy than Disposal, albeit noting that "in general, composting or materials recovery are preferable to incineration".

(ii) I would also draw the Board's attention to Directive 2000/76/EC on the incineration of waste which states at Paragraph (24) that

The requirements for recovering the heat generated by the incineration or co-incineration process and for minimising and recycling residues resulting from the operation of and recycling residues resulting from the operation of incineration or co-incineration plants will assist in meeting the objectives of Article 3 on the waste hierarchy of Directive 75/442/EC.

- (iii) In December 2005 the European Commission presented its "Thematic Strategy on Waste Prevention and Recycling". The new Thematic Strategy on Waste Prevention and Recycling seeks to apply life cycle thinking to waste management with the ultimate goal being the prevention of waste; however where waste does occur then the strategy recommends that it be used as a resource; in that regard therefore the strategy still adheres to the waste hierarchy by acknowledging the role that waste can play in energy recovery.
- (iv) A first step in the strategy was a revision of the Waste Framework Directive; 74/442/EEC and its repeal and consolidation by Directive 2006/12/EC which came into force on 17.5.06; that directive reiterates at Annex II a list of waste operations which are classified as waste disposal; those include "incineration on land" (B10); Annex II B lists those waste operations which are however classed as recovery under the Directive; those include the use of waste "principally as a fuel or other means to generate energy". The codified Directive therefore continues to observe the distinction between waste disposal and waste recovery by identifying waste which is used principally as a fuel to generate energy as a "recovery operation".
- (v) A weakness however in EU legislation is that it fails to identify the amount of energy which must be recovered from the incineration process for it to be classified as recovery. That matter is still unresolved with uncertainty fuelled by the ECJ. Decision in Case C-458/00; that decision held that municipal waste generated in Luxembourg but incinerated in a dedicated municipal waste incinerator in France was waste disposal. Given that the situation however as to what processes constitute recovery or disposal is still unclear and uncertain, that the above case can likely be distinguished on a number of grounds, and that further revisions to Directive 2006/12/EC are still only in the process of consideration viz as to whether municipal incinerators can be

classified as recovery operations based on their energy output it is likely that each individual case may have to be decided on its own merits as to whether it constitutes disposal or recovery. As of July 2007 however it would appear that the Council has agreed to maintain the waste management hierarchy including recovery of energy by incineration. Currently therefore the proposed development would appear to be an energy recovery rather than a waste disposal facility and be higher in waste management hierarchy than landfill.

- 18.4 Since 2003, and the decision under PL.17.126307, a number of strategies and plans at National and Regional level have been published; the following are of relevance to the proposed development:
- (i) Waste Management: Taking Stock and Moving Forward: DOEHLG April 2004; The policies set out in this document implicitly endorse and recognise the role of thermal treatment in national waste management infrastructure. Chapter 3.5.2 notes that for example "most of the waste management plans envisage a role for some form of waste-to-energy or thermal treatment technology in the overall package of waste management measures to be put in place..." noting that "the Local Authorities concerned will need to give early consideration as to how they envisage accelerating progress towards meeting the objectives of their waste management plans in relation to thermal treatment."
- (ii) The National Strategy on Biodegradable Waste April 2006; Chapter 5 of the strategy states that in order "to reduce the environmental impacts of landfilling and meet the targets set out in the Landfill Directive, the management of biodegradable municipal waste (BMW) will be improved by implementing a range of options...including thermal treatment which enables the energy content of the residual waste to be captured and used.

Chapter 5.2 of the strategy sets out a number of fundamental principles which include the principle of:

Striving to maximise the recovery of materials firstly, and energy secondly as a sustainable means of treating waste, rather than diverting from landfill to other forms of disposal.

Chapter 5.3 of the Strategy then goes on to deal with national targets for the diversion of BMW waste from landfill. The Strategy states that

As a result of the substantial increase in the amount of BMW generated over the past 9 years additional BMW will need to be diverted from landfill despite current progress in recycling and biological treatment...Meeting the national recycling and biological treatment targets and the E.U. landfill diversion targets will result in the diversion of approx 80% of all BMW from landfill in 2016. Approx. 1.82m tonnes of BNW will need to be diverted annually from landfill by 2016 if waste growth continues as anticipated...

The quantities diverted by means of separate collection, materials recycling and biological treatment are still not sufficient to entirely

bridge the gap between biodegradable municipal waste generation and the Landfill Directive targets. Meeting targets will therefore require that a certain proportion of residual biowaste which is not suitable for recycling or biological treatment or is not collected separately is pretreated prior to landfill. Two broad categories of treatment are available, thermal treatment with energy recovery and mechanical – biological treatment (MBT) with thermal treatment or landfill of the stabilised residue.

The National Strategy on Biodegradable Waste therefore acknowledges the role of thermal treatment in improving the national waste management system by reducing "dependence on landfill in favour of more environmentally sound alternatives".

(iii) National Climate Change Strategy 2007-2012; that strategy follows on from the first National Climate Change Strategy of October 2000; it sets out a range of measures by which greenhouse gas emissions will be reduced as part of its response to global warming. Chapter 3 of the Strategy states that "electricity generation from renewable sources provides the most effective way of reducing the contribution of power generation to Irelands' greenhouse gas emissions. To that end therefore the Government has established ambitious national targets for the contribution of renewables to power generation; 15% of electricity consumed will be from renewable sources by 2010 and 33% by 2020". I note that the Strategy refers to "existing incentives to help Ireland achieve these targets such as the Renewable Electricity Feed-in-Tariff (REFIT) Scheme.

Chapter 8 of the Strategy states that "waste accounted for 2.5% of total greenhouse gas emissions in 2005" and that those emissions "consist mainly of methane from the anaerobic decomposition of solid waste that has been deposited in landfill sites".

Chapter 8 also states that "to assist in the development of waste-to-energy projects, the Government is extending REFIT to allow support for the renewable portion of mixed renewable and non renewable generation. This will allow waste-to-energy projects to obtain support for the renewable portion of the generated electricity. This type of hybrid support mechanism is fully consistent with the overall "hierarchy of waste" treatment approach."

Finally Chapter 8 also states that "the CO₂ emissions resulting from the combustion of biodegradable waste are considered carbon neutral and are not counted for the purposes of Kyoto obligations. In addition, generation of heat and electricity from waste in thermal treatment plants reduces the need to produce this energy from fossil fuels and will therefore displace CO₂ emissions from these sources. By exploiting an indigenous energy source waste-to-energy plants make a contribution to national security of energy supply".

The current Climate Change strategy therefore endorses the role of thermal treatment plants in contributing to a reduction in green house gas emissions and national security of energy supply.

(iv) The National Development Plan 2007-2013 affirms support for thermal treatment with energy recovery. The Plan states that "in line with national Policy on the integrated approach to waste management, thermal treatment with energy recovery will be the preferred option for dealing with residual waste after achieving ambitious targets in respect of waste prevention, recycling and recovery". The Plan envisages that such thermal treatment facilities will be provided either entirely by private sector investment or by way of PPP.

(v) North-East Region Waste Management Plan 2005-2010:

The 2005 Waste Management Plan contains a review of the 2001 North-East Waste Management Plan; the 2005 Plan noted that although household waste recycling rates have increased from less than 4 per cent to 16 per cent approximately and those of commercial waste from less than 9 per cent to 35 per cent approximately, further advances need to be made, in the development of additional waste recovery capacity in the region; the Plan states therefore that "while the Local Authorities will continue to develop bring banks and recycling centres, other facilities such as biological treatment and thermal treatment are urgently required and expected to be delivered through private investment or public-private partnership. Local Authorities must facilitate the provision of these facilities" (confer page 8). In the above context therefore the proposed development complies in principle with the Waste Management Plan policy.

The 2005 Plan also states that "the policy and targets which were proposed in the original plan and which were based on the 15 year planning horizon are still valid; the targets are:

- 43 per cent recycling,
- 39 per cent energy recovery,
- 18 per cent disposal.

In the case of energy recovery the Plan states in Chapter 3.8 that "the provision of thermal treatment capacity is a critical objective of the plan to ensure that the requirements of the landfill directive (1999) can be met and to provide a more sustainable option for residual waste than landfill". The Plan therefore goes on to state that "it is an objective of this plan to develop a thermal treatment plant with a capacity of 150,000-200,000 tonnes per annum"; those tonnages have been reduced from the 200,000-300,000 tonnes proposed in the previous Plan.

Although the tonnages proposed for thermal treatment have been reduced in the current N.E. Reg. Plan from that previously proposed the current plan continues to endorse the principle of thermal treatment as an integral rather than a dominant component of the Waste Management Programme for the region.

In conclusion therefore I consider that support for the role of waste-to-energy facilities as part of an integrated Waste Management Strategy has been strengthened and endorsed to an even greater degree under EC legislation, national waste and energy policies and regional waste policies, since permission for the original waste management facility at Carranstown was granted by An Bord Pleanála under PL17.126307.

- 18.5 A major argument in all third party appellant submissions is the absence of any justification/need for the proposed development having regard to:
 - (i) Permitted landfill capacity in the region
 - (ii) Zero Waste Policy
 - (iii) The likely adverse impacts which thermal treatment will have on recycling
 - (iv) The precautionary principle and health impacts.
 - (v) Air quality and climate impacts.
- 18.6 Re (i) above permitted landfill capacity, I would refer the Board to the North-East Region Waste Management Plan and in particular to Chapter 14 and the tables set out therein;

Table 14.2 identifies the licensed landfill capacity for the North-East region at 313,500 t.p.a, and the overall residual landfill capacity for the North-East region at 3,783,395 tonnes. On that basis the appellant's arguments re absence of need for the proposed development would appear to have some basis.

However Chapter 14.2 notes that "in order to meet both the regional landfilling target and the EU Landfill Directive target, the actual quantity accepted (at landfill) will be considerably less". In the case of the EU Landfill Directive, the maximum volumes of biodegradable municipal waste disposed of to landfill must be reduced by July 2009, to 50 per cent of the total amount by weight of the biodegradable municipal waste produced in 1995; by July, 2016 that amount must be further reduced to 35 per cent of the total amount by weight generated in 1995. Table 14.4 of the North-East Waste Management Plan calculates therefore that the permitted maximum biodegradable municipal waste quantities allowed for landfilling in 2009 and 2016 are 41,949 and 29,364 tonnes respectively. Turning to Table 16.4 of the plan, projected municipal waste arisings for the years 2009 and 2016 are 313,515 and 346,286 tonnes respectively. When a conversion factor of 65% is applied those volumes equate to approximately 203,785 and 225,086 tonnes respectively of BMW – some 161,836 and 195,722 tonnes in excess of the amount permitted for landfilling in the North-East in 2009 and 2016.

Even when a recycling rate of 43 per cent is applied to the projected quantities of municipal waste, for the years 2009 and 2016, (313,515 and 346,286 respectively) the residual amount of waste, which must be disposed of equates to approximately 178,704 tonnes in 2009 and 197,384 tonnes in 2016. When 18% of those amounts is landfilled (in accordance with Waste Mgt. Plan targets), some 122,272 tonnes approx. still require to be disposed of in 2009 and a further 135,053 tonnes approx in 2016. The applicant proposes therefore that in accordance with the N.E. Region Plan policy those amounts will be thermally treated at Carranstown.

In conclusion therefore while the third party appellants' argument that sufficient overall landfill capacity exists in the N.E. Region to facilitate future waste arisings there, is correct in mathematical terms, it is incorrect in terms of the restrictions the amounts of certain types of waste which can be disposed of to landfill under The Landfill Directive and the current N.E. Reg. Waste Mgt. Plan

Even on the above basis however, the waste tonnage capacity of the incinerator would appear to exceed that required for the N.E. Region; however I consider the following factors are relevant in that regard;

- First it would appear that wastes other than municipal are proposed for acceptance at the site; I would draw the Board's attention to the fact that neither the application form nor the public notices received by Meath County Council stipulate the types of waste which are proposed for treatment at the site while, the EIS only states at page 1 of the introduction that wastes proposed for acceptance will be non hazardous; clarification of that matter however was provided at the oral hearing by Mr. John Aherne who stated that while mixed municipal waste was the main type envisaged for acceptance at the site a small proportion of sludges from wastewater treatment plants would also be accepted – approx between 5% and 8%; the acceptance of sludges would be as a direct result of the restriction on disposal to landfill under the Landfill Directive and a further restriction on land spreading under the Nitrates Directive. He also stated that meat and bonemeal would also be potentially accepted and that waste wood, particularly treated wood would be accepted; electrical waste may also be accepted although it was conceded that amounts of that may be small given the high rates of recycling associated with that waste.
- Secondly while the N.E. Reg. Waste Mgt. Plan aspires to a target recycling rate of 43%, current recycling rates are adrift of that target by some 20%; it would therefore appear that by 2009 when the first Landfill Directive and Waste Mgt. Plan targets become operative, that significant amounts of waste will need to be disposed of by alternative means; while ultimately therefore annual waste tonnages proposed for incineration by 2020 should not exceed 150,000 tonnes when higher in hierarchy waste management targets have been complied with, interim provision requires incineration capacity in excess of 150,000t.p.a.

• Thirdly, the current N. E. Waste Mgmt. Plan proposes a thermal treatment plant with a capacity between 150,000 and 200,000 tonnes- (a reduction from the 200,000 –300,000 tonnes proposed in the previous Waste Mgmt. Plan). In order to comply with the capacity objectives of the current Plan and also to provide for acceptance of wastes from outside the N.E. Region (it being logistically impossible to ensure that all wastes accepted at the plant will have their origins in the N.E.Region) an increased capacity of 50,000 tonnes over and above that permitted under Pl.17.126307 is sought. That policy of accepting waste from adjoining regions is given credence in Dept. Circular WIR:04/05 issued in May 2005 by DoEHLG which states:

The policy document Taking Stock and Moving Forward...reflects acceptance that facilities provided in a region must deal primarily with waste from that region. However it also recognises that an unnecessarily restrictive approach may not be in keeping with the philosophy underpinning the regional approach to waste management planning and ...the rational use of waste management infrastructure...(while) the Minister confirms that one of the fundamental components of policy in regard to the regulation of the movement of waste is the application of the proximity principle...relevant authorities...should recognise that the application of the proximity principle does not entail interpreting administrative waste management planning boundaries in such a manner as to inhibit the development of waste infrastructure which will support the attainment of national waste management policy objectives through the rational development and use of such infrastructure.

Regions adjoining the N.E. include The Midlands and Dublin regions. The Midlands Waste Management Energy Recovery Policy (2005-2010) states that "The Region supports the thermal treatment of non hazardous residual waste materials after waste prevention, minimisation and maximum recycling measures have taken place. The local authorities will aim to engage with the private sector to determine the commercial viability of such a facility for the Region taking into account developments in neighbouring Regions..." It would therefore appear that the acceptance by The Midlands Region of the principle of thermal treatment for residual waste, could result in waste arisings from the Midlands Region being treated at Carranstown.

Similarly, having regard to the Dublin Waste Management Plan, which accepts the principle of energy recovery from waste, and to the 2004 – 2016 Regional Planning Guidelines for The Greater Dublin Region (which Region includes Co. Meath), which advise that "new facilities should be allowed to perform their required function in one region and also perform part of the wider strategy that includes waste management in another region"(Section 8.6.3,) it would appear that the recovery facility at Carranstown, if permitted, may also accept limited volumes of waste for recovery from the greater Dublin Region.

• Finally I would refer the Board to the E.P.A. National Waste Report of 2005, Ch.9 on "Notified Exports of Waste" where it states that

Of particular note is the increased export of non-hazardous municipal waste. This is comprised principally of residues from the pre-treatment sorting of municipal waste and construction and demolition waste...Of 118,385 tonnes of mixed municipal waste exported, 16,352 tonnes were burned as a fuel...

Were permission therefore to be granted for the WTE facility, it may be required, in accordance with the Proximity Principle, to accept some or all of those wastes currently exported for incineration as well as wastes generated in the N.E. Region and adjoining Regions. The additional capacity requested would therefore appear to be warranted if the facility is to service the needs of the North-East Region without prejudicing the logistical requirements to accept waste which may have also been generated in adjoining regions.

I therefore consider that having regard to:

- The N.E. Regional Waste Management Plan Policy to provide a thermal treatment facility with a capacity of 150,000-200,000 tonnes p/a to service the projected needs of the N.E. Region,
- Ancillary capacity needed to process waste arisings from adjoining regions which may be mixed with waste arisings from the north east region in compliance with Ministerial Circular WIR:04/05 of May 2006 (which advised against rigid interpretation of Waste Management Plan boundaries in a manner likely to "inhibit the development of waste infrastructure which would support the attainment of national waste management policy objectives") and in compliance also with Regional policy as set out in the 2004-2016 Regional Planning Guidelines for The Greater Dublin Area; (that recommends the development of integrated waste management facilities in the G.D.A.- Co. Meath forming part of the G.D.A.)
- The potential need, if permission were to be granted for a waste recovery facility, for that facility to also process waste currently exported abroad for incineration.
- The permission already granted for a 150,000 tonne capacity incinerator at the site under PL.17. 126307 and the modest increase in capacity in terms of waste tonnages now proposed.

An additional 50,000 tonnes capacity over and above that previously permitted under PL17.126307 is not excessive in the context of the plant processing waste arisings from within the GDA, from other adjoining regions and also from regions where it is currently exported abroad for incineration.

At this point I would draw the attention of the Board to Condition No. 3 attached to the Planning Authority's grant of permission which states that "waste for acceptance at the waste management facility for incineration and

recycling/treatment shall be primarily be waste generated and produced in the North-East region of counties Meath, Louth, Cavan and Monaghan, and shall have regard to the proximity principle". I consider such a condition to be appropriate for attachment to any grant of permission which may issue as it seeks to ensure that the facilities shall, in accordance with bedrock national waste management policy set out in "Changing Our Ways", primarily service the North-East region, but that an ancillary infrastructural service may also be provided for other adjoining regions.

18.7 Re (ii) above the appellants also oppose the proposed development in principle on the grounds that it is extraneous to need if a zero waste policy were to be put in place; the third party appellants, the No Incineration Alliance in the presence of Ms. Aine Walsh and Mr. Ollan Herr referred to such a policy in their written and oral hearing submissions; the objective of such a policy is to reduce volumes of waste generated to the extent where zero waste becomes a reality and where any waste which is generated would become a resource by way of reuse and recycling. The zero waste concept focuses on the whole life cycle of waste products rather than just on an end of pipe solution; the concept of zero waste would appear to be incorporated into the EU Thematic Strategy on the Prevention and Recycling of Waste which aims to make Europe a recycling society by avoiding the generation of waste and where waste does occur by using it as a resource; the purpose of the strategy is to minimise pollution caused by waste and reduce the environmental impacts of resource use.

The concept of zero waste is one to which serious consideration must be given, particularly as it would appear to be linked to the above strategy and also to the Thematic Strategy on Natural Resources.

However the zero waste concept is a long-term, rather than a short or medium-term strategy as it requires significant changes in production methods and design as well as changes in attitude towards product life and natural resource use; the North-East Region Waste Management Strategy facilitates movement towards a zero waste strategy by its promotion of increased recycling rates and its proposal to incinerate only residual waste in order to provide energy recovery; ultimately however significant progress towards a zero waste policy can only be realised when substantive waste prevention, minimisation and recycling measures are implemented; it is unrealistic however to expect that such a goal can be attained in the short-term, and therefore incineration with energy recovery must remain as part of the suite of waste management measures needed to ensure compliance with EC. Waste management and energy targets.

18.8 Re (iii) above - the appellants argue that the proposed WTE facility at Carranstown will undermine proposed expansion of recycling facilities and thereby obstruct attainment of the zero waste policy; I am unable to concur and would draw the Board's attention to the following;

First the North-East Regional Waste Management Plan states that "it is important that the introduction of thermal treatment does not provide a

disincentive to recycling. In this regard the Local Authorities and EPA will use their statutory powers to ensure the delivery of the plan objectives;" this is further clarified at page 15 of the plan where it is stated that "the North-East Local Authorities will, if necessary and/or appropriate for environmental or other reasons, direct that certain waste streams be delivered to a certain tier in the waste hierarchy (for example reuse, recycling, biological treatment, energy recovery). This would be achieved by means of the waste collection permit system or other appropriate regulatory or enforcement measures."

Secondly, I would refer the Board to 'Taking Stock and Moving Forward' - Waste Management Policy published by DOEHLG in 2004 which states that

A second significant concern expressed is that the adoption of thermal treatment will prejudice the achievement of ambitious recycling targets. While this would be a danger were thermal treatment to be employed in a waste management policy and planning vacuum, the reality is that thermal treatment is included in Irish waste management policy on the basis that it is *one* element in an *integrated* approach.

Thirdly, the above policy refers to experience of certain other EU member states being instructive in this regard "as they have shown how significant levels of recycling and the use of thermal treatment can comfortably coalesce". I would refer the Board in that regard to Belgium where a recycling rate in excess of 70% has been achieved in conjunction with a waste-to-energy policy (confer developers observations on third party appeal submissions, received by An Bord Pleanála on 26.10.06). In Denmark, meanwhile, a target of the Danish Governments Waste Management Plan (Waste 21) is the improved exploitation of resources in waste and the reduction of environmental impacts by requiring "inter alia" that waste types previously incinerated or landfilled, will now be collected and treated separately. It is obvious therefore that even established incineration practices in regard to certain waste streams need not inhibit recycling operations nor their ongoing expansion.

It can be seen therefore from the above that waste-to-energy recovery can coexist with recycling and is not considered to impede same.

I therefore conclude that the appellant's assertion that proposed waste-toenergy facility will inhibit recycling cannot be supported, either in terms of national policy and objectives nor in terms of existing practice in other EC countries. Most importantly the appellants have not provided any evidence to support their own assertion.

18.9 Re 18.5 (iv) above – Precautionary Principle and health impacts - a common objection to the proposed development by all third party appellants was its potentially adverse health impacts. The appellants argue that such impacts warrant the application of the Precautionary Principle. The principle is set out at Chapter 7.1 of the 4th Report of The British Society for Ecological Medicine and reads as follows:

The Precautionary Principle has now been introduced into national and international law including that of the European Union. This principle involves acting in the face of uncertain knowledge about risks from environmental exposures. This means public health measures should be taken in response to limited, but plausible and credible, evidence of likely and substantial harm. In the case of incinerators a recent review of health effects found two thirds of studies showed a positive exposure-disease association with cancer (mortality, incidence and prevalence) and some studies pointed to a positive association with congenital malformations. It is absolutely clear from this and from the evidence presented here that building municipal waste incinerators violates the Precautionary Principle and perhaps European Law.

The developer provided at Chapter 6.2, Volume 2 of the EIS an assessment of the potential effect on human health of the proposed WTE facility at Carranstown; the assessment relied on the knowledge and experience of the assessor and evidence available in studies and literature, in particular the Irish Health Research Board Publication of 2003 on Health and Environmental Effects of Landfilling and Incineration of Waste, the 2004 publication by DEFRA, A Review of the Environmental and Health Effects of Waste Management. The assessment was based on the assumption "that the incinerator will be built and operated as per terms described in the EIS and as licensed by the Environmental Protection Agency. The assessment first referred to the 2003 Health Research Board Report on Health and Environmental Effects of Landfilling and Incineration of Waste which was commissioned to review existing data on waste management; the EIS notes that although the Health Research Board stated that "a number of well designed studies had reported associations between developing certain cancers and living close to incinerator sites"...it also stated that it "is hard to separate the influences of other sources of pollutants and other causes of cancer and as a result the evidence for a link between cancer and proximity to an incinerator is not conclusive." The report went on to state that further research was needed in this regard although "Ireland presently has insufficient resources to carry out adequate risk assessment for proposed waste management facility" and that "Irish health information systems cannot support routine monitoring of the health of people living near waste sites".

In response the EIS assessment states that:

- Comprehensive risk assessments of waste management systems in other countries can be extrapolated to Ireland provided that provision is made in the assessment for the inclusion of local factors,
- That rather than monitoring the health of residents near waste sites it is more valuable to monitor "exposure" to changes in the environment by way of emissions to air, soils and food sampling as recommended in the 2004 UK DEFRA Report;
- Ongoing monitoring at the national level already takes place in regard to the concentrations of PCDD/F in air, soil and food. At a local level in the

vicinity of the proposed plant an assessment of the PCDD/F exposure through inhalation was also carried out based on the Conceptual Site Model. The Conceptual Site Model considers all likely pathways for dioxin and furan intake in a human, presupposing that the human lives in the area of predicted maximum impact from the facility and that the humans entire food intake is also from that area; the model also therefore examines the impact of dioxin and furan deposition rates on soil dioxin and furan concentrations and subsequently food dioxin and furan concentrations.

The assessment concluded that "based on a worst case scenario the predicted dioxin and furan intake for the most at risk individual was well within the EU 14pg/kgbw/wk value limit set for the protection of human health and the environment; even in the case of a potential worst case annual accident scenario it was found that the predicted dioxin and furan intakes were well below relevant EU limit values; the facility will therefore not have any impact on human health or the environment.

The conclusions drawn in the assessment would therefore appear to reflect World Health Organisation Policy, UK Government Policy and National Government Policy, as well as policy of state organisations and institutions; those are listed in the EIS as:

- 1996 WHO Report on Waste Incineration which states that "in general properly equipped and operated waste incineration need not pose any threat to human health and compared to the direct landfilling of untreated wastes may have a smaller environmental impact".
- 2004 DEFRA Report which states that "published epidemiological studies...have failed to establish any convincing links between incinerator emissions and adverse effects on public health..."
- 2003 Food Safety Authority of Ireland (FSAI) Report on waste incineration and potential contamination of the food supply, concluded that "estimates by the Environmental Protection Agency of the contribution of waste incineration to dioxin emissions to air...translate into low predicted levels of dioxins in food, as currently found...The FSAI considers that such (waste) incineration facilities if properly managed will not contribute to dioxin levels in the food supply to any significant extent" and that "the risks to health and sustainable development presented by the continued dependency and landfill as a method of waste disposal far outweigh any possible effects on food safety and quality."
- 2003 Health Research Board (HRB) Study Health and Environmental Effects of the Landfilling and Incineration of Waste. The report was commissioned by the HRB at the request of Department of the Environment, Heritage and Local Government; however views expressed in the paper are a reflection of the authors views and do not necessarily represent those of the HRB or the DOEHLG. Re incineration the report concludes that while "a number of well designed studies have reported

associations between developing certain cancers and living close to incinerator sites...it is hard to separate the influences of other sources of pollutants and other causes of cancer and, as a result, the evidence for a link between cancer and proximity to an incinerator is not conclusive...further research ...is required".

 2004 DOEHLG Waste Management Policy – Taking Stock and Moving Forward – states that "re health matters it must be born in mind that comparisons between thermal treatment facilities being put in place now and facilities which may have operated historically in other countries without stringent controls are not soundly based.

I would also refer the Board to the 2007 FORFAS – Key Waste Management Issues in Ireland report – which states re thermal treatment that "specific health concerns among the public appear to centre on the possibility of dangerous levels of dioxins, Polysyclic Aromatic Hydrocarbons (PAH), and heavy metals such as lead and arsenic being emitted in incinerator flue gas...Significant improvements in thermal treatment technology have been made in recent years and there has also been a significant tightening in operating standards. Today facilities within the European Union operate within a tightly controlled regime that specifies combustion temperatures, residency time, turbulence and feed rates. These requirements coupled with advances in plant technology mean that the latest generation of incinerators produce significantly lower concentration of all pollutants than their predecessors.

The third party appellants however have challenged the EIS conclusions on public health by reference to:

- (i) Findings of the fourth report of the British Society for Ecological Medicine, February 2006; that report stated that:
 - Studies have shown high rates of adult and childhood cancer as well as birth defects around municipal waste incinerators; results are consistent with the association being causal.
 - Incinerator emissions are a major source of fine particulates, of toxic metals, and of more than 200 organic chemicals including known carcinogens, mutagens and hormone disruptors; fine particulates cause increases in cardiovascular mortality, and respiratory mortality; particulates, which are formed in incinerators in the presence of toxic metals and organic toxins adsorb those pollutants and carry them into the bloodstream where they accumulate. Some chemical pollutants such as Poly Aromatic Hydrocarbons (PAH's) and heavy metals are known to cause genetic changes which present therefore a risk to future generations. The baghouse filters used in incinerators block only the less dangerous larger particulates, and allow the small particulates to pass through.

- Incinerator monitoring is unsatisfactory due inter alia to the small number of compounds measured, the levels deemed acceptable and the lack of monitoring of body burdens in the local population. Furthermore monitoring almost never takes into account secondary particulates which are formed as the products of combustion rise up the stack.
- It is impossible to establish the claim that modern abatement procedures render the emissions from incinerators safe in fact fine particulates and heavy metals are relatively resistant to removal.
- Given that short term monitoring does not provide statistical significance for individual installations, and given that cancers could also be delayed for at least 10 to 20 years it would be appropriate to apply the precautionary principle particularly as alternative, less hazardous and cheaper methods of dealing with waste are available.
- (ii) Presentation by Dr. Vivien Howard, Toxico-Pathologist; at the oral hearing. Dr. Howard's presentation was divided into two sections viz (1) Persistent Organic Pollutants (POP's) and (2) particulate emissions. In regard to POP's, Dr. Howard stated that:
 - There is universal exposure to POP's in differing concentrations.
 - The POP's occur as carbon chlorine compounds which are very soluble in fat but not in water and which will volatilise to undergo long range transport.
 - Human exposure to organo-chlorine compounds is through the food chain with the compounds eventually bio-accumulating in the fat stored within human bodies; the human body does not have any enzymes for their efficient detoxification and removal.
 - The most toxic of the organo-chlorines are dioxins (PCDD/F) and polychlorinated bi-phenyls (PCB's); those act as developmental toxins. Research concludes that there is already an excess of dioxin-like chemicals in the bodies of the background population which is causing developmental damage at a population level; such levels need to be reduced not increased.
 - Waste incineration has been the major source of dioxin like substances in the past due to a large proportion of the waste stream consisting of Poly Vinyl Chloride (PVC); despite the application of engineering solutions to incinerator design to minimise emissions to air, emissions to bottom ash and to fly ash will be 30 times and 100 times greater than to air, for each tonne of waste incinerated; that represents a long-term hazard for future generations due to the environmental life of dioxins.

• The hazard from exposures to OC's is manifest in infants and non infants alike; in the former it is manifest through the transmission of the mothers dioxin body burden which can cause reduced intelligence, and altered immune systems in infants; in non infants the hazard is manifest in increased infection, and flawed behavioural development.

(2) Particles:

The presentation was concerned with the toxicology of very small or Ultra Fine Particles, UFP, which are less than 100 nanometres in diameter and which are emitted by incinerators. Dr. Howard stated that:

- Epidemiological studies on the effect of UFP's show that in periods of poor air quality within the first 24 hours there would be acute respiratory illnesses, followed 4 or 5 days later by a second peak of cardiovascular disease;
- Increased exposure to Ultra Fine particles facilitates their migration around the body, allowing them to penetrate the cell wall and interfere with the cell function.
- There are grounds for predicting that particles emitted from waste incinerators would be more toxic because of the high content of heavy metals and the presence of hot vapours of hydrochloric acid. This can cause the "de nova" synthesis of dioxin-like substances on the highly reactive surfaces of UFP's after the gas scrubbing devices have been passed.

Dr. Howard concludes that:

- Scientific evidence of the effects of body burdens of dioxin like substances on the foetus and infant are already occurring at current population body burdens; this is a global problem.
- At a local level we are concerned with the impacts of small particles on human health; the problem here seems to be the inability of technology to abate the emission of smaller particles; the emission of such particles could have an impact on long-term health for example on the cardiovascular system but also in the short term between periods of air inversion and poor air quality leading to short-term respiratory effects; small particles however are not subject to a regulatory system but the public requires to be made aware of their impacts.
- The incineration of waste does not contribute to sustainability or to the detoxification of the waste stream through substitution of less toxic products.
- It is an inherently hazardous process in which the risks are minimised through complex engineering solutions which do not work to specification all the time.

- Waste management by way of reduction, separation at source and recycling is more fail safe, conserves natural resources, identifies elements of the waste stream which are problematic and therefore encourages substitution, but does not give rise to health impacts arising from physico-chemical changes to waste consequent upon combustion.
- Health impacts associated with incineration should not be underestimated simply because they have not been widely measured; such impacts are very difficult to measure and require long term epidemiological studies often with large sample numbers. However POP's have an adverse impact on development of human beings even when there is exposure to small particles.
- While models are available to estimate the additional body burden of POP's from an incinerator, the main cause for concern is that already current body burden levels of dioxins give cause for concern and therefore the aim should be to reduce any additional loading; it would appear that developers are not required to measure ultra fine particles nor to comply with any limit values on same simply because regulation lags behind scientific knowledge.

The developer responds by saying that if regulations change then they will comply with same; meanwhile the proposed development complies with regulations of the WHO, the UN Environmental Organisations, food safety organisations and the Environmental Protection Agency and others.

I note that the potential impacts of the proposed development on public health is an issue which is closely bound up with that of environmental pollution to which the Board is required to give due consideration.

In the current case the third party appellants have provided evidence by way of reports and studies which they contend demonstrates a causal association between incineration and an increase in adverse human health impacts. In the case of the 4th report however of the British Society for Ecological Medicine it should be noted at Chapter 4.4 that the report states that the authors of some of the reports reviewed by the Society "did not consider that they had sufficient grounds for concluding that the health effects around incinerators were caused by pollution from the incinerators"; further the Society's report also stated that "the studies reviewed apply to the older incinerators"; nevertheless the Society went on to conclude that

- While newer incinerators may have better filters, fine particulates and metals are incompletely removed...
- That as such particles do not appear to have a safe threshold it is clearly incorrect to claim that incinerators are safe.

Those conclusions are largely endorsed by Professor Howard whose evidence at the oral hearing also referred to higher levels of pollutants being emitted under "start up" as opposed to "steady state" conditions.

I note that the developer at the oral hearing did not rebut either Professor Howard's evidence or that contained in the report of the British Society for Ecological Medicine referring only to compliance with internationally recognised values and criteria.

However I would refer the Board to the review of the health impacts, data and information presented in the EIS and at the oral hearing, carried out on behalf of the Board by Dr. Dan Murphy, Registered Specialist in Occupational Medicine. (See Appendix 1) Dr. Murphy's review concluded that there was not any reason to refuse planning permission for the proposed development on grounds of health implications: that conclusion was based on an analysis of health evidence as presented by the developer in the EIS by third parties in their submissions and in review documents on health effects of municipal waste incinerators. Of note is Dr. Murphy's statement that

Evidence presented by the appellants included toxicological evidence (how the various pollutants might affect the body), and epidemiological evidence, (the extent to which proven medical statistical studies show that health has been harmed in a given situation involving the use of a particular industrial process). Although there was some reference to the epidemiological study, involving reproductive affects, in Cumbria, most of the health effect evidence was purely in the area of toxicology. In toxicology, unless the exposure and dose are significantly above the known limits, the health effect concerned always remains a possibility but without any measurable risk.

Of particular note in Dr. Murphy's report is the touchstone which he considers is provided by the 2002 Irish Health Research Board Review and the 2004 UK DEFRA Review on the Environmental and Health Effects of Waste Management. Dr. Murphy states in that regard that

These documents, and particularly the epidemiological evidence summarised by them are, in my view, sufficient to indicate that there is, to date, no known significant risk from the use of the latest generation of municipal solid waste incinerator technology.

In conclusion therefore while I consider that the integrity of the evidence on the impacts of UFP's on human health and the environment as presented by Professor Howard and the 4th report of the British Society for Ecological Medicine, is not open to question nevertheless the absence of any international or national regulatory standards for UFP maximum limit emission values and/or associated abatement measures for same is a significant factor which must be taken into account in assessing the potential health impacts of the proposed development. Given therefore

• That the facility will comply with EU PM₁₀ and PM_{2.5} maximum limit emission values for dioxins and furans,

- That monitoring measures which will be undertaken to ensure ongoing compliance with those values,
- That predicted dioxin and furan intake for the Most at Risk Individual lie well below EU limits set for the protection of human health and the environment.

I consider that the appellant's request that the Precautionary Principle be invoked should be rejected. As the HRB stated at page 4 in their review of Health and Environmental Effects of Landfilling and Incineration of Waste, "scientists can decline to make decisions pending the availability of new evidence but legislative and administrative decisions are often made to fixed timetables"; that would appear to be the crux of the matter in the case of UFP's. However rejection of the appellants request should not preclude any dedicated Health Impact Assessment of emissions from the proposed facility being carried out as recommended by Dr. Murphy, nor indeed any relevant epidemiological study: that however is not a matter for regulation by An Bord Pleanála. Overall therefore having regard to the facility's compliance with EU and International emission limit values I am unable to recommend refusal of permission for the proposed development on grounds of likely adverse health impacts.

18.10 Air Quality Impacts

An issue common to all third party appellant submissions is the potentially adverse environmental impacts likely to be generated by the proposed plant; on air quality and climate with particular reference to greenhouse gas emissions.

A presentation on air quality and climate impacts was presented in the EIS and in person at the oral hearing by Clare Shellshear and Dr. Edward Porter on behalf of the developer.

The study was carried out by means of:

- An extensive baseline ambient air quality survey.
- An assessment of the air quality impact of the proposed development using the AERMOD, air dispersion model.
- The cumulative Air Quality Impact Assessment which was based on impacts from the proposed facility, existing industrial facilities, road traffic, and background air quality levels;

That cumulative impact was then compared with the applicable ambient air quality standards. The assessment adopted a conservative approach; for example it assumed that emissions from all significant existing facilities and from the site would operate at their maximum emission levels 24 hours a day over a full year period. The assessment concluded that the area currently experiences good air quality, that any impacts from the proposed facility will

be minor and limited to the immediate environs of the site, and that the waste management facility will not have any significant impact on the cumulative air quality in the Carranstown area with levels of emissions being maintained below all relevant air quality standards. Finally the assessment concluded that a stack height of 65 metres is appropriate to ensure that ambient air quality standards are not exceeded.

Specialist advice was sought and obtained by the Board in regard to the adequacy of the emissions model as described in the EIS and as further elaborated on in Dr. Porters presentation at the oral hearing; the advice was provided in the form of a report by Dr. Brian Broderick (see Appendix 1). The report concluded that the air quality assessment methodology employed was appropriate in that:

- The air pollutants considered are those whose emission rates are restricted in the EU Directive on Waste Incineration;
- The assessment methodology employed a conservative approach in that the atmospheric dispersion modelling employed the use of maximum emission rates and volume flows from the proposed plant, and
- The AERMOD model has been validated and is an appropriate model for estimating air quality impacts of emissions from a proposed facility.

Criticisms of the modelling exercise by Dr. Broderick however referred to:

- The modelling of maximum emission rates allowed under the EU Directive on Incineration in conjunction with infrequently occurring abnormal emission rates rather than the modelling of expected emissions. The consultants report states that "this is a conservative approach that ensures that the modelling results remain valid only so long as the terms of the facilities waste licence are not breached"; in that context however the consultant noted that "the proposed increase in the amount of waste incinerated at the facility (200,000 tonnes per annum as opposed to the 150,000 permitted;) will not result in the licensed emission rates being exceeded.
- That the model results will be characterised by a degree of inaccuracy as
 the models representation of the plume dispersion is an approximation,
 hence individual hourly average pollutant concentration will differ from
 those predicted.
- That during periods of low wind speed alternative models could have been applied to obtain a more comprehensive air quality impact assessment than that provided by AERMOD; it is hence reasonable to assume that maximum short-term concentrations at receptors close to the source will be higher than predicted by AERMOD and reported in the EIS.
- Predicted ambient concentrations in the vicinity of the facility were based on two selected years – 1998 and 2000; best practice however involves

modelling for 5 or 10 consecutive years in which case predicted concentrations may have been slightly higher than reported and locations of maximum impact expected to vary.

• The baseline survey used to define background concentrations is deficient in regard to the age of the data, its restriction to a single season and in certain cases to a single location;

The report therefore advises that deficiencies in the baseline survey reduce the "relevance of the cumulative impact assessment reported in the EIS, because emissions from other major sources in the vicinity of the proposed facility are likely to have their greatest impact at different locations, where backgrounds levels have not been established".

The consultants report goes on to conclude that AERMOD results show emissions from the waste-to-energy facility having only a small impact on ambient air pollution concentrations in the vicinity of the stack and less impact farther afield; total ambient concentrations for example during operation of the facility are expected to remain at levels that are much less than 50% of the relevant limit values; however the use of only one years meteorological data to calculate either short or long-term average concentrations is insufficient if the location of maximum impact is to be established with confidence; similarly periods during which air modelling was carried out are insufficient to accurately establish the impact at the specific locations such as the nearest residential receptors and conclusions therefore reached in the EIS that "concentrations at the nearest residential receptor will be less than 3.5% of the short-term limit values cannot be supported from the results and the methodology presented in the EIS. The consultant's report states however that "it can be reasonably concluded that concentrations at these receptors will remain below limit values".

Overall the consultant's report concluded however that the air quality assessment carried out by the developer which states that emissions from the proposed facility even at maximum operation will not lead to exceedances of air quality limit values is appropriate, based on results presented in the EIS. The report further concludes that "the margin between the predicted concentrations and the limit values is large and any inaccuracies resulting from inadequacies in the input meteorological data and background concentrations are not likely to materially affect the above conclusion".

18.11 Stockholm Convention

The Stockholm Convention is a global treaty to protect human health and the environment from persistent organic pollutants (POP's). The third party appellants therefore correctly indicate its relevance to the proposed development. A presentation in that regard was given by Mr. Herr at the oral hearing where he stated

• that the objectives of the Convention oblige, that with regard to incineration, waste management strategies will be adopted which will

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eventually eliminate and avoid emissions of dioxins and furans through avoidance of technologies which emit such POP's; a waste management policy therefore which proposes the construction of a dioxin emitting incinerator may be a breach of the Convention since the state will be failing to adopt feasible alternative waste management methods which exclude all avoidable dioxin emissions.

- A national implementation plan which is required under Article 5(a) of the Convention has still not been delivered in Ireland despite the due date for that plan having passed; any decision therefore by An Bord Pleanála on the proposed development is premature until such a plan becomes available.
- Article 5(b), (c) and (d) of the Convention prohibit the grant of planning permission for incinerators and therefore any such development is a breach of the Stockholm Convention where an alternative process is available, technically feasible and economically more cost competitive.

In response I note that

- The EPA is the competent authority for the implementation of EC Regulation 850/2004 on POP's;
- The EPA is currently preparing a national implementation plan to demonstrate how the obligation of the Convention will be implemented in Ireland; an accompanying action plan will also seek to identify, characterise and minimise the release of POP's with a view to eliminating them completely (cf. EPA Freedom of Information Act 1997 and 2003 Section 16 Reference Book of July 2007);
- The EPA already undertakes monitoring of dioxin in the Irish environment including dioxin monitoring as part of the licensing requirements for certain industrial sectors.

I therefore consider that in the light of ongoing monitoring by the EPA against the background of EC Regulation 850/2004 requirements that it is inappropriate to refuse permission for the proposed development on grounds of prematurity.

18.12 Climate Impacts

Chapter 15 of the EIS and Dr. Edward Porter's proof of evidence on air quality and climate presented at the oral hearing, together formed the basis of the developer's submission on generation of greenhouse gas emissions by the proposed development and likely impacts on climate arising thereof. The third party appellants also referred to this issue in their written submissions and in their presentation at the oral hearing. The issue is of particular importance having regard to the Government's recently published Climate Change Strategy and Ireland's compliance requirements under the Kyoto Protocol.

Chapter 15 of the EIS states that:

- Ireland's ratification of the UN Framework Convention on Climate Change in 1994 and the Kyoto Protocol in 1997 requires Ireland "to limit the net anthropogenic growth of the six greenhouse gases between 2008 and 2012 to 13% above the 1990 level; article 5 of the Kyoto Protocol states "that the methodologies for estimating anthropogenic emissions by sources and removal by sinks of all greenhouse gases (except those controlled by the Montreal Protocol) shall be those accepted by the Intergovernmental Panel on Climate Change (IPCC)". The IPCC guidelines focus on anthropogenic greenhouse gas emissions rather than biogenic emissions; the former are generated directly by human activities or natural processes which have been affected by human activities; biogenic emissions on the other hand are released through natural life cycles and do not contribute to emission totals considered in the Kyoto Protocol.
- In order to calculate the net contribution of the proposed development to greenhouse gas emissions and hence its impact on Irelands obligations under Kyoto, the total forecasted anthropogenic emissions from the proposed development were calculated over its lifespan 25 years. The baseline year was assumed at 2010; in that year, the proposed development will contribute 0.09% of the total greenhouse gas emissions in Ireland, when power generation from the plant is not taken into account; when the 13 megawatts of power are however taken into account and are exported to the national grid, a net reduction of 67% in the amount of greenhouse gases emitted from the site will result; overall that equates to a contribution of 0.03% to the total greenhouse gas emissions in Ireland in 2010.
- Calculations were then made regarding the impact on climate were the 200,000 tonnes of waste to be landfilled rather than treated at the plant; a 25 year disposal period for the landfill was considered and it was also assumed that landfill gas collection would take place at an efficiency of 75% (despite the fact that actual capture rates are likely to be lower at 50-70% for new landfills and 40% from existing landfills). The peak generation of greenhouse gas emissions was calculated to occur after 25 years and was equivalent to 177,000 tonnes of CO₂; if gas collection is ignored the contribution of the landfill to the total greenhouse gas emissions for a worst case year is 0.25% of the total greenhouse gas emissions in Ireland in 2010; if the collection of greenhouse gas emissions is taken into account and the emissions are condensed to a 25 year time period to allow a comparison with incineration, the annual contribution to total greenhouse gas emissions is equivalent to 0.042% of greenhouse gas emissions in Ireland in 2010, as opposed to 0.03\% of greenhouse gas emissions from the proposed waste-to-energy facility. The overall annual impact of the proposed waste-to-energy facility on climate is therefore a net benefit of approximately 0.012% of the total greenhouse gas emissions in Ireland in 2010; that would be imperceptible in terms of Irelands obligations under Kyoto. At the oral hearing Dr. Porter stated that such a

saving was "equivalent to removing over 3,000 cars per annum from the road".

At the oral hearing Dr. Porter was cross-examined by third party appellants' representative, Mr. J. McCarthy, mainly in regard to rationalisation of conclusions reached in the EIS and the advantages of WTE plants as opposed to landfill when greenhouse gas emissions are taken into account. Salient points in the cross-examination were:

- The EIS fails to state the actual tonnages of biogenic CO₂ emitted by the installation. In response Dr. Porter states that the approach adopted is in accord with the IPCC and Kyoto protocol methodology which does not refer to biogenic waste.
- The reduction in the contribution of the plant to the total greenhouse gas emissions in Ireland in 2010 from 0.09% to 0.03%. Dr. Porter clarifies that the reduction is accounted for by the export of 13 megawatts of power to the national grid which would otherwise have been released from power stations.
- The EIS for the proposed WTE facility at Poolbeg where 600,000 tonnes are proposed for treatment at Poolbeg in comparison to the 200,000 tonnes proposed for treatment at Carranstown, yet greenhouse gas emissions in terms of CO₂ tonnages for Poolbeg are only twice that calculated for Carranstown. Dr. Porter clarifies the discrepancy by stating that in Poolbeg the figure for the fraction of carbon in the waste was assumed to be 0.29 rather than the 0.4 assumed for Carranstown; were the assessment for Carranstown to be recalculated then the adopted figure for the carbon fraction would also be 0.29.
- The detailed analysis of the landfill alternative for Poolbeg which included calculations for carbon sequestration; those are not included in the EIS for Carranstown; Dr. Porter in clarification stated that sequestration is not required under IPCC methodology. In terms of sequestration for landfills it is important to note that only biogenic waste is sequestered and not fossil fuels; furthermore under the Landfill Directive the volumes of biogenic waste going to landfill will drop dramatically so the issue of sequestration from landfills will tail off as a benefit in favour of landfill.
- The Poolbeg EIS where it is stated that "landfill in conjunction with anaerobic digestion offers a small net saving over incineration of the order of 0.03%". In response Dr. Porter states that if one looks at the Kyoto protocol for that particular facility under different sets of analyses, incineration is more favourable if carbon sequestration is ignored as is required under the protocol; however extrapolation from one facility to another is not appropriate having regard to important variables such as tonnage, power produced, alternatives considered; also the displacement in terms of energy has to be taken into account i.e. in terms of CO2 emissions per megawatt hour a figure of 0.4 has been adopted rather than a figure of 0.624%; the analysis is therefore conservative by a factor of 1/3 in terms of

power generation from the incinerator. Furthermore if the analysis for Carranstown were to be revised with the correct biogenic and carbon fractions – 0.29 – the real power ratio of what is being replaced, then incineration is negative and landfill is positive; however in a future scenario where renewables reach 39%- 2034 – and where biogenic waste decreases to 5% of input by 2020, then over the lifetime of the facility incineration is still a better alternative to landfill.

- The developer had ample opportunity to rebalance the model and apply the same analysis to Carranstown as to Poolbeg; in that scenario the model would then likely conclude that incineration would be less favourable than landfill with anaerobic digestion, taking into account carbon sequestration. In response Dr. Porter states that a number of variable factors have to be taken into account e.g. fuel mix per megawatt hour and the percentage of biogenic waste going to landfill; a timeline analysis is therefore required for the development as it progresses and landfill directive targets are met; therefore it is appropriate to assess the development over a 25 year time period; while the issue of carbon sequestration may be taken on board, it does not play a part in the Kyoto Protocol; hence any decision based on carbon sequestration will be ignored when compliance with Kyoto is being assessed; it is therefore unwise to include carbon sequestration in any calculation on that basis.
- Combustion of materials in an incinerator immediately releases all of the carbon fraction. Dr. Porter agrees but also equally notes that some landfills can release over a 100 year period; furthermore recent evidence reports that landfill gas capture rates are significantly over estimated; so for example while it is currently assumed that 75% of methane is captured from landfill, studies show that the likely capture figure is 20%; given that methane is 21 times more potent than Carbon dioxide then extremely high levels of CO₂ equivalents are obtained; a further important factor is that if the greenhouse gas emissions climate change is predicted to be 50 years away then waste currently being disposed of to landfill will generate significant emissions during that 50 year period.
- Clarification of the extent of CO₂ emissions released from landfill in the first ten years of that landfill assuming that biogenic waste is sent for anaerobic digestion. Dr. Porter states that a scenario has been considered whereby the biogenic content of the landfill reduces to 5% and a 75% landfill gas capture rate is assumed: even then incineration is still a more positive alternative particularly as a 75% landfill capture rate would appear unrealistic. Mr. McCarthy responds that for the first 10 years the CO2 emitted from the landfill is only a tiny proportion in comparison for example to an incinerator where all of the CO₂ would be released immediately. Dr. Porter indicates that the real crisis will occur in the future and if the waste is in the ground then landfill emissions will occur going forward. Mr. McCarthy disagrees strongly with that assumption on the basis that putrescible waste will not go to landfill but rather to an anaerobic digestion facility. Dr. Porter states that even if only 50% of the putrescible waste goes to an anaerobic digestion facility incineration is still

the better alternative in terms of greenhouse gas emissions. Mr. McCarthy challenges that assertion, stating that the methodology used to assess greenhouse gas emissions for the development at Carranstown ignores the temporal effects of the instant release of carbon dioxide by the plant.

- Mr. McCarthy then asks if the applicant has included in the EIS an analysis of carbon sequestration; Dr. Porter says no as this is not required under IPCC protocols.
- Mr. McCarthy then asks if any analysis of the temporal effect over the next 15 years was conducted. Dr. Porter states that that scenario was looked at but was not included in the EIS because the EIS preceded the publication of the IPCC 2006 database which enabled that scenario to be assessed.
- Mr. McCarthy concludes that although the EIS assessment for Carranstown was carried out in compliance with IPCC methodology, that methodology is insufficient to meet the present day challenge facing mankind and that current science should be employed.

Specialist consultancy advice was sought by the Board on how greenhouse gas emissions likely to be generated by the proposed development compare with those likely to be generated by landfilling or alternative method of waste disposal. I would refer the Board to the consultant, Mr. Brian Broderick's, response which was provided after hearing the above arguments. Mr. Broderick concluded in his report that:

- That an evaluation of greenhouse gas emissions for Carranstown was carried out in accordance with IPCC protocol.
- Uncertainties and variables exist in the primary input data necessary for such evaluations for example the mix of waste material, gas capture rates from landfill and the method of electricity generation likely to be displaced by the waste-to-energy facility.
- By making different valid assumptions on the input data it can be demonstrated that greenhouse gas emissions from the proposed waste-to-energy facility will be less than those from landfill or vice versa; in both cases however the magnitudes of the global warming potential of emissions from both waste-to-energy and landfill will be similar.
- Greenhouse gases emitted from landfill differ from those due to incineration as they are generated by different elements of the waste stream. The production of such gases can be minimised if incineration or landfill forms part of an integrated waste management strategy that promotes maximum recycling and alternative treatments for biodegradable matter.
- The proposition by Mr. McCarthy that landfilling is to be preferred over incineration for "inter alia" its delayed temporal effects i.e. in incineration greenhouse gas emissions occur immediately whereas with landfill they

are delayed – is correct but the implications of such a scenario are not understood as they depend on the unknown ability of future technology to mitigate the effects of landfill emissions; furthermore that scenario does not appear to be the subject of any international agreements or national strategies.

I therefore conclude that:

- (i) The assessment carried out in the EIS for the evaluation of greenhouse gas emissions from the proposed development accords with the recognised protocol of IPCC, which protocol excludes carbon sequestration.
- (ii) The contribution to total greenhouse gas emissions by the proposed development equates to 0.03% of the total greenhouse gas emissions in Ireland in 2010,
- (iii) The proposed development will contribute marginally less to the total greenhouse gas emissions in Ireland in 2010 than will landfill, the contribution from landfill being equivalent to 0.042% of the total greenhouse gas emissions in Ireland in 2010; the modelling methodology however for landfill incorporates a gas collection efficiency of 75% which is likely to be significantly above actual capture rates.
- (iv) Potential exists for an ongoing reduction in greenhouse gas emissions from the proposed facility; that however is dependent on increased recycling and the use and promotion of alternative treatments for putrescible and biodegradable matter.
- (v) The argument that new landfill facilities are preferable to WTE on the basis of delayed greenhouse gas emissions is based on the premise that technology, as yet undeveloped, will be available to efficiently capture those emissions as and when they will occur is, I consider, inappropriate; such an argument is speculative in nature and based on a "what if" premise.

It can therefore be concluded that the proposed waste-to-energy facility has marginal advantages over landfill disposal at this point in time in that it reduces dependence on fossil fuels through use of waste as a resource, and in the absence of large scale and extensive recycling facilities and alternative methods of waste disposal which are greenhouse gas neutral, the proposed waste-to-energy facility will contribute only 0.03% of the total greenhouse gas emissions likely to be generated in Ireland in 2010.

18.13 The design specification and build of the proposed WTE was also the subject for discussion at the oral hearing; the third party appellants contested that it was uncertain as to whether the design and construction parameters of the facility were owned and determined by the developer, or by the builder, hence raising potential safety, health cost and operational implications associated with the running of the plant.

Mr. Jones on behalf of the developer stated that Indaver owned the specification for the plant and decides the performance which Indaver wishes the plant to deliver both within the requirements of the legislative framework and operating experience. He also further clarified that

- Although an increase in waste tonnage is proposed, over that previously permitted, the volume of exhaust gas flow through the stack is less than previously, due to the model used and the input data.
- The waste tonnages on the moving grate relate to and are controlled by the calorific value of the waste; hence the loading system is automatic.
- In the design specification there is a specific request that the tender addresses the issue of secondary air injection above the furnace to demonstrate (i) that an even temperature profile will occur above the furnace and (ii) that the boiler will be protected against corrosion; the method of addressing those issues however differs from tender to tender according to the system proposed; other important design parameters referred to in the tender are the temperature of the grate, the rate of cooling on the grate.
- It is proposed to operate the plant at a minimum furnace temperature of 850°C and 1,050 above the furnace; even when the chlorine content of waste varies the temperature in the furnace will not vary; any increase in temperature which is required as a result of the chlorine content of the waste increasing above 1% will not happen.
- Profiling of the waste mix can be achieved through contracts with waste suppliers thus enabling the developer to identify potential waste streams in advance of acceptance at the facility; this allows for rerouting of certain types of waste to the hazardous waste facility in Cork; however the profile of municipal waste which is the largest waste stream for acceptance at the facility is well understood.

In conclusion Mr. Jones states that the turn key supplier therefore not only has to design the plant in accordance with certain parameters but he also has to stand over the design and a commissioning test in which criteria set by the developer and based on the developers experience must be met; likewise for the software this is written by Indaver and provided by the supplier; the Environmental Protection Agency also has to be satisfied with the level of control of automation at the plant. Were the system to fail the plant would automatically shutdown; shutdown takes place over an extended period of time in order to avoid damage to the furnace.

I conclude that the design specification, build and operation of the proposed WTE is controlled by the developer rather than by other parties; that ensures that obligations to comply with relevant design, build, and operational standards rest with the developer particularly in regard to the waste streams accepted for incineration at the facility, the impact of such streams on

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temperatures in and above the furnace and the subsequent range and limit values of emissions to air.

18.14 Traffic Impacts:

The traffic impacts of the proposed development require consideration having regard to the proposed 50,000 tonnes per annum increase in waste for acceptance at the site, over and above that previously permitted under PL17.126307.

The TIA provided by the developer was based on traffic counts carried out in December 2005 and January 2006; traffic generated was based on the amount of waste to be processed at the facility and the amount of consumables required to operate the plant. The assessment states:

- Five main haul routes will be used to access the site as shown on Figure. No. 1 attached to Chapter 13 of the EIS. Those are:
 - (i) From Drogheda in the North-East via the R152;
 - (ii) From Louth and Monaghan in the north via the M1 and the R152;
 - (iii) From Navan in the north-west via the R153 through Kentstown, thence via the N2/R150 junction, the R150/R152 junction and ultimately via the R152;
 - (iv) From Ashbourne in the south via the N2/R152 junction at Kilmancross and
 - (v) From East Meath via the R150/R152 junction.

Ultimately all traffic accesses the site via the R152 via a priority control junction at the site entrance; traffic from the north-west, west and south-west will access the R152 via the village of Duleek.

The Traffic Impact Assessment is also predicated on:

- An average daily total of 58 inbound waste delivery truck movements equating to 13 peak hour truck movements.
- An average daily total of 15 truck movements per day delivering raw materials and removing residual waste; this equates to a peak hour movement of 4 vehicles.
- Total peak hour traffic predicted to be generated by the proposed development is 17 inbound truck movements or 34 two-way movements.

The TIA referred to:

• Impacts of the predicted traffic increase on the R152 from the proposed development stating that the number of trucks during the peak hour period there will increase from 165 to 199 bringing the HGV proportion of the total traffic flow from 14.9% to 17.4%; overall the post development traffic peak hour flows on the R152 will increase by 3% - a small increase

which will not impact on the operation of the road as it will still allow the R152 to operate within its AADT design capacity.

- Modelling of the R152/R150 junction post development shows that again
 the junction operates well within capacity until 2013 when significant
 queuing will occur; however plans by Meath County Council to bypass the
 village of Duleek will remove a considerable portion of the traffic from
 that junction and result in additional traffic capacity there.
- M1/R152 junction analysis shows that there is significant spare capacity at that interchange to cater for anticipated flows under post development conditions.
- From Navan, traffic to the site will pass through the village of Kentstown, the R153/N2 junction, the N2/R150 junction and the R150/R152 junction; the proposed development will generate an additional 6 HGV movements per hour through the village and will not have a significant impact in traffic terms; post development the N2/R153 junction will operate well within capacity, as will the N2/R150 junction; in order to access the R152/R150 junction however traffic will pass through Duleek village at a rate of an additional 8 HGV's per hour; however completion of the eastwest bypass of Duleek village included as an objective in the County Development Plan will divert traffic away from the main street there.
- N2/R152 junction at Kilmoon Cross; predevelopment traffic conditions shows the junction operating within an RFC of 0.9 for the approach on the R152 during the morning peak hour above the desirable maximum when through flows on the N2 southbound are higher than throughout the rest of the day; in practice however operational conditions do not match simulation results as the traffic approaching the junction from the R152 uses an acceleration lane to merge onto the N2 with little delay; post development the RFC increase is so small as to be imperceptible and the operation of the junction will not therefore be adversely affected.

A TIA also assessed construction traffic flows likely to be generated by the proposed facility over the 24 month construction period; the peak hour in respect of construction traffic is estimated to occur between 6.00am and 7.00am and between 6.00pm and 7.00pm; both am and pm peak hour periods do not significantly impact on the road network as they will not coincide with peak background flows; even if simultaneous construction on several developments in the Carranstown area were to take place (for example at Platin power station and Irish Cement) normal construction start and finish times are outside of the peak periods for main road traffic.

Re R152 alignment, the response to the Planning Authorities request for additional information stated that realignment of the R152 would only be necessary were the Platin power station to be constructed.

The traffic impacts of the proposed development were challenged particularly by the third party appellant Mr. Stephen Ward who stated:

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- (i) That the location of the application site in the south-eastern corner of the North-East region is unsustainable as all material will require to be transported by road; (the developer did confirm at the oral hearing that waste transportation was confined to road haulage as rail freight was not feasible due to the absence of loading facilities such as transfer stations at railway stations; given the small scale nature of the North-East region it would not be feasible to construct a network of such transfer facilities as it would still require waste collectors to haul the waste to the stations).
- (ii) That the traffic generated by the development would create a traffic hazard along the R152; that again was rebutted by the developer who stated that sight lines at the proposed entrance as well as forward sight visibility on the R152 comply with the requirements of NRA DMRB.

Having had regard to the data contained in the EIS and the further information response by the developer I am unable to concur with Mr. Wards assertion. Furthermore I also note that cumulative traffic impacts arising from the proposed development and any traffic generated by the permitted power facility in close proximity to the site would not have a significant impact on the operation of the associated junctions nor on the R152 as it is proposed that realignment works to the R152 would then be carried out.

Neither can I concur with Mr. Ward's assertion that the proposed development would have "disastrous effects on the amenities of the residents of Duleek", having regard to Meath County Development Plan proposals for a bypass of Duleek village, and funds already allocated for a preliminary route selection and design process to be carried out for that bypass, as confirmed by Mr. Gallagher on behalf of Meath County Council at the oral hearing. It was also confirmed by Meath County Council at the oral hearing that were the project to be fast tracked then construction on that bypass could be expected to commence within one year.

While the TIA associated with the currently proposed development is overall acceptable I would draw the Boards attention to the fact that the AADT flows for the R152 pre development were calculated at 11,080, with the R152 operating within capacity at LOS E; that contrasts markedly with the predicted AADT flows on the R152 for 2004 as set out in the EIS associated with PL.17.126307; there the AADT predicted flow for 2004 was 6,060 with the R152 operating at LOS D; the contrast is even more marked between the two sets of AADT figures when it is noted that the predicted traffic flows for 2004 included a growth factor attributed to the Marathon power plant on the R152 which development has not yet taken place. In conclusion having regard to the 100% increase in AADT flows on the R152, it must be queried as to whether at any point in the future, access to the site will be difficult with traffic management by way of a signal junction at the site entrance becoming inoperative due to congestion; furthermore it could be assumed from the significant differential between AADT flows predicted for 2004 and those actually occurring for 2006 that the National Roads Authority National Roads Needs Study - which envisages that light vehicle traffic will grow by 2% a

year from 2005 to 2015 on the national roads network - is not applicable to the R152 on the basis that the significant increase in traffic flows on the R152 may be due to increased usage of the road by commuters seeking to avoid congestion on alternative routes rather than a growth in light vehicle traffic per se; if that were the case, predicted future AADT flows on the R152 even without the proposed development may be significantly underestimated.

However as the significant increase in traffic flows on the R152 would appear to be due to unidentified variables internal to the proposed development I do not consider it appropriate to recommend any form of mitigation measures at this point in time, other than monitoring of the signal junction by the Local Authority.

I would however recommend that the prohibition on facility traffic travelling the R150 between its junction with Regional Road R153 to the west and the N2 to the east as provided for under Condition 11 of PL17.126307 be retained were permission to be granted for the proposed development. I would also recommend that any realignment of the R152 required to provide extended forward sight lines as a result of the permitted power plant development not be implemented until construction works on latter development commence.

18.15 Visual Impacts:

The proposed development differs from that for which permission was granted under Planning 17.126307 in that the main building rises to a height of 40 metres as opposed to the 30 metres previously permitted, and the height of the stack rises to 65 metres as opposed to the 40 metres previously permitted; the increased height of the stack results from Condition No. 3.19.1(i) of waste license register no. 167-1 granted by the EPA in November 2005 for the development permitted under Planning 17.126307. The increased height of the building results from operational changes. The appellants state that the increased heights will result in visual intrusion within a high amenity landscape.

In response I note that the proof of evidence given at the oral hearing by the developer's landscape architect assessed the potential impact of the development on:

- The perceived character of the area on which the development was assessed to have a significant and neutral visual impact as the landscape is already subject to a significant level of visual intrusion (the village of Duleek, the cement complex at Platin and the N1).
- Existing views the development will have a significant but neutral impact in general terms as it can be visually accommodated within the existing landscape structure while from the heritage sites of Dowth, Newgrange, Bellewstown and the Battle of the Boyne the visual impact will be low and neutral in all cases; the only element of the development visible from those sites will be the upper level of the stack which will be visually dominated by the mass of the upper levels of the cement plant.

Visual and recreational amenity – the development will have a significant
and neutral impact on visual amenity which is open to mitigation through
the layout of the development on site, choice of external materials and
colour and landscaping and planting; the development will not however
have any impact at all on recreation amenity.

The photomontages submitted with the EIS and the additional montages submitted as part of the F.I. response to the Planning Authority's request for additional information show alternative locations on site which have a much more significant impact than the on site location currently proposed; those all endorse the conclusions reached by the landscape architect in his submission to the oral hearing namely that in distant view points from heritage sites the proposed development will not be visible except from the top of the tumulus at Dowth where the top of the stack will be visible in clear weather at a distance of 5.45 kilometres; however View 15 in the photomontage shows that such visibility will be extremely limited.

I would also point out to the Board that at the oral hearing it was stated that the photomontages were derived from "a 3D digital model which included all camera locations, reference points and buildings and structures, and the proposed development. The model of the proposed development was based on drawings provided by the architects and landscape architects. Computer renderings of the proposed development were then made from each of the camera positions and the renderings positioned within each photograph, using the surveyed reference point to confirm accuracy of positioning. A3 digital laser prints of the photomontages were then produced". Having regard to the above methodology I consider that the accuracy of the visual impacts as illustrated in the photomontages is reasonable.

In regard to visual impacts on the archaeological heritage of the area, I would also refer the Board to the conclusions reached by the UNESCO-ICOMOS reactive monitoring mission report on the archaeological ensemble at the bend of the Boyne; the report was compiled subsequent to three visits by the mission to the world heritage site and its buffer zone and an examination of all available planning documents.

The report noted that it had been informed by the developer subsequent to the mission on 27.2.04 "that the Environmental Protection Agency had advised Meath County Council of an increase in the height of the stack from 40 metres to 65 metres...to facilitate further dispersal of potential emissions". The report concluded:

- There was not any basis for believing that the construction of the proposed incinerator would have a direct impact on the outstanding universal value of the world heritage site or on any possible interpretation of the course of the Battle of the Boyne.
- That photomontages submitted by Indaver to the World Heritage Centre in March 2004 showing the revised height of the chimney stack to 65 metres

will result in the chimney stack being visible from the top of Dowth; the mission concluded however that such visual intrusion "would have a minimum impact on the world heritage site compared with the existing cement factory nearby". The mission also noted the applicant's assurance that any smoke plume from the stack would be eliminated by the provision of a secondary combustion chamber except on foggy days when the emission would not be visible against background cloud.

Having regard therefore to the evidence provided by the photomontages contained in the EIS, to the conclusions reached in the UNESCO-ICOMOS mission report, I am satisfied that the proposed development will not have any significant adverse visual impacts on views of or from designated heritage sites or high amenity views.

In regard to near views of the site, the proposed development will be visually intrusive particularly in views from R152 to the east; however in mitigation I note that:

- Views from the R152 and in fact from the road network in the surrounding area are dominated wholly by the cement works at Platin whose chimneystacks have an elevational height in excess of 100 metres.
- That the on site layout and orientation of the proposed development have been revised from that proposed and permitted under Planning 17.126307; the relocation of the facility to the rear of the site allows for an increased separation distance between the façade of the building and the site frontage with the public road; hence the minimum separation distance currently proposed is 170 metres compared to the 115 metres previously.
- The increased recessed distance between the plant and the public road allows for more intensive screening of the façade from the R152 while the east-west orientation of the plant provides for reduced exposure of the eastern and western elevations.

In conclusion I consider that the proposed development is not likely to have any more significant visual impacts both on near and distant views within the surrounding area than would previously have been the case under Planning 17.126307.

18.16 Impacts on the Aquifer:

A common ground of objection in the submissions by two of the third party appellants is the potentially adverse impact of the proposed development on an underlying regionally important aquifer; that issue was not discussed at any length in the Inspectors Report under Planning 17.126307 due to legislative constraints; however as a result of the Planning and Development Act 2000, the issue of potentially adverse polluting impacts on the aquifer from the proposed development may now be considered in this appeal; the importance of that issue is heightened by the consultant's report referred to in the current Meath County Development Plan at Chapter 4 page 155 which stated that in

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order to address the future water supply needs of the county "it will be essential to maximise the use of existing sources together with the development of new ones". The report then identified a regionally important aquifer in north-east Meath as a new source.

The third party appellants – Mr. McKenna on behalf of the Carranstown Residents Group referred in his submission to An Bord Pleanála to the GSI (2004) Aquifer Vulnerability Classification and classifies the location of the proposed development as extremely and highly vulnerable. Although Map 6.6 attached to the Environmental Report of the current Meath County Development Plan identifies the locations of extremely and highly vulnerable regionally important aquifers; I note that the appeal site lies outside the boundaries of those aquifers i.e. to the south of the railway line.

The No Incineration Alliance referred to the fact that in the previous appeal under Planning 17.126307 the developer attempted to show that the aquifer should be rated moderately vulnerable, despite the fact that removal of overburden and pile driving during construction was proposed.

In response I consider that the following factors must be taken into account:

- (i) The following range of mitigation measures proposed by the developer:
- The finished floor levels of the waste and ash bunkers which although they will lie some 5 metres below finished ground floor levels in the main process building will still lie some 9 metres on average above rock levels (confer EIS Chapter 9.6).
- All concrete underground storage structures whether for waste or liquid
 will be constructed as water tight structures in accordance with appropriate
 codes of practice; the structures will be integrity tested to confirm their
 water tight nature prior to use for storage.
- In the case of the stormwater attenuation tank that will be constructed from a sealed hydrocell type storage unit; again the tank will be tested prior to usage.
- Any substances with the potential to cause a negative impact on groundwater will be stored in appropriate containers and/or placed within bunded areas.
- Raw materials for the process will be stored in containers/silos within the process building.
- Residues will be stored in a bunker in silos within the process building.
- Monitoring wells will be located around the perimeter of the facility; the
 wells will be sampled in advance of the commissioning of the facility and
 then there afterwards on a frequent basis to ensure continuation of baseline
 conditions. Should any contamination of groundwater beneath the

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development site occur through accidental spillage of potentially polluting substances, any resulting plume would move in the direction of the Platin Quarry causing potential deterioration of the groundwater being pumped from the quarry; the developer will therefore consult with Irish Cement to ensure that the quality of the groundwater being pumped to the River Nanny is not compromised as a result of any discharge or leakage from the development site.

(ii) The EPA Inspector's draft report on waste application licence no. 167-1 associated with the development proposed under Planning 17.126307; Chapter 5 of that report deals with emissions to groundwater and states as follows:

The applicant considers the aquifer vulnerability for the site to be moderate, but based on the varying thicknesses and type of overburden cover I consider the aquifer vulnerability to be high.

However the Inspector does not recommend a refusal of permission on that basis but rather states that:

The integrity and water tightness of all tanks, including the waste bunker for the incineration plant, must be checked on an annual basis.

In the recommended decision prepared by the EPA programme manager subsequent to the draft report it was stated that in regard to groundwater

There is no discharge to ground authorised in the license other than the emission from the sceptic tank treating sanitary waste only. All material and waste held on site will be on impermeable surfaces or specially engineered concrete structures that will eliminate the possibility of discharge to ground. The provision of monitoring wells and monitoring of groundwater as recommended should be more than adequate to evaluate the impact, if any, the activity is having on groundwater quality. The activity will involve the abstraction of $470\text{m}^3/\text{day}$ and the RD provides for the provision of alternative supplies if anyone is adversely affected by the abstraction.

In conclusion I consider that whether the regional aquifer underlying the site is classified as being of moderate or extreme vulnerability, the mitigation measures proposed by the developer to prevent leachate from the waste or ash bunkers to ground water are sufficient to render the possibility of such discharges highly unlikely; furthermore backup in the form of monitoring and the provision of alternative water supplies in the unlikely event of contamination of the aquifer is available.

18.17 Ecology:

Given that the site location and characteristics of the proposed development are similar to those permitted under Planning 17.126307 and given also that the permission granted under Planning 17.126307 was approximately 4 years

ago only I do not consider that ecological issues associated with the proposed development require in the main to be revisited.

However at the oral hearing, the third party appellant Mr. Stephen Ward stated that the EIS had referred to the potential presence of bat roosts in the disused dwelling outside of but adjacent to the extreme south-western corner of the site; although the developer clarified at the oral hearing that the structure lies on lands outside the developers ownership, the concern here arises as to the impact of the proposed road frontage setback at the site entrance (associated with the proposed 160 metre sight lines) on that structure.

Figure 2 however attached to Chapter 13 of the EIS shows that any road frontage setback is unlikely to impact on that structure as it is recessed back from the road in the right hand elbow of the lane and therefore unlikely to be impacted on by any road proposals at that point.

However as the BAT survey referred to in the EIS was carried out during daylight hours only, it is to some extent incomplete. It is therefore appropriate that were permission to be granted for the proposed development that conditions be attached requiring the provision of a more comprehensive survey and regulating the protection of any bat colonies or feeding grounds which may exist at the site. In the certainty that bats "certainly utilise the area for feeding and that summer and (perhaps winter roosts) may be present in mature trees or within ivy-covered trees on-site" the developer proposes that a range of mitigation measures be effected in regard to tree felling, landscaping and provision of bat boxes. I endorse such proposals and recommend that they be attached by way of condition to any permission which may issue in the current case.

18.18 Consideration of Alternatives:

This issue was raised by Mr. Ward as part of his appeal submission; Mr. Ward stated that the rejection of three alternative site locations for the proposed development and the underlying reasons for the rejection was "a limited restricted exercise which has as its sole purpose the verification of the Carranstown site. The investigation of other sites other than the Carranstown site was insufficient and/or orchestrated solely to verify the site selected".

Furthermore if the facility is to accept waste from outside the North-East region the site selection process engaged in by the developer failed to take that into account.

I consider that the permission already granted by An Bord Pleanála under Planning 17.126307 for a waste-to-energy facility with a 150,000t/p/a capacity at the appeal site largely undermines the appellants argument; furthermore the "centre of gravity" model used in the previous development to identify a suitable location for the site as close as possible to the centre of waste production for the region was deemed by the Inspector in his assessment under Planning 17.126307 as:

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A reasonable attempt at providing a regional analysis for the purposes of locating the proposed plant. While it can be argued that the level of detail provided by the developers analysis is insufficient, nonetheless is does in my opinion offer a reasonably robust regionally analysis. It also provides results capable of comparison as between the various locations examined.

The location of the proposed development scored highly in the gravity modelling analysis carried out by the developer. In general I consider that this is a reasonable outcome from the inputted data.

In the current case:

- I have had regard to the site selection process involved in identifying the site and to the revisiting of that process in the light of the replacement 2005-2010 Replacement Waste Management Plan for the North-East Region,
- To the revised data input into the centre of gravity model of waste arisings based on the results of the 2002 census which have become available since the previous grant of permission,
- To the fact that as the proposed facility is to serve primarily the needs of the North-East region and thereafter and only in an ancillary manner, adjoining regions,

I consider that the developer's focus on locations associated with the centre of gravity of waste arisings in the North-East region is correct.

18.19 Conflict with Rural Settlement Strategy as set out in the now adopted Meath County Development Plan 2007-2013; the strategy set out in the plan states that the Planning Authority should "ensure that the planning system guides development to the right locations in rural areas thereby protecting natural and man-made assets in those area"... Mr. Ward states that the conflict with the plan is evident in that "the type, scale and extent of development as proposed is totalling inappropriate to the are and would lead to fragmentation of the established greenbelt surrounding the primary development centre of Duleek."

In response I note that:

- Permission has already been granted for a development of a similar nature and scale at the site under Planning 17.12630.
- The Planning Authority in its submission to the oral hearing stated that Meath County Council had granted permission for the proposed development having regard to inter alia "the location of the proposed development in an area where there is an established and permitted industrial land-use pattern; that rationale by the Planning Authority also complies with a further policy set out at Chapter 6.7.1 of the current

County Development Plan namely that the Planning Authority should "analyse the different types of economic, social and physical circumstances of different types of rural areas and tailor planning policies to respond to these differing local circumstances.

• Finally I consider that the criteria set out in policies under the Rural Settlement Strategy are not necessarily the appropriate criteria in assessing a development of the nature and scale of that currently proposed. I refer particularly to the appellant's arguments not only on rural housing but also on Reg. Ref. SA/50445 – change of use from grain store to C&D recycling facility.

I am therefore unable to concur with the above ground of appeal put forward by Mr. Ward.

18.20 Insufficient legal interest by the developer to make the application as lodged. I would refer the Board to page 3 of the developer's submission to An Bord Pleanála received on 26.10.06 which stated that "Indaver Ireland has obtained legal advice regarding this matter, confirming that the company has sufficient interest in the land to give the company *locus standi* to make the application"; I would also refer the Board to the application form received by Meath County Council from the developer on 16.2.06 in which the applicants stated that their legal interest in the land was "condition of option and sale agreement" with an explanatory note stating that completion was "delayed due to death of title of Ms. Geraldine Campbell O'Brien and pending extraction of probate in the estate". I consider that the above information is sufficient to indicate that the developer has sufficient legal standing to apply for permission for the proposed development.

18.21 Re a Source of Waste Arisings

The appellant Mr. Shane Ward states that this cannot be controlled by the Local Authority. I do not agree: I consider that adequate controls exist by way of the waste permit operational conditions and the Local Authority and EPA enforcement powers.

18.22 First Party Appeal Submissions Against Conditions 6, 7, 13 And 32 Attached To The Notification Of Decision To Grant Permission

At the appeal against Conditions 6, 7 and 32 is taken on the basis that they are "unreasonable" when tested against basic criteria for planning conditions set out in the 2005 draft government guidelines – "Development Management Guidelines for Planning Authorities". The guidelines state that in deciding whether a planning condition is reasonable Planning Authorities are required to consider whether the attachment of a condition is "inter alia" enforceable, stating that

A condition should not be imposed if it cannot be made effective. In a case where doubt arises it may be useful therefore, to consider how the enforcement provisions of the 2000 Act could be operated to secure

compliance with the condition. To facilitate enforcement, the aim should be to frame conditions, where possible, so as to require some specific act to be done at or before the specified time, or to prohibit some specific thing from being done in carrying out development.

Condition Nos. 6, 7 and 32 read as follows:

Condition No. 6

'The developer shall pay an annual sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of environmental improvement (to include artistic feature in Duleek village) and recreational/community facility projects in the vicinity of the proposed waste management facility. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The application of indexation required by this condition shall be agreed between the Planning Authority and the developer.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the Planning Authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.'

Condition No. 7

'The developer shall pay an annual sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of a community recycling park (environmental improvement) benefiting development in the vicinity of the proposed waste management facility. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The application of indexation required by this condition shall be agreed between the Planning Authority and the developer.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the Planning Authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.'

Condition No. 32

'The developer shall pay a sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of road improvement works facilitating the proposed development. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The application of indexation required by this condition shall be agreed between the Planning Authority and the developer.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the Planning Authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.'

The first party appellant states that the above conditions are:

- Unenforceable as in the event of any conflict between the developer and the Planning Authority as to the appropriate amount of contribution to be paid, the conditions fail to offer any recourse to third party arbitration such as An Bord Pleanála.
- The text of Condition Nos. 6 and 7 also lacks precision as both conditions refer to the developer paying "an annual sum to the Planning Authority as a special contribution" but then go on to state that "this contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate". The appellant states that either the word "annual" shall be omitted or else that it be retained and other proposed payment methods clarified.
- The appellant also argues that Condition Nos. 6 and 7 are unreasonable in that a "once-off contribution is more appropriate towards an artistic feature in Duleek village as required in the condition, rather than an annual contribution; the latter however is more appropriate towards the provision of environmental improvements and recreational/community facility projects. Similarly in regard to Condition No. 7 a once-off contribution rather than an annual contribution is more appropriate towards the provision of a community recycling park.

The appellant therefore requests that Condition Nos. 6, 7 and 32 be amended as follows:

Condition No. 6

'The developer shall pay an annual sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of environmental improvement and recreational/community facility projects in the vicinity of the proposed waste management facility. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The amount of the contribution, and the application of indexation required, shall be agreed between the developer and the Planning Authority, or, in default of agreement, shall be determined by An Bord Pleanála.'

'The developer shall pay a sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of an artistic feature in Duleek village. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The amount of the contribution, and the application of indexation required, shall be agreed between the developer and the Planning Authority, or, in default of agreement, shall be determined by An Bord Pleanála.'

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental/recreational/community facility projects which will mitigate the impact of the waste facility on the local community in accordance with Government Policy as set out in the "Changing Our Ways" published by the Department of the Environment and Local Government in September, 1998.'

Condition No. 7

'The developer shall pay a sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of a community recycling park (environmental improvement) benefiting development in the vicinity of the proposed waste management facility. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The amount of the contribution, and the application of indexation required, shall be agreed between the

developer and the Planning Authority, or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental/recreational/community facility projects which will mitigate the impact of the waste facility on the local community in accordance with Government Policy as set out in the "Changing Our Ways" published by the Department of the Environment and Local Government in September, 1998.'

Condition No. 32

The developer shall pay a sum to be agreed (updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office), to the Planning Authority as a special contribution under Section 48(2)(c) of the Planning and Development Act 2000 in respect of road improvement works facilitating the proposed development. This contribution shall be paid prior to the commencement of the development or in such phased payments as the Planning Authority may facilitate. The amount of the contribution, and the application of indexation required, shall be agreed between the developer and the Planning Authority, or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the Planning Authority which are not covered in the Development Contribution Scheme and which will benefit the proposed development.'

The developer also appeals Condition No. 13 which it is stated fails to allow sufficient flexibility should conditions relating to local water provisions change in the future. Condition No. 13 reads as follows:

'Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the Planning Authority for such works and services. The development shall not connect to the public water mains in the area. All water requirements to facilitate the development shall be sourced on site.

Reason: In the interest of public health and to ensure a proper standard of development.'

The appellant states that while the Planning Authority concerns regarding the capacity of the existing public water supply are appreciated, it is suggested that Condition No. 13 be revised as follows:

'Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the Planning Authority for such works and services. The development shall not connect to the public water mains in the area, unless otherwise agreed with the Planning Authority.

Reason: In the interest of ensuring a proper standard of development.'

In response Mr. John Gallagher representing the Planning Authority at the oral hearing stated that the Planning Authority on the basis of legal advice has decided not to object or raise any issue in regard to the revised wording of the conditions as proposed by the first party appellant.

I consider it appropriate that a contention by the developer regarding the inappropriate application of the terms of the Section 48 Contribution Scheme may become the subject of an appeal to An Bord Pleanála by virtue of Section 48(10)(b) of the Planning and Development Act 2000. I also have taken on board the third party appellants comments in regard to the methods of payment as provided for in the revised text of the conditions and consider that such a revised text is acceptable and generally accords with Board policy. I therefore recommend that if permission is to be granted for the proposed development then the Board generally and with minor modifications only adopt the revised text of Condition Nos. 6, 7, 13 and 32 as set out by the first party appellant in the submission to An Bord Pleanála received on 21.09.06.

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19. CONCLUSION

- 19.1 Although a degree of precedent for the proposed development is afforded by the Board's decision of March 2003, under Planning 17.126307, to grant permission for a 150,000 t.p.a. waste to energy facility at the current appeal site, significant changes have since taken place in European, National and Regional environmental policy and legislation; those changes have impacted on the proposed development not just in terms of standards compliance but also in terms of environmental impacts associated with the operation of the proposed development, which the Board may now consider.
- 19.2 Even were the Board to consider that the proposed development is acceptable in principle, in the context of a changed legislative and policy landscape, it must also consider the detail of the proposed development which differs significantly from that previously permitted at the site in terms of building scale, plant capacity, sources of waste arisings and decide whether such changes are also acceptable.
- 19.3 The third party appellants' submissions have focussed on both the strategic and detailed issues referred to above; my conclusions and recommendations on those issues are set out below; and have been arrived at "inter alia" in the context of specialist advice provided to the Board, the full text of which is available in the Appendices to this report.
- 19.4 A preliminary step in assessing the proposed development in the context of strategic European and National legislation and policies is the determination as to whether or not a waste to energy facility is simply a waste disposal facility which has the same status in the European Waste Management Hierarchy as landfill or whether it can be classified as energy recovery thus occupying a higher in hierarchy status; it would appear that that matter requires further clarification, that such will be given in the proposed revisions to the recently consolidated Waste Framework Directive 2006/12/EC, and that in the meantime the proposed incinerator at Carranstown may still be classified as a waste recovery facility.
- 19.5 The third party appellants have refuted the "need" for the proposed development stating that there is sufficient existing and permitted landfill capacity in the North-East region to cater for the regions waste. I consider however that there is a "need" for the proposed development having regard to national and regional policies published since 2003 when permission was previously granted by An Bord Pleanála for a waste to energy facility at the appeal site under Planning 17.126307. The strategies and policies are:
 - National Strategy on Biodegradable Waste: 2006 which explicitly acknowledges the role of thermal treatment in the national waste management system.
 - The National Climate Change Strategy 2007-2012 which recognises, again explicitly that the "generation of heat and electricity from waste and thermal treatment plants reduces the need to produce this energy from

fossil fuels, thereby displacing CO₂ emissions from those sources" and simultaneously "making a contribution to national security of energy supply".

- The National Development Plan 2007-2013 which affirms that "thermal treatment with energy recovery will be the preferred option for dealing with residual waste after achieving ambitious targets in respect of waste prevention, recycling and recovery".
- The North-East Region Waste Management Plan 2005-2010; that states at Chapter 3.8 that "the provision of thermal treatment capacity is a critical objective of the plan to ensure that the requirements of the landfill Directive (1999) can be met and to provide a more sustainable option for residual waste than landfill".

It is obvious therefore that since 2003 the role of thermal treatment as part of a national integrated waste management system has been endorsed to an even greater extent than previously.

- 19.6 The appellant's argument that existing and permitted landfill capacity in the region pre-empts the need for thermal treatment, cannot I consider be endorsed; while national and regional waste management policies seek to achieve the maximum possible waste prevention, reduction and recycling rates, it is quite obvious that those targets cannot be achieved in the short-term particularly as their achievement may be dependant on factors outside national or regional authorities control; in order therefore to comply with imminent and medium term EC and national targets regarding a reduction in the volumes and types of waste disposed of to landfill it is appropriate that waste management by means of "inter alia" waste to energy facilities be availed of particularly in the absence of any alternative proposals in the North-East region for large scale waste recovery facilities.
- 19.7 Although it would appear that the 200,000 tonne maximum processing capacity proposed at the WTE facility would exceed the requirements of the North-East region, I consider that:
 - The additional 50,000 tonnes over and above that for which permission was granted under Planning 17.126307 is not significant in terms of the overall capacity of the plant.
 - The facility will accept waste from adjoining regions in line with the proximity principle and in compliance with Ministerial Circular WIR:04/05 as well as potential acceptance of non-hazardous wastes currently exported abroad for incineration.
 - Although the facility will primarily accept municipal waste it will also accept small quantities of non-municipal wastes such as sludges.
- 19.8 The appellant's argument that the proposed development is also extraneous to need were a zero waste policy to be implemented, does not I consider take into

account timeline issues; while it is appropriate environmentally for waste management policy to move towards a position of zero waste, it is not a goal which can be achieved in the short-term; waste to energy recovery therefore has a role to play as part of an integrated waste management system which has by implication an end goal of zero waste if waste prevention and reduction measures are continuously maximised.

- 19.9 The appellant's argument that the proposed development will undermine expansion of recycling facilities and obstruct maximisation of waste prevention and reduction has not I consider been proven internationally; given particularly the Danish experience it would appear that even where there is an established practice of incineration for certain waste streams, that is not a bar to reversal of that practice.
- 19.10 An objection common to all third parties was that of the potentially adverse environmental impacts likely to be generated by the proposed development. In regard to:
 - Health impacts, the third party appellants advocate the use of the Precautionary Principle – that in the light of plausible and credible evidence of likely and substantial harm to human health from incinerator emissions, permission for the proposed development should be refused. The appellants relied on an extensive range of studies and publications to support the application of the Principle, the major evidence however being derived from the fourth report of the British Society for Ecological Medicine and the presentation given by Professor Howard at the oral hearing; while there is not any reason to doubt the integrity of Professor Howard's evidence, published international regulations and standards must be conceded as the touchstone for assessment of health impacts; in coming to that conclusion I have had regard to specialist consultancy advice provided to the Board on that matter. I consider therefore that provided the proposed development operates in accordance with design standards which will facilitate compliance with emission limit values set out in the EC Incineration of Waste Directive (200/76/EC). I consider that it is inappropriate to invoke the precautionary principle in regard to the proposed development.
 - Air quality and climate change: the third party appellant's argument in the current case largely rests on the fact that the proposed development is a significant source of air pollutants and that in terms of greenhouse gas emissions landfill is to preferred as an alternative to waste to energy having regard to the temporal advantage which landfill provides over waste to energy in the release of greenhouse gas emissions.

Further specialist consultancy advice was sought on the above issues; the advice concluded that the air quality model employed to estimate the air quality impacts of the proposed facility and the methodology involved therein were appropriate with any inaccuracies in either the methodology or the data not being likely to materially effect the conclusion that the proposed facility "will not lead to exceedances of air quality limit values".

The consultancy advice also stated that "net greenhouse gas emissions from the facility would be similar to those from landfill" but concluded that the temporal lag in greenhouse gas emissions which the appellants state places landfill at an advantage over waste to energy "depends on the unknown ability of future technology to mitigate the effects of landfill emissions" when they eventually occur; I do not consider therefore that the appellants argument in the absence of such tried and tested technologies for landfill gas capture can be considered a rationale for preferring landfill over waste to energy at this point in time.

Finally the appellant's argument that any decision by An Bord Pleanála to grant permission for the proposed development would be premature in advance of ratification of the Stockholm Convention by Ireland, cannot I consider be endorsed having regard to the National implementation plan currently in preparation by the EPA and to the ongoing monitoring of dioxins by the EPA against the background of EC Regulation 850/2004 emanating from the Stockholm Convention.

- 19.11 Re traffic impacts of the proposed development I do not consider that the additional traffic likely to be generated by the proposed development will either result in additional hazard on the road network or generate significant adverse environmental impacts for the village of Duleek having regard to:
 - The Traffic Impact Assessment contained in the EIS and as further revised in the response to the F.I. request number three by the Planning Authority, and
 - The proposal in the Meath County Development Plan for a bypass to the south-west of Duleek Village – funds having already been allocated for a preliminary route selection there as confirmed on behalf of Meath County Council at the oral hearing.

However I would recommend to the Board that Condition No. 11 attached to Planning 17.126307 be retained.

- 19.12 In regard to visual impacts, the increased height of the process building from 30 to 40 metres and of the stack from 40 to 65 metres gives cause for concern having regard to the potential intrusion into views towards and from the World Heritage Sites at Brú na Broinne and the historical site of the Battle of the Boyne; on the basis of a site inspection, the photomontages submitted by the developer, as clarified further at the oral hearing presentation and to the report of the UNESCO-ICOMOS Reactive Monitoring Mission, I do not consider that the proposed development will be any more intrusive in views than that previously proposed under Planning 17. 126307.
- 19.13 Re impacts on groundwater, the appeal site is stated by the third parties to overlie a regional aquifer which is classified in the Development Plan as extremely and highly vulnerable; while I note that the EPA inspectors draft report compiled under the waste license application no. 167-1 associated with

the previously permitted development at the site also considered the aquifer vulnerability to be high, permission was not refused by the EPA for that development; in the current case I consider that the range of mitigation measures proposed by the developer, particularly those regarding the watertight nature of the waste and ash bunkers and the provision of some 9 metres between the finished ground floor levels in those bunkers and underlying rock levels are sufficient to reduce the risk of groundwater pollution to a minimal level.

- 19.14 Re site ecology, having regard to the modest interim time period between permission granted for development at the site under Planning 17. 126307 and that currently proposed, and having regard also to the agricultural nature of the proposed development I consider that the only issue in regard to site ecology is the requirement for the developer to carry out a more comprehensive bat survey of the site and to ensure that appropriate mitigation measures in respect of roosting a and feeding areas can be implemented.
- 19.15 Re consideration of alternative, again having regard to permission granted under Planning 17.126307 I consider that that section of the EIS which deals with alternative technologies is adequate; in regard to alternative site locations, the developer has incorporated, in the centre of gravity of waste arisings model, the results of the last census; the results of the model indicate that the proposed site location at Carranstown still falls within the centre of gravity of waste arisings of the North-East region; I do not consider it appropriate that the model requires to be adjusted on the basis of potential acceptance of waste arisings from outside the North-East region as such waste arisings are ancillary in terms of tonnage to those within the North-East region. I recommend however that the ancillary nature of waste arisings from outside the North-East region be made a requirement by way of condition attached to any grant of permission which may issue in the current case.
- 19.16 In regard to the developer's "locus standi" I consider that sufficient information has been provided to show that the developer has sufficient standing in the current case to submit an application for the proposed development.
- 19.17 Finally I would refer the Board to the first party appellant's submissions on Conditions 6, 7, 13 and 32 attached to the notification of decision to grant permission by the Local Authority; the appeal against Conditions 6, 7 and 32 is taken on the basis that they are imprecise due to conflicting timelines for payment of the contributions and that they are unenforceable as they fail to offer any recourse to arbitration by An Bord Pleanála in the event of conflict between the developer and the Planning Authority as to the amount of contributions to be paid; the Planning Authority at the oral hearing conceded the legitimacy of the appellant's submission and agreed to a revised wording to allay the appellant's concerns. The revised text of the above conditions is set out in the list of conditions below.

In regard to Condition No. 13 – connection of water supply on site to the public water mains in the area- again the Planning Authority at the oral

hearing confirmed that they did not have any objection to the revised text of the condition as set out by the first appellants in the submission to An Bord Pleanála. The revised text of that condition is therefore included below in the list of conditions.

- 19.18 In regard to the appellant's arguments on landfill tax I consider that assessment for such arguments is not within the remit of An Bord Pleanála.
- 19.19 I therefore recommend to the Board that having regard to:
 - The waste to energy facility permitted at the site under Planning 17.126307, which permission established the principle of the proposed development,
 - To the subsequent national policies and objectives in regard to waste management and climate change,
 - To the North-East Regional Waste Management Strategy and objectives,
 - To the policies and objectives of the current Meath County Development Plan (which by virtue of Section V of the Waste Management (amendment) Act 2001) is deemed to include the objectives contained in the Regional Waste Management Plan,
 - To the location of the proposed development in an area characterised by established and permitted industrial land use patterns,
 - To the strategic location of the proposed development in terms of the centre of gravity of waste arisings of the North-East region and in terms of transport infrastructure, and
 - Finally to the mitigation measures proposed by the developer to prevent and minimise environmental impacts associated with the proposed development,

That permission be granted for the proposed development on the basis that subject to compliance with the conditions set out below that the proposed development would not seriously injure the visual or environmental amenities of the area, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and development of the area.

I therefore recommend that permission be granted for the proposed development for the reasons and considerations and in accordance with the conditions set out below.

REASONS AND CONSIDERATIONS

Having regard to -

- (a) The planning history of the site where permission was established in principle under PL17.126307 for a proposed waste to energy facility.
- (b) Subsequent National Waste Management policy framework and strategy as set out in Government Policy Statement Taking Stock and Moving Forward (2004);
- (c) The subsequent National Development Plan (2007-2013) provisions in regard to waste management;
- (d) The subsequent National Strategies on Biodegradable Waste (2006) and Climate Change (2007-2012);
- (e) Waste management strategy for the North-East region as set out in the current North-East Regional Waste Management Plan (2007);
- (f) The policies and objectives of the current Meath County Development Plan 2007 (which by virtue of Section V of the Waste Management (amendment) Act 2001) is deemed to include the objectives contained in the Regional Waste Management Plan;
- (g) The location of the proposed development in an area characterised by established and permitted industrial land use patterns;
- (h) The strategic location of the proposed development in terms of the centre of gravity of waste arisings of the North-East region and in terms of transport infrastructure;
- (i) The mitigation measures proposed by the developer to prevent and minimise environmental impacts associated with the proposed development.

It is considered that subject to compliance with the following conditions the proposed development would not seriously injure the visual, environmental or residential amenities of the area, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and sustainable development of the area.

CONDITIONS

1. The development shall be carried out in accordance with the plans and particulars lodged with the application as amended by the additional information and particulars received by the planning authority on the 4th day of July 2006, and in accordance with the provisions of the Environmental Impact Statement as amended, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

 Appropriate arrangements for the connection of the proposed waste to energy facility to the E.S.B. National Grid transmission lines, shall be in place prior to commencement of development and shall be to the satisfaction of the Planning Authority.

Reason: In the interest of orderly development.

3. Waste for acceptance at the waste management facility for incineration shall primarily be waste generated and produced in the North East Region area of counties Meath, Louth, Cavan and Monaghan; where waste is accepted from outside that region, it shall only be done so in accordance with the Proximity Principle and Ministerial policy as set out in Circular WIR:04/05. The tonnage accepted for thermal treatment at the facility shall not exceed the quantities as identified in the Environmental Impact Statement, that is 200,000 tonnes per annum.

Reason: To ensure compliance with national waste management policy and the provisions of the North-East Regional Waste Management Plan.

- 4. Each and every consignment of waste, howsoever arriving at the waste management facility, shall be accompanied by a waste certificate, which shall identify the following
 - Waste origin, source and area in which it was produced/generated.
 - Waste collection schedules.
 - Weight of each consignment.
 - Waste collection contractor name and address.
 - Composition and nature of waste.

The developer shall submit to the planning authority, on a monthly basis, records of all waste delivered to the site on a daily, weekly and monthly basis, in accordance with the aforesaid waste certificate.

Reason: In the interest of development control and to ensure that the principles of regional waste management as set out in the North-East Region Waste Management Plan are adhered to.

5. A Community Liaison Committee shall be established consisting of a minimum of eight representatives (two officials from the planning authority, two representatives for the developer, two local residents and two elected members of Meath County Council). The composition of the committee shall be subject to the agreement of the planning authority.

Reason: To provide for appropriate on-going review of waste management operations at the site in conjunction with the local community.

6. Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services. The development shall not connect to the public watermains in the area other than with the written agreement of the Planning Authority.

Reason: In the interest of public health and to ensure a proper standard of development.

- 7. Prior to commencement of development, the developer shall submit to the planning authority for written agreement design details of the proposed new junction of the waste management facility access road with the Regional Road R152, to include the following
 - (a) Junction layout in accordance with Design Manual for Roads and Bridges,
 - (b) surfacing and road construction materials,
 - (c) junction marking, delineation and signage,
 - (d) drainage details,
 - (e) fencing/roadside boundary treatment and landscaping, and
 - (f) lighting.

The full costs of the proposed new junction shall be borne by the developer and the works shall be carried out under the supervision of the Road Design Section of Meath County Council.

Reason: In the interest of traffic safety and development control.

- 8. The developer shall ensure that:
 - (i) Prior to commencement of development, details of a Traffic Management Plan for the control and operation of the proposed new junction during the construction phase, shall be submitted to the Planning Authority for their written agreement.
 - (ii) The proposed junction and access road inclusive of dust free surfacing shall be constructed and completed to the satisfaction of the planning authority within two months of the commencement of the development.

(iii) The Traffic Management Plan shall be subject to on-going review with the planning authority during the whole of the construction period with review periods being directly related to the levels of construction employees on site.

Reason: In the interest of development control and traffic safety.

9. The developer shall submit to the planning authority for written agreement details of a Traffic Management Plan which shall "inter alia" prohibit traffic associated with the proposed facility from travelling along Regional Road R150, between its junction with Regional Road R153 to the west and the N2 to the east.

Reason: In the interest of traffic and pedestrian safety and to protect existing educational and recreational facilities associated with Kentstown Village.

- 10. The developer shall facilitate the planning authority in the archaeological appraisal of the site and in preserving and recording or otherwise protecting archaeological materials or features which may exist within the site. In this regard, the developer shall:-
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
 - (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:-

- (i) the nature and location of archaeological material on the site, and
- (ii) the impact of the proposed development on such archaeological material.

Prior to commencement of development, a report containing the results of the assessment shall be submitted to the planning authority. Arising from this assessment, the developer shall agree with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be determined by An Bord Pleanála.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.

11. The developer shall fully comply with the "Special Requirements in Relation to Bord Gais" conditions relating to the execution of any works in the vicinity of the Bord Gais distribution mains, which traverse the site.

Reason: In the interest of development control.

- 12. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details in relation to temporary car parking facilities for construction employees to include
 - (a) Location and number of spaces to be provided,
 - (b) construction details in include road base materials, surfacing details and markings,
 - (c) surface water drainage details,
 - (d) proposals for the reinstatement of the area on completion of the construction phase.

Reason: In the interest of traffic safety and development control.

- 13. Prior to commencement of development, a detailed landscaping scheme for the site shall be submitted to the planning authority for agreement. This scheme shall:
 - (i) include details of all existing trees and hedgerows on the site, specifying those proposed for retention, together with measures for their protection during the period in which the development is carried out,
 - (ii) details of the species and setting of all new planting, including supplemental planting around the site boundaries,
 - (iii) details of height and configuration of all screening mounds and proposed species and eventual height of all tree and shrub planting thereon,
 - (iv) An implementation programme for planting on site and an associated maintenance programme,
 - (v) Provision for topsoiling and grass seeding of all berms and screening mounds as soon as practicable after construction, with provision for dust suppression as required.
 - (vi) Details of road frontage boundary treatment.

Reason: In the interests of the visual amenities of the area.

14. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, a detailed layout for lighting on site; the layout shall be provided at scale 1:1,000 and shall include provision for lighting of all internal roads, storage and hardstanding areas, circulation areas between buildings and pedestrian walks.

Details to accompany the above shall include numbers and type of light fittings, locations and orientation of fittings, wattages and height of lighting standards and a planned maintenance programme.

Reason: In the interest of public safety and the amenities of property in the vicinity.

15. Prior to commencement of development, the method and type of markings and the provision of aviation warning lights for the emissions stack shall be agreed in writing with the Irish Aviation Authority and the planning authority. The co-ordinates of the as constructed position of the stack and the as constructed elevation shall be submitted to the Irish Aviation Authority.

Reason: In the interest of public safety, development control and the protection of light aircraft using the surrounding area.

16. The site construction working hours shall be confined to between 0700 and 1900 hours Monday to Saturday, inclusive (excluding public holidays and Sundays) unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential amenity.

17. Prior to and during construction of the earthen bunds on site timber hoarding at least 2.5 metres in height shall be provided to screen the bund workings from the nearest residential properties. The location and extent of such hoardings shall be agreed between the developer, the Planning Authority and affected residents.

Reason: To protect residential amenities in the area.

18. During the construction phase of the proposed development noise levels at the site when measured at noise sensitive locations in the vicinity shall not exceed 65dB(A) between 0700 and 1900 hours Monday to Saturday inclusive, excluding public holidays and Sundays, and 45dB(A) at any other time.

Noise monitoring locations for the purposes of the construction phase of the proposed development shall be agreed in writing with the planning authority prior to commencement of any development on site; the locations shall "inter alia" be situated proximate to nearest residential buildings.

Reason: To protect the amenities of property in the vicinity of the site.

19. Dust deposition levels during the construction phase shall not exceed 130 mg/m²/day when measured at the site boundaries and averaged over 30 days. Monitoring of dust deposition shall be carried out in accordance with the requirements of the Planning Authority.

Reason: To protect the residential amenities of the area.

20. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, details of temporary settlement ponds/silt traps/oil interceptors to control discharges of site surface water runoff during the construction period in advance of the construction of the proposed permanent attenuation tanks. The concentration of suspended solids (SS) of the surface water run-off from the site construction works, for discharge to surface waters, shall not exceed 30 mg/litre.

Reason: To prevent surface water pollution and to protect the amenity value of watercourses.

21. The developer shall monitor noise, dust deposition and suspended solids of surface water run-off associated with the construction phase and shall submit to the planning authority on a monthly basis a summary report of all such monitoring. The developer shall pay a contribution to the planning authority towards the cost of supervision of check monitoring the development for the duration of the construction phase. The amount of the contribution shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: To ensure satisfactory monitoring of the development, it is considered reasonable that the developer shall contribute towards the cost of check monitoring of the development in order to pre-empt pollution during the construction phase of the development.

22. During the construction phase of the development, oil and fuel storage tanks, chemicals and all other materials that pose a risk to waters in the event of spillage, shall be stored in designated storage areas, which shall be bunded to a volume of 110 per cent of the capacity of the largest tank/container within the bunded area(s). Filling and draw-off points shall be located entirely within the bunded area(s). Drainage from the bunded area(s) shall be diverted for

collection and safe disposal. The use of bunded pallets for storage of drums is not acceptable.

Reason: In the interest of orderly development and the prevention of groundwater and surface water pollution.

23. Prior to the commencement of development the developer shall carry out a comprehensive bat survey for the site; in that regard the developer shall engage and be advised by a "competent" person on appropriate mitigation measures required to minimise disturbance to bat roosts and feeding areas on the site boundaries; the above survey and an appropriate ecological response shall be submitted for the written agreement of the Planning Authority prior to the commencement of development.

Reason: To protect the environmental and ecological amenities of the area including the protection of any bat species which feed and roost on the site boundaries.

24. During the construction phase of the development a vehicle washing facility shall be provided and used at the entrance to the site through which all vehicles shall pass on exiting the site during the construction phase. Details of the facility including on-site location construction and operation shall be submitted to and agreed with the planning authority prior to the commencement of development.

Reason: In the interest of the amenities of the area and traffic safety on the adjoining public road.

25. Prior to commencement of development details of materials colours and textures of all external finishes on site structures including site boundary demarcation structures shall be submitted for the written agreement of the Planning Authority.

Reason: In the interests of the visual amenities of the area.

26. Signage proposed at the site other than that permitted under the provisions of exempted development regulations, shall not be erected without a prior grant of permission by the Planning Authority.

Reason: In the interest of the visual amenities of the area.

27. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, detailed plans and proposals for the restoration and reinstatement of the entire site following de-commissioning of

the plant. The restoration works shall be completed within two years of the closure of the plant.

Where the planning authority is of the opinion that the plant has ceased to operate for a period in excess of one year and where the developer can offer no reasonable grounds to dispute this opinion, the planning authority shall be empowered to notify the developer to activate the restoration plan as provided for in this condition. In the event of the developer's failure to activate the restoration works, the planning authority shall be empowered to notify the developer of their intention to activate the restoration plan and of their intention, within a period of 60 days, to call upon the financial guarantees referred to under condition 27 thereof.

Reason: To ensure satisfactory restoration of the site in the interest of the amenities of the area and proper planning and control.

28. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit or other security to secure any final restoration measures required to be undertaken under the terms of condition number 26, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the restoration plan. The form and the amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: To ensure satisfactory completion of the restoration plan in the interest of orderly development.

29. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of environmental improvements and recreational/community facility projects in the vicinity of the proposed waste management facility and also in respect of the provision of an artistic feature in Duleek Village. The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which shall benefit the proposed development.

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30. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of a community recycling park (environmental improvement). The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which shall benefit the proposed development.

31. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of road improvement works. The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which shall benefit the proposed development.

Mary Cunneen Senior Planning Inspector

17th September, 2007

JG

Board Decision

An Bord Pleanála



Board Direction

Ref: 17.219721

The submissions on this file and the Inspector's report were considered at a Board meeting held on 10^{th} October, 2007.

The Board decided unanimously to grant permission generally in accordance with the Inspector's recommendation, subject to the amendments shown in manuscript on the attached copy of the Inspector's draft reasons, considerations and conditions.

Board Member		Date	11 th October,2007
	Margaret Byrne		

Board Order

An Bord Pleanála



PLANNING AND DEVELOPMENT ACTS 2000 TO 2006

Meath County

Planning Register Reference Number: SA/60050

An Bord Pleanála Reference Number: PL 17.219721

APPEAL by No Incineration Alliance care of 27 Highfield, Drogheda, County Louth and by Indaver N.V. care of Tiros Resources Limited of Armitage House, 10 Hatch Street Lower, Dublin and by others against the decision made on the 25th day of August, 2006 by Meath County Council to grant subject to conditions a permission to the said Indaver N.V. in accordance with plans and particulars lodged with the said Council.

PROPOSED DEVELOPMENT: 70 megawatt waste to energy facility consisting of a main process building of 7,218.23 square metres (18.5 metres to 40.2 metres high) incorporating a waste reception hall, waste bunker operations building, boiler/grate furnace, ash bunker, flue gas treatment building, associated access galleries and a 65 metre high flue stack. Ancillary structures will consist of an AC turbine unit and cooler building of 605.16 square metres (27.7 metres high) with associated access galleries, pumphouse building of 155.42 square metres (eight metres high), water storage tank 2,000 cubic metres (eight metres high), gate house 27 square metres (3.67 metres high), education centre/workshop/warehouse building of 623.4 square metres (8.9 metres high), transformer compound, contractor laydown area, car parking (46 number spaces), electrical switch room of 35.89 square metres (2.97 metres high), an on-site puraflo effluent treatment system and the realignment of the R152 Road along the road frontage of the site. Road access will be via a new entrance from the R152, approximately three kilometres from Duleek and four kilometres from Drogheda all on a 10.36 hectare site at Carranstown, Duleek, County Meath. This activity relates to an activity which is subject to a Waste Licence under Part V of the Waste Management Act, 1996.

DECISION

GRANT permission for the above proposed development in accordance with the said plans and particulars based on the reasons and considerations under and subject to the conditions set out below.

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MATTERS CONSIDERED

In making its decision, the Board had regard to those matters to which, by virtue of the Planning and Development Acts and Regulations made thereunder, it was required to have regard. Such matters included any submissions and observations received by it in accordance with statutory provisions.

REASONS AND CONSIDERATIONS

Having regard to -

- (a) the extant planning permission for a waste to energy facility on this site granted under appeal reference number PL 17.126307,
- (b) the national waste management policy framework and strategy as set out in Government Policy Statement Taking Stock and Moving Forward (2004),
- (c) the National Development Plan (2007-2013) provisions in regard to waste management,
- (d) the National Strategies on Biodegradable Waste (2006) and Climate Change (2007-2012),
- (e) the Waste Management Strategy for the North-East region as set out in the current North-East Regional Waste Management Plan (2007),
- (f) the policies and objectives of the Meath County Development Plan, 2007 which by virtue of Section 4 of the Waste Management (Amendment) Act, 2001 is deemed to include the objectives contained in the Regional Waste Management Plan,
- (g) the location of the proposed development in an area characterised by established and permitted industrial land use patterns,
- (h) the strategic location of the proposed development in terms of the centre of gravity of waste arisings of the North-East region and in terms of transport infrastructure, and
- (i) the mitigation measures proposed by the developer to prevent and minimise environmental impacts associated with the proposed development,

it is considered that, subject to compliance with the conditions set out below, the proposed development would not seriously injure the visual, environmental or residential amenities of the area, would not be prejudicial to public health, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and sustainable development of the area.

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CONDITIONS

1. The development shall be carried out in accordance with the plans and particulars lodged with the application as amended by the further plans and particulars received by the planning authority on the 4th day of July, 2006, and in accordance with the provisions of the Environmental Impact Statement, as amended, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

2. Appropriate arrangements for the connection of the proposed waste to energy facility to the E.S.B. National Grid transmission lines shall be in place prior to commencement of development and shall be to the satisfaction of the planning authority.

Reason: In the interest of orderly development.

3. Waste for acceptance at the waste management facility for incineration shall primarily be waste generated and produced in the North East Region area of counties Meath, Louth, Cavan and Monaghan. Where waste is accepted from outside that region, it shall only be done so in accordance with the Proximity Principle and Ministerial policy as set out in Circular WIR:04/05. The tonnage accepted for thermal treatment at the facility shall not exceed the quantities as identified in the Environmental Impact Statement, that is 200,000 tonnes per annum of residual waste.

Reason: To ensure compliance with national waste management policy and the provisions of the North-East Regional Waste Management Plan.

- 4. Each and every consignment of waste, howsoever arriving at the waste management facility, shall be accompanied by a waste certificate, which shall identify the following
 - (a) Waste origin, source and area in which it was produced/generated.
 - (b) Waste collection schedules.
 - (c) Weight of each consignment.
 - (d) Waste collection contractor name and address.
 - (e) Composition and nature of waste.

The developer shall submit to the planning authority, on a monthly basis, records of all waste delivered to the site on a daily, weekly and monthly basis, in accordance with the aforesaid waste certificate.

Reason: In the interest of development control and to ensure that the principles of regional waste management as set out in the North-East Region Waste Management Plan are adhered to.

5. A Community Liaison Committee shall be established consisting of a minimum of eight representatives (two officials from the planning authority, two representatives for the developer, two local residents and two elected members of Meath County Council). The composition of the committee shall be subject to the agreement of the planning authority.

Reason: To provide for appropriate on-going review of waste management operations at the site in conjunction with the local community.

6. Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services. The development shall not connect to the public watermains in the area other than with the written agreement of the planning authority.

Reason: In the interest of public health and to ensure a proper standard of development.

- 7. Prior to commencement of development, the developer shall submit to the planning authority for written agreement design details of the proposed new junction of the waste management facility access road with the Regional Road R152, to include the following
 - (a) realignment of the R152, including provision of right/left turn lane and ghost islands,
 - (b) junction layout in accordance with Design Manual for Roads and Bridges,
 - (c) surfacing and road construction materials,
 - (d) junction marking, delineation and signage,
 - (e) drainage details,
 - (f) fencing/roadside boundary treatment and landscaping, and

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(g) lighting.

The full costs of the proposed new junction shall be borne by the developer and the works shall be carried out under the supervision of the Road Design Section of Meath County Council.

Reason: In the interest of traffic safety and development control.

- 8. The developer shall ensure that:
 - (a) Prior to commencement of development, details of a Traffic Management Plan for the control and operation of the proposed new junction, during the construction phase, shall be submitted to the planning authority for written agreement.
 - (b) The proposed junction and access road, inclusive of dust free surfacing, shall be constructed and completed to the satisfaction of the planning authority within two months of the commencement of the development.
 - (c) The Traffic Management Plan shall be subject to on-going review with the planning authority during the whole of the construction period with review periods being directly related to the levels of construction employees on site.

Reason: In the interest of development control and traffic safety.

9. The developer shall submit to the planning authority for written agreement details of a Traffic Management Plan which shall include the prohibition of traffic associated with the proposed facility from travelling along the Regional Road R150, between its junction with the Regional Road R153 to the west and the N2 to the east.

Reason: In the interest of traffic and pedestrian safety and to protect existing educational and recreational facilities associated with Kentstown Village.

- 10. The developer shall facilitate the planning authority in the archaeological appraisal of the site and in preserving and recording or otherwise protecting archaeological materials or features which may exist within the site. In this regard, the developer shall:-
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and

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(b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:-

- (i) the nature and location of archaeological material on the site, and
- (ii) the impact of the proposed development on such archaeological material.

Prior to commencement of development, a report containing the results of the assessment shall be submitted to the planning authority. Arising from this assessment, the developer shall agree with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be referred to the Board for determination.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.

11. The developer shall fully comply with the "Special Requirements in Relation to Bord Gais" conditions relating to the execution of any works in the vicinity of the Bord Gais distribution mains which traverse the site.

Reason: In the interest of development control.

- 12. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details in relation to temporary car parking facilities for construction employees to include
 - (a) location and number of spaces to be provided,
 - (b) construction details to include road base materials, surfacing details and markings,
 - (c) surface water drainage details, and
 - (d) proposals for the reinstatement of the area on completion of the construction phase.

Reason: In the interest of traffic safety and development control.

- 13. Prior to commencement of development, a detailed landscaping scheme for the site shall be submitted to the planning authority for agreement. This scheme shall include:
 - (a) details of all existing trees and hedgerows on the site, specifying those proposed for retention, together with measures for their protection during the period in which the development is carried out,
 - (b) details of the species and setting of all new planting, including supplemental planting around the site boundaries,
 - (c) details of height and configuration of all screening mounds and proposed species and eventual height of all tree and shrub planting thereon,
 - (d) an implementation programme for planting on site and an associated maintenance programme,
 - (e) provision for topsoiling and grass seeding of all berms and screening mounds as soon as practicable after construction, with provision for dust suppression as required, and
 - (f) details of road frontage boundary treatment.

Reason: In the interest of the visual amenities of the area.

14. Prior to commencement of development, the developer shall submit to the planning authority for written agreement a detailed layout for lighting on site. The layout shall be provided at a scale of 1:1,000 and shall include provision for lighting of all internal roads, storage and hardstanding areas, circulation areas between buildings and pedestrian walks.

Details to accompany the above shall include numbers and type of light fittings, locations and orientation of fittings, wattages and height of lighting standards and a planned maintenance programme.

Reason: In the interest of public safety and the amenities of property in the vicinity.

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15. Prior to commencement of development, the method and type of markings and the provision of aviation warning lights for the emissions stack shall be agreed in writing with the Irish Aviation Authority and the planning authority. The co-ordinates of the as constructed position of the stack and the as constructed elevation shall be submitted to the Irish Aviation Authority.

Reason: In the interest of public safety, development control and the protection of light aircraft using the surrounding area.

16. The site construction works shall be confined to between 0700 hours and 1900 hours, Monday to Saturday. No works shall take place outside these hours or on Sundays or Bank or Public Holidays unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential amenity.

17. Prior to and during construction of the earthen bunds on site, timber hoarding at least 2.5 metres in height shall be provided to screen the bund workings from the nearest residential properties. The location and extent of such hoardings shall be agreed between the developer, the planning authority and affected residents.

Reason: To protect residential amenities in the area.

18. During the construction phase of the proposed development noise levels at the site when measured at noise sensitive locations in the vicinity shall not exceed 65dB(A) between 0700 hours and 1900 hours, Monday to Saturday inclusive, excluding Bank and Public Holidays and Sundays, and 45dB(A) at any other time.

Noise monitoring locations for the purposes of the construction phase of the proposed development shall be agreed in writing with the planning authority prior to commencement of any development on site. The locations shall generally be situated proximate to nearest residential buildings.

Reason: To protect the amenities of property in the vicinity of the site.

19. Dust deposition levels during the construction phase shall not exceed 130 mg/m²/day when measured at the site boundaries and averaged over 30 days. Monitoring of dust deposition shall be carried out in accordance with the requirements of the planning authority.

Reason: To protect the residential amenities of the area.

20. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details of temporary settlement ponds/silt traps/oil interceptors to control discharges of site surface water runoff during the construction period in advance of the construction of the proposed permanent attenuation tanks. The concentration of suspended solids (SS) of the surface water run-off from the site construction works, for discharge to surface waters, shall not exceed 30 mg/litre.

Reason: To prevent surface water pollution and to protect the amenity value of watercourses.

21. The developer shall monitor noise, dust deposition and suspended solids of surface water run-off associated with the construction phase and shall submit to the planning authority on a monthly basis a summary report of all such monitoring. The developer shall pay a contribution to the planning authority towards the cost of supervision of check monitoring the development for the duration of the construction phase. The amount of the contribution shall be agreed between the developer and the planning authority or, in default of agreement, shall be referred to the Board for determination.

Reason: To ensure satisfactory monitoring of the development, it is considered reasonable that the developer shall contribute towards the cost of check monitoring of the development in order to pre-empt pollution during the construction phase of the development.

22. During the construction phase of the development, oil and fuel storage tanks, chemicals and all other materials that pose a risk to waters in the event of spillage, shall be stored in designated storage areas, which shall be bunded to a volume of 110 per cent of the capacity of the largest tank/container within the bunded area(s). Filling and draw-off points shall be located entirely within the bunded area(s). Drainage from the bunded area(s) shall be diverted for collection and safe disposal. The use of bunded pallets for storage of drums shall not be permitted.

Reason: In the interest of orderly development and the prevention of groundwater and surface water pollution.

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23. Prior to commencement of development, the developer shall carry out a comprehensive bat survey for the site. In this regard, the developer shall engage and be advised by a competent person on appropriate mitigation measures required to minimise disturbance to bat roosts and feeding areas on the site boundaries. The above survey and an appropriate ecological response shall be submitted to the planning authority for written agreement prior to commencement of development.

Reason: To protect the environmental and ecological amenities of the area including the protection of any bat species which feed and roost on the site boundaries.

24. During the construction phase of the development, a vehicle washing facility shall be provided and used at the entrance to the site through which all vehicles shall pass on exiting the site during the construction phase. Details of the facility, including on-site location, construction and operation, shall be submitted to and agreed with the planning authority prior to commencement of development.

Reason: In the interest of the amenities of the area and traffic safety on the adjoining public road.

25. Prior to commencement of development, details of the materials, colours and textures of all the external finishes on site structures, including site boundary demarcation structures, shall be submitted to the planning authority for written agreement.

Reason: In the interest of the visual amenities of the area.

26. No advertisement or advertisement structure, the exhibition or erection of which would otherwise constitute exempted development under the Planning and Development Regulations, 2001, as amended, shall be displayed or erected within the curtilage of the site without the agreement of the planning authority.

Reason: In the interest of visual amenity.

27. Prior to commencement of development, the developer shall submit to the planning authority for written agreement detailed plans and proposals for the restoration and reinstatement of the entire site following de-commissioning of the plant. The restoration works shall be completed within two years of the closure of the plant.

Where the planning authority is of the opinion that the plant has ceased to operate for a period in excess of one year and where the developer can offer no reasonable grounds to dispute this opinion, the planning authority shall be empowered to notify the developer to activate the restoration plan as provided for in this condition. In the event of the developer's failure to activate the restoration works, the planning authority shall be empowered to notify the developer of their intention to activate the restoration plan and of their intention, within a period of 60 days, to call upon the financial guarantees referred to under condition number 28 below.

Reason: To ensure satisfactory restoration of the site in the interest of the amenities of the area and proper planning and control.

28. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit or other security to secure any final restoration measures required to be undertaken under the terms of condition number 27 above, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the restoration plan. The form and the amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to the Board for determination.

Reason: To ensure satisfactory completion of the restoration plan in the interest of orderly development.

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29. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of the provision of environmental improvements and recreational/community facility projects in the vicinity of the proposed waste management facility and also in respect of the provision of an artistic feature in Duleek Village. The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which shall benefit the proposed development.

30. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of a community recycling park (environmental improvement). The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which shall benefit the proposed development.

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31. The developer shall pay to the planning authority a financial contribution as a special contribution under section 48(2)(c) of the Planning and Development Act 2000 in respect of road improvement works. The contribution shall be paid prior to the commencement of the development or in such phased payments as the planning authority may facilitate and shall be updated at the time of payment in accordance with changes in the Wholesale Price Index – Building and Construction (Capital Goods), published by the Central Statistics Office. The amount of the contribution shall be agreed between the planning authority and the developer or, in default of such agreement, the matter shall be referred to the Board for determination.

Reason: It is considered reasonable that the developer should contribute towards the specific exceptional costs which are incurred by the planning authority which are not covered in the Development Contribution Scheme and which shall benefit the proposed development.

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day of 2007.

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7. Planning Ref: PL17.126307 (01/4014)

Inspector's Report



An Bord Pleanála

Inspector's Report

PL 17.126307

Meath County Council

Proposed:

Waste management facility, consisting of;

Main process building incorporating waste reception hall, waste sorting plant, bunker, operations/turbine building, boiler, grate furnace, ash bunker, demineralisation unit, boiler feed pumps, flue gas treatment building, solidification unit, AC unit, turbine cooler and 40 metre high stack.

Ancillary structures;

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Pump house building 200 square metres, water storage tank, warehouse building 890 square metres incorporating security and drivers' rest area, administration building 770 square metres, transformer compound, laydown area, car park, Puraflo effluent treatment system.

Community recycling park incorporating security building, container storage area and canopied area.

Road access via new entrance from R152.

At: Carranstown, Duleek.

Developer/

First party appellant: Indaver Ireland.

Third Party Appellant: S. Lynch, Cllr.

Louth/Meath Health Protection Group

P. Meade

D. Lenihan

M. Halpenny

F. Hughes

C. Devlin

S. Ward

J. V. Farrelly

F. O'Dowd, T.D.

M. O'Leary and others

P. Dowling

Carranstown Residents Group

T. Sargeant, T.D.

- R. Nulty and N. McCabe
- T. C. Burke
- A. Fagan and M. Taaffe
- G. Rogers
- A. and B. Quinn

East Meath Dairy Farmers

- C. Searles
- E. Cullen
- An Taisce

No Incineration Alliance

Observers:

- P. McCluskey
- M. McGuiness
- B. E. Clance and others
- O. Herr and Louth People Against Incineration
- L. McCauley (1976) Ltd.
- F. and O. Shuter
- P. McKenna, M.E.P.
- J. Bruton, T.D.
- P. and C. O'Brien
- N. Ahern, M.E.P.
- B. Halpenny
- K. Russel and others

Eastern Regional Fisheries Board

- V. Reigs
- A. Dillon-Gallagher
- T. Prendevalle and R. McGrath
- M. McKeon
- G. Reilly and A. Morgan

Irish Cement Ltd.

- N. Heeney
- P. Butler
- M. Wallace, T.D.

- M. O'Dowd
- B. Hanretty
- Dr. M. Grahan
- P. Keary

Duleek Parents' Council

- T. Kelly
- T. Rooney

Boyne Valley and Newgrange Environmental

Protection Group

D. English

Environmental Protection Agency

Concerned Parents of Mount Hanover National School

G. B & B Ehan

- E. Martin
- G. Carr

I have inspected the appeal site (21/6/02, 16/8/02 and 21/10/02), read the documents relating to appeals submitted and held an oral hearing.

The oral hearing was held in the Boyne Valley hotel, Drogheda, commencing on 21/10/02, continuing on 22/10/02 and 23/10/02 and concluding on 24/10/02.

A list of those attending the oral hearing is included in the documentation.

Those attending the oral hearing, representing parties and participating by way of direct evidence and cross examination, were as follows:

ORAL HEARING PARTICIPANTS:

For developers/first party appellants:

- T. Phillips, Town Planner
- F. Simons, Barrister at law
- G. Ahern, Indaver
- L. Burke, Indaver
- E. Lee, Engineer
- E. Halpin, Archaeologist
- F. O'Mahony, Architect
- J. Kelly, Architect/Photomontage preparation
- Dr. B. Madden, Ecologist
- S. McGearailt, Roads Engineer
- K. Cullen, Hydro-geologist
- E. O'Kelly, Sound Engineer

For planning authority:

- P. Butler, Senior Council
- T. Clarke, B. L.
- R. McEntee, Law Agent
- M., Killeen, Senior Executive Engineer
- D. Whelan, Senior Executive Officer
- J. Gibney, Senior Executive Engineer

For third party appellants:

Councillor S. Lynch

S. Ward, Planning Consultant

F.O. Dowd, T.D.

Carranstown Residents Group

N. McCabe

T. Burke

No Incinerator Alliance represented by M. O'Neill, Town Planner

Louth/Meath Health Protection Group

- E. McKenna
- P. Sweetman, An Taisce

East Meath Dairy Farmers represented by M. Rave

- J. Rogers
- M. Godfrey, Mayor of Drogheda
- D. Smyth (No Incinerator Alliance)
- Dr. E. Cullen (No Incinerator Alliance)
- Dr. A. Stains (No Incinerator Alliance)
- V. Reijs (No Incinerator Alliance)
- D. Lattimer (No Incineration Alliance)
- T. Sargeant, T.D.
- O. Herr (No Incineration Alliance)
- B. Hanratty (No Incineration Alliance)
- P. Cunningham (No Incineration Alliance),

Drogheda on the Boyne Tourism

- H. Phelan (No Incineration Alliance)
- S. McDonnagh (No Incineration Alliance)
- T. Byrne (No Incineration Alliance)
- M. O'Donnell, Barrister (No Incineration Alliance)

Observers:

- F. Shuter
- P. O'Brien

This is a third party appeal, taken by a considerable number of parties, against the decision of the planning authority to grant permission for the above proposal at Carranstown. The decision of the planning authority to grant permission was made under Reg. Ref. 01/4014, by order of 3.7.2001, and was subject to 30 conditions.

The third party appeals are against the principle of the development.

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A first party appeal has been taken against one of the conditions contained in the decision of the planning authority to grant permission, namely no. 3, which is as follows:

"Waste for acceptance at the waste management facility/incineration and recycling/treatment shall be strictly limited and confined to waste generated and produced in the north-east region area of Counties Meath, Louth, Cavan and Monaghan. The annual tonnage for thermal treatment/recycling shall not exceed the quantities as identified in the Environmental Impact Statement on an annual basis i.e. 172,000 tonnes per annum.

Each and every consignment of waste, howsoever arriving at the waste management facility shall be accompanied by a waste certificate, which shall identify, inter alia, the following:

Waste origin, source and area in which it was produced/generated.

Waste collection schedules.

Weight of each consignement

Waste collection contractor name and address.

Composition and nature of waste.

The developer shall submit to the planning authority on a monthly basis records of all waste delivered to the site on a daily, weekly and monthly basis, in accordance with the aforesaid waste certificates. (In the interest of development control)".

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REMIT OF AN BORD PLEANÁLA:

The proposed development comprises an activity which comes within the scope of Class 11.1 of the First Schedule of the Environmental Protection Agency Act, 1992. Under the Environmental Protection Agency (Licensing) Regulations, 1994 the licensing function of the Environmental Protection Agency applies. A licence from the Environmental Protection Agency is required in relation to the activity.

Under Section 98 of the Environmental Protection Agency Act, 1992, An Bord Pleanála must consider the instant appeal in relation to matters other than the risk of Environmental Pollution from the proposed activity. The remit of An Bord Pleanála covers the risk of environmental pollution arising from construction.

SITE LOCATION AND CONTEXT:

The site of the proposed development is located approximately 3 kilometres to the north-east of Duleek and approximately 4 kilometres to the south-west of the nearest built-up area of Drogheda.

The site lies on the western side of the R152 Regional Route, which connects Drogheda South Westwards to Duleek. Frontage onto the regional route is approximately 360 metres.

Donore Village is located approximately 2 kilometres to the north/north-west of the site. The site lies within the lowest part of a north-east/south-west trending local valley, defined by a ridge at Red Mountain, approximately 2 kilometres to the north-west of the site, between it and the River Boyne Valley at Bru na Boinne. The highest point at Red Mountain is approximately 120 metres O.D.

To the south the land rises into the Bellewstown Ridge which trends east/west, to a maximum elevation of approximately 160 metres O.D.

Notwithstanding the presence of a vary large quarry and cement factory at Platin, immediately to the north of the site, the predominant land use in the area is agriculture. This consists mainly of pastureland, with a significant amount of tilled land. The landscape is characterised by field hedgerows.

The site itself contains an area of approximately 10 hectares (25 acres). It consists of 3 fields in permanent pasture and approximately 50% of another field, at the northwestern section of the site. Field boundaries, in the main, consist of hedgerows typically 3 to 4 metres in height. A major part of the roadside boundary consists of a cut hedgerow to a height of approximately 1.5 metres. At the south-western corner of the site there is a significant row of mature deciduous trees several metres in height.

On its northern, western and southern sides the site immediately adjoins similar permanent pastureland. The site and the adjoining lands to the south were being grazed by cattle at the times of inspection. The site and surrounding lands are in single ownership amounting to approximately 35 hectares, all of which is in agricultural usage.

Site levels decline from a high point of 41 metres O.D. in the North Eastern corner to 31 metres O.D. in the south eastern corner, 32 metres O.D. in the north western corner and 31 metres O.D. in the south western corner.

The single track Drogheda to Navan railway line runs on a north-east to south-west alignment, roughly parallel to the site and approximately 50 metres to the north of it. The line is presently used for the carriage of freight. It runs through the adjoining cement factory site, which covers an area of approximately 20 hectares consisting of the heavy industrial facilities associated with cement manufacture. The plant has been in operation since the late 1960s and constitutes a significant heavy industrial land use. The facility contains extremely large buildings and several storage bins, averaging 40 metres in height. It also contains two emission stacks to a height marginally in excess of 100 metres. To the south of the cement factory there is large electricity substation, within the overall curtilage of the factory. This is served by 110 kV electricity lines, one of which runs from the substation, south westwards through the appeal site.

The cement factory is served by a large limestone quarry, located immediately to the west of it. This quarry has been in operation for a considerable number of years and excavation has proceeded to a depth of 40/50 metres, well below the water table in the area. The southern extremity of the quarry is located approximately 200 metres to the north-west of the appeal site. The quarry covers an area of approximately 30 hectares.

Access to the cement factory is directly from the R152. A secondary means of access into the cement factory and into the quarry is available from a county road located to the north.

The north-eastern corner of the appeal site immediately adjoins the curtilage of an old two-storey dwellinghouse. The dwellinghouse is located approximately 5 metres from the appeal site and setback a similar distance from the R152.

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There are two single-storey dwellinghouses on curtilages of approximately .5 hectares, opposite the appeal site, on the eastern side of the R152. These dwellings are approximately 50 metres from the appeal site. To the rear of the western dwelling there is a commercial premises, used in the repair of trucks.

To the north-east of the appeal site, across the R152, there are 5 dwellings fronting westwards onto the roadway. All of these are located within 100 metres of the appeal site. There is also a garage and tyre centre, within a cluster of development contained within approximately 2 hectares.

Within 1 kilometres of the appeal site there is a total of 20 dwellinghouses. There is also a public house, located on the eastern side of the R152, between the site and Duleek. There is also a football ground, used by a local soccer club.

100 metres to the south-west of the south-western corner of the site, there is a minor county road running westwards from the R152. This roadway underpasses the rail line described above. It provides access to a considerable area of farmland and to four dwellinghouses at the western extremity of the county road, which is a cul-de-sac.

Mount Hanover National School is located approximately 1 kilometre to the east of the site. Access to a school in by means of a county road which joins the R152 approximately 1 kilometre to the north-east of the appeal site.

A section of the National Gas Pipeline grid runs in a 7-metre way leave under the eastern part of the site. This is indicated on submitted drawings.

A scale model of the site of the proposed development, including the proposed development, and existing and proposed development in the area was submitted as part of the proposal. This model also indicates a proposed electricity generating plant which was the subject of a decision to grant permission by the planning authority under Reg. Ref. 99/2490. This resulted in several third party appeals in PL 17.118993. The decision of An Bord Pleanála was to grant permission for the proposed generating station. No development has commenced resulting from the

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permission, which was granted approximately 2 years ago. The power station site is approximately 150 metres to the north east of the appeal site, across the R152 from it.

PROPOSED DEVELOPMENT:

The overall development proposal is described by the developers/first party appellants in the Environmental Impact Statement submitted as part of the proposal, as a waste management facility.

The proposal contains 3 mains elements. The first is a waste to energy plant for non-hazardous waste. The capacity of this plant is stated to be 150,000 tonnes per annum.

The second element of the proposal is a recycling plant for non-hazardous waste with a projected throughput of 20,000 tonnes per annum.

The third element of the proposal is a community recycling park with an estimated throughput of 2,000 tonnes per annum.

WASTE TO ENERGY PLANT:

The proposed waste to energy plant would be powered by grate incineration. Two proposed furnaces would be fed from a hoist bunker into which waste is tipped from trucks.

Waste is incinerated in the furnaces thereby producing heat. Ash and combustion gases are also produced.

Flue gases are cooled, filtered, passed through scrubbers and reheated prior to discharge via a proposed 40 metre high stack.

Waste liquid produced by the scrubbers is used in the cooling process and a solid waste is produced. There is no process water discharged from the incineration process proposed.

The proposed plant would produce approximately 11 MW of electricity, sufficient to provide power for 16,000 homes.

The capacity of the waste to energy plant is estimated at 150,000 tonnes per annum, consisting of municipal waste. The two proposed furnaces are fed into a combined flue gas treatment system.

Trucks discharge to a proposed 6,000 cubic metre bunker. Waste is mixed in the bunker and fed by grab cranes to hoppers at the highest point of the furnace.

The acceptance halls are proposed to be maintained under negative pressure with air being drawn in through openings rather than escaping out, to prevent wind blown waste and odour emission.

Two furnaces are proposed mainly to allow maintenance to be carried out without interrupting the capacity of the plant to accept waste.

The hot combustion gases resulting from furnace incineration are used to generate steam in the boiler unit. The boiler uses heat generated by furnace combustion to produce energy in the form of steam.

Steam from the electricity turbine is condensed in an air-cooled condenser.

Flue gas cleaning is proposed through a five stage process. This involves the removal of oxides of nitrogen, dioxin and heavy metal removal, evaporation and dust removal, acid gas removal and a second stage of dioxin and heavy metal removal.

Incineration of waste produces dioxins. The proposed incinerator includes a two stage dioxin removal system using activated carbon thereby ensuring that the plant operates below emission levels required by the European Union. A continuous dioxin sampler is proposed.

The main residues from the incineration plant are bottom ash, boiler ash and residues from flue gas cleaning.

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Ash will be generated from 3 separate parts of the proposed process.

Bottom ash would be collected from the grate of the furnaces. This accounts for the majority of the solid residues, approximately 30,000 tonnes per annum or 20% of waste input by weight.

Boiler ash would be collected from the boiler and represents 1,500 to 3,000 tonnes per annum.

Approximately 1,000 tonnes of gypsum would be recovered from the flue gas cleaning plant per annum.

Approximately 4,000 tonnes of flue gas cleaning residues would also be collected from the flue gas cleaning plant per year.

Bottom ash represents the bulk of the solid residue arising as a result of the present development. In Additional information submitted by the developers to An Bord Pleanála on 24.9.02 it is stated inter alia;

Bottom ash:

"The bottom ash mainly consists of sand, glass, scrap and other inert materials. Indaver Ireland has received written confirmation from a number of companies stating that they would be capable of accepting this material."

Boiler ash;

This material may be hazardous or non hazardous depending on composition analysis. The boiler ash would therefore require hazardous or non-hazardous landfill. Indaver Ireland have received written agreement from a number of companies stating that they would be capable of accepting this material from the proposed waste management facility.

Flue gas cleaning residues;

It is anticipated that the flue gas cleaning residues will require disposal at a hazardous waste landfill.

Currently, there are no purpose-built hazardous waste landfills in operation in Ireland. The Environmental Protection Agency has stated in the National Hazardous Waste Management Plan Section 6.2.2 that;

"It is envisaged that hazardous waste landfills would be required at at least two locations, one in each of the largest hazardous waste producing areas/ the South-west and Dublin Areas."

The plan also states;

In addition, in the event of a thermal treatment facility (whether municipal, non hazardous or hazardous waste) being constructed, a hazardous landfill facility would be required for the ash. If thermal treatment facilities are constructed in other parts of the country consideration would have to be given to the provision of hazardous waste landfill capacity and additional facilities may be required."

In addition a Department of the Environment and Local Government circular WN01/02 dated 19.3.02, gives details of a waste management infrastructure grant scheme for certain waste management infrastructure.

Section 1.3 states:

"The investment under the above operational programmes would be dedicated to the implementation of waste managing plant and will be targeted primarily to support the development of waste recycling/recovery facilities (those parts of the waste management measure assisting towards the provision of hazardous waste landfill deposit will be also be considered).

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In the event that purpose built hazardous waste landfills are not established, the disposal of flue gas cleaned residue will take place on the continent (of Europe) Indaver Ireland has received written agreement from two companies that both will accept this material for landfill disposal.

Gypsum;

Approximately 1,000 tonnes of gypsum will be produced as a by-product of the flue gas cleaning process at the proposed facility. This material is considered non hazardous for landfill. The developers have received written confirmation from a number of companies stating that they are capable of accepting this non hazardous material."

The proposed waste to energy plant would accept waste between 8.00 am and 6.00 pm five days per week and between 8.00 am and 2.00 on Saturdays throughout the year.

Each line of the plant would operate 24 hours per day only being shut down for maintenance purposes. Shut down periods would be staggered so the plant would be able to accept and dispose of waste on a continuous basis. For this reason two furnaces and two boilers and an appropriate sized waste bunker are proposed.

COMMUNITY RECYCLING PARK:

The second major element of the proposed development is the proposed community recycling park. It is proposed to accept 12 different categories of waste to optimise recovery and recycling. This would range from paper to glass to plastic, footwear, batteries, waste oil, wood and garden waste.

Waste would be deposited into dedicated containers by members of the public. These containers would be in shelters which would be planted with an organic green roof system to improve the visual appearance of the area from the road.

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The recycling park would be staffed continuously during operation to ensure that appropriate waste is delivered and to monitor waste delivery. No organic kitchen waste would be accepted at the park and there would be no problem with odour or vermin.

Based on the experience of a similar park in Navan, the developers consider that 3,500 cars will use the park each month. It is also anticipated that 2,000 tonnes per annum of recyclable domestic waste would be collected by the facility.

RECYCLING PLANT FOR INDUSTRIAL MATERIALS;

Unsorted dry recyclable industrial and commercial waste would be accepted in a separate area within the waste acceptance hall of the waste to energy plant. There items would be potentially be recovered or recycled and would be separated. For recycling to be possible no organics can contaminate the waste.

The main types of waste are paper, cardboard, plastics, wood and metals.

Large items such as bulky pieces of metal or wood would be removed and put directly into containers.

Waste is loaded into a hopper and passed through to screens. The first screen separates coarse material, greater than 300 millimetres. The second screen separates small particles which contain mostly sand, minerals, some metals and other small fractions.

After screening the waste is spread out onto conveyers from which metal items are automatically removed by magnetic separators. The metal is directly containerised and sent elsewhere for recycling.

Paper, plastic, cardboard and wood are then manually picked out by sorters. These items are either containerised or baled and sent onwards for recycling. Non recyclable waste would be sent to the waste bunker for incineration.

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The plant is designed to sort 20,000 tonnes of waste per annum based on single shift operations. The plant would be operated by up to 16 personnel. Although it is intended that it could operate at any time of the day it would mainly operate from 8.00 am to 6.00 pm Monday to Friday and from 8.00 am to 2.00 pm Saturday. It is expected that 20,000 tonnes of waste would be processed by the plant each year with 16,000 tonnes being sorted for recycling.

SOURCES OF WASTE;

It is proposed that the overall operations on the site would accept waste from a variety of sources and for a variety of disposal and recycling options.

The proposed incinerator would source waste from municipal and industrial unsorted solid waste.

Recycling with residue for waste to energy would source dry recyclable commercial and industrial waste.

Domestic recyclable waste would be for dispatch and recycling elsewhere.

There would be no charge for acceptance and dispatch of waste recycling. There would be a charge for the waste sorting facility and the waste to energy plant. The developers would accept waste from commercial enterprises. They would sort dry recyclable waste for businesses which do not expect to separate waste at source.

Energy generation and use:

The waste to energy plant would convert the thermal energy produced into electricity. Some of that electricity would be used by the plant itself with the remainder being exported to the national grid, 11 mega watts.

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The plant would use natural gas to bring the furnaces to the required operating temperature of 850 degrees centigrade. This would be supplied from a natural gas low pressure pipeline operated by Board Gais Eireann, in the adjoining R152.

SITE LAYOUT AND BUILDINGS:

Vehicular access onto the site is proposed from the south-western corner. In this regard it is proposed to provide a deceleration lane south of the site. The vehicular access point would contain an ingress point from the deceleration lane. A separate ingress point is proposed adjoining the egress point, for right turning traffic, who would be provided with a ghost island and a filter lane.

An on site vehicular access road is proposed running from the south western corner to the north western corner of the site, parallel to the western site boundary. This internal access road would contain an on site roundabout. This is intended to separate traffic using the various uses proposed on the site. In this regard the south western corner of the site would contain the recycling/bring facility which, together with a two-storey administration building, would take access off the northern leg of the roundabout.

The bring facility would be provided with its own separate access cul-de-sac and turning circle at its northern end. To either side of the access way, covered skips would be further enclosed by fixed monopitched covering units numbering approximately 20. A small administration/security building is proposed at the southern end of the cul-de-sac.

The administration building would be contained within a largely flat roofed twostorey structure, floor area 770 square metres. This building is proposed to provide for the office work element entailed in the development, as well as the training and engineering elements.

Approximately 50 metres to the west of the roundabout, noted above, a weigh bridge is proposed. Immediately to the north of this a warehouse building, containing a floor area of 819 square metres, is proposed. This is intended as storage area for recyclables, as well as a rest area for drivers and also on site security.

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The main element of the overall development would generally be located in the south and western sectors of the site. In this regard the northern and north eastern parts of the site would largely be given over to planting and laydown, parking area.

WASTE TO ENERGY PLANT BUILDINGS:

The reception hall would provide the means of vehicular access from the access roadway. Heavy commercial vehicles entering the reception hall would either deposit material for the sorting plant, or discharge directly into the waste bunker, immediately adjoining the reception hall. The on site access road would run along the eastern side of the reception hall/sorting plant with traffic mainly travelling from the sorting plant taking materials for recycling off the site.

The other element of traffic generation would be from the ash bunker and the solidification unit, for the transfer, off the site, of residues from the incinerator.

The overall floor space contained within the waste treatment plant is 11,900 square metres. The building would have a maximum parapet height of 30 metres. The single highest element in the development is the stack at 40 metres.

The waste to energy building is a large, quite irregularly shaped structure containing the various elements of reception hall, sorting plant, waste bunker, operations building, furnace and flue gas treatment building. These are basically conjoined units contained within flat roofed rectangles. The proposal is to visually soften the bulk of the various structures by the use of a colour range with greens and browns predominating.

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OTHER SITE ELEMENTS

The two final elements of structures proposed are the water tank and pump house located adjoining the western site boundary.

Significant landscaping is proposed on boundaries and also on the northern part of the site, with particular emphasis on the north-eastern part of the site. Existing trees adjoining the south eastern boundary of the site would require removal with the provision of the proposed access point and the community recycling park.

These are presently the more significant visual elements on the site by reason of their height, relative to the remaining hedgerows. Existing on site hedgerows require removal.

A total of 50,000 trees would be planted.

Landscaping on the site boundaries, particularly the eastern and southern boundary, adjoining the roadway, would consist of 3/4 metres high berms, also containing planting.

Water supply to the development is proposed by the use of rainwater and ground water supplies.

Sewage disposal is proposed by means of a Puraflo unit located on the western part of the site.

MEATH COUNTY DEVELOPMENT PLAN 2001:

The site of the proposed development lies within the functional area of County Meath and is subject to the County Development Plan of 2001.

Volume 1 of the County Development Plan 2001, contains objectives for the County.

Section 2.2.2 relates to implications of the Strategic Planning Guidelines for the Greater Dublin Area as follows:

The main implications for the County are listed below;

That significant population growth for the County can be reasonably anticipated over at least the next 10 years. The town of Navan has considerable potential in a regional context to become a self-sustaining town in the hinterland of the metropolitan part of the Greater Dublin Area and connected to that urban area by high quality road and possibly rail linkages.

That the landscape, environmental and cultural heritage qualities of the Meath countryside have a significant amenity role to play in the future of the greater Dublin Area which should be protected by designation as strategic green belts.

That other strategic resources such as agricultural land and building raw materials need to be protected for strategic regional and national roles.

Industrial land availability is high at Navan and Drogheda environs. There are 391 hectares of land countywide.

Section 2.6.1 relates to sustainable urban development principles and states inter alia;

Concentrate development into those centres that can be economically provided with high quality transport and other services.

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To identify green belts, to clearly define urban areas and protect sensitive rural areas from uncoordinated unserviced sprawl.

To provide for the supply of zoned serviced lands in line with actual needs and the provisions of the regional planning guidelines to avoid excessive over-zoning and consequent difficulties in co-ordinating development.

Section 2.6.2 relates to implications for urban growth from the Strategic Planning Guidelines and states inter alia;

"The primary development centres would be separated from each other and the metropolitan area by extensive strategic green belts devoted to agriculture and similar uses within which development needs would essentially be locally driven."

Key issues that will arise will relate to: inter alia,

Protection of the countryside.

Section 2.6.4 relates to the availability of industrial and residential development land and states, inter alia;

Of the 298 hectares of undeveloped industrial lands in the county 35% lies in Navan, 31% lies in Drogheda environs, 21% in Laytown. Secondary pools of land are at Ashbourne, Trim and Duleek.

Navan and the East Meath Area are the ones best prepared to accommodate new industry by available services/serviceable land banks.

Section 2.7 of the Plan relates to strategic infrastructure need as follows;

The provision and safeguarding of infrastructural investment is a critical component of the development plan objectives for the county. Without environmental means of supplying water, disposing of waste water and solid waste as well as offering modal choice in transportation, the principles of sustainable development cannot be met.

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Strategic infrastructure investment will therefore be guided by;

The objectives for the development of the county and its urban and rural areas as set out in Section 2 of the Plan.

The Strategic Planning Guidelines.

Greater environmental standards such as the EU Waste Water Directive (91/271/EEC) and directives in relation to ground and surface water quality and solid waste disposal.

Section 2.7.3, the Plan relates to solid waste disposal as follows;

The review of the County Development Plan will embrace the recommendations of the Council's consultants in relation to recommended options for waste disposal and management.

At present the existing system is dependent on landfill with little segregation of waste with recovery of compostible waste and/or recyclables. Major investment has been identified for a new landfill at Knockharley near the N2 Road in the eastern part of the county and this new sanitary landfill will be operated in association with management practices aimed at recovering organic and recyclable waste fractions.

Future waste management action will be informed and have due regard to the regional Waste Management Plan.

The waste management strategy will be based on 4 core tenets;

Public awareness and local authority support for waste minimisation and recycling.

Provision of improved recycling facilities.

Development of waste handling process including the consideration of thermal treatment to reduce bulk and landfill needs while yielding an energy return.

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The provision of residual landfill capacity for the short, medium and long-term at strategic suitable locations.

Section 2.8 of the Plan refers to "approach to rural areas and resource management". This states inter alia;

Sustainable rural development objectives will;

Ensure that any commercial or industrial proposals in rural areas are sustainable."

Section 3.2.1 of the Plan relates to land use zoning objectives. Figure 8 of the Plan provides for zoning of land in 16 separate categories.

Category E1 is as follows;

"To provide for industrial and related uses subject to the provision of necessary physical infrastructure."

E2 is as follows:

"To provide for light industrial and industrial office type employment in a high quality campus environment subject to the requirements of approved action plans and the provision of necessary physical infrastructure".

The subject site is not covered by a land use zoning objective. The site, and surrounding land are unzoned.

Section 3.5.4 of the Plan relates to solid waste as follows:

"The existing facility at Basketstown has been replaced by a new landfill at Knockharley off the N2 in the east of the county. This facility would be accompanied by greater recovery of recyclable materials and composting of organic waste fractions.

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In the longer term, the region's waste management strategy being adopted by the regional authorities will set out a longer term vision.

The strategy will be based on four core tenets; (also noted in 2.7.3 above).

Public awareness and local authority support for waste minimisation and recycling.

Provision of an improved recycling facility.

Development of waste handling processes including the consideration of thermal treatment to reduce bulk and landfill needs while yielding an energy return.

The provision of residual landfill capacity for the short, medium and long term in strategic suitable locations.

In relation to waste transfer stations, the planning authority will have regard to the impact of a development on residential areas in terms of visual amenities and the capacity of the road network to accommodate anticipated traffic levels in deciding on site proposals.

Section 3.6.9 relates to views and prospects as follows;

"The Meath landscape contains a wide range of points where either there are fine views or which in themselves are landmarks or prospects. The conservation of these amenities are vital to the tourism attraction of the county. The rural detail maps indicate the location of such features which are also listed in Volume 3. Where development is envisaged adjacent to such features, the planning authority will pay close regard to the potential effect on the amenity value of these items with an overriding objective of their protection".

Section 3 of Volume 3 of the Development Plan relates to conservation with specific reference to views and prospects.

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View reference VP16 indicates views northwards, from the Bellewstown Ridge, across the valley, in which the site is located.

Section 3.6.3 of the Plan relates to landscape classification and states as follows;

"The rural parts of Meath have been analysed for their visual characteristics with a view of offering a clearer picture to developers and others as to the sensitivity of various categories of development in areas with different abilities to absorb development. The extent of these areas is depicted on the rural detail maps.

A list of these areas is indicated in a table of "Visual Quality Groups". In this regard the appel site and surrounding lands are located in area VQ11; rural and agricultural. The characteristics of such areas are given as follows;

"These parts of the county make up the majority of its area in that they comprise of normal rolling lowland pastoral landscapes that apart from occasional ridges or prominent areas, are not particularly visually sensitive.

These areas can absorb quite effectively appropriately designed and located development in all categories, including masts and wind energy installations, afforestation and agricultural structures."

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WASTE TREATMENT REPORTS:

There are a number of previous studies carried out on behalf of both of the local authority and the north-east regional authority relating to the disposal of waste.

Initially a waste management strategy study was undertaken on behalf of the planning authority, in the period 1995-1997. The study recommended intensive composting, civic amenity sites, a pilot bio-gas plant and residual landfill.

Biological and thermal treatment were investigated but found to be uneconomic on a county basis.

In 1997 a feasibility study of Thermal Options for Waste Treatment/Recovery was carried out on behalf of the regional authority, for the north-east region. The main objectives of the study were:

- To seek maximum diversion of new waste from landfill.
- To consider the feasibility of thermal co/treatment of other wastes
- To make recommendations on preferred technologies and siting of a thermal treatment facility for the north-east region.
- To make recommendations on how best to integrate the outcome of the study into the then ongoing waste management strategy for the north-eastern region.

The study, completed in 1999, concluded that waste combustion with energy recovery (WTE) and gasification, are the most suitable thermal technologies for the north-eastern region. While gasification offers the advantage of reduced emission with greater possibility of recycling, waste to energy (WTE) is widely used and has a proven track record and robustness, not associated with gasification.

Gasification is also more expensive than waste to energy.

The report notes that even with thermal treatment there would still be a requirement for residual landfill in the region.

Thermal treatment recommendations need to be integrated as recovery elements into county/regional strategy/plan to complement proposals for waste reduction, recycling and disposal.

The major study carried out relating to waste management was the **Waste Management** Plan for the north-east region, consisting of Meath, Louth, Monaghan and Cayan.

The purpose of the plan was to provide a framework for the management of nonhazardous waste in the region.

The population of the region in 1996 was 306,155.

The largest towns in the region, by population, are Drogheda, population 24,406 and Dundalk at 25,762. The next largest town is Navan, with a 1996 population of 12,810.

The Waste Management Plan looked at three scenarios, which were computer-modelled.

Scenario 1 provided for the introduction of door to door collection of dry recyclables with an increased number of bring banks in rural areas, together with new recycling centres in specified towns. Recycling would be further increased by collection of household waste in large urban areas for biological treatment. Remaining waste, not recycled would be landfilled.

Scenario 2 provided for collecting dry recyclables through an extensive bring bank network in combination with recycling centres in specified towns. The collection of material for biological treatment would be extended to include all households. Remaining combustible waste would be thermally treated and the residual waste which could not be recycled or thermally treated would be landfilled.

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Scenario 3 provided for the introduction of door to door collection of dry recyclables such as paper, plastics, etc., increased number of bring banks for rural areas together with new recycling centres in specified towns. Recycling would be further increased by collection of household kitchen waste in larger urban areas for biological treatment. The remaining combustible waste would be thermally treated and the residual waste which could not be recycled or thermally treated, would be landfilled.

The main difference between scenario 2 and 3 is that scenario 2 achieves dry recycling through bring banks only and has a higher collection of organic waste.

Scenario 3 includes door to door collection of dry recyclables but also has a lower level of organic material from households. Scenario 3 was recommended by the study on its ability to meet the new national targets, not involving excessive costs.

The recommendation in scenario 3 would involve 43% recycling, 38.9% thermal treatment and 18.1% landfill. This is proposed over a 15 year period.

Section 3.7.4.2 of the Plan relates to thermal treatment and state inter alia;

Thermal treatment is a term covering several energy recovery concepts including the more traditional methods of waste to energy (WTE) such as incineration with energy recovery and also the available non/incineration technologies such as pyrolysis, gasification and liquefaction.

INCINERATION;

Incineration reduces the bulk of waste and recovers surplus energies heat (hot water or steam) or electric power or a combination of these. All combustible materials and solid waste from households, commerce and industry can be treated by incineration.

Co/incineration, for example in combination with sludges, can also be carried out. Incineration has a proven track record in Europe, with the technology being developed and improved in terms of energy efficiency and atmospheric emissions.

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The two alternative systems for incineration of municipal solid waste (MSW) are Grate combustion and fluidised bed technology. The former is a 50 year old technology while the fluidised bed system has been in place principally in Sweden for over 20 years. Both systems require a degree of mixing and shredding of the waste before entering the incineration chamber.

GRATE COMBUSTION

Waste is placed on a moving grate which moves slowly towards the combustion chamber allowing waste to be dried out before incineration at a temperature range of 950/1200 degrees centigrade.

Flue gases are passed through an after/combustion chamber for at least 2 seconds at greater than 850 degrees centigrade, to ensure complete burning, then passed to a boiler where steam or hot water is generated from the energy in the flue gases.

The end products expressed as a proportion of the weight of incoming waste is;

fly ash and flue gas cleaning products 2/5% by weight ferrous metals 2/3% by weight clinker 15/25% by weight

Expressed as volume the result is a reduction to approximately 5/10% of the waste input. The options for these by-products are recycling e.g. magnetic sorting of any metals incorporation of clinker in road building etc. and disposal to landfills. The surplus energy produced can be recovered through production of electricity and heat, for example for industry, drying of materials, heating schemes for households.

Flue gas cleaning involves scrubbing to remove particulates, heavy metals, acid, gases and dioxins. In terms of emissions to the environment, modern incinerators will comply with the draft European Union Directive on incineration of waste. These emission limits, set out by the legislation, are more onerous than national legislation in many states and are quite stringent. Much of the recent development in

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incineration technology has been in the refinement of processes and flue gases cleaning systems in order to meet the strict requirements on emissions.

Section 8.3 of the Regional Waste Management Plan relates to waste management policy;

Section 8.3.1 is as follows;

"The local authorities in the north-east region aim to achieve the objectives and targets set out in the recent government policy on waste management/Changing Our Ways. These new national targets are to be achieved over the next 15 years and are intended to fulfil our obligations under E.U. legislation. The plan shall implement the following specific policies over the period of the plan;

- 8.3.2 Waste minimisation.
- 8.3.3.3 Waste collection.
- 8.3.3.4 Waste recycling policy.
- 8.3.5 Energy recovery facilities. This states inter alia;

"Thermal treatment shall be an integral part of the solution to the management of the region's waste. Thermal treatment of the residual combustible waste stream with energy recovery is recommended. One plant will serve the region. This plant will cater for combustible waste transferred from other transfer stations. Estimated normal capacity of 200,000/300,000 tonnes per annum."

8.3.6 Waste disposal policy. This states inter alia;

"The diversion of waste from landfill is the primary objective of the Waste Management Plan. It is also the policy of the plan to ensure that all counties in the region will have arrangements in place for landfill disposals. This will be achieved by co-operation among the local authorities in the region."

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Section 8.3.13.3 relates to thermal treatment facility as follows;

A guide to the selection of such facility shall be taken from relevant legislation and best international practice. The primary pieces of legislation are;

Waste Management Act, 1996.

E.U. proposal for a Council Directive on the incineration of waste 1998.

Similar to the siting of landfills the first step in a siting process could be the identification of exclusionary factors which would prohibit the siting of a facility in these excluded areas. These areas having been identified, the next step could be to identify relevant siting criteria to assist with the selection of potentially suitable areas."

Part 5 of the Waste Management Plan relates to the implementation of waste management policy over the planned period.

Section 10.3 relates to treatment and energy recovery facilities as follows;

"Thermal treatment of the residual combustible waste stream with energy recovery is recommended with construction of a plant to commence in 2006. One plant will serve the region. This plant will cater for combustible waste. Estimated normal capacity of 200,000/300,000 tonnes per annum to 350,000/1,000,000 tonnes of agricultural waste, sewage and other sludges in addition to the municipal waste where synergies apply. This plant to undergo siting, planning and procurement procedure and to be commissioned by the end of 2007.

The technical assessment of thermal treatment indicates that it will satisfy the national policy requirement for diversion of waste from landfill. It will provide a cost effective treatment in the context of the north-east region, will greatly increase the security of the waste management system, and with energy recovery is favoured on environmental criteria compared with landfill disposal. The siting criteria for the

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plant to have regard to most efficient use of heat/energy, transportation, industrial zoning and other relevant factors.

A separate report on the feasibility of thermal treatment (January 1999) has been completed. This report looks in more detail at available technologies, energy usage and environmental aspects. It recommends proceeding to the E.U. procurement process for early provision of such a plant by means of public/private partnership (PPP) as favoured by current government policy.

Criteria which shall apply to thermal treatment includes;

Siting criteria including central location close to the waste production centre of gravity, proximity to energy users, ideally users of heat, reasonable road access, appropriate development zoning and availability of cooling water and provision for its disposal.

The procurement process should enable the most up to date technologies to be availed of in terms of reliability and robustness of the facility, reduction of residuals, high standard of atmospheric emissions in general, and public safety at a competitive cost.

The contract for thermal treatment must make provision for the necessary flexibility to cater for variations in the waste stream, volume and characteristics and to meet changing standards over time.

Any thermal treatment plant must be capable of meeting prevailing EU emission standards (e.g. new proposals for a Council's Directive on the incineration of waste/December 1998).

Waste suitable for thermal treatment in the region includes agricultural wastes and sewage sludges, industrial sludges in addition to municipal and related waste. The large quantities of poultry litter and spent mushroom compost in particular would be amenable to thermal treatment."

Section 10.4 relates to a bulk transfer system and states inter alia;

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The necessary bulk transfer capacity shall be developed to service the needs of the region. This shall involve construction of transfer stations which will handle and compact combustible waste for transport in containers to the thermal treatment facility and other treatment facilities. Stations to be provided at Cavan, Castleblayney, Drogheda and Navan.

Figure 10.1 of the plan titled "North-east Region/proposed waste facilities", in its legend contains the following;

Thermal (possible locations). The map indicates four possible locations for a thermal treatment plant. These are;

Reference 26-Dundalk, Louth,

Reference 27-Navan, Meath

Reference 28-Carrickmacross, Monaghan

Reference 29-Kingscourt, Cavan

Table 10.4 gives a summary of waste plan infrastructure and includes the following;

Thermal treatment plant; number of sites.

Land area required (approximately) 4/8 hectares.

Activity; conversion of waste to energy.

Indicative location; one central facility.

ASSESSMENT:

The proposed development, as described by the developers, consists of an integrated waste management facility fully consistent with national, regional and local plans relating to waste management. This includes recycling, treatment and disposal.

The third party appellants, while recognising the recycling elements contained in the proposal, concentrate their opposition to the thermal treatment facility.

Notwithstanding the legal differentiation of agency functions of responsibility as between An Bord Pleanála and the Environmental Protection Agency, there was a reasonable degree of understanding of the separate roles of these two agencies, by the parties.

The written submissions of the third party appellants and observers in many instances contain considerable detail in relation to environmental pollution. As can be seen from previous reference to these written submissions in this report, the only aspects of third party appeal and observation referred to are aspects other than operational environmental pollution.

During the course of the oral hearing constraint as to the admissibility of evidence relating to environmental pollution was an ongoing requirement for the inspector. By the third day of the hearing the lines of demarcation had been reasonably well established. This is not, however, to underscore the difficulty and unease felt by many third party appellants relating to the separate roles of the two statutory agencies.

Because of the public confusion in relation to the precise roles of the two agencies I consider it of some importance to outline, what I consider to be the legal position of An Bord Pleanála. This area has already been referred to in some detail by several third parties in both written and oral form.

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Legal Remit Considerations;

Prior to the enactment of the Environmental Protection Agency Act 1992 the full impacts of the proposed development would have been within the remit of An Bord Pleanála.

Section 98 of the Environmental Protection Agency Act 1992 divided consideration of elements of the proposed development between An Bord Pleanála and the Environmental Protection Agency.

The Section empowered the Environmental Protection Agency to deal with issues relating to environmental pollution. Specifically these relate to air, water, noise and waste impacts, in the operation of the development.

Issues relating to land use, visual impact, transportation and construction remained with An Bord Pleanála.

A major point of third party appeal relates to the competence of An Bord Pleanála to fully assess the statutory environmental impact statement required by the type of activity proposed. The arguments made rely on the third party contention that An Bord Pleanála in the E.I.S. assessment must of necessity consider all aspects of the proposed development, whereas Section 98 of the Environmental Protection Agency Act 1992 limits the areas of assessment.

This line of argument is in the opinion of the third party appellants, strengthened by the European Commission's questioning of Irish Legislation as it applies to the process of environmental impact assessment. The overarching remit of EU 337/87 is incapable of implementation due to the effective division of consideration as between An Bord Pleanála and the Environmental Protection Agency.

Mr F. Simons the developers' legal advisor, in his submission to the oral hearing, counters the third party position.

Having considered the legislation and the arguments I do not consider that An Bord Pleanála is constrained in consideration of the proposed development. There is a clear imperative on An Bord Pleanála to consider all aspects of the proposed development other than those relating to environmental pollution in the operation of the proposed activity. For the proposed development to be built An Bord Pleanála must have decided to grant planning permission. Operation of the proposed development could not however commence without the requisite E.P.A. license. This involves consideration of the environmental pollution impacts of the proposed development by the Environmental Protection Agency.

The applicable legislation therefore covers all aspects of the proposed development notwithstanding the demarcation of responsibility as between the two agencies. On that basis there is not, in my opinion, a requirement to refer the proposed development to the Courts.

Waste Management Considerations;

The increasing amounts of waste generated in a rapidly expanding economy have placed a heavy burden on the waste management system. Landfill has in the past and presently caters for the vast bulk of disposal. Problems relating to landfill give rise to the need for alternative management systems. This is exemplified in the EU Landfill Directive of 1999, which requires the diversion of bio-degradable waste, including organic waste away from landfill.

National Policy;

Government policy relating to waste management is set out in the "Changing Our Ways" document published in October 1998. This sets out the requirement for an integrated approach to waste management. Major elements of the policy refer to the need to reduce the reliance on landfill.

A waste management hierarchy is put forward. Prevention is at the top of the hierarchy closely followed by minimisation.

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Reuse, recycling and recovery are the methods advocated for prevention and minimisation.

Waste disposal is at the bottom of the hierarchy.

The Waste Management Act of 1996 is the primary legislation governing the management of waste. The implementation of the 1996 Act is governed by the Waste Management (Planning) Regulations of 1997. The 1996 Act requires the preparation of waste management plans on a regional basis.

Regional Policy;

The requirement to publish a regional waste management plan for the north east was addressed by the publication of a draft waste management plan for the North Eastern region. The plan period is 1999-2004.

The draft plan was adopted by Cavan County Council on 10/4/00, by Meath County Council on 3/7/00, by Monaghan County Council on 17/7/00 and by Louth County Council on 3/8/01.

Prior to the publication of the draft regional plan 3 studies of waste management/treatment had been published.

The first was the Meath Waste Management Strategy 1995/1997. This examined waste management and treatment for the county. The main recommendations of the study pointed to the need for intensive home composting, the provision of civic amenity sites and a pilot biogas plant and residual landfill.

Biological and thermal treatment were examined however both were considered to be uneconomic on a county basis.

A review of the Meath Waste Management Strategy 1995/1997 was carried out by the original consultant in 1997. This review related to biological and thermal treatment. The main recommendations were for an increase in the municipal recycling rate to 25% and regional biological and thermal treatment of waste.

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The second publication of January 1999, is titled Feasibility Study of Thermal Options for Waste Treatment/Recovery in the North East Region. The study addressed two main issues. The first was the need to provide for maximum diversion of waste from landfill. The second was consideration of thermal treatment.

The study concluded that the most suitable thermal techniques for the region were waste combustion with energy recovery (WTE) and gasification. ~WTE was noted to be cheaper and more developed than gasification, however it still required a residual landfill facility.

The third publication was a strategic study of waste management, Waste Management Strategy for the North East Region, April 1999. It advocated a 25 year strategy for the region, however the region studied covered counties Cavan, Monaghan and Louth. It did not include county Meath. It recommended waste minimisation, bring sites, recycling, household bio waste collection and anaerobic digestion. It also recommend thermal treatment for non-biodegradable waste including the residual waste of anaerobic digestion. Finally residual waste was to be landfilled.

North East Regional Waste Management Plan;

As noted above this plan was adopted by the four counties in the North Eastern region and constitutes the statutory response to non hazardous waste management in the north east.

The major objective of the plan is to recycle 43% of total waste, thermally treat 39% of waste and landfill 18% of waste.

The development proposed involves all elements contained in the waste management plan for the North Eastern region.

Recycling facilities are proposed in the development.

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Thermal treatment is proposed in the incinerator, for non hazardous waste.

Landfill is also proposed for the residues produced by thermal treatment. This accounts for approximately one-third, by weight, of treated waste.

In terms of waste management methods the proposed development complies with the recommendations in the plan, including as it does recycling and thermal treatment; which also involves landfill.

The timeframe for the plan is 15 years. The proposed development has a 25 years operational span.

Regional Waste Plan/Locational Criteria;

Community recycling park/bring bank;

This element of the proposed development is referred to in the regional plan as requiring locations throughout the north east. In strictly locational terms the recycling park is poorly located relative to its function, which is seen by the developers as serving a local need.

The facility is seen as generating an annual turnover of 2000 tonnes in recyclables. While it is somewhat more than a basic bring bank, nevertheless the function of the facility is predicated on local need. This is outlined by the developers who see it as serving a local need. In strictly locational terms the facility is, in my opinion, poorly placed relative to its function. The function requires proximity to a population centre, preferably located in the population centre. Both Drogheda and Duleek would be more suited to such a facility. There are three existing bring banks serving Drogheda.

Given the relatively low population density within two kilometres of the appeal site, the existing bring banks in Drogheda and the desirability of providing a bring bank in Duleek, the raison d'être for providing a local facility on the appeal site is not apparent. This is particularly so when viewed in terms of traffic generation of the

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three separate elements proposed on the site. It is of note however that there is no third party opposition to the provision of a community recycling park on the site.

Recycling plant for industrial material;

The main types of waste proposed to the recycled are paper, cardboard, plastics, wood and metals. What is basically proposed to be accepted is unsorted dry recyclable industrial and commercial waste. This proposed facility would sort material from commercial contractors.

Material capable of recycling would be separated out for dispatch off site. The remainder of the imported material would go to incineration. This element of the proposed development has a dual purpose being both a recycling centre, for commercial waste, and also a source of waste for incineration. Given this function there is a raison d'être for its location within the waste to energy plant.

However it should be noted that figure 10.1 of the North Eastern Regional Waste Management Plant proposes a materials recovery facility in Drogheda. Such a facility is the same as that proposed on the appeal site. Drogheda is a logical location for such a facility, possibly in conjunction with a waste transfer station. Such a station is also proposed to be located within Drogheda, as per figure 10.1 of the regional plan.

Waste to energy plant/incinerator;

Section 8.3.5 of the North Eastern Regional Waste Management Plan relates to recovery facilities. This sets out several important objectives.

It accepts thermal treatment as an integral part of the solution to waste management. The principle of incineration is therefore accepted in the regional plan.

It recommends thermal treatment of the residual combustible stream with energy recovery. This is proposed in the major part of the proposed development. One plant is seen as serving the region. Normal capacity is seen as 200,000 tonnes, 3000 tonnes per annum. The reason for the greater amount, as opposed to the 150,000 tonnes per

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annum which it is proposed to thermally treat on the appeal site, is made up in the inclusion of waste, other than municipal and related waste, such as agricultural waste, sewage sludges and industrial sludges.

The location of thermal treatment facilities in the North Eastern region is specifically outlined in figure 10.1 of the plan. Four possible locations are outlined. The first is Dundalk ref. 26. The second is Navan ref. 27. The third is Carrickmacross ref 28 and the fourth is Kingscourt, ref. 29. Given the fact that one thermal treatment facility is proposed presumably the regional plan, in relation to siting criteria considers these four locations to be suited to such a plant.

Section 10.3 of the plan states inter alia;

the siting criteria for the plant to have regard to most efficient use of heat/energy, transportation, industrial zoning and other relevant factors.

Criteria which shall apply to thermal treatment include;

"siting criteria including central location close to the waste production centre of gravity, proximity to energy users, ideally users of heat, reasonable road access, appropriate development zoning and availability of cooling water and provision for its disposal."

Finally in relation to the regional plan table 10.4 of the plan gives a "Summary of Waste Plan Infrastructure", indicating a requirement for one central facility, to be used in the conversion of waste to energy and containing a land area of 4/8 hectares (10/20 acres).

From the above, it is clear that the North Eastern Regional Waste Management Plan did not foresee the provision of a thermal treatment facility on the appeal site. The four possible locations chosen are all a considerable distance from the appeal site, with Navan the only one being reasonably proximate, at approximately 11 miles from it.

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The remaining three sites are well to the north of the appeal site, being on average 25 miles from it.

The four locations shortlisted in the North Eastern Regional Waste Management Plan were those contained in the Feasibility Study on Thermal Treatment Options for the North Eastern region. Section 8 of this study sets out the criteria to be used in the siting of a thermal treatment plant. This siting policy was taken directly from the options study. However it should be noted that the options study concluded in Section 8.3.

'Shortlisting of sites"; (which compared the four possible locations)

"It is therefore concluded that from this comparison the actual siting of the thermal treatment plant in any of the above shortlisted towns in not critical to its future operation and availability. It is therefore recommended that a detailed siting study be conducted to ascertain the availability in each town having regard to more detailed issues within each of the four towns.

A detailed siting study was not carried out as part of the regional plan in spite of that the fact that the four possible locations contained in the Thermal Option Study reappear in the Regional Plan. Nonetheless the four options put forward in the regional plan constitute the only site specific references to the location of a thermal treatment facility in the region. None of these locations have featured in planning applications for thermal treatment plants.

Regional policy as set out in the North Eastern Regional Waste Management Plan in relation to site selection does not constitute part of the developers' consideration. None of the locations were examined by the developer in any detail. The only sites, apart from the appeal site, examined in any detail, were in Drogheda and in Ardee.

The developers disregarded the site locations in the Regional Study on Thermal Options and the Draft Waste Management Plan for the North Eastern Region in deciding on the location of the proposed facility.

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Regional policy on the siting of waste management facilities, including thermal treatment, refers to exclusion factors. These factors are as contained in the Environmental Protection Agency Draft manual on landfill site selection.

Section 8.3.13.3 of the North Eastern Regional Waste Management Plan specifically refers to a thermal treatment facility. Guidance on the site selection of such facilities is to be from relevant legislation and best international practice.

Of critical importance in locational criteria is the listing of exclusionary factors, as noted in the Environmental Protection Agency Draft manual. These factors are now considered.

The site is not underlain by a regionally important aquifer.

It is removed from an airport.

It is not so proximate to a proposed Natural Heritage Area as to materially impact upon such an area. Third party reference has been made to the proposed Natural Heritage Area at Duleek Commons, however it is located well to the west of the site.

There are no other heritage designations or proposed designations affecting the site or its environs.

The site is not situated in a geologically unsuitable area.

It is not located in or proximate to an area of high archaeological interest. In this regard the site is situated in a valley to the south of the Boyne Valley, which is a World Heritage Site. In strictly archaeological terms the works proposed on the site would have no direct impact on an area of archaeological interest as the site and the immediately surrounding area do not contain archaeological remains.

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The final exclusionary factor contained in the Environmental Protection Agency Draft manual on site selection refers to Areas of High Amenity. In this regard the Meath County Development Plan, at pages 27 and 28, contains a table of visual quality groups. A total of 11 groups is noted, ranging from area VQ1 to area VQ11. The table notes characteristics and sensitivities of each category. The table constitutes a basic landscape classification. This is specifically referred to in Section 3.6.3 (landscape classification) of the plan which states;

"the rural parts of County Meath have been analysed for the visual characteristics with a view of offering a clearer picture to developers and others as to the sensitivity of various categories of development in areas with differing abilities to absorb development. The extent of these areas is depicted on the rural detail map".

The appeal site is located within an area designated at VQ11, rural and agricultural.

The characteristics of VQ11 areas are outlined as follows;

"These parts of the county make up the majority of its area in that they comprise of normal rolling lowland pastoral landscapes that, apart from occasional ridges or prominent areas, are not particularly sensitive."

The sensitivities are outlined as follows'

"These areas can absorb quite effectively appropriately designed and located development in all categories including masts and wind energy installations, afforestation and agricultural structures."

In the immediate valley of the Nanny River there is a reasonably large area containing plan designation VQ3 which is;

"River valleys which are referred to as follows;

Characteristics;

this area includes the valleys or corridors of rivers such as the Boyne and its tributaries up river of Navan, the Blackwater, Nanny, Moynalty, Athboy/Trimblestown River. These main river channels in the county are characterised by lowlying grassland valleys, interspersed with woodlands and demesnes.

Sensitivity;

This area is very sensitive to all categories of new development, particularly housing, large agricultural structures, extractive industries, coniferous afforestation and masts or other tall structures which impinge from outside the visual envelope along the valley. There are a large number of views and prospects that are sensitive, including views from bridges."

To the north of the site along the ridge of Red Mountain, immediately to the west/south west of Donore, is the southern extremity of area VQ2; Lower Boyne Valley.

Characteristics are as follows;

"This area includes the River Boyne between Navan and Drogheda and the Bru na Boinne Archaeological Park including the World Heritage Site, this area is of regional to international amenity and heritage importance and contains areas of the highest visual quality in the county, including wooded river valleys, framed by castles and demesnes and archaeological sites and the Boyne Navigation Inland Waterway."

Sensitivities;

These areas are moderately sensitive to developments especially close to the river channel where the unspoilt character of such rivers would be impinged upon for anglers and walkers and where there would be an unacceptable risk to water quality".

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Volume 3 of the Meath County Development Plan relates to conservation. The introduction gives the contextual background to the items listed in Volume 3.

Section 3 relates to views and prospects (page 33). VP16 includes 13 townlands in which views are located. All of the views are to the north across the Nanny Valley towards Red Mountain. The appeal site is in a central position from a number of the viewing positions.

The Bellewstown Development Plan, Volume 2 of the County Development Plan at Section 4.3.0, refers to a specific objective "To protect and preserve the scenic views as designated in the Development Plan".

Section 4.1.2 of the Bellewstown Development Plan relating to heritage and amenities states "Bellewstown is located on the southern edge of the Boyne Valley Amenity Area and the ridge it is located upon is dominant in the Meath landscape".

Notwithstanding the developers and indeed the planning authority having full knowledge of the location of the site in a central position in a view listed in the County Development Plan, and between areas outlined in the area of visual quality map as VQ2 and VQ3, these facts were not considered by either party as an exclusionary factor in considering locating the proposed development on the appeal site.

The appeal submissions detailed the position of the site within a listed view and in an area considered by the third party appellants to be of considerable amenity value. They see this as a significant locational drawback.

The inclusion of VP16 in the County Development Plan, in my opinion, constitutes a highly significant and primary exclusionary factor in terms of locational criteria for the proposed development.

The location of the site within a central position in a listed view is considered in detail in the visual appraisal section of this report.

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Basic regional locational policy and exclusionary criteria, referred to in the North Eastern Regional Waste Management Plan, were not adequately addressed initially by the developers or subsequently by the planning authority, in consideration of the proposal.

Meath County Development Plan;

This section of the assessment considers county plan policy on;

- (a) waste management,
- (b) infrastructure provision and location,
- (c) industrial location.

(a) Waste Management

Policy relating to solid waste disposal in County Meath is set out in section 2.7.3 of the County Development Plan. Critical elements of policy are to;

"embrace the recommendations of the Council's consultants in relation to recommended options for waste disposal and management.

be informed and have due regard to the Regional Waste Management Plan"

While the Council's consultants did not consider that the provision of thermal treatment facilities for County Meath was a viable option, the North Eastern Regional Waste Management Plan not only considered such treatment to be required but outlined four possible locations for such facility. One location was in each of the four counties covered by the region. As noted above none of these locations were considered in any detail in the proposed development.

The Meath County Development Plan bases its waste management strategy on four core tenets. The first two relate to waste minimisation and recycling.

The third is the development of waste handling process. Of major importance this includes;

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"The consideration of thermal treatment to reduce bulk and landfill needs while yielding an energy return."

The fourth is the provision of residual landfill capacity for the short, medium and long term. This capacity is to be provided at strategic suitable locations.

The planning authority not only considered thermal treatment in the proposed development but decided to permit it.

The fourth tenet has been largely met in the short to medium term with the provision of the landfill site at Knockharley. It is of note in relation to this facility that the County Development Plan contained a specific reference to the provision of a landfill site at Knockharley.

Although thermal treatment reduces waste bulk, residual waste requires landfill unless it is to be used otherwise, as for instance as a road fill material. Landfill is the most likely treatment of residual waste. Amounts of such waste are not inconsiderable with an input of 150,000 tonnes of untreated waste and an output of 38,000 tonnes of thermally treated residue per annum. Approximately 10% of this would be hazardous waste.

There is no hazardous waste disposal capacity within the State to cater for the amount of such waste generated by the proposed development. It would therefore be required to export such residue.

While thermal treatment reduces bulk and therefore landfill requirements, it nonetheless sets up a new requirement to dispose of hazardous residues, not presently required or available nationally.

Section 3.5.4 of the County Development Plan also relates to solid waste.

The section also refers to the opening of Knockharley landfill.

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It also reiterates the four core tenets of waste management strategy detailed in section 2.7.3, referred to above. The reason for this reiteration is unknown however it is most likely included twice in error.

Section 3.5.4 is however affirmative in relation to waste transfer stations. The planning authority would have regard to the impact of such development on residential areas in terms of visual amenities and the capacity of the road network.

Having regard to the fact that a specific plan objective to site a landfill at Knockharley was included in the plan, it was not necessary to refer to planning control elements such as referred to in relation to waste transfer stations.

As the County Development Plan only refers to the consideration of thermal treatment, it was also presumably not seen as necessary to outline planning control elements as in the case of waste transfer stations.

(b) Infrastructural Provision;

Section 2.7 of the County Development Plan relates to strategic infrastructure. The provision of infrastructural investment is seen as being a critical component of development plan objectives for Meath. Without environmental means of disposing of solid waste the principles of sustainable development cannot be met.

While section 2.7.3 of the Plan and 3.5.4 of the Plan relate to solid waste the only area in which waste disposal is referred to in a strategic infrastructure sense is in section 2.7.3 in which reference is made to the disposal of solid waste in an environmentally sound way.

Infrastructure, as referred to in the Plan relates to; transportation (2.7.1) including roads and public transport.

(2.7.2) water services.

(2.7.3) solid waste disposal.

(2.7.4) education, social and sporting infrastructure

There is considerable detail provided in the development plan relating to road and water services. The county is divided up into five areas, each one of which is covered by an infrastructure map. The relevant map related to the appeal site is the Slane area.

The map outlines water infrastructure, including bore holes, existing water treatment plants, reservoirs, water intake works and water treatment plants.

It also outlines waste water infrastructure including existing wastewater treatment plants, such plants with additional capacity, proposed waste water treatment plants, new wastewater treatment plant with additional capacity, new/improved/proposed upgrade of waste water treatment plant and new/improved/proposed upgrade of waste water treatment plant with additional capacity.

The map also indicates road proposals for Dunshughlan/Navan route options. It also indicates Navan bypass options.

In relation to road infrastructure it indicates national road upgrade, proposed bypass, proposed relief road, regional road upgrade and roads under construction. It also indicates motorway and proposed motorway lines. It indicates rail infrastructure, electricity lines, quarries, sand and gravel pits, limestone reserves, gas lines and mining areas.

There is no reference to solid waste disposal in the infrastructure map for the Slane area. This is in spite of the fact that it is elsewhere there is specific reference to the provision of a landfill site at Knockharley. There is no reference to bring banks, recycling facilities, waste transfer stations, landfills or thermal treatment facilities. Having regard to the detail contained in figure 10.1 of the North Eastern Regional Waste Management Plan, referred to above, which indicates proposed waste facilities, on a regional basis, there is a

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complete lack of reference to such facilities in the rural details maps of infrastructure, which are part of the Meath County Development Plan.

The planning authority maintain, very strongly, that the proposed development constitutes a major item of infrastructure provision, similar to a waste water treatment plant or a water treatment plant. The absence of any reference to the provision of solid waste treatment facilities on the infrastructre maps in the County Development Plan would not support that contention. Moreover there is little or no reference to such provision, in the written statement, apart from the Knockharley landfill.

(c) Industrial location;

The planning authority description of the proposed development, in land use term, is industrial. The proposed development is also described, by the third party appellants as an industrial development of regional, if not national proportions. It is therefore, in my opinion of considerable importance to assess the proposed development relative to the industrial location policy of the Meath County Development Plan.

Strategy relating to industrial location is outlined in section 5.2 which states inter alia;

"In considering population strategies for these centres, if the premise of balanced settlements is accepted, having regard to the principles of sustainability, Navan and to a lesser extent Trim and Kells, are naturally selected for future industrial expansion. Other centres pose servicing difficulties unless major infrastructural investment is made, particularly in the south Meath fringe."

The amount of lands zoned for industry in the development plan is referred to specifically in section 2.6.4 of the Plan as follows;

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"Of the 298 hectares (736 acres) of undeveloped industrial lands in the county, 35% lies in Navan, 31% in Drogheda environs and 21% in Laytown. Secondary pools of lands are at Ashbourne, Trim and Duleek. In relation to Duleek it should be noted that industrial development is presently occurring on lands located to the east of the town, approximately 2 kilometres from the appeal site.

The Plan continues;

"The availability of development land and services place Navan in a strong position to gain population in the short term. In the longer term, water supply and road/rail infrastructure will become critical constraints.

A high proportion of present development land lies in east Meath in a part where servicing constraints associated with the Drogheda sewerage scheme which are in the process of being overcome. This region is well place in land supply terms to form part of the Dublin/Belfast economic corridor."

Industrial development is further referred to in paragraph 3.2.3 in relation to the overall settlement strategy. This clearly sets out the objective of the development plan to locate employment type proposals in areas identified for employment and industrial uses in designated development centres. Of considerable importance in relation to the proposed development is the following part of section 3.2.3;

"Whilst it is accepted that there are sites suitable for industrial or small business type activities in rural areas, such locations will only be considered where these activities serve the needs of rural and local communities or where they are considered to have locational requirements necessitating a rural context."

It could not, in my opinion, be argued that the proposed development would serve the needs of a rural or local communities. The only part of section 3.2.3 which may be applicable to the proposed development is that relating to locational requirement necessitating a rural context. In this regard the planning authority, and indeed the developers, concluded that the proposal constitutes

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infrastructural provision, while at the same time being a large scale industrial unit. It is the linking of the infrastructure requirement with the industrial use, which, in the opinion of the planning authority, renders the proposed development acceptable in a rural context. This is the basis on which the planning authority considered the proposal acceptable and generally in compliance with the industrial location strategy of the development plan.

If it is accepted that the proposed development constitutes infrastural provision it must be viewed in the same context as the provision of water supply, waste water treatment, roads, electricity supply, gas supply etc.

Water treatment plants are located proximate to populations to be served. The same applies to waste water treatment plants. Road improvements and new roads are carried out where required. Electricity power lines and gas lines are provided in accordance with a grid supply network. Each of the above items of infrastructure have specific locational requirements. The provision of a regional thermal treatment plant does not have the same contextual requirements. The third party point, reiterated on several occasions, correctly, in my opinion, outlines the proposed development as being relatively footloose in locational terms. Obviously there are site user requirements as well as considerations of proximity to large areas of population and distance factors. However it could not, in my opinion, be accepted in land use planning terms, that the proposed development has a locational requirement necessitating a rural context.

The basic land use point made in the third party appeal submission is, in my opinion, a valid and overriding one. This is to the effect that the site is not a designated development centre and furthermore, that it is not zoned for industrial development. The lands are in agricultural use, within a mainly agricultural area.

It is of note that Section 3.2.3 of the County Development Plan relating to Industry and Employment contains as an objective "promoting the location of light industrial uses including transport, logistics and distribution centres or office campus uses to designated development centres including Ashbourne,

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Athboy, Dunglaughlin, Dunboyne, Duleek, East Meath, Oldcastle, Nobber". The planning authority therefore as an objective of the Plan promote light industry on zoned land in Duleek, approximately two kilometres from the appeal site. The proposed development could not be considered as light industrial in nature.

Section 12.2.7 of the Duleek Town Plan relating to industry and employment states as an objective in relation to zoned industrial land that "It will be an objective of the planning authority to ensure that such lands are developed to a very high standard given their high visibility". The visibility factor of the appeal site is far greater. Moreover the industrial zoned lands in Duleek do not lie within a view listed in the County Development Plan, unlike the appeal site.

From an industrial location viewpoint the proposed development fails in relation to its location in a rural area, outside a designated development centre, on land not zoned for industrial development. The proposal also fails to meet the industrial land use criteria outlined in the development plan relating to rural areas.

The developers point to the fact that as the site is not zoned, for any use, industrial development is therefore acceptable in land use terms. This somewhat curious argument, if accepted, in relation to land use planning, would permit any type of development on unzoned land, while accepting that a variety of uses are excluded from zoned lands. The categories of permitted, open for consideration and not permitted, in relation to zoned lands refer only to such land. They could not, in my opinion, in any logical way, be applied to unzoned land. They are the refinement of land use relating only to zoned land and therefore not applicable to unzoned land.

Another point of particular note in relation to the infrastructure provision argument, heavily relied upon by the planning authority in their consideration of the proposal, is the fact that no reference whatsoever, relating to the location of a thermal treatment facility is made in the development plan, whereas the rural

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detail infrastructure maps of the development plan outline the objectives of the planning authority in relation to the provision of new infrastructure.

I consider that the proposed development is at serious variance with the Meath County Development Plan and indeed the North Eastern Regional Waste Management Plan in relation to the location of a thermal treatment plant. I furthermore consider that the planning authority analysis of the proposal as constituting an item of infrastructure similar to a water treatment plant or a waste water treatment plant makes no allowance for the relative footloose nature of the proposed development, not only at a county level but also at the regional level. Finally I consider that the proposed development is not compatible with the several policies and objectives relating to the location of industry, as set out in the County Development Plan.

Land use/spatial context;

Contextual factors already considered include the various waste management studies carried out in the north east region, including the adopted North East Regional Waste Management Plan and the Meath County Development Plan.

The Greater Dublin Area includes the counties of Meath, Kildare and Wicklow, as well as the four Dublin authorities. The Strategic Planning Guidelines for the Greater Dublin Area therefore affect County Meath and include the appeal site and surrounding areas.

Having regard to the location of the site within the North Eastern region for waste management purposes and within the Greater Dublin Area for strategic planning purposes, County Meath is in somewhat of a different category to the remaining three counties in the North Eastern region. In this regard it should also be noted that Drogheda is included within the Greater Dublin Area, for the purposes of the Strategic Planning Guidelines.

The basic land use strategy for the Greater Dublin Area is set out in the Guidelines. Of particular note in this regard is the location of the appeal site within the area described as hinterland within the Guidelines. This area has been designated within the Strategic Greenbelt Area, covering the vast majority of the hinterland.

In land use planning terms, the third party appellants place considerable weight on their assertions that as the site is located within a Strategic Greenbelt, industrial development, such as proposed on the appeal site, is precluded. The developers' and the planning authority's position is somewhat the contrary as they both consider that the Strategic Planning Guidelines, particularly the amended guidelines specifically refer to the requirement, by each planning authority, within the Greater Dublin Area, to outline the extent of the strategic greenbelt.

Map No. 2 of the Strategic Planning Guidelines outlines overall strategy. In this regard the appeal site is located within a strategic greenbelt however as noted by the developers and the planning authority a considerable number of reasonably sized

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settlements, including for instance Duleek, are located within the Strategic Greenbelt Area.

Page 102 of the Strategic Planning Guidelines states inter alia;

"A fundamental principle of the strategy is the concentration of development into identified development centres in the hinterland. This strategy implies that development elsewhere should be primarily to meet local, rather than regional needs.

Land uses in the strategic greenbelt areas will, therefore, be primarily rural and include agriculture, forestry and similar activity. Leisure and recreational facilities, especially those requiring extensive areas of land can also be accommodated in these areas. Other forms of development including housing and employment activities, should be restricted to local needs only."

Strategic greenbelt areas are referred to in page xii of the Guidelines as follows;

"Strategic greenbelt areas should be identified in the appropriate development plans to protect areas outside the development centres from excessive development."

Page 102 of the Guidelines further states, in relation to Strategic Greenbelt Areas;

"It is, therefore, proposed that strategic Greenbelt areas be identified in the appropriate development plans. Land use within these areas should be restricted to that compatible with the objectives of concentrating development into the metropolitan area and the development centres in securing a clear distinction between urban areas and rural areas."

The Meath County Development Plan links into the Strategic Planning Guidelines for the Greater Dublin Area in sections 2.6.2 and 2.8.3.

Of note in relation to section 2.6.2 is the following;

"The primary development centres would be separated from each other and the Metropolitan area by extensive strategic greenbelts devoted to agriculture and similar uses within which development needs would essentially be locally driven.

It is intended therefore that this development plan should set itself the task of implementing the Guidelines as they apply to County Meath. Key issues that will arise therefore relate to:

protection of the countryside

framing of appropriate infrastructural needs with a particular emphasis on public transport."

Section 2.8.3 relates to development of a greenbelt policy as follows;

"To facilitate the expansion and development of the towns in the county while protecting rural areas from uncoordinated rural sprawl, it is proposed to designate greenbelts responsive to the Strategic Planning Guidelines. Such greenbelts would protect vulnerable but high quality agricultural land whilst affording opportunities for the development of leisure and recreational pursuits. These policies would protect fragile landscapes and create visual breaks between urban areas such as between Rathoath and Ashbourne or Clonee and Dunboyne."

The third party position in relation to the location of the site within what is considered to be strategic greenbelt is that the proposal is at variance with the Strategic Planning Guidelines as they relate to the strategic greenbelt areas. It is considered by the third party appellants that the proposal to build a large industrial development on unzoned lands outside a defined and designated development centre is in conflict with the greenbelt strategy.

Greenbelts should define urban areas and provide a break and a clear distinction between urban and rural areas with clear visual breaks between both areas.

The developers consider that the proposed development is acceptable as the strategic greenbelt areas outlined in the Strategic Planning Guidelines have not been indicated

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in the County Development Plan, as referred to in section 2.8.3. This is more or less the position adopted by the planning authority. The third party position relative to this argument is that if that is the case the proposed development is at best premature.

The planning authority have within the very recent past outlined areas of greenbelt in south east County Meath at Stamullen and at Clonee. The stated purpose of these greenbelt designations is to provide a demarcation and clear visual breaks between expanding urban areas. This is fully consistent with section 2.8.3 of the Plan.

The urban development policies of the Meath County Plan relating to Drogheda Environs to the east and to Duleek to the south west have been clearly outlined in the County Development Plan. In relation to Drogheda Environs the alignment of the M1 Motorway constitutes both a visual and physical barrier to the spread of development to the west, and this is clearly accepted in the environs plan for Drogheda in which all of the development plan land is located on the eastern side of the M1 motorway.

The eastern extremity of the development area for Duleek is clearly indicated in the development plan.

The approximate 6 kilometres separating the designated development areas of Drogheda Environs and Duleek provides a quite extensive physical separation and a very clear distinction between both urban areas. The fact that there is a large scale industrial usage in the Platin cement works located to the east of the appeal site, does not vitiate the open rural character of the intervening area.

If one accepts the planning authority argument in relation to the designation of greenbelts, as referred to in section 2.8.3 of the development plan, then I consider the third party position that the proposed development is, at least, premature, to be the correct one. However having regard to the distance involved between the two designated development areas of Drogheda Environs and Duleek, there is not, in my opinion any apparent land use reason to anticipate that the area between the two designated development areas would be anything other than strategic greenbelt. Moreover that designation would be fully consistent with section 2.8.3 of the development plan which seeks to protect rural areas from uncoordinated rural sprawl,

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protect high quality agricultural land, afford protection to the landscape and protect the quite extensive visual break between Drogheda and its fully developed environs, and a fully developed Duleek.

The submission of the planning authority in relation to the strategic greenbelt is, in my opinion, somewhat disingenuous particularly having regard to the distance between Drogheda Environs and Duleek. In this regard the separations involved in the planning authority's proposed greenbelts at Stamullen/Gormanstown and at Clonee/Dunboyne certainly point to the need to adhere to somewhat rigorous demarcation as between development areas. (Meath County Development Plan 2001 (Variation No. 4) Draft). However this does not apply in relation to Drogheda Environs and Duleek.

I therefore conclude that the site of the proposed development not only presently constitutes part of the strategic greenbelt, as referred to in the Strategic Planning Guidelines, but that it would continue to be located in the Strategic Greenbelt, notwithstanding studies carried out by the planning authority in the designation of greenbelt responsive to the Planning Guidelines particularly having regard to the considerable separation distance between the two settlements/development areas, referred to above.

Of considerable note in relation to the proposed development is its location within the only county covered by the North Eastern Regional Waste Management Plan, which is also affected by the Strategic Planning Guidelines for the Greater Dublin Area. Moreover Meath is the only one of the four counties covered by the Regional Waste Management Plan in which strategic greenbelt designation is a statutory requirement. This fact is of considerable importance having regard to the regional function of the proposed development.

Reference to the Strategic Planning Guidelines for the Greater Dublin Area by the planning authority, was made with particular reference to a recent High Court Case, the outcome of which was that Meath County Council, while having regard to the Strategic Planning Guidelines for the Greater Dublin Area, were not bound by the Guidelines. This judgement is noted, as is the submission of the planning authority in

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relation to it. It is also noted however that the development of a greenbelt policy is specifically referred to in section 2.8.3 of the development plan as noted above. The planning authority is bound by this section of the development plan in relation to the implementation of the stated greenbelt objective in which it is proposed to designate greenbelts, for the reasons indicated in the Plan and referred to earlier.

Variation No. 4 of the 2001 Meath County Development Plan was published on 16/12/2002. The proposed variation relates to;

"The incorporation of a Greenbelt Strategy into the Meath County Development Plan as recommended in the Strategic Planning Guidelines for the Greater Dublin Area (1999) and providing for protection of areas outside the identified development centres from excessive development and to secure a clear distinction between urban and rural areas."

SITE SELECTION:

This important aspect of the proposed development was the subject of in-depth questioning by the third party appellants during the course of the oral hearing. These questions established the sequence of events which led to the lodging of the planning application.

The appeal site was selected by Mr. J. Ahern of the development company. Mr. Ahern stated that he had wide experience of site selection however he had not previously been involved in the selection of a site for a thermal treatment facility.

A number of sites have been looked at by him. There were no professional planners advising him at this stage.

As a result of cross-examination it emerged that Mr. Ahern alone had been involved in initially deciding that land, zoned for industry, which covered a large area within the region, was not suitable for the proposal. Assessments of that land were carried out by Mr. Ahern in relation to all of the impacts of the proposed building on such

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land. The conclusion which he arrived at was that the proposal was not suited to industrially zoned land, particularly in Ardee. However no site investigation had been carried out on any of that land. Other land had been looked at in Drogheda, however it was considered by Mr. Ahern to be unsuitable.

It is of note that the developers pointed to the fact that they were not required to look at alternative sites. The third party point in this regard is that the developers did not consider alternatives in any structured way and that inferences had to be drawn from that fact.

Another point of importance raised by the third party appellants was the fact that the developers did not discuss the location of the proposed development on the appeal site with the planning authority. This, in my opinion, in very unusual having regard to the scale of the proposal and its cost.

While Mr. Ahern stated that he spoke to the Area Planners in Louth County Council as to the availability of lands suitable for the project, he had not sought any professional planning guidance. At that stage sites were not looked at in any detail.

It is of considerable importance to note that no sites zoned for industrial development were examined in Dundalk at any stage.

A site in Ardee had been looked at. While this was zoned for industry, it was considered to be too small and not suited to the traffic generated by the proposed development. This assessment had been made by Mr. Ahern.

From the evidence submitted at the oral hearing, subsequent to cross-examination, it does not appear that sites in Cavan or Monaghan were examined. It does not appear that any other site in County Meath was examined.

The initial process of site selection was carried out by an individual.

Having decided on the site of the proposed development the development company employed a further company, Project Management, to advise on the preparation of an

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environmental impact statement. This company did not have in house land use planning advice. The major decisions as to site selection and outline development brief had been well advanced prior to the involvement of town planning advice.

The method by which the site of the proposed development was initially selected is perhaps somewhat explained by the fact that the land is not in the developers' ownership. Presumably ownership of the land by the developers is contingent upon the requisite planning permission and E.P.A. licensing.

The proposed development was discussed with the planning authority prior to the application being submitted. It does not appear that the location was raised as an issue by the planning authority. In this regard the planning authority would have been conversant with the process of site selection in relation to waste management, with particular reference to the designation of a landfill site. The planning authority chose a site for a land fill at Knockharley, which is several kilometres from the appeal site. An environmental impact statement had been prepared for that site. This statement, in section 3, sets out site selection and includes site selection criteria, description of site selection process, comparative evaluation of alternative sites and a detailed evaluation of the two sites considered to be most suitable as a result of the site selection process. This was carried out fully in compliance with the Environmental Protection Agency draft manual on landfill site selection, which, is a template to be used in the selection of sites for such facilities.

During the course of the oral hearing and indeed from the written submissions, it has not emerged why the detailed site selection process as set out in the E.P.A. draft manual was not used either directly or indirectly. This aspect of the proposed development does not appear to have been queried by the planning authority at any stage. The only explanation available in relation to site selection appears to be the statement by the developers that there was no statutory requirement to examine alternative locations.

An indication of the developers' approach to site selection was given, during the course of the oral hearing in statements made by Mr. Ahern in reply to cross-

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examination. The following statements are, in my opinion, of considerable relevance, in this regard.

"The proposed development would not be out of place on the appeal site when viewed against the quarry and the cement works. This is why the site was chosen. The developers have never said anything but that.

The developers wanted to find a site that the building would fit into.

The Ardee site was suited to the proposed development from a traffic point of view however this was only one criterion.

Sites to the east and the west of Drogheda were examined by developers. There was a number of sites with which only one or two criteria were examined, however no site was found which complied with all of the developers's criteria relating to site selection.

One did not need to be a planner to know that the proposed development would not have fitted into the site in Ardee which is zoned for industrial development."

The decision of the planning authority to grant permission obviously accepts that the site of the proposed development is suited to the proposal. Despite the fact that a considerable amount of additional information was requested by the planning authority in dealing with the application, no information was sought in relation to possible alternative sites.

I consider that the concerns expressed by the third parties in relation to site selection were borne out by the evidence of the developers during the course of the oral hearing. It is more than a little surprising that the various studies carried out at county and regional level in relation to waste management and also the North Eastern Regional Waste Management Plan, do not appear to have been considered in detail in relation to the site selection process. As noted above the template for site selection in relation to waste management had already been made available publicly by the planning authority in relation to the Knockharley landfill site.

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While it has been argued by the developers that the European Communities (Environmental Impact Assessment) (Amended) Regulations, 1999 S.I. No. 93 of 1999 requires only "An outline of the main alternatives studied by the developer", the process of site selection was unsatisfactory.

LOCATIONAL APPRAISAL;

Notwithstanding the shortcomings in relation to site selection, referred to above, the location requires appraisal under a number of headings. These relate to regional appraisal, proximity principle, gravity modelling, and land use, including permitted development, in the area.

Regional Appraisal;

Having regard to the function of the development as a regional facility the location obviously has to be considered on a regional basis. As noted above the site, nor any location within 10 kilometres did not feature in the regional and county studies carried out relating to thermal treatment. The site is located a considerable distance from the nearest one referred to, which is Navan, at approximately 10 kilometres from the site. The remaining three locations referred to earlier at Carrickmacross, Kingscourt and Dundalk, are a considerable distance from the site.

The site is located in the south east of the region. In geographical terms it is well off centre. The site is however located on a regional route. The location is close to the M1 motorway with interchange access. It is also proximate to the second largest urban area in the region, Drogheda.

While the North Eastern region is characterised by a high level of dispersed rural settlement, nonetheless it contains two large towns, Dundalk and Drogheda and a series of smaller towns, particularly in Cavan and Monaghan.

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Navan is a major development centre, so designated in the Strategic Planning Guidelines. Dundalk, Drogheda and Navan will be the major urban centres in the region and will therefore account for a considerable amount of waste generation. It was presumably for this reason that Ardee was examined in some detail by the developers, as the possible location for the proposed facility. In this regard the general agreement between the parties who attended the oral hearing is that the centre of gravity of the region was located in the vicinity of Ardee, in terms of geography, population and major access routes. The developers point in relation to Ardee as compared to the appeal site, is that the distance between both locations is not great and the availability of the M1 is a major consideration in relation to travel time as opposed to distance.

I consider that the site of the proposed development is considerably off centre relative to the region. A location in the vicinity of Ardee would figure highly as a central place relative to the region.

Proximity Principle;

EU framework Directive 91/156/EEC, at article 5, requires that member-states should establish a network enabling waste to be disposed of in one of the nearest appropriate installations and by means of the most appropriate methods and technologies to ensure a high level of protection for the environment and for public health. Having regard to the proposed development of a thermal treatment facility the proximity principle constitutes, in my opinion an important locational element. In this regard the site of the proposed development, is not particularly well placed to fulfil a regional function. Spatial analysis would point to a location well to the north/north west, and not located in the south eastern sector of the region. In this regard two of the locations mentioned in the regional study, Kingscourt and Carrickmacross, are relatively proximate to each other and relatively proximate to the centre of the region, in geographical terms. A triangle formed by both of these towns and Ardee, being somewhat equidistant from Dundalk, Drogheda and Navan, could provide a location for a thermal treatment plant consistent with the proximity principle, in the regional context.

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A disadvantage with the appeal site is its relative proximity to Fingal and its relative isolation from a major part of the North Eastern region, particularly the western/north western part of it.

I therefore consider that the location of the proposed development is not well placed to serve as the sole thermal treatment facility for the region, having regard not only to spatial considerations but also to population centres.

Gravity Modelling:

This aspect of the proposed development was covered in some detail in the environmental impact statement. It also constituted the subject matter of a considerable amount of cross-examination in the oral hearing.

The major element for consideration in relation to gravity modelling, carried out by the developers, relates to tonnes relative to kilometres. This is based upon population distribution, particularly towns. In this regard the developers did not include towns containing a population less than 1,000. It also disregarded the distribution of rural population. This was described by the third party appellants' side, at the oral hearing, as a simplistic analysis of regional waste generation relative to the distribution of major population in the region.

I consider that the exercise carried out by the developers constitutes a reasonable attempt at providing a regional analysis for the purposes of locating the proposed plant. While it can be argued that the level of detail provided by the developers' analysis is insufficient, nonetheless is does, in my opinion offer a reasonably robust regional analysis. It also provides results capable of comparison as between the various locations examined.

The location of the proposed development scored highly in the gravity modelling analysis carried out by the developers. In general I consider that this is a reasonable outcome from the inputted data. There is however in my opinion an over-reliance on urban population location and a considerable understatement of rural population and in particular towns of less than 1,000 population.

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Ardee is the location most suited to the proposed development from the gravity modelling analysis carried out by the developers, however the appeal site, as noted above also ranks highly in that analysis. The disparity is not that great as to rank Ardee considerably higher than the appeal site.

The gravity modelling analysis is obviously not site specific rather looking in general at locations such as the Drogheda area, including the appeal site, Dundalk, Ardee, Navan, etc.

In overall regional terms a location proximate to the M1 will score highly, as it can avail of national transport infrastructure the M1 motorway running north/south through the eastern sector of the region, which is its most densely populated area.

Land Use:

The predominant land use within the general area is agricultural with permanent pasture and a considerable amount of tillage particularly to the south of the site. Notwithstanding other uses, the area is agricultural in character and the site constitutes a locally significant area of pasture land, presently used as grazing for cattle. The proposed development would obviously totally change the use of the site from low intensity agricultural to relatively high intensity industrial.

Apart from the predominant agricultural usage of land in the area the second most extensive land use is the cement works at Platin and its supply quarry. The very extensive limestone reserves in the area are being depleted at a considerable rate. There is a very extensive area of worked out quarry, as large scale quarrying operations have been in progress for the last 30 years approximately.

An extension in quarrying activities will commence within the next several years as a result of a permission granted for a large scale quarry extension, located to the west of the existing quarry and to the north of the appeal site, across the adjoining railway line. The quarry extension is into lands presently used for agricultural purposes.

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The Platin cement works is an extensive user of land. This large scale industrial plant, which is also established a considerable number of years, is a major supplier of cement to the building industry.

In land use terms both the quarry and the cement works are locationally fixed to the resource. Expansion of the quarry is a function of the exploitation of the limestone reserve as is the continued operation of the cement works. The cement works were expanded subsequent to a permission granted by the planning authority in the early 1990's. Both the quarry and the cement works are long established uses the continuation and development of which are directly related to the resource.

There are 5 dwellinghouses located within the immediate vicinity of the appeal site. One of the houses is located immediately adjoining the North Eastern boundary of the site. Two houses are located directly across the R152 from the site. The remaining three are located within 150 metres of the site, to the east. There are a further four dwellinghouses located approximately 300 metres to the north west of the site, access to which is by means of a minor county road located due west of the site and within approximately 100 metres of it.

There are two small commercial premises located on the southern side of the R152, within approximately 150 metres of the site.

To the rear of one of the dwellinghouses directly across the road from the site there is a commercial premises containing a building, floor area approximately 200 square metres.

There is a large 110 KV electricity substation located approximately 100 metres to the east of the site.

While there is a mix of land uses in the area, as noted, the predominant use is agricultural. Although the quarry occupies a large land area the level of activity, within the quarry, is generally confined to the working face.

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Permission exists for the erection of an electricity generating station, on the southern side of the R152, directly opposite the site. The site of this proposed development is extensive, covering several hectares. The scale of the proposed buildings are also extensive. Access to the proposed power station is opposite the North Eastern corner of the appeal site, onto the R152, with the two site access points being approximately 150 metres from each other.

The cement works is a major industrial activity. The proposed power station is also a major industrial activity.

The proposed development constitutes a major industrial use of the appeal site. The area of land covered by the cement works amounts to approximately 20 hectares. If one includes the existing quarry and the permitted extension the areal extent of that site is of the order of 50 hectares.

The electricity substation accounts for approximately 2 hectares.

The proposed power station accounts for approximately 11 hectares. The appeal site also accounts for approximately 10 hectares.

Almost 70 hectares of land, within quite a confined area, would be either in industrial or extractive use if the proposed development was permitted. If one excludes the area of the quarry what is proposed in the thermal treatment facility is an industrial use on a site of similar size to the proposed power generating plant. This is a significant change of use of agricultural land. Together with the proposed power plant it would double the amount of industrial land. Alone it would increase it by 50%.

Having regard to the scale of the cement works and to the permitted electricity generating plant the two amount to very extensive industrial land use. Permitting the proposed development would, in my opinion, unreasonably extend the amount of land in industrial use over that existing and permitted, in a predominantly agricultural area.

In land use terms what is proposed is very extensive development. The cumulative impact of existing, permitted and proposed industrial development would in land use

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terms be grossly excessive, relative to the existing predominantly rural character of the general area. The addition of the proposed industrial usage to the area would effectively produce an areal extent of industrial land which would be quite notable. Having regard to the location of the site I do not consider that such extension is warranted in strictly land use terms.

I consider that the cumulative impact of the development taken in conjunction with existing and permitted nearby development would be grossly excessive having regard to the land use policy parameters relating to industry contained in the Development Plan.

I consider the establishment of further large scale industry, in an agricultural area, and within a confined area which already contains large scale industry, albeit resource-based, and permitted industry on adjoining land, to be inadvisable. The agglomeration of industry would be excessive and unacceptable. Its impact upon the character of the area would be to unreasonably extend industrial usage.

The third party appellants consider that as the area already contains a large industrial usage, with a further large industrial use permitted, this should result in the curtailment of further industrial use. On the contrary it is clearly the developers' position that the existence of large scale industrial use in the cement work constitutes a positive land use element in relation to the proposed development and that the presence of such industry was an important factor in deciding to select the appeal site as the location for the proposed development.

In basic land use terms the fact that the site is not zoned to provide for industrial development is highly significant. This factor was discounted by the planning authority by comparing the proposed development to water treatment or waste water treatment infrastructure. As noted earlier this line of argument is seriously undermined by the relative footloose nature of the proposed development compared to the requirement to locate water treatment and waste water treatment plants proximate or relatively proximate to the populations to be served by such facilities.

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The location of large scale development normally arises as a result of land use planning. As no land use plan exists for the appeal site, or the general area, a reason had to be adduced by the planning authority to permit the proposed development on unzoned land. This reason relies on two related points. The first point is that the amount of employment generated by the proposed development would be limited relative to the area of land contained in the site. The second relates to the scale of the development and to the fact that the use of such a large area of industrially zoned serviced land would not be an efficient use of such land.

In relation to the first point I do not consider it to be an overriding reason why a reasonably large area of agricultural land, which could arguably be located in many other parts of the region, should be required to facilitate the proposed development at this location.

The planning authority general point relating to the relatively low level of employment for such a large area of serviced industrial land is one which stands. However it is not, in my opinion, a reason to locate large scale footloose industrial development on unzoned and unserviced rural land. Moreover I am unaware of a differentiation of zoned industrial land by labour intensiveness contained in any local authority development plan. While the logic of the planning authority position vis-à-vis the density of employment per hectare, of a particular development, may be relevant to zoned land, it is not particularly germane to the location of the appeal site in a rural area. The logic of that position is that any labour extensive industry should locate in unserviced rural areas. That position is not tenable. It would also mean that industrial land use planning would only be appropriate at certain labour intensity. This is a specious argument which requires to be discounted.

Industrial development of any scale, other than that of a strictly local nature, is normally carried out on serviced land which is zoned for industry. In this regard the zoning of land for industrial purposes is a basic function of the planning authority. This is a primary requirement for industrial location. It is all the more necessary the greater the area of land involved in any particular development.

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The argument put forward by the planning authority in relation to a development of the scale proposed using up too much serviced land disregards the fact that the appeal site is not zoned for industrial development. Presumably in such circumstances the planning authority could permit development of the type and scale proposed on unserviced industrially zoned land.

For a development of the type and scale proposed, I consider it to be a basic requirement that such development be located on land which is, at a minimum, zoned to provide for industrial development. Preferably the land should be serviced with public piped water and sewerage facilities. While the site has the benefit of public piped water facilities, it is not served by a public sewer. As noted earlier the site is located in an agricultural area not zoned for development.

Having regard to the location of the site within an unzoned area, the agglomeration of industrial usage would cumulatively unacceptably impact upon the rural character of the area and in particular its location proximate to a World Heritage Site. It should also be noted that the land to the west of the appeal site approximately .5 kilometres to 1 kilometre from of it, constitutes the extended retreat area of Jacobites fleeing the Battle of the Boyne site approximately 2 kilometres to the north.

In land use terms I therefore do not consider that the location is suited to extensive industrial development having regard to the existing and permitted large scale industrial land uses in the area and in particular to the cumulative impact of this development, together with the proposed development, in terms of landscape character and visual amenity.

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Visual Appraisal:

One of the main areas of third party concern relates to the visual impact of the proposed development. In this regard a considerable amount of detail has been submitted both by the developers and by the third party appellants in relation to the visual impact of the proposal. The developers prepared a series of photomontages illustrative of existing views and views resulting from the superimposition of the proposed buildings.

The visual impact of the proposed development is an area of considerable disagreement. The developers consider that the site of the proposed development, being one of the lowest within the general area, is a suitable location for the proposed development. The third party appellants consider that the proposed development by reason of its location, height, scale and mass would result in a serious injury to the visual amenity of the area.

The Meath County Development Plan provides a number of important contextual factors relating to the site. Initially the site is located within a rural agricultural area. The area is characterised by a hedgerow landscape. The site is bounded by hedgerows, which contain a number of trees. The most significant trees on the site are located in the southwestern corner, immediately adjoining the R152. This is at the proposed vehicular access point on to the site. This row of mature deciduous trees would be lost with the provision of the proposed access point as noted in one of the third party appeal submissions. At present these trees constitute the most significant visual features on the site. The remainder of the hedgerows are gapped, considerably lower than the 7-10 metre high trees in the southwestern corner or consist of trimmed hedgerows, particularly along the roadside boundary.

With the felling of the trees in the southwestern corner, the site would be largely bereft of significant landscape/screening features. Extensive berming is proposed along the roadside boundary and in the northeastern corner of the site, where it adjoins a residential curtilage. It is also of note that very extensive landscaping of the site, with the planting of trees, is proposed, particularly on the roadside boundary and on the northeastern boundary. It is also proposed to plant very large numbers of trees

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on the northeastern sector of the site, to the northeast of the proposed buildings. These landscaping proposals are intended to mitigate the visual impact of the proposed development. The mitigation of such visual impact would relate mainly to views available into the site from the surrounding area, in the immediate vicinity of the site, particularly from the adjoining roadway and surrounding lands. They do not particularly relate to other views.

As noted above the development plan contains several references relevant to the site. The most notable of these is the location of the site in the centre of V16, a listed view from Bellewstown, to the south of the site. This view is directly northwards from a number of vantage points, referred to as townlands in the listed view designation. In this regard the location of the proposed thermal treatment facility, i.e. existing ground level, is directly visible from several of the vantages points contained in V16, notwithstanding the presence of the mature trees in the southwestern corner of the site, which are directly in the line of the viewing positions contained in the development plan and the location of the proposed thermal treatment plant.

There is no doubt that the proposed thermal treatment plant would constitute a highly visible feature when viewed from several of the vantages points contained in V16. The most notable of these is from the townland of Bellewstown, from which the site is highly visible. Notwithstanding the mitigation measures proposed by site landscaping building colour schemes and profiling, I consider that the proposed thermal treatment facility would by reason of its scale, height and bulk constitute a significant landscape feature and result in a serious injury to the visual amenity of the area. This contravenes the objective of the development plan to preserve views and prospects across the site as outlined in VP 16 Volume 3 of the Meath County Development Plan 2001. Volume 3 sets out the details of various conservation, environmental and amenity designations for various areas, sites and buildings that are of environmental, historic, architectural or other interest and which deserve protection from unsympathetic development or activities which would be destructive to their integrity. It should be noted that the planning authority state, by way of introduction in Volume 3 that;

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"By protecting and conserving these features, the planning authority seeks only to maintain and nurture the cultural heritage of the county and therefore an essential part of its identity."

The visual impact of the proposed development as it relates to VP16 is, in my opinion, the most serious visual impact of the proposed development in relation to medium to long range views of the site.

While the development plan does not indicate other views of the site, as being worthy of preservation, it is of note that the site is highly visible from the southern side of Red Mountain, immediately to the south/southwest of Donore. The proposed development would constitute a highly visible feature when viewed from this location, which is on the southeastern boundary of the Boyne Valley World Heritage Site.

Reference has been made in third party appeal points, to the fact that the site of the proposed development would be visible from Newgrange. I do not consider that any part of the proposed development, including the 40 metre high stack, would be visible from Newgrange, having regard to the intervening topography of Red Mountain.

Reference has also been made to the visibility of the site from Dowth. In this case topography also intervenes to prevent intervisibility between the Mound at Dowth and the site. I furthermore consider that the proposed development, including the stack, would not be visible from Dowth.

The site is not visible from the interchange between Donore and Drogheda, as it crosses over the M1 motorway.

The proposed thermal treatment facility would not be visible from the vicinity of Duleek, having regard to topography and intervening trees and hedgedrows.

In relation to visual appraisal, the most dominant man made features in the area are those at the Platin cement works. These features consists of two large stacks/chimneys, approximately 110 metres in height. These features are visible over

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a very wide area, including from most vantage points in the adjoining World Heritage Site. There are also several extremely large reinforced concrete cement silos measuring approximately 50 metres in height. Included with it this there are several buildings. The cement works constitutes an extremely large and somewhat varied man made feature which is visible over an extremely wide area and constitutes a dominant element in the landscape.

It would appear, from the evidence submitted at the oral hearing, that the presence of the cement works constituted an important factor in the selection of the appeal site for the proposed development. Because of the visual dominance of the cement works within the vicinity consideration of the visual quality of all sections listed in VP 16 require consideration.

There can be little doubt but that the cement works adversely impacts upon the eastern sector of the listed view. The same however could not be said of the view northwards and northwestwards, towards Red Mountain. Of particular note is the separation distance between the cement works and the proposed development. This is approximately .8 kilometres. In this regard I consider that the proposed development would unacceptably diminish the visual quality of the listed view constituting a direct imposition on the view. Therefore notwithstanding the presence of the existing cement works I have no reservation regarding the direct impact that the proposed development would exert on VP16 and therefore conclude that the proposed development would be in direct contravention of the preservation of this view. Mitigation measures by way of site landscaping would do little to ameliorate the visual impact of the proposed development.

It is of note that the quality of VP16 will be further diminished if the permitted power station is constructed. The power station is in the direct line of vision available from the majority of vantage points available from VP16, with the cement works in the immediate background, forming a backdrop to the general view. The same is not the case with the proposed development. The backdrop to the views contained in VP16, across the appeal site is Red Mountain.

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In general I do not consider that the proposed development is advisable having regard to the seriously damaging impact the proposed development would have in diminishing the quality of views from the Bellewstown Ridge. It should be noted that the ridge is referred to in Volume 2 of the Development Plan section 4.1.0 as providing "spectacular views of the surrounding countryside".

Section 4.1.2 refers to Bellewstown as follows;

"Bellewstown is located on the southern edge of the Boyne Valley Amenity Area and the ridge it is located upon is dominant in the Meath landscape."

Section 4.3.0 contains specific development objectives and Objective BE2 is as follows;

"To protect and preserve the scenic views as designated in the development plan".

The photomontages presented by the developers, containing the superimposed development, in my opinion, seriously underestimate the visual impact of the proposed development from VP16.

Plumes would result from emissions from the proposed stack. These could be visible over quite a wide area, including the Boyne Valley. As the visibility of plumes would be an infrequent occurrence it is not considered that this aspect of the proposal would, of itself, constitute a significant visual impact. However the addition of a further stack to the two existing and the permitted one in the proposed power station would cumulatively result in the greater possibility of visual interruption by plume. Having regard to the visibility factor from the Boyne Valley this would be inadvisable.

The relatively high visibility factor of the proposed development from immediately surrounding areas would be considerably ameliorated with the proposed landscaping of site boundaries including the berming on the roadside boundary and on the northeastern boundary. In the medium term, over a five year period, there would be considerable lessening of direct visual impact from nearby residential curtilages. However notwithstanding the landscaping proposed I do not consider that there is

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adequate separation of the proposed development from residential curtilages such as to safeguard the residential amenity of adjoining properties.

The proposed development would bear unreasonably upon the residential amenities of the five properties, referred to earlier, with particular reference to the dwellinghouse immediately adjoining the northeastern corner of the site and the two dwellings located directly across the R152 from it. The visual impact of the proposal upon these properties would be very severe, being such as to constitute a serious injury to residential amenity.

I consider that the general activity associated with the proposed development would be such as to constitute a serious injury to the residential amenity of these properties. The separation distances between these properties and the site are, in my opinion, inadequate to protect the residential amenities of the properties. I also consider that the proposed development would cause a devaluation of the properties resulting from the diminishment of the level of residential amenity available to the properties.

Ecological Impact;

While this aspect of the proposed development is largely covered by legislation outside the remit of An Bord Pleanála nevertheless construction impacts are of direct relevance. The site is not adjacent to an area of scientific interest as outlined in the development plan. Duleek Commons is located a considerable distance from the site as noted earlier. The erection of the proposed buildings would have no material impact on the flora and fauna of the site other than the removal of a significant area of grassland.

Considerable evidence was submitted on the part of third party appellants in relation to the impact of the erection of the proposed development on the nesting of a pair of peregrine falcons. The nesting positions are outlined by the third party appellants as being in the adjoining quarry, to the north. Having regard to the submitted evidence by both parties I do not consider that a direct link has been established between the proposed development, particularly during construction and disturbance of a bird

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Traffic Considerations:

The traffic generated by the proposed development was the subject of appeal by most of the third parties. As a result considerable evidence was submitted in relation to traffic, both in written form and at the oral hearing.

Access to the proposed development is from the R152. The roadway connects Drogheda to Duleek. The junction of the R152 and the R150 is located approximately 1 kilometre to the south west.

Major road works are presently taking place with the provision of the M1 Dublin-Belfast Motorway approximately 1 kilometre to the east of the site. Interchange access, with grade separation, would provide access from the R152 to the M1. Traffic circulation in the general area would be significantly altered with the opening of the M1. There is a projected 40% decrease in the amount of traffic using the R152 when the M1 is operational.

Existing level of usage of the R152 is outlined in the environmental impact statement. The M1 would be available for the proposed development and must therefore be viewed as part of the available road network.

Level of service LC or LD would exist on the R152, with the traffic generated by the proposed development and the proposed adjoining power station. Therefore the amount of traffic which the R152 would have to cater for can be accommodated in volume terms.

The heavy commercial vehicles generated by the proposed development through Duleek is a major concern of the third party appellants. The existing quarries in the area and the cement plant already generate a considerable amount of heavy commercial vehicular traffic. It is an objective of the planning authority to provide a bypass for Duleek as an alternative to the R152, which runs through the town. Having regard to the evidence submitted to the oral hearing relating to heavy goods vehicles presently using Duleek and to the development plan objectives and policies relating to the preservation of the historic core of the town, the need to provide a

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bypass would, in my opinion, arise if the proposed development was carried out. The bypass is referenced DK1 in section 12.3.0, Specific Development Objectives, contained in the Duleek Town Plan. The bypass would connect the R150, to the south of the town, with the R153 to the west. It should also be noted that objective DK3 contained in the town plan is "To upgrade the junction of the R150 and R152 roads".

There is a considerable amount of development to either side of the R152 to the north east of Duleek, to within approximately 1 kilometre of the appeal site. This consists mainly of residential accommodation. Traffic and turning movements are also generated by a public house, a garage and by soccer pitches. There has been a strict development control regime operated by the planning authority in relation to traffic generation by proposed development to either side of the R152. This was referred to in third party appeal submissions, particularly where single houses have been refused for traffic reasons.

The planning authority considered that the proposed development is not possible from a traffic viewpoint without road improvement and traffic calming measures on the R152.

Condition No. 7 of the decision of the planning authority to grant permission requires the carrying out of road improvements in the vicinity of the site, by the developers. This includes the provision of a northbound deceleration lane from the R152 to the proposed access point. The provision of a right turning lane on the R152 for ingressing southbound traffic, and the lowering of the road surface to improve visibility adjoining the North Eastern corner of the appeal site.

A financial contribution is also required by condition no. 10 to provide for the traffic improvement measures proposed by the planning authority elsewhere on the R152. Traffic calming implies reduced speeds from the maximum permissible, which obtains at present on the R152.

The character of the R152 would be considerably altered from that of a regional road connecting a large urban area with a smaller one, to a traffic calmed road for a

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considerable distance between the access point to the cement works, to the east of the site, to the junction of the R152 and the R150.

While road improvement is required to the R152 the level of change required by condition 10, which requires a financial contribution, points to the change in character of the road resulting from the proposed development. As noted above this is required by the planning authority. If the proposed development was not to be carried out this level of intervention would not be required. It could therefore be argued that the proposed development has quite wide ranging impact in traffic terms and in road conditions.

The third party appellants consider that the level of road works require the implementation of part 8 of the Planning and Development Regulations 2001. Having regard to the planning authority level of involvement and to the works proposed, I do not consider that part 8 requires to be invoked.

The cumulative traffic impact of the Platin works, the proposed power station and the proposed development is considered by the third party appellants to be excessive. In this regard the access point to the proposed development is very close to the access point to the power station. Effectively 2 new junctions are proposed onto a busy regional road, within 150 metres of each other. One junction has been permitted, the other is now proposed.

The planning authority position that the proposed development is not acceptable without road improvement in the immediate vicinity of the site and more wide ranging improvements and traffic calming on the R152, is one with which I concur. Traffic calming and road improvement is particularly required having regard to the proximity of the new junctions permitted and proposed, the level of traffic, particularly of heavy commercial vehicles using the road and the presence of existing access points to nearby houses directly onto the R152.

Having regard to the road improvements and traffic calming measures proposed I do not consider that the traffic generated by the proposed development would result in a traffic hazard or traffic congestion.

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Construction traffic has been particularly referred to by the developers in the environmental impact statement. The construction of two large building projects in such a confined area, with vehicular access points so close, would require that the two projects not be built at the same time. This would obviously require the proposed development not to be constructed at the same time as the permitted power plant.

The planning authority require that a further condition be inserted if a decision to grant permission on appeal is made. This relates to the haul route for heavy commercial vehicles accessing the site from the west. A similar condition was included in the second schedule of the Knockharley decision. The reason for this condition is to protect educational facilities and in the interest of traffic and pedestrian safety in Kentstown Village.

Water Supply: A public piped water supply is available to serve the proposal. However the main source of supply is proposed by groundwater abstraction and rainwater storage. While water consumption would be high the site is capable of provision with a supply adequate to serve the proposal.

First Party Appeal;

Condition No. 3 relates to the origin of waste.

The developers consider that inclusion of this condition would unreasonably bear upon the operation of the development.

The planning authority consider that without the inclusion of condition no. 3 permission would have been refused.

A condition similar to condition No. 3 was included in the Knockharley appeal decision 17/125891.

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Condition No. 3 would, in my opinion, be required to control the source of waste and is therefore considered necessary, having regard to the stated intention of the proposed development, to serve the North Eastern region only.

CONCLUSION:

The assessment of the proposed development has considered all of the written submissions and the proceedings of the oral hearing, in terms of impact other than those relating to environmental pollution.

The provision of a waste management facility including a waste to energy plant constitutes a land use of regional significance. The chosen location is however seriously flawed relative to the regional function and the land use planning implications to which the proposal gives rise.

The proposed development would conflict with important Meath County Development Plan policies and objectives. These relate to industrial location, the protection of rural areas from uncoordinated rural sprawl, the preservation of views and prospects and residential amenity.

The general land use policy contained in the Strategic Planning Guidelines for the Greater Dublin Area would be seriously compromised by permitting such large scale industrial development in the hinterland area. It would also unacceptably conflict with the implementation of a green belt policy for the rural area between Drogheda and Duleek and thereby conflict with a core land use tenet of the County Development Plan.

Locating the development as proposed would preclude the provision of such a facility at a location more spatially central in the North Eastern region and one where the site did not display the several unsatisfactory land use planning factors associated with the proposed development.

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RECOMMENDATION:

I recommend that permission be refused for the following reasons;

1. Having regard to;

- (a) the location of the proposed development in a rural green belt area not zoned for development,
- (b) the policy of the planning authority as set out in the current Meath County Development Plan, to locate industrial uses in designated development centres,
- (c) the cumulative impact of existing, permitted and the proposed large scale industrial development in this rural area,
- (d) the regional function of the proposed development relative to its peripheral location in the North Eastern region,

it is considered that the proposed development would be contrary to the provisions of the Meath County Development Plan and conflict with the provisions of the Strategic Planning Guidelines for the Greater Dublin Area and would, therefore be contrary to the proper planning and development of the area.

2. It is considered that the proposed development by reason of its overall height, scale, bulk and massing would be visually intrusive in the landscape and would adversely impact on views which are listed for preservation in the Meath County Development Plan. The proposed development would, therefore, be contrary to the proper planning and development of the area.

3. It is considered that the proposed development would seriously injure the residential amenities of property in the vicinity and result in a devaluation of this property, by reason of the proximity of the proposed large industrial development to existing houses in the vicinity.

James Carroll

Senior Inspector

February 2003.

 \mathbf{CC}

THIRD PARTY AND OBSERVERS WRITTEN SUBMISSIONS:

Reference to the third party written submission relates only to the relevant parts of the submissions. In this regard issues referring to the environmental pollution aspects of the proposed development as excluded.

The third party written submissions are referred to in the sequence in which they were received in An Bord Pleanála.

Councillor S. Lynch;

An Bord Pleanála cannot permit the development when it has already refused permission to the Agri-Park development, Reg. Ref. 00.1107, on grounds of not being zoned land and on traffic safety grounds.

The site is within 1 mile of the Agri-Park development, also on the R152.

The entrance to the appeal site is at a dangerous crest of the road where a continuous white line exists and where 3 fatal accidents have occurred in recent years.

By comparison the Agri-Park development has no accident history and no continuous white line.

The appeal site is on unzoned land and not within the development boundary of Duleek.

The Agri-Park development did not constitute any health or environmental risk and yet it was refused.

The traffic generated by the proposed development will have a major impact on Duleek Village. The village is unable to cope with existing traffic.

Louth/Meath Health Protection Group;

An Bord Pleanála's Mr J. Barnes, in his report dated 25th September 2002 (relating to a proposed electricity generating station) acknowledged that the existing cement factory complex dominated a landscape of relatively high quality with listed prospects from Bellewstown Ridge and Red Mountain Ridge.

One cannot, on the one hand, designate areas for tourism and preservation, while simultaneously packing such a defined location with cement factory, electricity power plant and waste incineration complex.

At section 13.6.2 of the report of Mr J. Barnes, relating to the gas fired electricity generating station, it is stated;

"The site is not zoned for industry and notwithstanding the location of the adjacent cement factory, the area should not be considered as one which would inevitably develop as an industrial area. Assertion that the area will in any event develop as an industrial zone should be rejected."

At 13.6.3 of the same report it is stated;

"There is the possibility that a grant of planning permission by the Board for the subject development may be used as justification for further industrial development in the area. It should therefore be emphasised that the subject development is unique owing to its locational requirements."

An Bord Pleanála should not deviate from the guidance of its own inspector.

The European Commission, through its Directorate General (Environmental) is currently engaged in action against the Irish Government following upon a letter of formal notice to Ireland under Section 226 of the E.C. Treaty, stating a belief that Ireland is not in compliance with the provisions of Directive 85/33/EC on the effects of certain public and private projects on the environment. It is now inappropriate for

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An Bord Pleanála to continue to seek comfort from Section 98 of the Environmental Protection Agency Act, 1992.

P. Meade;

An Bord Pleanála should seriously consider the impact of the proposal on the rural economic life of the surrounding area.

Newgrange Growers Group;

The proposal to develop an incinerator and associated facilities is totally at variance with the wishes of the local community and that of the vast majority of the citizens of Count Meath.

Strategic resources such as agricultural land need to be protected for strategic regional and national roads.

Land value and property in the area will be adversely affected if the development is implemented. The Meath County Development Plan states that high quality agricultural land underpins a vibrant hinterland and is seen as a strategic resource. The use of such land for thermal waste treatment, where there is both zoned land and other poor quality land available is at very variance with this policy.

The location of the site close to the edge of the north-east region is at variance with the expressed policy of the planning authority on this issue as set out in section 2.6.1 of the Meath County Development Plan.

The development of a peripheral facility for regional use is at variance with the policy of minimising transport particularly where there is an existing waste disposal facility nearby at White River, and one proposed at Knockharley.

There is no established carrying capacity in respect of sanitary services. The developers have to provide their own waste water treatment facilities and use a public

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water supply. The development plan indicates that potable water should be reserved for zoned lands.

The planning authority has already identified Knockharley, some 10 kilometres west of the subject site, as a suitable landfill. This is outlined in section 2.7.3 of the County Plan. Permission has recently been granted by the planning authority and on appeal for a landfill at this site. The permission restricted the waste stream to the site, only from the north-east region. A question must be asked therefore as to the need for a second major regional facility in the Duleek area, a location which is peripheral to the region.

The County Development Plan only indicates that consideration would be given to the development of thermal waste treatment facilities.

Study of the planning authority file indicates that the planning view was that the proposal was in compliance with the regional waste management strategy, however the strategy has not been universally adopted. Therefore compliance with the regional waste management strategy could be considered premature.

Section 3.2.3 of the development plan states;

"It is accepted that there are sites suitable for industry or small business type activities in rural areas, such locations will be considered where these activities serve the needs of rural and local communities or where they have locational requirements necessitating a rural context."

The proposal does not serve the needs of either the rural or local community and from the submitted environmental impact statement does not require a rural setting.

The proposal is in material contravention of the Meath County Development Plan. The application should have been put before the members for consideration and decision. The planning authority did not do this.

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An Bord Pleanála recently refused permission for a development to Agri-Park at Bellewstown, PL 17.121102. Included in the reasons for refusal was the fact that the site was located on unzoned land outside the development plan for Duleek and that it is an objective of the planning authority to reserve the use of water supply for zoned land.

The proposal does not comply with these requirements of the Meath County Development Plan. Equity of treatment would suggest that the proposal should be refused.

Permission for a single house was refused by the planning authority on the Dunboyne/Summerhill Regional Road. One of the reasons for refusal was traffic hazard. The standard of road available at this location is superior to that at the appeal site.

Applications are refused throughout County Meath on the basis of the number of septic tanks in the area, some in areas where the density of septic tanks is lower than in Carranstown.

No detail has been submitted as to the capacity of the soil at the location to accept an effluent discharge. The probable T-value of the soil is above the acceptable limit. The underlying bedrock is Karst limestone. The bedrock has been identified as an aquifer of regional importance. In respect of effluent treatment the proposal should be refused.

The appellants are opposed to the condition imposed relating to the unrestricted working hours particularly during construction. The level of noise at 65 dBA is well above the limit set by the World Health Organisation in respect of noise.

Traffic volumes on the R152 are high. Operational speed of traffic is also high. Traffic speed would suggest that all major entrances should fully comply with the requirements of R REU 100 Design. The developers will not be able to provide an entrance to an acceptable standard. A traffic hazard would be created.

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Any junction proposal for the site should take account of the entrance to the proposed power plant which is to be located adjacent to the subject site.

Taken as a whole, the percentage sight distance greater than 460 metres on the R152 is less than 20%. The capacity of the road is 900 pcus per hour. The figure quoted by the developers is 1200. The environmental impact statement shows that background peak levels close to this amount exist at the peak hour at the moment. Traffic will grow resulting from the growth of Duleek and Drogheda.

There is a large area of land zoned for industrial and related use close to the M1/R152. Traffic growth in the north east region in the recent past is well above the national average and can be expected to grow at a higher level.

The level of service of the R152 at opening would be at best D, in the opening year. This level of service would drop with future traffic growth.

The proposal to toll the new Boyne Bridge and sections of the M50 are adopted, and the expected 30% drop on traffic on the R152, as indicated in the E.I.S., will not be realised. Traffic will continue to use the R152 as an outer bypass of the city.

A level of service of D on the R152, a route vital to the development of Duleek, in the year of opening should not be acceptable to the local authority.

The net result resulting from traffic generated by the development will be a traffic hazard to users of the receiving road. The level of service of the R152 would also be to an unacceptable level.

The heavy commercial vehicles generated by the development would damage the pavement of the R152 and reduce the life of the existing pavement. This would require repair sooner rather than later. The contribution sought by the planning authority to cover road improvement works at some 250,000 punts, to cover both upkeep and pavement repairs is totally inadequate.

The community levy should be considerably being increased.

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The majority of people on the community liaison committee should be locals.

The proposal should either be deemed to be invalid or refused.

If permission is granted all the potential risks for and losses to the community should be covered by imposed conditions. A fund to cover the very real prospects of community loss including loss to the farming and local business community is a vital requirement.

(A) M. Halpenny and F. Hughes:

(B) Mount Hanover Primary School:

This submission is the same as that submitted for the Newgrange Growers Group, referred to above. The same submission was submitted on behalf of the Board of Management of Mount Hanover Primary School.

S. Ward;

The proposal represents a large scale industrial activity. The site extends to 10 hectares and incorporates a main process building, 13,480 square metres, pump house building, 200 square metres, warehouse building, 890 square metres, administration building, 770 square metres and stack 40 metres high.

The industrial location strategy of Meath County Development Plan 2001 is clear. Industrial expansion is to take place at Navan and to a lesser extent at Trim and Kells.

In terms of overall settlement patterns, it is the strategy of the plan to direct new development, including industrial development into designated centres (paragraph 3.2.3).

The appeal site and surrounding lands are not within a designated development centre and are not zoned for industrial development. The lands are agricultural. The proposed development does not serve the needs of the surrounding local and/or rural community and the proposal has no particular location requirement that necessitates a rural context.

The proposal presents a large industrial development of regional, if not national proportions, in a rural and agricultural area not related to the needs of the rural and local community.

Construction activity of the site would be typical to that for any industrial facility. (This is a quotation from the non technical summary of the environmental impact statement at paragraphs 2.4 and 3.1.1). As such the development is typical industrial activity in a rural and agricultural area. The proposal is in material contravention of the Meath County Development Plan 2001.

The proposal displays all the characteristics of a heavy industrial development including traffic generation, extent of buildings, extent of hard surface areas, noise, dust, nuisance, heavy water consumption etc. It displays none of the characteristics of an activity required to serve the needs of a rural and local community or to have a location requirement necessitating a rural context. There is no mains drainage to serve the site and bored wells are needed to allow the development to function.

A cornerstone of the County Development Plan is the promotion of sustainable development. The development, in its location and nature is in material conflict with this cornerstone objective of the Plan. Geographically the site is located at the southeastern corner of the north-east region and all materials to and from the site will have to travel by road.

In terms of activity the proposal is a non sustainable form of development. If allowed to proceed this would actively discourage other forms of more sustainable means of waste disposal including recycling. The development represents the lazy option in attempting to deal with waste disposal.

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The preamble to the Local Government (Planning and Development) Act, 2000 states that the act is "an act to provide, in the interest of the common good, for proper planning and sustainable development".

As an example of the non sustainability of the proposal section 2.3.3 of the non technical summary to the E.I.S. states that the development is designed to treat 150,000 tonnes of waste per annum. At paragraph 2.2(f) of the non technical summary it states that 30,000 tonnes of bottom ash, 3,000 tonnes of boiler ash and 1,000 tonnes gypsum and 4,000 tonnes of flue gas cleaning residues will be produced each year. In essence the development will have an input of 150,000 and an output of 38,000 tonnes, all of which will have to go to landfills.

By the developers' own admission the development will generate over 4,000 tonnes of hazardous waste. This will have to be disposed of to a hazardous waste facility.

The proposal has a high water consumption requirement. However the site is not located in those areas designated in the development plan as locations where industries with high water consumption requirements should be located.

While Drogheda is a designated primary development centre in the Strategic Planning Guidelines for the Greater Dublin Area, Duleek is not. The countryside surrounding Duleek is certainly not. The Guidelines designate the area west and south-west of Drogheda as part of a strategic greenbelt. The extent of the Drogheda urban area and environs is very well defined with the western expansion of Drogheda being defined by the line of the Drogheda West motorway bypass. The extent of the Drogheda environs is set down in the statutory Drogheda environs development plan and incorporated into the Meath County Development Plan 2001.

No lands west of the line of the motorway are zoned for development. To allow the development to proceed would essentially lead to the physical coalescence of Drogheda with Duleek. This would be contrary to the strategies of both the Strategic Planning Guidelines and the Meath County Development Plan.

Page 'X' of the Strategic Planning Guidelines states;

"Development outside the metropolitan area and identified development centres in the hinterland should be primarily to meet local need, rather than regional needs and future employment would be located in existing employment centres.

A fundamental principle of the strategy is the concentration of development into the identified development centres in the hinterland area. This strategy implies that development elsewhere should be primarily to meet local rather than regional needs. The consequence of that strategy is that large parts of the Greater Dublin Area will require to be protected from development, other than that necessary to meet local needs. This need for protection would be greatest close to the metropolitan area between that area and the principal development centres in the hinterland area.

It is therefore proposed that strategic greenbelt areas be identified in the appropriate development plans. Land use within these areas should be restricted to that compatible with the objectives of concentrating development into the metropolitan area and the development centres and securing a clear distinction between urban areas and rural areas.

Land uses in the strategic greenbelt areas will, therefore, be primarily rural and include agricultural, forestry and similar activity. Leisure and recreational facilities, especially those requiring extensive areas of land can also be accommodated in these areas. Other forms of development, including housing and employment activities, should be restricted to local needs only."

The proposed development is fundamentally at variance with the Strategic Planning Guidelines for the Greater Dublin Area. The application site is located within a strategic greenbelt. Drogheda is a designated development centre. The plan and zoned area of Drogheda is well defined in a statutory development plan made several years after the publication of the Guidelines. The area outside the defined development centre forms part of the greenbelt.

One of the primary aims of the greenbelt strategy is to provide a clear distinction between urban areas and rural areas. The proposal by permitting a large scale

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industrial use on unzoned lands outside the defined and designated development centres is fully and completely in conflict with that strategy.

2.8.3 of the Meath County Development Plan deals with the development of a greenbelt policy. This section of the Plan only states that it is the intention of the planning authority to "designate greenbelts responsive to the Strategic Planning Guidelines". The Plan then states "such greenbelts would protect vulnerable but high quality agricultural land whilst affording opportunities for the development of leisure and recreational pursuit. These policies would protect fragile landscapes and create visual breaks between urban centres such as between Rathoath and Ashbourne, or Clonee and Dunboyne.

The County Development Plan has failed to incorporate a cornerstone policy of the Strategic Planning Guidelines which is the designation of strategic greenbelt areas. The purpose of the greenbelt is to define urban areas, to provide a clear distinction between urban and rural areas and to ensure clear visual breaks between urban areas. In all of those criteria the size of the proposed development would have to form part of any greenbelt designation in the Drogheda area.

If permitted the proposal would be located in a greenbelt area and would for this reason contravene materially the Greater Dublin Planning Guidelines and the Meath County Development Plan.

The waste management plan for the north-east region considers Dundalk, Navan, Carrickmacross, and Kingscourt, as possible locations for a thermal treatment plant. Drogheda or Duleek were not included.

The E.I.S. does not properly assess alternative sites for the proposed development.

The E.I.S. fails to deal comprehensively with hydrology, material assets, visual impacts, traffic and land use planning and emissions, creation of nuisance and elimination of waste.

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No effort is made to produce visual representation of impacts from surrounding listed views. The fact that the Boyne Valley is a World Heritage Site is given no analysis.

The E.I.S. fails to consider ground water in the context of the Strategic Development Plan.

The E.I.S. contains no details of impact of light from the 24 hour operation of a large scale industrial activity.

The environmental impact statement does not give a breakdown of types of waste to be incinerated and what is exactly intended for incineration.

The Proposed development would endanger public safety by reason of traffic hazard. The R152, at the site entrance and over almost its full length between Drogheda and Duleek has very poor vertical and horizontal alignment. It does not contain public lighting or footpaths and is characterised over the large majority of its length by a solid white centre line.

No assessment is provided as to the impact of hauling waste through the centre of Duleek. This route from the N2 and N3 would be route for the haulage of significant volumes of waste from all of the north-east of the region. Access from the N2 and N3 utilising the R150 is a line of least resistance for hauliers. Such a scenario would have disastrous effects for the amenities of the residents of Duleek.

Heavy vehicles mostly associated with quarrying already pass through the village. These vehicles endanger public safety and have a severe negative effect on the environmental quality of the village. The E.I.S. takes no account of existing and proposed quarrying activities in the area.

In considering the proposal, the local authority planner has not properly considered the development in the context of the statutory County Development Plan. Justification for the development is made by reference to the applicants' site selection criteria. This is fundamentally flawed.

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No analysis is made of the impact of the development on the settlement structure of the area, coalescence with Duleek or the impact on the village of Duleek, new zoning provisions affecting the eastern part of the village, relevant planning applications in the area, including a large proposed quarry in the Duleek area.

The Strategic Planning Guidelines for the Greater Dublin Area are not even mentioned.

The County Development Plan is a solemn environmental contract between a population and the planning authority. The content of the development plan deserves, and requires, detailed and minute consideration in dealing with any planning application. The development plan was effectively cast aside in this case. The planner had no authority or delegation to grant a permission for a development which patently contravenes, in a material way the provisions of the development plan.

In a previous appeal, PL 09.112536 for a thermal waste treatment plant at Kilcock, County Kildare, the inspector at page 61 of his report states;

"The site lies outside the development boundary of Kilcock on lands which are unzoned, but are deemed to be primarily for agricultural use as set out in paragraph 2.9.2 of the 1999 development plan. The fact that there is an outline permission for light industrial use on this site does not change the zoning and therefore, as it stands, any application for an industrial use, other than for an approval and compliance with the outline permission, would be a material contravention of the plan."

An Bord Pleanála in deciding the appeal concurred with the opinion of its senior inspector and refused permission for the development. Reason no. 1 for refusal is as follows;

"The site of the proposed development is located outside the town of Kilcock, on lands which are not zoned for industrial purposes, and where the use of the land is deemed to be primarily agriculture, as set out in paragraph 2.9.2 of the 1999 Kildare County Development Plan. The proposed development because of its industrial

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nature, would contravene materially the development objective set out in the development plan for the use primarily of the site for agricultural purposes."

The instant site is located in an area designated as rural and agricultural in the Meath County Development Plan. It is an objective of the plan to protect these areas from development other than development which services the needs of the local area. In the case of PL 09.112536, the inspector was also highly critical of the site selection procedures used, visual impact, impact on the environment and impacts on residential amenity.

In the case of PL 17.122364 a substantial mill building and associated buildings were proposed. An Bord Pleanála decided to refuse permission and attached reason no. 1 as follows:

"Having regard to;

- (a) the location of the proposed development in a rural greenbelt area remote from any major transportation route and development centre,
- (b) the policy of the planning authority in the current development plan for the area, to ensure that any large scale commercial proposal in rural areas is sustainable,
- (c) the principles of sustainable development as set out in the Strategic Planning Guidelines for the Greater Dublin Area,

it is considered that the proposed development would by reason of its dispersed and extensive geographical supply and customer base and its production output capacity, constitute a large scale regional development facility which would conflict with the provisions of the current development plan for the area and the principles of sustainable development set out in the Strategic Planning Guidelines for the Greater Dublin Area and would, therefore, be contrary to the proper planning and development of the area,."

The proposal in PL 17.122364, was for industrial development.

J.V. Farrelly:

When considering the proposal, the planning authority did so in the knowledge that, if it goes ahead, it will accommodate waste from all of the north-east region. When the members of Meath County Council discussed and approved the waste management plan, it was never the members' intention that the county manager would have the power to grant planning permission for any incinerator plant in the region. The councillors were not fully informed of the management's and the Department of the Environment's intention.

Senator F. O'Dowd and others:

The members of Drogheda Corporation passed a resolution to appeal the decision of the Meath County Council to grant permission for the proposed development.

There is a genuine fear that incineration will undermine public confidence in the safety of food both at home and abroad. The incineration of waste will seriously affect the agricultural industry.

Landfill sites would still be required for the deposit of ash resulting from incineration. The ash would require to be transported to such sites. Constant traffic to and from the site would make life unbearable for local residents and the general public travelling to and from the recycling point.

The Platin cement works is approximately 2 miles from a highly populated urban area and surrounded by many rural properties. The proposed plant would affect property values in the area resulting in a devaluation. It would reduce the prospect of attracting new residents to the area.

The proposed development would have a devastating and adverse effect on property and cause people to leave the area.

Nobody would willingly choose to buy a house in the immediate vicinity or surroundings of an incineration plant or decide to move to the area or build a house there.

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The proposal will affect tourism.

M. O'Leary and others (Stameen Residents' Association):

The location is so close to residential areas that the proposal would have a negative impact on the price of property and the housing market within the Drogheda area and outside.

There is a lack of evidence on the rate and level of traffic generated by the process. The centralised processing of waste will increase traffic to an unsustainable level.

P. Dowling:

The proposed development with its chimney, will set a precedent for other similar industries to be located at Duleek, to join the present industrial development at the Irish Cement factory, Platin. This will lead to a total rezoning of this area into a heavy industrial area. Waste is proposed to be incinerated, not thermally treated.

Carranstown residents Group:

The group consists of a number of residents living in the immediate area who would be seriously affected by the proposed development. The location so close to residential and agricultural property would represent an inappropriate land use at this location. It would have serious and significant consequences for the agricultural use and residential amenity of adjoining property and would significantly devalue these properties.

Third party appellants' houses are located to the south and west of the site. Access to the site is in close proximity to some of these houses and they would be directly affected by the proximity of the development.

The traffic generated by the proposal, in addition to the existing cement plant and the proposed Marathon power plant would endanger public safety by reason of traffic

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hazard and obstruction of road users. The plant would operate 24 hours per day. This is a heavy industrial activity and will give rise to impacts which will not be compatible with a normally accepted level of residential amenity. There would be vehicle movements, lighting etc. which would impact on residential amenity. It would be normal for industry located in a residential area to operate only during normal working hours.

Heavy goods vehicles would be generated by the development and this would add to the dangers of the local road network and to the safety of local residents. Heavy goods vehicles will operate in early morning, late at night and at weekends, thereby adding to the incompatible nature of the development in respect of its location in relation to nearby houses and the amenity of Duleek.

The planning authority adjudicating on the proposal failed to properly evaluate the likely impacts of the development on the character of the area and residential amenity of those living in the vicinity.

Agricultural and residential property values in the immediate area would be affected by reason of visual intrusion of the development.

The proposed development clearly constitutes one which should be confined to a zoned area.

Carranstown retains a distinctive rural character. It acts as an environmental buffer between the built-up settlement of Duleek and the existing industrial site at Platin. The proposal would have a negative impact on the rural character of the area and affect residential amenity.

The nature and scale of the development, its close proximity to houses and significant negative impacts would represent an unreasonable diminution in the level of residential amenity.

The regional route R152 has a serious blind summit adjacent to the location of the proposed entrance. This would constitute a major traffic hazard in the context of the

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proposal. There is a continuous white line and a 60 mph speed limit at this point on the road.

T. Sargeant T.D.:

The planning authority should have evaluated environmental criteria when considering the proposal.

The proposal fails to consider or specify means by which ash arising from the development would be ultimately treated. Ash amounts, which were estimated to be 30% of the material volume incinerated, would require a hazardous waste landfill facility. Such a facility is not available in Ireland.

R. Nulty and N. McCabe:

There is already a huge cement factory at Platin which has recently been extended with additional silos and other large buildings. This factory is now almost twice as large as it originally was. The appeal site is beside the cement factory. It is proposed to build a power plant beside the incinerator. With these additional plants the character of the area would be altered in a damaging way.

The proposal will result in a devaluation of property.

T.C. Burke:

In July 2001 the appellant was offered a price of £245,000 per acre for land in Lagavoorin consisting of approximately 13 acres.

With the possibility that the planning authority might grant permission for the proposed development the appellant was unable to get one single tender for his land. The net loss to him already from the proposed development is therefore £3.283m. Will the developers compensate for loss?

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The R152 is already a busy road and the planning authority considers that major improvements would have to be made to it if the traffic generated by the development is to be accommodated.

When the Marathon power plant was given permission to proceed the planner's report on that development suggested that the granting of permission should not be used by the planning authority as an excuse for making the area industrial, as the Marathon application was unique by virtue of the position of the gas pipeline and the proximity of a ready tap in to the national grid.

The view from Bellewstown Ridge is of particular beauty and as such was supposed to be preserved.

The building of the proposed development would ruin the view completely and together with the cement factory will become an eyesore in what would always remain a view of particular natural beauty.

The proposed development is entirely out of place within the area.

A. Fagan and M. Taaffe:

The third party appellant properties have recently been zoned for residential and commercial development. It would be inexcusable for the planning authority to allow the erection of an incinerator in the immediate vicinity of such lands. These lands would become unsalable.

A serious traffic hazard would result from the placing of an incinerator on site. The adjoining road is already very busy and congested. It is used by Drogheda people to travel to Dublin. Traffic will increase over a period of time.

The site is close to the World Heritage Site at Newgrange, one of Ireland's foremost tourist attractions.

J. Rogers:

The third party appellant owns lands approximately 6 kilometres from the site. These lands are used for agricultural purposes.

An Bord Pleanála should refuse to deal with the appeal pending clarification by the Commission of the European Union and, if necessary, by the Court of Justice of the Union, on the question of whether Section 98 of the Environmental Protection Agency Act, 1992 is in conformity with Council Directive 85/337/EEC, as amended, and in particular, article 8 thereof which requires that information gathered pursuant to articles 5, 6 and 7 of the Directive has to be taken into consideration in development consent procedures.

Section 98 of the 1992 Act expressively prevents An Bord Pleanála from considering whether the proposal would cause environmental pollution. There is no doubt that the proposed plant would cause such pollution in terms of direct and indirect effects as described in Article 3 of Council Directive 85/337/EEC.

It is clear that the statutory restriction imposed on An Bord Pleanála by Section 98 is in breach of Article 8 of Council Directive 85/337/EEC. For these reasons An Bord Pleanála should decline jurisdiction to proceed with its consideration of the appeal and seek and await a determination of the Commission and/or the Court of Justice in relation to these matters.

Alternatively An Bord Pleanála should simply refuse jurisdiction to proceed further or at all with the appeal on the basis that it does not have the legal competence to satisfy the requirements of Directive 85/337/EEC as amended.

Section 98 of the 1992 Act created a requirement which is a direct contradiction of Article 8 of the Directive.

An Bord Pleanála is requested to apply to the High Court for a declaration on the issues relating to An Bord Pleanála's competency to deal with the proposal.

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The development should not be permitted in such proximity to Newgrange, Dowth and Knowth and the Boyne Valley Heritage Area. It is accepted in the developers' submission and photomontage that the incinerator would be visible from Dowth. It would be an act of cultural vandalism to introduce further industrial plants which would impinge further visually on the core of the Boyne Valley Heritage Area.

Permitting the development alongside the cement factory and proposed power plant will represent an intensification of industrial development entirely inconsistent with the Boyne Valley's designation as a UNESCO World Heritage Site.

In the Board's inspector's report in relation to the electricity power point, Mr J. Barnes, illustrated the extent to which the cement factory complex currently dominates the landscape and the listed prospects from Bellewstown Ridge and Red Mountain Ridge. The developers accept, in their photomontage, that the proposal would further impinge on the protected view from Bellewstown Hill.

The site is zoned agricultural in the County Development Plan. The proposal therefore constitute a material contravention. It involves bringing a heavy industry into an area zoned for agricultural use, in circumstances where it cannot be absorbed into the surroundings.

The proposal is inimical to the agricultural economy.

The waste management plan for the north east region 1999-2004 as adopted by Meath County Council, sets out siting criteria at page 76 as follows:

"Siting criteria including central location close to the waste production centre of gravity, proximity to energy users, ideally users of heat, reasonable road access, appropriate development zoning and availability of cooling water and provision for its disposal."

The location is not close to the source of where the majority of waste is generated in Meath, Louth, Monaghan and Cavan. There are more suitable locations available. Possible sites were identified at Figure 10.1 of that Plan.

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Specific objection to the site selected is made in that it is located next to limestone and aquifer reserves. Such sites are expressly excluded by the World Health Organisation Siting for Hazardous Waste Incinerators. The North-Eastern Health Board by letter dated 22.2.2001 have expressed concerns in this regard.

This appear to have been ignored by the planning authority.

The proposal will cause a significant hazard to the ground water in a wide area around it. If this reservoir becomes contaminated it cannot be remediated.

The incinerator will produce at least 5,000 tonnes of hazardous waste in the form of fly ash. The waste management plan makes no provision for the disposal of this waste and there is no adequate proposal by the developers. It is difficult to accept that the planning authority could have granted planning permission for a facility producing 5,000 tonnes of hazardous waste in the absence of somewhere to put this waste. This issue should be a central feature of An Bord Pleanála's consideration of the appeal.

As no policy in relation to disposal of waste by incineration has been established An Bord Pleanála should reject the proposal as being premature. An Bord Pleanála should adopt the precedent established in relation to the proposed development of an incinerator at Kilcock and should refuse permission.

The proposal will require the sterilisation of adjacent lands and An Bord Pleanála should not grant permission in these circumstances.

The site is too close to urban and residential areas and will give rise to such an intensification of industrial development that it is entirely unsuitable for the location chosen. The concerns of residents of Meath and Louth are evidenced by signed petitions of over 26,000 people in Meath and 22,000 in Louth who have stated, in effect, that they do not want incineration as a form of waste management. There is widespread concern that the proposal will adversely affect traffic in the area.

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The development would significantly reduce property values in the area in circumstances where local owners would have no recourse to compensation. No adequate provision is made in the proposal for the disposal of fly ash and bottom ash being the residue of the incineration process. There is no provision in the surrounding areas for landfill disposal of such hazardous materials.

East Meath Dairy Farmers:

The third party appellants represent a large number of dairy farmers farming in the vicinity of the subject lands.

The location of a development of the type proposed is very much a worst-case scenario in terms of consumer confidence.

The third party appellants own land, within the area, amounting to approximately 3,000 acres. They form the hub of existing economic activity in the area between Duleek and Drogheda. The proposal therefore represents a threat to the future viability of the core industry (agriculture) and the socio-economic fabric of the area.

The proposed development would negatively impact on the value of the property and businesses of the third party appellants. Basic land use management dictates that existing users are protected from incursion by incompatible uses. This is why industrially zoned lands are located in areas where there is minimum impact on surrounding development. It appears that in the current instance an industrial type development is to be shoe-horned into a rural area where agriculture is the dominant land use.

While the developers will argue that the area is already industrial in character resulting from the cement works/quarry, that business is site specific and one normally associated with rural areas. It does not, as with incineration, give rise to anxiety on the part of the public regarding agricultural produce.

C. Searles:

Permission should be refused as the site is situated in a rural area with no physical or infrastuctural services.

The Waste Management Act envisages that activity such as proposed would be carried out by a local authority, or at worst, as a public/private partnership. It was never envisaged that a private company would be allowed to operate such a facility the purposes of which are simply the generation of profit. Profit would have an adverse effect on sustainability.

Permitting the development in the absence of a coherent and manageable approach to waste production, minimisation, recycling and reuse would render the proposal premature.

The proposal amounts to a material contravention of the County Development Plan. a development plan should advise local people as to likely developments which could be expected within the period of the plan. There is not a single indication in the plan that the site could ever be capable of being used for a waste disposal facility as proposed.

The development is in contravention of the Draft Waste Management Plan for the North Eastern region. In that plan an incinerator is not contemplated for the Duleek area.

The proposed development would be visually intrusive, discordant and invasive in the landscape.

The development is located in the middle of a residential area with a large number of houses immediately on site boundaries. The impact on these properties would be devastating,

What is proposed is a Seveso type installation. In these circumstances a large area of land should be sterilised in and around the site. This would require a much larger site. There is a high degree of site coverage which extends as far as site boundaries.

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Permission should be refused on the basis of inadequate site and relationship to adjoining residences.

Such a proposed development should be located in a heavy industrial zone designated by the County Plan for such purpose and remote from existing houses and schools and other facilities of a like kind.

The existing cement plant and proposed power plant are resource related and site specific. This is not the case with the proposed development.

No precedent has been created by virtue of the permissions granted.

The proposal would result in a traffic hazard on the adjoining roadway. This road is incapable of accommodating the levels of traffic likely to be generated. It is not possible to control the location of such traffic to and from the site.

Construction activity on the site would be destructive, noisy and visually and environmentally damaging. The proposal does not comply with the proximity principle, as the facility would be located on the edge of the area from which waste is to be gathered, as opposed to being centrally located. The proposal involves collection of municipal waste primarily from urban areas and its incineration in a rural area. The proposal is fundamentally unjust as it would impose a severe burden on the local community without justification or that community choosing this imposition.

E. Cullen/Irish Doctors Environmental Association:

Incineration does not remove or destroy waste as it just transforms it into emissions into the environment.

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An Taisce:

The site is in an agricultural area. It has not been zoned for industrial or waste processing activities.

While the developers contend that the area has an industrial character, due to the proximity of the Platin quarry and cement works, it could be argued that there is a site specific need for such a resource-based industry to locate at Platin unlike the proposed development.

An Taisce queries the desirability of concentrating such heavy industry in this area between Duleek and Drogheda given that Drogheda is likely to develop towards the M1 and that blasting is a frequent occurrence at the Platin quarry.

The existing pattern of development consists of a significant amount of ribbon development housing on the opposite of the R152 from the site. The proposal is not consistent with the sequential waste management hierarchy identified in Section 2.1 of the Waste Management Document;

"Changing Our Ways, A Policy Statement" published by the Department of the Environment and Local Government in September 1998".

The creation of recycling facilities is of benefit however this would be significantly undermined by the fact it also involves the generation of waste, namely boiler ash and gypsum, both of which would probably have to be sent to conventional landfill facilities. However the greatest concern is the generation of flue gas residues which would be classified as hazardous waste.

The site is not centrally located to service the north-east waste management region consisting of Meath, Cavan, Monaghan and Louth.

The visual impact of the stack at 40 metres is significant. It would be visible from the listed view at Bellewstown, VP 16 (page 34) Section 3 of the 2001 Meath County Development Plan.

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The plant and stack would appear to be visible from Dowth; as in view 12 in attachment no. 7 in Volume 2 of the Environmental Impact Statement.

Traffic proposals do not envisage use of the adjacent railway line which does not represent a sustainable approach to minimisation of traffic impact.

Given the proximity and significance, from an environmental impact perspective, of Platin cement works, the developers should have addressed the potential cumulative impact of the proposal and the impact of the cement complex, under the interaction of factors, in Section 14 of the E.I.S.

No Incineration Alliance:

The area is primarily agricultural in use and essentially rural in character, notwithstanding the quarry, cement plant and 110kV ESB substation.

The third party appellants are fundamentally opposed to incineration as a method of waste disposal. Given that the thermal treatment plant is the most significant element of the proposal the third party appellants have no choice but to register their opposition to the proposal in its entirety.

The developers have not submitted evidence or legal agreement or contracts specifying that they will purchase the land on receipt of planning permission.

The application documentation does not include the written consent of the current owners of the site to the lodgement of the application. The developers have failed to demonstration that they have the necessary legal interest in the land to enable them to lodge a planning application.

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Site Selection Criteria;

The Environmental Impact Statement identified key criteria in site selection. These criteria are:

- proximity to centres of waste production/centres of gravity of waste production;
- proximity to transport infrastructure (National Roads);
- proximity to electricity distribution systems;
- appropriate zoning/land use;
- availability of site;

Table 2.5 of the E.I.S. indicates three locations at Ardee, Drogheda and Duleek as a shortlist of possible locations based on minimal haulage distances.

When all of the haulage figures are examined the majority of locations are within the 4 to 5 million total tonne kilometre category.

There are in fact 7 towns out of a total of 20 which fall within the 4-5 million cohort. The effect of shortlisting of Ardee, Drogheda and Duleek and the ultimate selection of Duleek is fatally undermined by this fact.

There is therefore little justification for picking the subject site based on the estimated total tonne kilometre analysis. This forms the backbone of the developers' site selection procedure.

The E.I.S. fails to adequately demonstrate how the developers selected Duleek in respect of the three sites shortlisted.

The existing R152 is dangerous and has seen many accidents. Traffic associated with the proposal would exacerbate the situation. Electricity generation is at best a byproduct of the proposed incineration process. Ready connection to this source of electricity should not be a major concern relative to other locational factors such environmental impact.

The E.I.S. states that the planning authority recognises some non agricultural uses being permissible in areas deemed agricultural. Examples of infrastructures such as masts and wind turbines and site specific industries such as quarrying, are noted in this regard. The central issue in deciding whether such non agricultural activity should be allowed in these locations should be based on two factors.

The first factor is whether the industry is site specific.

The second factor is whether the industry is compatible with the location.

In relation to the first issue the proposed development is not site specific. The development could be placed at any number of more suitable locations. The developers have failed to make a sustainable case for allocating the development at this particular site.

In relation to the second issue the proposal due to its height, nature and scale, is totally inappropriate to its rural location and fundamentally at odds with the agricultural area. While quarries and ancillary plant together with electrical infrastructure, are necessary in the rural landscape, incinerators are not.

Industrial type development must be directed away from rural locations unless there is a genuine sustainable case permitting then by way of exception. In relation to the availability of sites for the proposed development, the developers identified 5 criteria. In this regard the site is located relatively close to a proposed National Heritage Area, a wetlands, Duleek, Commons. Such an area would be sensitive to disruption.

The development would be intrusive when viewed from a number of various points. There is significant ribbon development in the vicinity. The existence of residences in the area seems to have been ignored by the developers.

Residual hazardous waste generated by the development cannot be land filled.

The site is located in a visually sensitive landscape. The developers state that the visual impact associated with the proposed development is less significant given that

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the area is already blighted by the appearance of the cement plant. This analysis is rejected by the third party appellants.

Because of the site specific nature of the quarry, this development had no choice but to locate close to the source of raw material due to the significant transport costs involved. The proposed development is not site specific.

If it was accepted that the presence of the existing cement plant and quarry was a positive reason for siting an incinerator in an agricultural area, there could be a proliferation of industrial type development all over the countryside by virtue of the operation of existing quarry developments.

The presence of the quarry should not be used to downgrade the importance of a critical issue such as visual intrusion.

The E.I.S. accepts that there will be glimpses and open views of the development from the adjacent road network and from the houses in the immediate vicinity. The suggestion that landscaping would screen the larger buildings is undermined by the fact that landscaping would take a number of years to be fully effective and that glimpses that remain will still be unacceptably intrusive owing to the scale and nature of the proposal. The proposal will be unacceptably intrusive when viewed from short distance.

In relation to greater distances consideration of the existing landscape designation is paramount. By reason of its nature, scale and height, the proposal could not be satisfactorily absorbed into the existing landscape.

Potential visitors to attractions such as at Newgrange will be put off by the prospect of an incinerator within 10 kilometres.

Given the proximity of the development to what are unique heritage features and the direct impact on important views of the landscape, the proposal will result in a significant reduction in the performance of the existing tourism industry.

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The issue of ground water contamination is serious given the fact that the site is located on a limestone reserve with an underlying aquifer.

The proposal would negatively affect existing property prices due the scale and nature. The Environmental Impact Statement failed to adequately consider alternative sites.

While the E.I.S. makes much of the existence of the cement works and quarry and the proposed power station in formulating the contention that the area has an industrial character, it fails to have any regard to the combined impact of three industrial developments. The cumulative impacts of three operations should have been analysed to assess the overall impact on the area in terms of traffic, visual intrusion, noise, etc.

Incineration helps to reduce the volume of waste to be disposed of. It transforms it to approximately 30% of its previous mass by weight and this remaining 30% requires treatment and landfill.

Incineration is not a sustainable form of development. The proposal is premature in the absence of a properly defined system of waste management for the north-eastern region.

Incineration is an outdated technology.

More energy is saved by recycling materials than burning them. This is due to the fact that significantly more energy is required to produce virgin material than to recycle.

Incineration poses a threat to the development of more sustainable, preferential methods of waste management. It also threatens the economic and social advantages of such methods.

The proposal contravenes a number of important development plan parameters.

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The location of an incinerator in the close proximity to the Boyne Valley materially contravenes the Council's objective to retain a rural cultural landscape of high quality.

The proposal is at best premature pending the provision of the separation and recycling options identified in the development plan at Section 2.7.3.

The proposal will contravene the objectives of the plan which seek to protect areas of high amenity from visually damaging development or proposals which cumulatively erode landscape quality.

The site is relatively close to a proposed Natural Heritage Area at Duleek Commons. There is not a satisfactory degree of separation between the site and the proposed Natural Heritage Area. The proposal would therefore contravene the development plan.

The proposed development would be visible from the listed view, V.16, Bellewstown Ridge. The proposal would therefore clearly contravene the objective of the development plan section 3.6.9 which seeks to pay close regard to potential effect on the amenity value of views with an overriding objective of their protection. The site is relatively close to Duleek. It will have a significant negative impact on the heritage value of Duleek. The proposal therefore materially contravenes the development plan objective relating to Duleek and the protection of its heritage.

There are two precedent decisions of relevance.

In PL 17.121102 the planning authority granted permission for the development of industry to Agri-Park.

Following a third party appeal An Bord Pleanála refused permission on the grounds of location of development on unzoned lands, traffic hazard at the junction of the R152/150,

unsustainable development,

and impact on residences within the vicinity. These reasons for refusal are equally appropriate in the context of the current proposal.

PL 09.120926;

This related to a power station at Dunstown, Kilcullen, County Kildare. An Bord Pleanála upheld the decision to refuse permission. This was in spite of the appellants arguing that the rural location would be acceptable having regard to existing electricity infrastructure in the area. This is similar to much of the argument presented in the instant case. Includes in An Bord Pleanál's reasons for refusal was the fact that the site was unzoned and that the development would be incongruous due to its height and scale. It was also considered that the proposal would contravene a landscape designation contained in the Kildare County Development Plan.

These reasons for refusal are appropriate in the instant case. An Bord Pleanála rejected the notion that the existing infrastructure sets aside concerns regarding impact on the rural character, as the developers seem to be suggesting in the instant case.

Observers:

37 separate observations were submitted in relation to the proposed development. Apart from the observation by Irish Cement Ltd., all of the submissions were in opposition to the proposal.

The following is a precis of the observers' comments;

P. McCluskey;

The proposal will result in a devaluation of property.

The R152 carries very heavy volumes of trucks.

The site is underlain by limestone and is not suitable for the siting of an incinerator.

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M. McGuiness;

The observer and his family have lived immediately across the road from the entrance to the proposed facility for almost 25 years. The area has been designated a greenbelt.

B. Clancy and others;

As residents who live 100 yards from the site objection is lodged. The environment will be changed and damaged. Truck traffic is already heavy and will be increased. The area will be changed from rural to industrial.

D. McCauley;

The project will affect the rural economic life of the surrounding area which depends entirely on the ability to produce clean and safe food.

Eastern Regional Fisheries Board;

The river Nanny is salmonid with notable stocks of brown and sea trout.

All surface and ground waters on and adjacent to the development are requiring of maximum protection during the construction phase. All polluting matter should be bunded to prevent any of this matter entering waters.

A strict condition should be imposed to ensure that a proper firewater retention facility is constructed to prevent any discharge polluting matter entering any waters in case of fire.

Louth People Against Incineration;

The proposed development fails to comply with the E.U. Waste Management Priority Hierarchy. Incinerators require guaranteed commitments for large volumes of waste to make them function on a continuous basis and be economically viable. Permitting

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the development would undermine the European Community's Waste Management Policy with its primary emphasis on waste prevention, re-use, recycling and recovery.

F. Shuter;

Road safety will be compromised with the proposed development. The village of Duleek will be badly affected by increased traffic.

N. Ahern M.E.P.;

The site is fundamentally inappropriate for the proposed development. There would be visual intrusion, impact on tourism and heritage, impact on ground water, impact on traffic and property value.

B. Halpenny;

The observer as an environmental health officer is familiar with hours of operation of industrial plants. The conditions contained in the decision to grant permission, particularly during the construction phase will give rise to nuisance and affect residential amenity.

The proposed development deviates from all agreed current policy and planning guidelines.

P. and C. O'Brien;

There is a large volume of heavy goods vehicles traffic already in the area. Traffic is generally increasing. The development will intensify existing problems caused by excessive traffic.

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J. Bruton T.D.;

Carranstown is the wrong place for an incinerator. It is close to other pollution generating industries and close to large centres of population. People living in these areas are already taking more than their share of traffic and pollution generated by industries such as Irish Cement at Platin.

Vary substantial traffic would be generated by the proposal. This would cause additional difficulties for local residents. It would require substantial costs in regard to road structures.

P. McKenna M.E.P.;

Many EU countries no longer allow incinerators to be built as it has become clear that they are not the answer to waste management. Production and recycling have become the favoured options.

Although the proposed incinerator will not process hazardous waste it will produce hazardous waste in bottom ash and boiler ash.

The development would have a major impact on the amount of traffic in the area.

The Environmental Impact Statement fails to meet legal standard for consideration of alternative sites. The cumulative impacts of the development in association with the adjoining cement works and proposed power station were not taken into accounts.

V. Reijs;

The emission stack of the incinerator could stimulate the formation of clouds and obstruct the sunlight coming inside Newgrange around winter solstice. The Boyne Valley is a world heritage site and the proposed incinerator is only 3 kilometres from this unique area.

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Councillor A. Dillon/Gallagher;

The Environmental Impact Statement is deficient.

Irish Cement Ltd.;

The cement plant operates in full accordance with its IPC licence. There is no valid or factual basis for drawing any conclusion that the plant is operated other than in full accordance with the terms and conditions of the licence.

T. Prenderville and R. McGrath;

The documentation does not refer to the ultimate disposal of residual ash. No discussion in any detail is indicated as to how the management of the ash will be carried out. There will be 37,000 tonnes of ash generated every year.

A proposed incinerator will adversely affect property value in the area.

M. McKeon;

The site is inappropriate as it is not an industrial area. The existing cement factory gets it raw materials from the area.

Residential amenity would be seriously impacted by the development.

G. Rilley, Member Meath County Council.

A. Morgan, Member Louth County Council

The proposed incinerator is situated in the heart of the Boyne Valley, one of the country's main tourist attractions. It will greatly impact on the world famous Newgrange Heritage Area and the Battle of the Boyne site.

The proposed development would have a serious negative impact on the character of the area. It would significantly add further industry in a rural agricultural area. It will add to urban sprawl.

Boyne Valley and Newgrange Environmental Protection League;

By appealing condition no. 3 of the planning authority's authority to grant permission implies that the developers want to accept waste from the Dublin Region. This would distort the waste planning process. It would also negate the requirement of the proximity principle.

Councillor T. Kelly;

The road structure is insufficient to cater for the traffic generated.

T. Rooney;

Condition no. 3 of the decision of the planning authority should be retained as the proposed incinerator could accept waste from anywhere in the country. Waste should be processed in its source area.

Duleek Parents' Council;

The site is very close to a local primary school at Mount Hanover which is one kilometre from the site.

There would be an increased amount of traffic in an area where there is already heavy traffic.

M. Wallace T.D.;

This area of Duleek already has its fair share of heavy industry with the Irish Cement Works at Platin and the proposed power station nearby.

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Councillor D. English;

Landfill and incineration are the last stages of waste disposal.

The four local authorities in the region had not passed the waste management plan at the time of the application. The County Managers have since passed this strategy. There is little point in having a waste management plan for a region if deviation from the plan is allowed at the very first stage. There is no logic in jumping from stage 1 to the final stage.

If an incinerator has to be built it should be built in conjunction with Council or Government giving the Government direct control over the activities. This is common practice in other countries. Private companies must generate profit to survive. It is Government duty to uphold the Constitution which basically protects the rights of people.

P. Butler;

The incinerator will generate hazardous ash. There is no hazardous material landfill in operation anywhere in Ireland. To proceed with the building of an incinerator without knowing where the ash generated will actually be landfilled is akin to granting permission for a house without knowing where the septic tank would be on the site.

N. Heeney;

The R152 runs passed the clubhouse and playing fields used by the local soccer club. There has already been many fatal accidents in recent times on the road. The traffic generated will add a huge strain to an already dangerous route. Many young players travel on foot to the ground. The additional levels of traffic will pose a serious risk on an already busy route. The proposal will degrade the visual quality of the area.

There are three playing fields used over a six acre site. The level of amenity of these playing fields will be greatly reduced if the proposed development is permitted.

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There is already a large cement works and a proposed power plant close to the playing fields.

Councillor M. O'Dowd;

The waste management plan for the north-east region clearly states that the first step in the siting process for an incinerator is the identification of exclusionary factors which would prohibit the siting of a facility in the excluded areas. Having identified these areas, the next step is to identify relevant siting criteria to assist with selection of potentially suitable areas section 8.3 and section 13.3.

In the feasibility study of Thermal Options for Waste Treatment Recovery in the North-east Region of 1999 a number of criteria were identified. These are;

- proximity to waste centres
- transportation links
- end market possibilities
- cross-border possibilities
- site availability
- transfer station

Based on these criteria the study shortlisted Navan, Kingscourt, Dundalk and Carrickmacross.

Apart from this study no objective list of exclusionary factors or of relevant siting criteria has been made. Until this happens the current proposal is premature.

The waste management plan for the north-east region clearly states that prior to the construction of a thermal treatment facility, door to door collection would have to be put in place as well as a whole waste management infrastructure including extensions to bring banks, ten recycling stations, materials recovery facility, dual collection biological treatment plants. These facilities are not in place. Consequently the proposal is premature and should be rejected.

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The proposed development has tenuous links with the north-east regional waste plan. This waste plan is in contravention of the EU endorsed hierarchy of waste management as it relies heavily on waste disposal using landfill and incineration.

A report of 1997, Technical Report of Thermal Technologies, confirmed the very high costs associated with incineration when compared to landfill.

The feasibility study of Thermal Options for Waste Treatment, Recovery, in the North-east Region selected sites other than the Duleek/Drogheda area. Neither the method of waste management, incineration, or site selection are the preferred choice set out in these previous reports, undertaken on behalf of Meath County Council and the other counties in the north-east region.

K. Russell and others;

The total cost of producing each Kilowatt of power from the incineration process is vastly higher than from a modern power station. The economics of this form of power generation must be questioned.

The site is geographically inefficient in serving the proposed north-east region being in the extreme south-east corner of the region. If the region was represented on a grid the input material has to be transported from less than optimal points. Added to this is the fact that infrastructure in general is less developed in the north and western regions. The most efficient point in the region is in the central area.

Mount Hanover Concerned Parents;

The site is not centrally located to serve the north-east waste management region.

There have already been three fatalities on the R152 in the past number of years. The increased traffic may increase this number. School children are picked up from the R152 on a daily basis by the school bus.

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E. Martin;

The Environmental Impact Statement submitted to An Bord Pleanála as part of the proposal is a requirement pursuant to EC Council Directive 85/337/EC and subsequent amending directives, to which An Bord Pleanála are bound. This requires the Board under Article 3, to carry out in each individual case and in accordance with articles 4, 11 of the directive, the direct and indirect effects of the project on human beings, fauna and flora, on soil, water, air, climate and the landscape and the interaction between these factors. They also require to take into account the direct and indirect effects of the project on material assets and on the cultural heritage.

This is a mandatory requirement.

The observer is particularly concerned in terms of emissions from the proposed development. The observer is concerned in the context of An Bord Pleanála carrying out an environmental impact assessment which seeks to exclude submissions in relation to matters relating to the risk of environmental pollution.

An Bord Pleanála in its environmental assessment cannot comply with its duties under both Irish and European law. Any assessment which is carried out would be completely inappropriate and inadequate as the very essence of the matters to be considered in an environmental impact statement would have been excluded. An Bord Pleanála should therefore suspend consideration of the proposal pending the conferring of a right on all persons interested in this to make appropriate submissions on all matters which are relevant to the environmental assessment procedures.

The observer cannot allow the assessment procedure to continue in the absence of what is, in his opinion, a violation of Irish and European law. This is a critical matter from the observer's point of view.

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PLANNING AUTHORITY SUBMISSION:

The planning authority is satisfied that the environmental impact statement covered all aspects of the proposal. Any of the issues relating to environmental pollution are matters for the Environmental Protection Agency.

The planning authority consider that the production of waste from the proposed incineration have been adequately detailed in the E.I.S. This includes proposals for treatment and disposal.

The planning authority is satisfied that condition no. 3 of the decision to grant permission adequately covers the origin of waste.

The proximity of the site to major population centres at Drogheda, Dundalk and Navan, coupled with adequate transport links is relevant to the location of the site. These centres of population contain approximately 90,000 people and would produce approximately a 30,000 tonnes of waste per annum.

Other major growth centres in Meath alone account for approximately 40,000 tonnes per annum. These consist of Ashbourne, Rathoath, Dunshoughlin, Trim, Kells, and Bettystown, Laytown and Stamullen. Based on a simple calculation it is evident that approximately 33% of the waste arises within an area proximate to the site. In addition, the population centres identified are forecast to grow significantly in terms of population and employment during the life of the 2001 Meath County Development Plan.

The scale of the proposed development should be viewed in the context of adjoining large scale industrial installations at the cement works and at the very extensive quarry.

A total of 17 out of 24 third party appeals cited traffic as an area of concern. These relate to road alignment of the R152, existing traffic volumes, sight distance at the proposed entrance, traffic generated at start up and over the life of the proposed

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facility, level of service, traffic attracted and generated by the M1 motorway and existing and permitted development in the area, traffic growth and volumes.

All of the above issues have been comprehensively addressed in the E.I.S. Traffic issues and works required to improve road alignment, entrance, construction, construction traffic, impacts and contributions, have been addressed by the planning authority's conditions attached to the decision to grant permission.

There is no definitive evidence relating to property devaluation submitted in any of the appeals. There is evidence to suggest that property/land prices have been affected by the proximity of the adjoining cement works which has operated in the area since the late 1960s.

The planning authority recognise that the area is rural and agricultural apart from the cement works.

The proposal does not materially contravene the County Development Plan.

Section 2.3 of the plan relates to policy with regard to industry and employment.

Section 3.2.3 also relates to these aspects.

Section 3.2.3 allows for the siting of industrial development in a rural area where such development necessitates a rural context.

From a locational point of view the criteria selected by the applicants is considered adequate. These criteria relate to proximity to centre of gravity of waste, proximity to transport infrastructure, particularly the M1 which is close to major centres of population in the region.

The existing industrial character of the area should also be considered.

The proximity to the ESB national electricity grid is also a significant factor.

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The planning authority essentially agree with the developers' site selection criteria.

Reference is made in the appeal submissions to the Strategic Planning Guidelines for the Greater Dublin Area.

The proposal by virtue of scale necessitates a large amount of land. To site such a large scale installation on serviced lands with specific land uses only for industry is unsustainable. The burden placed on the supply of costly serviced industrial lands by virtue of the area of land required in the absence of significant effluent treatment is not just justifiable. The proposed development at operation stage has no requirement for trade effluent disposal and effluent generated by the proposed 50 personnel employed on a shift basis may be catered for by the installation of a proprietary wastewater treatment unit.

The scale and bulk of the development should also be considered. Abrupt changes in scale in industrial zoned land should be avoided. It was for this reason that the site was chosen against the backdrop of the large industrial installation of the cement work.

The proposed development has a location requirement for a rural area, this being site specific in this instance due to the presence of large scale industrial activity in the area at present. While this justification for a rural location may not have been fully articulated in the original planning report on the application, the planning authority request An Bord Pleanála read the above submission in conjunction with the planner's report.

The planning authority contends that the proposal does not materially contravene the Meath County Development Plan 2001.

The visual impact associated with the development have been fully assessed by the planning authority. The site is situated within a landscape classification VQ11 as identified in the County Development Plan and rural detail maps.

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While the proposal will have a negative visual impact in the area, as acknowledged in the planning report, it is considered that the landscape is capable of absorbing the development particularly against the backdrop of the cement works. The landscaping comprising of planting and screening berms is considered to be an effective measure to reduce and ameliorate any long term negative visual impacts.

The proposal was assessed having regard to the groundwater protection scheme for County Meath prepared by the Geological Survey of Ireland.

Having regard to the low level of process water required and the connection to public watermains to satisfy potable water requirement, there would be no adverse impact to ground water supplies in the area.

The site is not situated in the Boyne Valley or within the Boyne Valley integrated development plan area. There would therefore be no negative or significant impacts on tourism and tourism development in the Boyne Valley resulting from the development.

The decision of the planning authority eliminates the siting of the proposed development from industrial lands. There are such lands zoned for industry zoned within Duleek development plan boundary.

If located on such land the proposal would impact upon the character of Duleek.

The installation and operation of the wastewater treatment unit to serve the development is a matter for the Environmental Protection Agency.

The site is not located in any special area of conservation, area of scientific interest or an actual heritage area.

Since the planning authority decided to grant permission for the proposal the Waste Management Amendment Act, 2001, has provided for the adoption of the waste management plan for the four north-eastern regional counties. The waste management plan was adopted on 3.8.2001.

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Issues raised in third party appeals relating to section 98 of the Environmental Protection Agency Act, 1992, are a matter for the courts. The determination as to whether or not the establishment of an incinerator on the site is subject to the European Community's (Control of Major Accident, Hazards involving Dangerous Substances), 1982/EC, is a matter for the Environmental Protection Agency in consultation with Health and Safety Authority.

The planning authority is fully committed to the implementation of all facets of the waste management hierarchy.

The County Development Plan lists four core tenets on which waste management would be based.

Thermal treatment is listed as one of these tenets.

Thermal treatment lies third in the order of the waste hierarchy being the next preferred option after landfill. Landfill is the least favoured option. There will however continue to be a need to develop landfill sites to cater for the disposal of residual waste through utilisation of other options.

The proposal to develop a thermal waste management facility accords with the waste management hierarchy.

The development is subject to the requirement to obtain a Fire Safety Certificate.

The Strategic Planning Guidelines for the Greater Dublin Area recognise the need to protect large parts of the region from development, other than lands required to satisfy local need. This results in the strategy to provide for greenbelt areas. Greenbelt need is greatest closest to the metropolitan area to ensure a distinct divide between urban and rural areas. The purpose of greenbelts is to primarily hold urban sprawl associated in particular with residential and industrial development expansion, thereby consolidating existing development centres. The 2001 County Development Plan embraces the requirement for strategic greenbelts in accordance with the Guidelines

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to protect areas outside development centres from excessive development. In this regard the strategic greenbelt study for the Meath area is at an advanced stage. The areas identified are;

the area between the metropolitan area and the settlements of Clonee, Dunboyne (the so-called South Meath fringe).

The area between Stamullen, Gormanstown and Balbriggan.

The planning authority therefore considers that the site is not located within a strategic greenbelt as per the Strategic Planning Guidelines.

The planning authority fully assessed the impact of the proposal on residential amenity. The site is in an area typical of rural dispersed one-off housing development. Commercial development and the large cement works typifies the area also.

The site is on the northern side of the R152 in an area where there is little residential development. Residential development is concentrated on the southern side of the R152. It is therefore considered any impacts on residential amenity have been ameliorated by the siting of the proposed plant west of the cement works, south of the railway line and quarry areas and north of the R152.

Mitigating measures proposed in the environmental impact statement are adequate to reduce any significant adverse impact in terms of residential amenity. Landscaping and screening berms are proposed. Large bulky structures on the site are located in the low lying part of the site.

The location is proximate to the centre of gravity of waste and also proximate to a major transport route, the M1. The motorway is considered to be strategically located in the east of the region close to major centres of population.

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DEVELOPERS WRITTEN SUBMISSION:

The major part of the developers' submission relates to issues raised in the various third party appeals, numbering more than 20. Matters relating to environmental emissions associated with the operation of the plant are outside the remit of An Bord Pleanála and for the EPA in assessing a waste license.

COMPLIANCE WITH PUBLISHED DOCUMENTS;

Relevant documents are the Meath County Development Plan 2001, the Waste Management Plan for the North-East Region 1999-2004, Changing Our Ways and the Strategic Planning Guidelines for the Greater Dublin Area.

"The Waste Management Plan clearly indicates that "thermal treatment shall be an integral part of the solution to the management of the region's waste".

The proposal is a strategic resource for the north-east region. This will play a crucial regional role in the safe disposal and treatment of waste.

The site is located on the edge of the main transportation corridor between Dublin and Drogheda. It is an ideal location for such a facility in terms of transport and ease of access.

The nature of the facility is not such that it would lead to a physical coalescence of Drogheda and Duleek. It is a self-sufficient facility which would not lead to other ancillary development.

Meath County Development Plan 2001,

The proposed development does not contravene the policies contained in the development plan relating to sustainable urban development and the encouragement of suitable nodes of growth.

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The proposed development is unique and as a result other criteria apply.

The site is not located in a greenbelt. It lies on the edge of a transportation corridor.

The position may appear, at first glance, to be a peripheral location, however, it can be proven to be the optimum feasible location in terms of centre of gravity of waste production.

Services Provision;

There is sufficient public water supply available to serve the site, which will use very little of this water.

There will be no burden on sanitary services in the area as domestic effluent will be treated on site.

The development is site specific as it has been found to be the most suitable location for the proposed development.

Waste management facilities such as landfills are traditionally associated with rural areas. The proposed development will not in any way detract from the objectives relating to the amenity value of the Boyne Valley. There is no link between the appeal site and the Boyne Valley. The site is not in a sensitive archaeological area.

There was no requirement for the decision of the planning authority to be put before the members of the Meath County Council by way of material contravention as the site is located on unzoned land. The members of the planning authority have agreed the waste management plan for the region and also thereby agreed in principle with the provision of waste to energy facilities within the region.

Site Selection and Land Zoning;

In site selection the centre of gravity for each of the major towns in the north east was estimated. This is the estimated haul distance to transport all waste from each of the

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other towns. The optimum location in this regard was the town of Ardee. Ardee was further examined within the context of its existing industrial character and suitability for industrial development. As no large scale industry is located in Ardee, the scale of the proposed development was found to be at variance with the town's existing character. The scale of the proposed development would have entirely dominated the town.

Drogheda was the next optimum location. The location of Premier Periclase, in Drogheda, is a development of a similar size and massing which was considered comparable to the proposed development. Access to this area through the already congested town was not considered appropriate in the interest of proper planning and development.

The town of Duleek ranked third on the list and was further examined. Similar to Ardee, the scale of the proposed development was found to be at variance with the town's existing character. The scale of the proposal would have entirely dominated the town.

Although none of the three towns were suitable because of scale, the location of the Platin cement works, 5 kilometres south of Drogheda and 2 kilometres north of Duleek, was of a scale and massing sufficient to ensure that the proposed development would have little impact on the existing character of the area. The location of the proposed development in a lowland undulating landscape also meant that it could effectively be absorbed without adversely impacting visual amenity. Facilities for the treatment of non hazardous waste in the area, were then examined in relation to the more stringent World Health Organisation criteria for non hazardous waste management facilities and criteria suggested in the feasibility study on thermal treatment options in the north east region. Included in this was transport links with the surrounding region, proximity to potential energy users and waste transfer station. All the evaluation criteria were satisfied and the owners of the land were then approached.

Dundalk was the next town on the centre of gravity listing, however, this represents a difference of 421,647 tonnes per kilometre. If one assumes the average distance of a

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load is ten kilometres this means there is approximately 42,165 loads to be transported. On average a truck would carry 7 tonnes of waste. This means an extra 6,000 trucks driving an extra 10 kilometres. In all an extra 12,000 trips over and above that necessary to service the facility at Carranstown would result. For this reason it was not sustainable to locate the proposal in any of the towns lower on the centre of gravity scale.

Ample justification is therefore provided for the proposed site and the selection procedure. While 7 towns fall within the 4-5 million tonne/mile category, there is a substantial difference in the 4 million tonne category and the 5 million tonne category in terms of additional traffic and additional emissions from traffic. For this reason the locations of the lowest haul distance were obviously preferred and examined first.

Contrary to the third party claims, statutory requirements set out at the European Community's (E.I.S. Amendment) Regulations 1998, Section 7, relating to information to be contained in an E.I.S. does not require the identification of specific alternative sites. It states that the E.I.S. should contain;

a description of the proposed development, the data necessary to identify and assess the main effects, a description of the likely significant effects and a description of the measures envisaged in order to avoid, reduce and, if possible, remedy those effects. Further information, by way of explanation or amplification of the following matters;

"The main alternative (if any) studied by the applicant, appellant or authority and an indication of the main reasons for choosing the development proposed, taking into account the environmental effects."

The waste management plan for the north east region merely suggests areas and gives guideline requirements. It does not define specific locations. The developers took due cognisance of the guidelines in the site selection process.

The site is not zoned in the Meath County Development Plan. The land is therefore considered rural for development control consideration.

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Although the area surrounding the site is rural in character, this character has been significantly eroded by the cement works. As such the addition of the proposed development would not unduly impact the character particularly in light of mitigation measures contained in the E.I.S.

The proposed location is not sensitive. Other locations were looked at including zoned lands and found to have more significant impacts. While the third party appellants claimed quarries and electrical infrastructure are an accustomed part of the rural landscape, waste management facilities are also an accustomed part of a rural landscape as most landfill sites are located in such areas. Cement plants are not normal in a rural area. There are only four cement plants in the entire country.

The dominant use in the surrounding area is agricultural. The third party appellants have not provided evidence in relation to apparent associated risks. There are incinerators in Dublin, Waterford and Cork as well as over 300 in Europe. There is absolutely no evidence of schools closing down. This supposition is based on unfounded concerns regarding health.

It is unusual that the proposed development is stated by third parties on the one hand to be close too urban centres and yet they consider it should be located on industrial zoned lands. Such lands are almost always located directly adjacent to towns, in particular dense residential areas.

The advantage of having a community recycling park and a materials recycling facility in the area have been entirely disregarded by the third party appellants.

The environmental impact statement and the subsequent additional information submission to the planning authority covers all items relating to site selection, alternatives, groundwater, aquifers, water supply, traffic, residential amenity, material assets, landscape and visual impact, noise, dust, climate and air, planning context and development plan considerations.

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Cumulative Impacts;

The cumulative impact of the proposal together with existing and proposed development in the area has been adequately dealt with in the environmental impact statement and the additional information submitted.

It was concluded that the levels of construction and operational traffic would not significantly impact on the surrounding road network and will not exceed design capacity. In the unlikely event of the power plant construction phase coinciding with that of the proposed development, mitigation measures would be put in place including restriction of heavy goods vehicles deliveries during peak hours and staggering the arrival and departure times of site workers.

In relation to visual amenity and its cumulative impact, the photomontage views clearly illustrate the effect of the proposed building colour scheme when combined with the proposed landscaping works. Given the industrial character of the area and the distance to elevated views, the impact of the proposal will be minimal.

Given the already high level of noise emanating particularly from the R152, the restrictions imposed by the planning authority in condition, are suitable, appropriate and in keeping with other development conditions in the county.

The Agri-Park development was refused permission by An Bord Pleanála as it encompassed a significant retail element. Traffic issues revolved around problems with the site entrance and the magnitude of impact were substantially greater than in the current proposal. Sustainability issues do not relate to the current proposal. A further reason of refusal was odour emission. This is a function of the EPA in relation to the current proposal.

The Agri-Park development was materially different to the current proposal and it is therefore misleading to compare it to the current proposal.

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The T value of the soil on the site is not suitable for use by septic tank. It would be necessary to import suitable material to build a percolation area and reserve percolation area on the site. A Board Na Móna Puraflo system would be used.

Reference to a further proposal refused permission on appeal, PL 17.122364 was for a completely different proposal. The Board's decision to refuse permission is therefore immaterial. The location of that site was in a rural greenbelt area remote from any transportation route and development centres. The road serving the site was inadequate. The proposal was considered to be visually intrusive.

Marathon Power Plant;

This is contained in PL 17.118993. The developers agree with the inspector of An Bord Pleanála that the proposed location should not be considered one which would inevitably develop as an industrial estate. In this case it should be noted that there is a policy in the North-East Regional Plan to provide waste to energy facilities and this is the most suitable location.

In the case of PL 17.118993, the inspector states that Irish Cement already dominates a landscape of relative high quality. It is also however noted that the view from Bellewstown Ridge is one to be analysed and that the cement factory already adversely impacts upon this view and it is considered that the subject proposal only further marginally erodes the quality of this view. The same argument would apply to the proposed development where the impact is even less significant.

Reference is also made to a proposed incinerator at Kilcock resulting in PL 09.112536. That proposal was for a hazardous waste facility. It was located within a different functional area with different development policies and pressures. That site was on the edge of a town. The proposed development is some 2 kilometres northeast of Duleek Village. Issues regarding perceived health and property values were greater because of its proximity and the type of waste treated. The site selection process was also very different.

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Reference is also made to the provision of sites for accommodation of travellers. There is no relationship between such a proposal and the proposed development at Carranstown. In Galway specific sites were identified in the development plan as halting sites and were ignored. With regard to the development currently proposed no specific sites are named in either the development plan for Meath or the waste management plan for the north-eastern area. Only areas are indicated.

An Bord Pleanála's decision concerning an electricity-generating plant at Dunstown, Kilcullen was in a different administrative area with different plans and guidelines. The instant development is not contravening objectives or policies of the applicable development plan. The scale and height of the Dunstown generating plant was found to be discordant with its surroundings. The instant proposal is in an area where it would not be the dominant visual feature.

Irish Law and EU Directives;

The European Commission is examining a claim that Ireland is not in compliance with the provisions of Directive 85/337/EEC, regarding the effects of certain public and private projects on the environment.

Section 98 of the EPA Act 1992 precludes the planning authority and An Bord Pleanála from considering any environmental pollution effects a result of the proposed activity. Any future changes in the legislation which may occur cannot be retrospective. Current legislation must be upheld. The developers fully agree with the inspector in PL 17.118993, where it is stated that the failure of Irish law to implement EC Directive 85/337/EC, is a matter for the courts to decide.

Other Waste Disposal Facilities;

The requirement for another waste disposal facility in the region has been questioned in the third party appeals. Landfill and incineration both form integral and necessary elements of the waste management plan for the north-east region. Incineration does not completely remove the need for landfill, instead it prolongs the lifespan of the landfill and reduces the environmental impact of landfills.

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Given the results of the centre of gravity analysis in site selection it is not unusual, in sustainability terms, that waste management facilities established to serve the entire region are located proximate to one another.

Noise and Working Hours;

Noise generated by the operation of the plant will be determined and controlled by the Environmental Protection Agency. The increase in noise levels due to the proposal will be insignificant.

While the proposed development will operate on a 24-hour basis, both the cement works and the proposed power plant will also operate on a 24-hour basis.

The proposed development does not fall within the remit of the EU Seveso 11 Directive.

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ORAL HEARING:

The oral hearing was opened on Monday, 21^{st} October, 2001 at 10 am. The first day of proceedings concluded at 5 pm. The hearing recommenced at 10 am on Wednesday 22^{nd} , concluding at 5 pm. The hearing recommenced on Thursday 23^{rd} commencing at 10 am and concluding at 5pm. The fourth and final day of the hearing was Thursday 24^{th} October, convening at 10 am and concluding at 6:40 pm.

In opening the hearing the inspector stated that the purpose of the proceedings was for An Bord Pleanála to be fully appraised of the proposed development. This would be achieved not only through the medium of the hearing but also through the various documentation, contained in the written submissions both at the application stage and subsequently to An Bord Pleanála. It would also include the environmental impact statement and all of the documentation associated with it including additional information.

The inspector stated that the hearing would take the form of direct evidence initially by the third party appellants, subsequently by the planning authority and ultimately by the first party appellants/developers. Observers would follow this.

Having taken direct evidence, cross-examination would follow. The hearing would be concluded with closing statements from the third parties, the planning authority and the developers.

The list of third party appellants was then read out by the inspector to elicit the numbers in attendance at the hearing. About one-third of the 20 odd third party appellants were in attendance. The remaining third party appellants did not attend the oral hearing.

Only two of the observers who were in attendance at the hearing proposed to make a submission.

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For of the third party appellants **COUNCILLOR S. LYNCH** stated that he was a public representative who lived in the area. The area is well developed and contains heavy industry. There was a lack of consistency in the planning process. While land use zoning had been used to refuse permission in other cases in had not been used in this case.

The Environmental Protection Agency covers air and other pollution. It also covers the risk to health.

The site is on the outskirts of Drogheda.

Duleek is a very historical settlement dating back to the early Christian times at 839 A.D. It is steeped in history.

The appeal site is located close to the Boyne Valley and will impact upon the valley.

There is a continuous white centre line on the R152. The road caters for hundreds of lorries on a daily basis.

For the third party appellants, **MR S. WARD** state that he was a town planner with considerable experience in local government and the private sector.

The R152, where it passes the site has a solid white centre line and poor vertical and horizontal alignment. There is no public lighting or footpaths at the site frontage. Mr Ward stated that much of his submission was an elaboration of the written appeal statement submitted by him on 27.8.2001.

Access to the site is proposed by means of the creation of a new access point from the R152. Extensive works are required to the public road, including the lowering of the road and the provision of traffic calming measures for a distance of 1.3 kilometres either side of the proposed access point. These works are not described in the public notice accompanying the application. They require completion of a public consultation exercise in accordance with Article 8 Part 8 of the Planning and Development Regulations 2001.

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The industrial location strategy of the Meath County Development Plan is clear. Industrial expansion is to take place at the designated development centres including Navan and to lesser extent at Trim and Kells. The application site is not a designated development centre, yet an industrial complex extending to 140,000 square feet is proposed, without a variation or material contravention of the County Development Plan.

The site and surrounding lands are not within a designated development centre and are not zoned for industrial development. The lands are agricultural. The proposal does not serve the needs of the surrounding local and/or rural community. The proposal has no particular location requirements that necessitate a rural context. If anything the development would serve the needs of the north east region and beyond and largely urban areas of the region.

The proposal presents a large industrial development of regional if not national proportions in a rural agricultural area not related to the needs of the rural and local community. Construction activity at the site will be typical of that for any industrial facility. The proposal therefore represents typical industrial activity in a rural agricultural area. The proposal is in material contravention of the Meath County Development Plan.

The proposal displays all the characteristics of heavy industrial development including traffic generation, extent of buildings including a 30 metre high building and a 40 metre high stack, extent of hard surfaced areas, noise, dust, nuisance, heavy water consumption etc. It displays none of the characteristics of an activity required to serve the needs of rural and local communities. There is no main drainage to serve the site and bored wells are needed to allow the development to function.

The proposal is in material conflict with the sustainability cornerstone objective of the Meath County Development Plan. The site is located in the south-eastern corner of the region and all materials to and from the site would have to travel by road.

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In terms of activity the proposal is also an unsustainable form of development. If permitted it would actively discourage other forms of more sustainable means of waste disposal including recycling.

The development will have an input of 150,000 tonnes and an output of 38,000 tonnes all of which will have to go to landfill.

The development would generate over 4,000 tonnes of hazardous waste which will have to be disposed of to a hazardous waste facility.

The development has a high water consumption requirement yet it is not located in those areas designated in the development plan as locations where industries with high water consumption requirements should be located.

The Strategic Planning Guidelines for the Greater Dublin Area are of primary importance.

Whilst Drogheda is a designated primary development centre, Duleek is not. The countryside surrounding Duleek certainly is not.

The Guidelines designate the area west and south west of Drogheda as part of a strategic greenbelt. The extent of the Drogheda urban area and Drogheda environs area is very well defined with the western expansion area of Drogheda being very well defined by the line of the Drogheda western motorway bypass. The extent of the Drogheda environs area is set down in the Drogheda Environs development plan incorporated into the statutory Meath County Development Plan 2001. No lands west of the line of the motorway are zoned for development. To allow the development to proceed would eventually lead to the physical coalescence of Drogheda with Duleek. This would be contrary to the strategies of both the Strategic Planning Guidelines and the Meath County Development Plan.

Page X of the Guidelines state "development outside the metropolitan area and the identified development centres in the hinterland area should be primarily to meet

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local, rather than regional needs and future employment will be located in existing employment centres."

At page 102 of the Guidelines, Development Strategy outside the designated development centres in the hinterland is made clear. It is stated;

"A fundamental principle of the Strategy is the concentration of development into the identified development centres in the hinterland area. This strategy implies that development elsewhere should be primarily to meet local, rather than regional needs. A consequence of the strategy is that large parts of the Greater Dublin Area will require to be protected from development, other than that necessary to meet local needs. This need for protection would be greatest close to the Metropolitan Area between that area and the principal development centres in the hinterland area."

In relation to strategic greenbelts it is stated;

"It is therefore proposed that strategic greenbelt areas be identified in the appropriate development plans. Land use within these areas should be restricted to that compatible with the objectives of concentrating development into the metropolitan area and the development centres and securing a clear distinction between urban and rural areas."

In terms of acceptable land use, it is stated;

"Land uses in the strategic greenbelt areas will, therefore, be primarily rural and include agriculture, forestry and similar activities. Leisure and recreation facilities, especially those requiring extensive areas of land can also be accommodated in these areas. Other forms of development, including housing and employment activities, should be restricted to local needs only."

The proposal is fundamentally at variance with the Strategic Planning Guidelines. The site is within a strategic greenbelt. Drogheda is a designated development centre. The plan and zoned area of Drogheda is well defined in a statutory development plan made several years after the publication of the guidelines. The area outside the

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defined development centre forms part of the greenbelt. One of the primary aims of the greenbelt strategy is to provide a clear distinction between urban areas and rural areas. The proposal by permitting a large scale industrial use on unzoned land, outside the defined and designated development centres is fully and completely in conflict with that strategy.

Paragraph 2.8.3 of the Meath County Development Plan deals with development of greenbelt policy. This section of the plan states that it is the intention of the Council to designate greenbelts responsive to the Strategic Planning Guidelines. Such greenbelts would protect vulnerable but high quality agricultural land whilst affording opportunities for the development of leisure and recreation. These policies would protect fragile landscapes and create visual breaks between urban centres such as between Ratoath and Ashbourne, Clonee and Dunboyne.

The development plan has failed to incorporate a cornerstone policy of the strategy of the Strategic Planning Guidelines which is the designation of strategic greenbelt areas. The site should form part of any greenbelt designation in the Drogheda area.

Because of its location in a strategic greenbelt area the proposal would materially contravene the Greater Dublin Planning Guidelines and the Meath County Development Plan. In relation to site selection the waste management plan for the north east region considers Dundalk, Navan, Carrickmackross and Kingscourt as possible locations for a thermal treatment plant. It does not include Drogheda or Duleek.

The developers themselves in their environmental impact statement conclude that Ardee is the most appropriate location for the proposed development. They claim that no sites were available at Ardee. Submitted is an extract from a zoning map of the Ardee Development Plan, Appendix 6, illustrating an extensive area of land zoned immediately abutting the N33, linking the N1/M1 with the M2.

No alternative sites have been properly assessed. As such the E.I.S. is fundamentally flawed. The E.I.S. states that Ardee is also well positioned to provide motorway links to both Dundalk and Drogheda but as no large scale industry is located in Ardee, it

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was not further considered. There are significant areas of land zoned for industrial development at Ardee.

The E.I.S. contains no reference to architecture. It does not deal comprehensively with many other areas including hydrology, material assets, visual impacts, traffic and lighting. The 'visual and landscape' section fails to provide details of the scale of the development relative to the cement works. It fails to consider the visual impact on the north side of the Boyne Valley, from lands to the south or from the Drogheda western bypass motorway.

No effort has been made to produce a visual representation of impact from surrounding listed views. The Boyne Valley which is a World Heritage Site is given no analysis.

No detailed and scaled photomontages are produced to allow the impact of the development from surrounding dwellings to be visualised.

The E.I.S. provides no details regarding the filling of the site to bring it to road level as indicated by finished floor level on certain of the E.I.S. sketches. A detailed tree survey does not appear to have been carried out. It is evident that a stand of mature native trees at the site frontage will have to be removed to facilitate visibility splays and site entrance formation. No assessment of this matter is given in the E.I.S.

Water supply requirements are only briefly referred to in the E.I.S. No impact of water extraction is given.

Ground water considerations are not taken into account in the E.I.S.

It is not clear from the E.I.S. as to what exactly is intended to be burnt. The amounts and the breakdown of waste types have not been given.

The Knockharley facility provides the opportunity to stand back from the incineration option and allow proper assessment of the implications of that option. The north east is at the very early stages of recycling. This should be given a chance over a period of

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say 5 years and an assessment then made of the need for an incinerator. If the incineration option is now taken the opportunity to achieve high levels of recycling will be lost.

Traffic considerations form a major part of the appeal.

The proposal would endanger public safety by reason of a traffic hazard. The R152 at the site entrance and over almost its full length between Drogheda and Duleek has very poor vertical and horizontal alignment.

The planning authority has consistently refused permission for development accessing onto the R152. This includes single dwellings. A reason for refusal relates to even single dwellings being likely to cause traffic hazard. Yet the planning authority see fit to grant permission with an access onto the same regional road for an industrial complex of 140,000 square feet.

No assessment is provided in the E.I.S. as to the impact of hauling waste through the centre of Duleek. This would be a route for the haulage of significant volumes of waste from the north western area of the region. Such a scenario would have disastrous effect on the amenities of residents in Duleek.

Heavy vehicles mostly associated with quarrying already pass through the village. These vehicles endanger public safety and have a severe negative effect upon the environmental quality of the village. The traffic analysis submitted relates only to the ability of the stretch of road to carry a stated amount of vehicles. This is not acceptable in land use planning terms and provides no assessment of environmental impact.

Given that 38,000 tonnes of waste will have to be disposed of annually from the site, this matter should have been considered in far greater detail by the planning authority. It should have formed part of a further information request.

The planning authority did not properly consider the development in the context of the County Development Plan. Reference is only made by the planning authority to

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the developers' site selection criteria. These are fundamentally flawed. The proposal represents a material contravention of the County Development Plan.

No analysis is made of the impact of the proposal on the settlement structure of the area. No analysis is given to new zoning provisions affecting the eastern part of Duleek. No relevant planning applications in the area were referred to, including a large proposed quarry in the Duleek area.

The Strategic Planning Guidelines for the Greater Dublin Area are not mentioned in the report of the planning authority. The guidelines are clear in stating that only extremely limited local need development outside the designated development area centres should be permitted.

No critical analysis is provided as to the landscape implications of the development. This includes considering listed views and the objective to provide a cycling route in close proximity to the application site. The Boyne Valley World Heritage site is given scant if any detailed consideration.

The planning authority failed to recognise that the development plan is a solemn environmental contract between the people of County Meath and the elected members of the Council and the planning authority. The content of the development plan deserves detailed and minute consideration in dealing with an application for permission. The statutory development plan was effectively cast aside in this case.

A proposed thermal waste treatment plant at Kilcock (PL 09.112536), was refused permission by An Bord Pleanála on appeal following a refusal by the planning authority notwithstanding the fact that the application site had the benefit of an outline permission.

The inspector in the Kilcock case stated;

"The site lies outside the development boundary of Kilcock on lands which are unzoned but are deemed to be primarily for agricultural use as set out in paragraph 2.9.2 of the 1999 development plan. The fact that there is an outline permission for

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light industrial use on the site does not change the zoning and therefore, as it stands any application for an industrial use, other than for an approval in compliance with the outline permission, would be a material contravention of the plan".

An Bord Pleanála in deciding the appeal concurred with the opinion of its Senior Planning Inspector and refused permission.

Reason no. 1 for refusal states;

"The site of the proposed development is located outside the town of Kilcock, on land which is not zoned for industrial purposes, and the where the use of the land is deemed to be primarily agriculture as set out in paragraph 2.9.2 of the 1999 Kildare County Development Plan. The proposed development, because of its industrial nature, would contravene materially the development objective set out in the development plan for the use primarily of the site for agricultural purposes".

The site is designated rural and agricultural in the Meath Development Plan. It is an objective of the plan to protect these areas from development other than development that is sensitively designed and which services local needs or the local area.

The Senior Inspector in the case PL 09.112536 was also highly critical of the site selection procedures, visual impact, impact on the environment and impact on residential amenity.

In the case of PL 17.122364, involving a substantial mill building and associated buildings on a site of 7.37 hectares at Oberstown, Skreen, the inspector concluded that in addition to many other considerations, the site was located in a strategic greenbelt as designated in the Strategic Planning Guidelines for the Greater Dublin Area and was an inappropriate use in this context.

In deciding the case An Bord Pleanála concurred with the opinion of its inspector in the attached reason for refusal;

Having regard to;

- (a) the location of the proposed development in a rural greenbelt area remote from any major transportation route and development centre;
- (b) the policy of the planning authority in the current development plan in the area, to ensure that any large scale commercial proposal in rural areas is sustainable,
- (c) principles of sustainable development as set out in the Strategic Planning Guidelines for the Greater Dublin Area,

It is considered that the proposed development would by reason of its dispersed and extensive geographical supply and customer base and its production output capacity constitute a large scale regional development facility which would conflict with the provisions of the current development plan for the area and the principles of sustainable development as set out in the Strategic Planning Guidelines for the Greater Dublin Area and would, therefore, be contrary to the proper planning and development of the area."

In the case of Knockharley, PL 17.125891, the Board in deciding to grant permission for the development, noted that the Meath County Development Plan 2001 contains an objective for the provision of a landfill at Knockharley. There is no such objective in the plan in relation to Carranstown.

F. O'DOWD T.D.;

Mr O'Dowd stated that he was a member of Louth County Council, Drogheda Corporation and Dail Eireann.

The proposed development is premature as the waste management options as set out in the waste management plan for the north east region have not been full explored. It should have identified locations for an incinerator. While mentioning 4 possible sites, it did not come down in favour in any one of these sites. None of these sites is the appeal site.

The proposed incinerator will devalue property in the area.

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The site is located in a rural area zoned for agricultural use.

A development of the type proposed should be on industrial lands which are zoned for that purpose in the County Development Plan, therefore allowing people to expect or anticipate that industry proposals would be put forward for that land. Such proposals would not be expected on agricultural land. The development would significantly add to the industrial nature of this agricultural area. Significant industrial developments already exist and further has been permitted with the electricity-generating plant. The proposal would add to the intensive industrial development of the area and is incompatible with the zoning of the site.

The site adjoins a very busy and a very dangerous road the R152. It is also on a very dangerous stretch of the roadway. The traffic generated would significantly add to traffic hazard. The use would operate 24 hours per day. There would be an unacceptable increase in traffic hazard. Residents would in fact be living in an industrial estate not in rural Meath.

The proposal would negatively impact upon Newgrange and the Battle of the Boyne Site.

The community recycling plant is a cosmetic exercise. This will only be a bring site as recycling will take place elsewhere.

The proposal would have an negative impact on food produced locally.

Condition no. 3 of the decision of the planning authority to grant permission would be impossible to police. It does not limit the size of the incinerator. The developers may well wish to bring waste from other parts of the country, particularly given the proximity of the site to the Dublin Area. It is important therefore that the size of the incinerator which is basically the volume of material that can be burnt, is strictly limited. This will limit the source of waste material to the North Eastern region. Condition no. 3 is otherwise non workable.

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Condition no. 5 is a requirement for a community liaison committee. However it should be more representative of local people.

There is no financial provision for independent scientific monitoring of the proposed development.

A recent proposal by Councillor S. Lynch on the R152, which was a much smaller development than that currently proposed was refused by An Bord Pleanála. An Bord Pleanála must be consistent and refuse permission for the current proposal.

If the plant went ahead a real time website should be available to ease people's minds in relation to the operation.

S. KEEGAN:

The witness stated that she was a member of the Carranstown Residents' Group. These were all local people resident in the area. She herself has been a local resident for the past 23 years.

A map was submitted indicating the houses in the locality with the names of the residents.

Most of the residents have been living in the area for generations.

With the tolling of the M1 Motorway roads such as the R152 and other local roads will be increasingly used by traffic accessing the site. This would be to the detriment of local residents.

The 150,000 tonnes to be dealt with in the incinerator will require 15,000 extra traffic movements per year. In total there would be 90,000 extra heavy goods vehicles on the R152 each year, if one includes the ash which would require movement off the site.

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There is a local cemetery at Carranstown. The increase in the heavy vehicular traffic will hinder the movement of people and into and out of the cemetery.

Construction traffic will greatly hinder local accessibility. There has already been considerable delay over the past 18 months resulting from the building of the motorway, which crosses over the R152 close to Carranstown.

The building of the power plant taken together with the proposed development will greatly impinge upon local accessibility on the R152.

Ash both hazardous and non hazardous will regularly traverse the R152 and it is a concern to the residents.

Within 400 metres of the site there is a vibrant soccer club. This caters for large numbers of children. The club also caters for adults. Getting to and from the sports fields will be greatly inconvenienced by traffic generated by the proposal. The R152 is already very dangerous and would be rendered more dangerous with the proposed development. Training takes place at night. There are no street lights on the R152. Cycling on the road is extremely dangerous and two cyclists have been killed on this stretch of road in the last two years.

It seems quite incongruous to have a World Heritage Site beside what would be an industrial complex. Farming would be badly affected by the proposal. Rental income from farmland would decrease.

The power lines and pylons resulting from the proposed development would be an eyesore and be disruptive in the area. These will affect property values.

Incineration encourages waste.

N. MCCABE;

Mr McCabe stated that he spoke on behalf of his family and the Nulty family, who are local residents with children attending the local Mount Hanover School.

It is unfair that the community should be asked to bear the burden of disposing of the waste of a large section of population. No inhabited area should have to bear this burden. Those who produce waste should be directly involved in a comprehensive waste management plan which would include minimising waste output and recycling. There has been little or no attempt to educate people in waste reduction or recycling. The nearest recycling facility is 12 miles away in Navan. There has been no attempt to provide a local recycling unit.

It is most unjust that a planning application which benefits one group of people, the developers, should have disadvantaged another group, of local families.

It is important to minimise waste because it cannot be destroyed. It can only be changed to a different form. If burying waste in landfills creates problems, it seems obvious that burning waste in incinerators can similarly create problems in the atmosphere. This is a huge area of concern.

The character of the area would be altered in a damaging way for existing and future generations.

The proposal would impact greatly upon livestock farming in the area.

T. C. BURKE;

Mr. Burke stated that he owned 13.4 acres of land. Before 2001 he was offered £234,000 per acre for the land. The land is zoned residential. When the application for the incinerator was made, the land became unsalable. Mr Burke stated that he has therefore lost £3.28m on the rumour that an incinerator was planned for the area.

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In reply to a question from the inspector Mr Burke stated that his land is approximately ³/₄ of a mile to the east of the site, on the eastern side of the M1 Motorway.

Mr Burke submitted an affidavit to the effect that he was offered £245,000 per acre for his land in July 2000. He did not accept the offer because he felt that the lands were more valuable. Instead he decided to put the lands up for tender. The tender process ended on 15th June 2001. It was organised by Messrs. Gunne Auctioneers, South Quay, Drogheda.

Before the tender day, news of the proposed incinerator became public knowledge and at the close of the tender, no tender had been received by him or by his agents, for the lands.

The proposed development affects not only his lands but other lands in the area.

It is difficult to see why the planning authority zoned land for residential use and then permitted industrial development on unzoned land. This virtually cancels the residential zoning.

The traffic generated by the development will seriously affect local people and cause traffic hazard.

If the proposed incinerator is allowed to proceed An Bord Pleanála must protect inhabitants of the area from monetary loss. This can be done either by surcharging the planning authority with the cost of the depreciation of lands in the area or surcharging the developers with the cost of this loss.

The site is located close to a World Heritage Site and will impact upon it.

In granting permission for the power plant the inspector's report on that development suggested that the granting of permission should not be used by the planning authority as a precedent for making this an industrial area.

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The view from Bellewstown Ridge needs to be preserved. The building of this development would ruin the view.

M. GODFREY;

The third party appellant stated that as the Lord Mayor of Drogheda he wished to strongly object to the decision of the planning authority to grant permission.

A proper working of the waste management hierarchy has not been given a chance.

The site is located in close proximity to schools, public and private properties and industries. It will have a devastating and adverse effect on existing developments.

The site is approximately 2 miles from a highly populated area and also surrounded by many rural properties. It may as well be in the centre of Drogheda. There is a fear that it will undermine public confidence in the safety of food.

It will seriously affect agriculture.

Hazardous ash will have to be transported.

The proposal will impact upon local tourism. It is unthinkable that an incinerator will be contemplated in the gateway to the Boyne Valley.

Thousands of people have objected to the proposed development.

MR. M. O'NEILL stated that he represented the "No Incineration Alliance". He would be assisted by Mr. M. O'Donnell, Barrister, during the course of evidence submitted by various witnesses who would be called by both Mr O'Neill and Mr. O'Donnell.

MS A. WALSH for the "No Incineration Alliance" stated that the group was from the locality and from all walks of life. They were a non profit and non political group. They are members of Zero Waste Ireland.

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Incineration of municipal waste should not be permitted. It is unnecessary, wasteful, dangerous, immoral and economically reckless. While it is practised in many countries of the world it is generally not practised in Ireland.

There are three main arguments against incineration. The first are health fears.

The second is related to wealth. Incinerators are expensive to build, run, maintain, monitor, feed, decommission and ash disposal raises further issues regarding costs.

A feasibility study as recent as 1999 commissioned by Meath County Council concluded that thermal treatment was more expensive per tonne than landfill. This same report designated Navan, Kingscourt, Dundalk and Carrickmacross, as being the most suitable sites for locating a thermal treatment plant, should the region choose the path of incineration.

In September 2002 The European Court of Justice ruled that municipal waste incineration is always waste disposal and not waste recovery. It is not a renewable force of energy. It is a wanton burning of resources which could potentially have further use.

It is an end of pipe solution. Allowing incineration gives the wrong message in relation to recycling. This rural area of Meath should not be the dumping ground for the north-east, nor for Dublin.

Agriculture and tourism are the two strong indigenous industries. These will be affected if the development proceeds.

The cement plant is there. It is a blot on the landscape of the rural area. However it is there fore a reason, the limestone reserve, the main ingredient for cement production. It was built in the 1960s when the significance of heritage was not as well known.

This small community should not have to bear the burden of heavy, dirty, industry for the whole north east.

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Over 22,000 people in County Louth and 25,000 in County Meath signed petitions of opposition to incineration in Ireland. Louth County Council voted against the north east regional waste management plan because of its reliance on incineration. This decision was overruled by the then Minister for the Environment.

MR. D. SMITH stated that he was a resident of the area and supported the "No Incineration Alliance". He was a professional golfer who had lived in the area for most of his life. He was concerned about the incineration of waste. Fears can be either real or imaginary.

There has been a lot of heavy industry in and around Drogheda over a considerable number of years. Mr Smith stated he was part of a group of people who attempted to get existing heavy industry to put in filters to existing plants. However the companies were more interested in profit. Companies reluctantly do what is necessary for the quality of air in the locality.

In spite of the many alternatives to incineration, it is being proceeded with by the developers.

For "No Incineration Alliance", **DR. E. COLLINS** stated that she was a member of the Irish Doctors' Environmental Association who had serious concerns regarding incineration. Incineration is not a solution to waste management problems.

She was opposed to incineration for 3 reasons. It does not make sense to burn the earth resources. Resources should not be destroyed.

The presence of incinerators creates a demand and allows continuation of the throwaway habits.

Incineration does not destroy waste, on the contrary it transforms it into emissions into the environment and converts household waste to hazardous waste.

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For every 3 tonnes of waste incinerated on average, 1 tonne of ash is produced. The safe disposal of ash also poses a problem. There is no requirement for health-related surveillance of incinerators, in the licensing arrangements.

There is problem with waste production. Municipal waste production doubled from the mid-1980s to the present time. It continues to increase by approximately 4.5% annually. 2m tonnes of municipal waste were produced in 1998.

In keeping with this the Government set waste management targets in 1998 largely based on EU Guidelines. These targets include;

Reduction of 65% in bio-degradable waste going to landfill.

Recycling of 35% of municipal waste.

Recycling of 50% of demolition waste in a five-year period.

Diversion of 50% of household waste away from landfill.

These targets are far too modest. No compostable waste should be landfilled.

The structures whereby people may recycle and reuse are not yet widely available. The piecemeal approach by local and government departments results in the fact that recycling rates in Ireland are the lowest in the EU. It is a disgrace that we are even considering an incinerator when there is such a non-structured approach to the implementation of the waste hierarchy. The waste hierarchy is reduce (consumption), reuse, recycle.

There is now sharply increased awareness by consumers of the direct link between consumption and disposal. A welcome development in many areas is of managed recycling depots. It is the responsibility of the present generation to deal effectively with the problem so as not to leave the legacy for future generations. Any risk that is avoidable is unacceptable.

We are a 'throw-away' society that has forgotten that there is no place called away.

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For the "No Incineration Alliance" **MRS P. DUNNE** stated that herself and her family lived locally. She had a number of children attending the local primary school, Mount Hanover. The safety of the local children is paramount.

In the event of an accident, what plans are in place for evacuation of the plant and the environs? In particular the school.

There is a local fear of increased accidents, particularly to children. There have been three fatalities on the R152 in recent years.

The developers have had a plant closed down in Belgium. This is a concern of the residents.

To place an incinerator in a densely populated area, which also contains a school, poses an unacceptable threat.

There must be a safer alternative solution to the waste problem.

For the "No Incineration Alliance" **DR. A. STAINS** stated that the aquifer under the site rendered it unsuitable as the location for an incinerator.

The flue ash generated by the development is hazardous and no details of disposal have been given.

If condition no. 3 of the decision of the planning authority is dropped the site would have to be reconsidered.

The meteorology of Dublin Airport is different to that at the appeal site.

Health impacts are not properly considered in the environmental impact statement. This is a legal requirement.

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For "Non Incineration Alliance" MR. V. REIJS stated that there was a right to light at Bru na Boinne. The Government had prepared a Draft Development Plan for Bru na Boinne.

A visible plume could be formed resulting from the presence of the stack and the emissions from it. This could affect the winter solstice sunlight at Newgrange. No modelling had been put forward by the developers in relation to this. In reply to a question from the inspector Mr. Reijs stated that there was a possibility that such a plume could arise.

Mr. Reijs stated that there should be an exclusion area around Newgrange in which new development requiring emissions would not be permitted. This would include the appeal site.

In reply to a question from Mr Phillips for the developers Mr Reijs stated that the suggested area was based on a number of assumptions made by him.

For the third party appellants Mr. D. Lattimor stated that he was a practising and licensed falconer.

There is a pair of peregrine falcons nesting in the adjoining quarry. It is a native bird of Ireland. The bird has seen persecution as well as poisoning on a massive scale culminating in near extinction in the 1960s. At present the bird is in a stable breeding condition in Ireland.

The E.I.S. clearly omits to mention a known peregrine nesting site in the adjacent Platin quarry. The nest site varies from year to year but is consistently found on the south or west quarry face. This offers the pleasure of observing the bird in its wild state. The developers in omitting the bird in its report, clearly made a grave error relating both to the construction phase and the final operation of the plant. In this respect the E.I.S. is fundamentally flawed.

From the legal point of view the peregrine falcon has the highest protection under law. European Bird Directive 9979. Irish Wildlife Act 2001. Dúchas has not

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objected to the proposal. The resources necessary to calculate the impact of the development on the falcons is sorely lacking.

The developers contend that there would no physical disturbance to the nest site. The third party appellant has no problem with this as the nest site would not be in direct danger from the development. However indirect disturbance from the construction of such a large structure so close to the nest site and above the line of horizon of the quarry could have a detrimental effect on the bird's sense of security. It may cause the birds to abandon a successful nest site, temporarily or permanently in favour of a more vulnerable location. One cannot calculate the impact of noise on the location.

Conditions on the appeal site may seem of little consequence compared to conditions that prevail in the quarry. However the birds have selected this site with its existing pressures and if any further pressures are applied this could have negative consequences.

The contention that the feeding habits of the birds will not be affected is questionable. The operation of the plant will require a form of vector control that may scare the falcons or worse still inadvertently poison them.

The main prey species of the peregrine falcon are birds. However it is not unknown for falcons to eat carrion and small rodents.

The third party appellant has observed the habits of this particular nest for many years and drawn a number of conclusions regarding hunting territory. This particular pair hunts primarily in the Bellewstown Hill area and south of Duleek. They are under existing pressure from major road building in the area. The proposed development will attract all sorts of vermin both avian and terrestrial and may encourage the falcons, especially the young, to try their luck at this apparent easy meal. This will inevitably bring them into close contact with power lines which will multiply in the area with the proposal. This is a major source of fatal injury to the peregrine falcon.

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An Bord Pleanála should seek further expert advice from sources other than those which have already been given in the environmental impact statement and by the developers.

Because the peregrine has selected the quarry as nest site does not mean that they will tolerate any form of industrial development. The reasons for the selection of these nest sites are still unclear. It is strange that many traditional nest sites have not been reoccupied. Many theories have been put forward but no firm conclusion reached.

The peregrine population in both Britain and Ireland is on the increase. This is good news for Ireland as well as mainland Europe where the peregrine populations have seen similar decline but not the corresponding increases. Many scientists believe that the population from Britain and Ireland will help to repopulate other areas. Irish birds have been recorded as far north as Sweden and as far south as Spain.

The peregrine falcon is seen worldwide as the symbol of bird conservation.

In reply to a number of questions from Mr. Phillips, Mr Lattimer stated that any disturbance of the bird was unacceptable. The hunting area of the bird was unknown but it could vary from 2 or 3 kilometres to 10 kilometres. The fact that the proposed development would be above the level of the existing nesting site is of particular concern. The flight path of the birds would be severely restricted by the proposed development, particularly the construction works. The peregrines have adapted to developments in the quarry however they could very well be disturbed by the proposed development.

They could eventually adapt to the conditions which would pertain with the proposed development on the appeal site completed however they may not.

Mr Sweetman of An Taisce, third party appellants, stated that he wished to elicit information from Mr Latimer. In response Mr Lattimer stated that in 99.9% of cases the food eaten by falcons was of the avian variety. Rodents would not necessarily be one of the main feeding species. Young peregrines could possibly feed on rodents

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however this was unlikely. However if young feed on rodents this would affect the survival of the species.

For the Louth Meath Health Protection Group **E. McKenna** stated that the inspector reporting on the proposed power plant, stated that the site of the power plant was remote from Drogheda and Duleek. The area was unserviced. It could not be taken as an industrial area.

Three people have lost their lives on the R152 within 100 metres of the appeal site. Two people have been badly injured on this stretch of road.

During a visit to the Indaver incinerator in Beveren the witness enquired as to the type of material being incinerated with particular reference to the fact that gas cinders could be incinerated. The manager of the plant stated that the only control as to the material entering the incinerator was when they saw such material explode on the monitors filming the interior of the incinerator. This is unsatisfactory.

Within the last three months a juggernaut exiting the cement plant jack-knifed across the road as it was not properly connected to the cab. This action occurred at 8:40 in the morning when the road was very busy. Luckily there was no other vehicle involved in the incident.

Dust regularly falls from the cement works, on surrounding lands. Such dust has on occasion affected the third party appellant's car and property. A sample of the dust was sent by the third party appellant to the Environmental Protection Agency. It took a number of months for a reply. The reply was unsatisfactory.

The environmental impact statement for the power station stated that the existing noise level in the area was extremely high. Since that time there has been an increase in traffic particularly heavy goods vehicles and this has increased noise levels.

The R152 is continuously used as a link route between the N2 and the M1. Because of the problem with the bridge in Slane traffic is diverted onto the R152 adding

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further to traffic levels. The volume of traffic on the R152 has practically doubled in the last four years.

In reply to a question from the inspector Ms McKenna stated that she lived 100 metres from the appeal site, in the Drogheda direction.

The third party appellant's house already adjoins the very large cement works and quarry. If the power plant is built this will also adjoin the third party house. The house will be completely surrounded by industrial development if the proposed development is carried out.

All of these plants would be within 100 metres in all directions.

In reply to a question from the inspector Ms McKenna stated that she had lived in the area since 1991. Her house was built in 1894. On requesting information regarding future developments prior to the purchase of the house the third party appellant was informed, by the planning authority, that the only new development in the area would be the M1 motorway which is located a considerable distance from the house.

For An Taisce, **MR P. SWEETMAN** stated that the hearing was fundamentally flawed as it could not hear evidence relating to environmental pollution. The proposed development is likely to have a significant impact on a Natura 2000 site, the peregrine falcon nesting place.

Mr. Sweetman then submitted a letter from the European Commission Directorate/General Environment, dated 1/10/2002, written to Mr. G. Casey, Casey and Company Solicitors, North Main Street, Bandon County, Cork. The letter relates to the development of the Corrib gas field off the Mayo Coast. It contains 11 paragraphs number 8 is the significant one. This states;

"Having regard to the links between the different project components making up the Corrib, comments on how in combination effects have been addressed by the different decision making authorities, together with comments on the fact that the Environmental Protection Agency Act 1992 appears to inappropriately constrain the

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role of the planning authority with regard to decision making on impacts affecting Natura 2000 site" the Europe Commission has recently written to the Irish Authorities seeking information in order to investigate issues raised in a number of complaints received relating to the Corrib gasfield and the method by which it is being dealt with by the local authority, An Bord Pleanála and the Environmental Protection Agency.

There is now a conflict between the European Commission and Ireland relating to how development projects should be dealt with. In this case An Bord Pleanála is the court of final appeal of planning matters. An Taisce considers that An Bord Pleanála should state a reference to the European Court of Justice as this is the only legal way of resolving this conflict.

The Environmental Impact statement does not refer to fire safety. Development which generates electricity is exempt from the Fire Safety Regulations. There is no information relating to fire safety which would enable an assessment of fire safety implications of the proposal. The European Commission consider that all likely effects should be taken in consideration. The proposed development is a concept. Permission cannot be granted for a concept. The proposal is fundamentally flawed in European Law.

MR M. RAVE representing East Meath Dairy Farmers stated that he was speaking on behalf of 34 dairy farmers operating in the area. The main business is dairy production with the majority supplying milk to Glanbia in Drogheda, for the liquid milk trade. A smaller number of farmers supplied milk for use in the production of Baileys Irish Cream Liqueur.

The farmers own somewhere in the order of 3,000 acres and carry in the region of 2,500 cows. They are a significant component in the economic activity in the area between Duleek and Drogheda where the incinerator is to be located. The recent crises in animal health such as foot and mouth disease and B.S.E. have considerably undermined public confidence in the food we consume. This has caused the introduction of measures such as trace back schemes. There are now direct links between individual producer and points of sale.

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Regular sampling takes place. Contracts for the suppliers of milk are reviewed on a regular basis.

The appellants are most concerned that the location of an incinerator in the vicinity of their farms will create the perception in the minds of consumers that they would rather purchase milk from a producer that does not accept milk that originates on such farms.

The issue of perception and consumer confidence is critical to the survival of the agricultural industry.

Given the general public's negative reaction to incinerators the appellants are of the opinion that their produce would be rendered worthless if the current proposal is permitted. The proposed development is therefore completely unacceptable to the appellants.

The proposal would have a crippling impact on the capital value of their properties and businesses. Many have invested over the years in stock, plant and housing and still owe considerable sums to financial institutions.

If day to day business is affected by the proposal the appellants will not have the opportunity to liquidate their assets and move elsewhere.

In addition to land and business many of the appellants live in the vicinity of the site. They face the prospect of their lands being devalued and also their residences. Even if they could tolerate loss to residential amenity many would be unable to cope with the financial loss that would accrue.

While the area is not exclusively used for agricultural purposes the existing cement works is perceived as an extension of the quarrying operations which have long been accepted at traditional or compatible rural industry. Such developments do not undermine consumer confidence.

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The proposal due to its nature and scale, represents a radical departure in terms of established land use and character of the area.

In refusing permission for an incinerator Fingal County Council deemed the incinerator to be out of character with the existing rural landscape.

In the case of PL 09.112536 An Bord Pleanála refused permission for an incinerator in a rural area stating that the incinerator would be out of character with the area.

The proposal would similarly be out of character with the area to the point that it would undermine the viability of the existing dairy farming land use.

For the planning authority **MR. M. KILLEEN** stated that the proposed development contained as principal component, a 2,000 tonnes per annum community recycling facility and a 20,000 tonnes per annum recycling plant for non hazardous, dry, unsorted, commercial waste.

The major element of the proposal is a waste to energy facility for 150,000 tonnes per annum of non hazardous waste. The proposed plant has a capacity in the range of 45,000/180,000 per annum. The proposal would result in the exportation of 11 mgWatt of surplus electricity to the national electricity grid. The nearest substations to the site are at Duleek, 2 kilometres and Rathmullen 2.5 kilometres.

The site of 10 hectares would contain development over 4 of those hectares. The remainder of the site would be landscaped.

Construction would take 2 years and employ 300 people.

The plant would operate for 25-30 years. It would employ 50 people.

The waste to energy facility would operate 24 hour per day. It would accept deliveries from 8am to 6pm Monday to Friday and 8am to 2pm Saturdays.

The community recycling facility would operate six days per week.

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Pre-planning meetings were held with the developers, relating to the documents to be submitted with the planning application and with scoping for the E.I.S.

The application was submitted to the planning authority on 15/1/2001.

Government policy was considered in the assessment of the application by the planning authority.

The 2001 Meath County Development Plan was adopted on 5/3/2001. The relevant sections of the Plan are 2.7.3 and 3.5.4. These relate to solid waste disposal and solid waste.

Meath Waste Plan 1994-1999 was also considered.

The Draft Waste Management Plan for the North-Eastern Regional Counties was published. This plan was adopted on 3.8.2001.

The planning authority had regard to the draft waste management plan for the region in assessing the proposed development. They also had regard to National Waste Management Strategy as contained in "Changing our Ways".

The planning authority also had regard to the Feasibility Study of Thermal Options for Waste Treatment/Recovery in the North-Eastern Region.

The North-Eastern Region Waste Management Plan envisaged one thermal treatment plant for the region. In relation to "energy recovery facilities" the Plan states;

"Thermal treatment shall be an integral part of a solution to the management of the region's waste."

The proximity principle is a fundamental part of the planning authority's consideration of the proposed development.

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In the Dublin region a thermal treatment plant proposal is an integral part of the plan.

As well as an application to the planning authority for permission for the proposed development an application is being made to the Environmental Protection Agency for a waste licence.

The planning authority is precluded from adjudicating on the environmental pollution implications of the proposed development by reason of the legislation.

The planning authority considered the construction phases of the proposed development.

In relation to the proposed development the methods by which the site was selected are acceptable to the planning authority.

Landfilling is the least favourable option in the waste management hierarchy.

Thermal treatment is fully compatible with an integrated approach to waste management, as outlined in Government Policy in "Changing our Ways". Landfill will continue to have a role in future waste disposal in Ireland however there is policy, at national level, to reduce long-term reliance on landfill. Landfill therefore becomes a subsidiary element of the integrated waste infrastructure.

Government policy aims to divert 50% of municipal household waste from landfill. A minimum of 65% reduction in bio-degradable waste, consigned to landfill is a further target. It is also a target to recycle 35% of municipal waste.

The County Development Plan at section 2.7.3 states that "future waste management action will be informed with due regard to the regional waste management plan."

The waste management strategy is based on four core tenets, one of which states;

"Development of waste handling processes including the consideration of thermal treatment to reduce bulk and landfill needs while yielding an energy return."

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Section 3.5.4 relates to solid waste and reiterates the regional waste management strategic approach.

Waste to be treated in the proposed facility will arise in the north-eastern region. Waste for thermal treatment will constitute unsorted waste.

The proposed development accords with the "Changing our Ways" policy of private sector involvement in providing waste management infrastructure.

The amount of waste to be disposed of is in line with that identified for thermal treatment in the waste management plan for the north-eastern region.

Condition no 3 of the decision of the planning authority confines the waste to the north-eastern region. A similar condition was upheld by An Bord Pleanála in their recent decision for a residual engineered landfill site at Knockharley.

It is a core objective of the north-eastern region waste management plan to reduce reliance on landfill. Key considerations in meeting this objective are 'the polluter pays principle' and the importance of economies of scale.

The appeal site is proximate to centres of waste production and therefore complies with the centre of gravity principle in relation to location.

The site is proximate to transport infrastructure.

It is proximate to the electricity distribution network.

Other sites were not available.

The north-eastern regional waste management plan in dealing with site selection criteria requires a central location, close to waste production, centre of gravity, proximate to energy users, good road access, appropriate development zoning and available source of cooling water.

The proposed development complies with primary selection criteria in relation to centre of gravity waste, proximity to transport and electricity infrastructure.

The environmental impact statement short-listed Ardee, Drogheda and Dundalk as possible locations for a thermal treatment facility.

The site of the proposed development has no specific land use zoning objective. It is in agricultural use.

The established land use pattern in the area includes industrial land, commercial.

The north-eastern regional waste management plan deals with the siting of a thermal treatment facility on a number of key issues.

The proximity principle is of major importance and requires proximity to origin of waste. Transport links with the surrounding regions roads is of considerable importance.

Proximity to potential energy users is important.

The North-Eastern Regional Waste Management Plan indicates that the optimal balance is to locate in one of the larger towns which has good transport links with the rest of the region. This town should be proximate to larger centres of population.

Section 3.2.3 of the 2001 Meath County Development Plan deals with industry and employment. One of the objectives is "identifying sufficient and appropriately located industrial land".

In general it is the policy to locate employment type proposals within areas identified for employment and industrial uses in designated centres. It is however furthermore stated that:

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"While it is accepted that there are sites suitable for industrial or small business type activities in rural areas, such locations will only be considered where these activities serve the needs of rural and local communities or where they are considered to have locational requirements necessitating a rural context."

The area has an industrial character.

The scale and bulk of the proposed structure and the amount of land required for a facility of this nature is large.

It would be inappropriate and unsustainable to site the proposed development on serviced industrial land. Waste management facilities are infrastructure.

Because of the scale and bulk of the structures proposed and the necessity to avoid an abrupt transition in scale of development, the planning authority consider that the proposed location is suitable rather that on zoned industrial land.

The site is located between two primary growth centres as outlined in the Strategic Planning Guidelines for the Greater Dublin Area, namely Drogheda and Navan.

The site has not been designated as a Natural Heritage Area, Special Area of Conservation or Amenity.

The area already contains a large quarry and the Irish Cement Ltd plant.

Environmental pollution aspects of the proposed development are the remit of the Environmental Protection Agency although they are referred to in the environmental impact statement.

The site is situated in a rural landscape with an established industrial area to the north east.

Residential development is scattered and dispersed in one-off housing characteristic of the area.

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Approximately 1 kilometre to the east there is a national school Mount Hanover.

There are three distinct local landscape characteristics. Boyne Valley, to the north is designated as a High Amenity Area of Natural Beauty.

The Bellewstown Ridge is located to the south.

The area in between these two land forms contains a landscape characterised by undulating ridges.

The local landscape is identified as an Area of Visual Quality, VQ11. This is designated as rural and agricultural in the County Development Plan which states;

"These parts of the county make up the majority of its area in that they comprise of normal rolling lowland pasture landscapes that apart from occasional ridges or prominent areas, are not particularly visually sensitive."

"These areas can absorb quite effectively appropriately designed and located developments in all categories including masts and wind energy installations, afforestation and agricultural structures".

The County Development Plan lists a number of views in the area for protection. There are a number of views located well to the north of the site. These are V5, V6, V7, V8 and V10. All of these views are northwards into the Boyne Valley and away from the site.

View V16, Bellewstown-Currant-Hillstown area afford views northwards into the proposed site. These are panoramic views.

There are open and glimpsed views from the Bellewstown Ridge, along county road no. 222.

The visual impact of the proposed development will be negative. It will not be significant due to views being distant from the site. It is also set against the background and backdrop of the high rise industrial structures and the open quarry face at the cement works at Platin.

During the construction phase there would be a high negative visual impact. This would be short term.

There will be open and glimpsed views from residences in the area.

The siting of the proposed stack and large structures utilises the sloping topography of the site.

There would be permanent visual impact when the proposed development is complete. These are acceptable having regard to the cumulative impact when taken in conjunction with the Irish Cement Works and the permitted power plant.

Mitigation measures include planting, screening, structure design and colour scheme.

The colour scheme provides darker colours at ground level and a gradual gradation to the lighter end of the colour spectrum for the upper portion of the buildings. This anchors buildings into the local landscape.

A number of architectural features have been incorporated into the structure. These include design profiled and flat metal cladding, and fenestration. These reduce visual impact.

The colour scheme and architectural features assist in distracting the eye from the massing and bulk of the buildings.

Extensive landscaping and screening will assist particularly the provision of berming.

There would be no plume formation from the proposed stack as it is intended that the temperature of exhaust gases will prevent this.

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Due to the 24 hour operation of the proposed plant a light glow will emanate from the site. However condition no. 19 of the decision to grant seeks to avoid, abate and reduce light pollution.

Traffic generated by the proposed development in both operational and construction phases was assessed in terms of impacts on the road network.

The file was referred to the National Roads Authority.

Peak hour traffic counts were taken on the R152 and the R150 to assess capacity.

Capacity is assessed in terms of level of service. The level of service for the R152 is in the range of 700/1200 p.c.u.'s (LOS) (C) and 1,300/1500 p.c.u.'s (LOS) (D).

These figures are based on one heavy goods vehicles equating to 3 p.c.u.'s.

The basis for the level of service estimation contained in the E.I.S. in section 7 is not clear. No reference has been made to daily traffic volumes on the network, annual average daily traffic.

Traffic impacts are only assessed for the opening year of 2004. They are not assessed during the proposed life of the proposed development and these constituted an element of further information request.

The developers assessed that the traffic using the R152 would reduce by 30% after the M1 motorway is open. Such calculations are based on 1995 traffic counts.

Existing and permitted development in the area have been factored into the traffic analysis. This includes the cement plant, the power plant, the proposed Duleek business park and the proposed Duleek Agri-Business Park. This agri-business park was later refused on appeal by An Bord Pleanála.

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In relation to traffic generally the developers have reasonably stated that there would be a 70/30% split north/south at the proposed entrance.

Construction traffic was considered by the planning authority to be significant as 300 personnel would be working on the site at peak construction. This would generate 100 heavy commercial vehicles per day onto and off the site.

The planning authority assessed the cumulative impact of the traffic generated by the proposed power plant construction phase coinciding with the proposed development. Mitigation measures were proposed for example a bus service could be provided for construction personnel, staggering of arrival/departure times would be implemented. Limiting heavy commercial vehicles to the off peak periods was also considered.

The developers originally proposed an acceleration lane for traffic leaving the site. This was altered, at the request of the planning authority. The acceleration lane was omitted and replace by a deceleration lane for traffic entering the site from the Duleek direction.

The planning authority required junction improvement at the access point to the site. This also included road widening and improvements to be carried out by the developers under the supervision of the planning authority.

Traffic calming measures were proposed by the planning authority on the section of the R152 300 metres south west of the site and 100 kilometres to the north east.

The planning authority sought a road contribution of €317,000.

In relation to concerns over traffic levels on the R152 the proposed development would not commence until the M1 motorway was open.

Adequate on site parking is proposed.

Traffic levels were predicted in the environmental impact statement for the year 2004 and also for the year 2020 with and without the development. It was predicted that

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there would be a 7% increase in peak hour traffic on the R152 and the R150 at year 2004 and a 5.4% increase at year 2020 allowing for traffic growth.

The developers considered the R152/R150 would operate with level of service D based on traffic volumes at year 2004 and 2020 with or without the development.

Junction capacities were re-evaluated in terms of predicted traffic growth/attraction/generation. No adverse impacts were forecast.

The junction with the R152 from the site has been redesigned in accordance with the requirements of the planning authority as per RT180. While the planning authority and An Bord Pleanála in condition no. 7 in PL 17.125891, relating to the proposed landfill at Knockharley, restricted traffic from using a section of the regional road close to Kentstown National School, a similar condition was not included in the proposed development. On reflection the planning authority consider that a similar condition would be advisable in the event of An Bord Pleanála deciding to grant permission to the current proposal. A traffic management plan could be put in operation.

In relation to soils, geology and hydro-geology, trial pits and monitoring wells and test wells were installed to determine soil characteristics, ground water flow and aquifer yield.

The bedrock is carboniferous limestone. Overburden deposits on site range from 5 to 20 metres comprising boulder clay deposits.

Ground water flow is eastwards towards the river Nanny.

The local ground water table is affected by the adjoining quarry operation.

The site is underlain by an aquifer classified as regionally important with moderate vulnerability to contamination.

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A 72-hour pump test carried out indicated a yield of 470 cubic metres per day with a low draw-down and good recovery. The potential for groundwater extraction is high with no adverse impact in particular for the local ground supplies.

Process water requirements are low. They would be provided by means of groundwater extraction and on site surface water attenuation with underground tanks.

Water supply is proposed from the adjoining public mains. This would supply on site operatives.

Wastewater generated by the construction phase would be by means of on site storage tanks. The operational phase would be by means of a proprietary wastewater treatment unit.

The site is not located in an Area of High Amenity or Natural Beauty. There are no tree preservation orders relating to the site. It contains a low diversity of flora and fauna and is considered of low ecological value.

The proposed development does not have any implications for archaeology and cultural heritage.

Evidence has not been submitted to substantiate alleged property devaluation in the area. The major industrial installation adjoining, at Platin, has not produced evidence of adverse impacts on property values.

Tourists sites are well removed from the appeal site.

The principal impacts on tourism are considered by the planning authority to be visual in nature.

The loss of 25 acres of agricultural land is not significant in the context of the overall agricultural land bank in County Meath.

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The planning authority consider that working closely with local communities use should be made of a proportion of the income from the waste charges and the gate charges to mitigate the impact of the proposal on the local community through appropriate environment improvement projects.

The strategic location of the proposed development in terms of proximity to the M1 motorway, the electricity grid and the gas distribution network is of primary importance.

The proposal accords with the provisions of the Meath County Development Plan. Provided it is developed and operated in accordance with the conditions of the decision to grant permission the proposal accords with the proper planning and development of the area.

The Fire Officer of Meath County Council, in a verbal report to the Planning Officer, offered no objections to the proposal.

The site is located in an infrastructure corridor. It is a piece of infrastructure like a wastewater treatment plant.

The Bru na Boinne draft management plan indicates a core area. The site of the proposed development is well outside this core area.

The proposal is not a material contravention of the County Development Plan. In relation to strategic greenbelt areas the planning authority are in the process of identifying these areas.

The site of the power plant was granted permission in a strategic greenbelt.

For the planning authority **MR. J. GIBNEY** stated that he was a Senior Executive Engineer with responsibility for roads in County Meath.

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The development has an access off the R152 which is a major regional road serving Drogheda and Duleek. The entrance to the development incorporates a right turn lane designed to RT180191 and includes a deceleration lane on the southern approach. An acceleration lane at the exit from the site was eliminated at the request of the planning authority.

The R152 contains a number of industrial and commercial sites such as the cement factory. It also contains a Department of the Environment test centre, a tyre centre, a filling station, a pub and soccer club grounds. All of these elements generate increased turning movements on this section of road.

A traffic calming scheme is proposed to cover the section from the sports ground west of the development to east of the cement works. This would increase the safety on this stretch of road. The proposed development will not be out of character with the remainder of the road. Sight distances and visibility are within standard.

The environmental impact statement assessed peak hourly flows on the surrounding roads up to 2004 as well as the junction capacities.

The developers were requested to submit additional information addressing level of service on these roads based on AADT. They were also asked to assess these figures over and up to 2020 and also to consider the cumulative traffic impacts of other developments in the area both existing and permitted.

The volumes of traffic predicted in the area with and without the development were given and accepted by the planning authority.

The M1 motorway would result in a decrease in traffic use in the R152 and the R150 or 30% and 15% respectively. This would reduce the effects from increased volumes, due to the proposed development, on traffic in the area.

The overall increase in traffic on the R152 and R150 due to the development would not have a significant impact on traffic levels.

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The junction of the R152 and the R150 at Duleek has been designed with a new layout to improve safety there and include right turning lanes. The capacity of the junction will also be improved reducing the impact of the development.

The junction of the R152 and the N2 at Kilmoon is assessed in the E.I.S. and the effects are not significant.

The R150/N2 junction at Flemington is also addressed and the capacity is not affected significantly.

The village of Duleek would see a slight rise in volumes which can be mitigated by provision of a pedestrian cross.

The impact of the development on traffic is assessed in the opening year of the facility up to 2020.

The planning authority consider that a traffic management plan with the required traffic on the R150 between Kentstown and Flemington, would prevent waste haulage to the site along this section of road.

During construction a traffic management plan is proposed and conditioned by the planning authority, for the R152. This plan must be agreed with the Road Authority prior to commencement of construction and would be monitored and reviewed by the planning authority.

Financial contributions have been sought by way of condition, by the developers, for traffic calming, realignment, redesign of the R150/152 junction, supervision of the road widening at the entrance and other road improvements in the area.

A facility of the type proposed requires a good road network. Being close to Drogheda South Interchange, the R152 serves this purpose. When the traffic calming scheme is constructed it will serve to increase safety on this section of road by reducing speed and overtaking.

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The planning authority is satisfied with the traffic impact assessment carried out in the environmental impact statement. Additional information submitted on traffic volumes and alterations to the design of the entrance were also satisfactory. The effects on surrounding roads and junctions are assessed. The junctions are assessed using the software Picady, which is an accepted package in traffic impact assessment. The design of the right turn lane is in accordance with standards. The effects on the roads in the vicinity will not be significant when the plant becomes operational.

For the third party appellants **MR. T. SARGEANT** stated that he was a T.D. for the Fingal area, an adjoining local authority area. He was also leader of the Green Party.

There was enormous concern in Fingal, relating to the proposal. Many points of view are concerned with the decision to locate an incinerator on the site.

The site is an agricultural area. Population in the area is growing.

The horticulture industry was of significant importance in the Fingal area. Incineration is a disadvantage to the horticultural and agricultural industry when one considers that countries such as New Zealand do not allow any incineration and are a major agricultural producers and exporters.

Many beef purchasing companies ask if there is incinerator within 40 kilometres of a source of beef stock.

The use of the proposed structure would impact on tourism, agriculture, health, etc. The design is unacceptable.

In Canada waste is a major talking point.

There are methods other than dealing with waste through incineration. These should be implemented rather than using technology which is of a considerable age and produces considerable amounts of residue.

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The consideration of the development by An Bord Pleanála is incomplete. Proper consideration of the development should provide for the full impact of the proposal including all aspects of environmental pollution.

The design and access to the building pales into insignificance when compared to the use to which the building will be put and the impact upon the health of the local population.

For the No Incineration Alliance MR. K. RUSSEL stated that he was one of a group of engineering professionals concerned with the proposed building of waste management incinerators. They are opposed to the concept of building incinerators as proposed by the Government's waste management plan and on that basis object in principle to the proposed development.

The proposed plant would be inefficient with respect to electricity generation. No substantive figures have been produced by the developers to justify the input energy relative to the subsequently produced output energy.

The total cost of electricity produced would include the buried cost to the North Eastern region waste suppliers within the cost of using the service. Effectively the developers are being supplied with free raw material to incinerate, but at a cost to others.

The logistics costs of getting raw material are not included. No mention is made in relation to cost of fossil fuel to maintain combustion in the firing chambers.

The latest purpose-built power stations which operate on natural gas and within strict operational guidelines have an efficiency in excess of 60%. The calorific value of the combustible material feeding the proposed incinerator cannot be scientifically measured in advance due to the variability of the raw material. This variability is due to a number of factors including constituent make up, water retentive characteristics, quantity, etc. Technical knowledge and experience would put this material efficiency ratio not greater than 20-25% maximum.

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The total cost to a region producing each kilowatt of power from the incineration process is vastly higher than from a modern power station. The economics of this form of power generation must therefore be questioned and fully re-evaluated in the broader sense of the need for an incinerator.

The developers must justify such enormous resources losses specifically for the Carranstown operation and produce sound engineering rationale for the proposal. The Electricity Supply Board, Dublin/North Est Regional grid has not got the capacity to take the electricity, based on the recent objection of other cleaner gas fired operators' proposals.

If the developers are granted access to the national grid transmission system in the Greater Dublin Area, this would compromise EU Directives, specifically the Electricity Directive, Competition Laws and have implications for the Government's stated directive for power generation in Ireland.

There is a lack of clarity in the National Development Strategy Special Plan regarding how developers may propose sites of national and regional importance. In addition the proposed site is geographically inefficient in serving the north-east region as it is proposed in the extreme south-eastern corner of the region. The input material has to be hauled from less than optimal points. As the infrastructure is less developed in the northern and western regions of the country it would be most efficient to put any site in the centre of the region in the interest of efficiency.

There are undefined validation and assurance processes available to ensure non-hazardous waste is used in the incineration process. Undefined processes are proposed to ensure the certificate of origin establishes waste input is from the North Eastern region. Both of these processes would leave the plant open to abuse in these operational modes.

Matter is not created or destroyed. It changes from one form to another. It simply means that the developers' proposal would put Ireland's waste into the air and is a scientifically illogical process.

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For the third party appellants **MR. O. HERR** stated that he was a member of the No Incineration Alliance. Considerable amounts of toxic metals could end up having to be dumped in Knockharley following incineration on the appeal site.

Bottom ash is not mainly inert. Over 30,000 tonnes of ash would be created each year. Over a 20-year period this is in excess of 600,000 tonnes.

Mr Herr stated that he had submitted three videos to An Bord Pleanála. The inspector stated that these constituted part of the evidence. There were facilities available for any of the parties to view the videos. This could be done during a lunchtime break as the videos were quite short.

Waste leaving the site would be of major concern. Accidents occurring involving toxic material can be very difficult to deal with. Flue ash would be a potential dirty bomb.

For the third party appellants **MR. B. HANRATTY** stated that his position was associated with the No Incineration Alliance. He was a resident of East Meath, married with two children. He was also involved with a cross-border organisation seeking to promote tourism in the area, the organisation being the 'Battle for the Boyne'.

The planning process is inadequate due to the separation of An Bord Pleanála's remit and the Environmental Protection Agency remit. This is a considerable concern to the third party appellants, particularly when the current Minister for the Environment, in August of 2002, was reported to say that he wished to fast-track waste disposal proposals.

Forfás recently published a paper on waste disposal which clearly indicated that the majority of people wish to see recycling. Landfill and particularly incineration are opposed by the vast majority of people.

Tourism and food production are two of our largest industries. The proposed development will directly impact upon these industries.

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Meath County Council, in their mission statement, refer to the promotion of sustainable development. The planning authority have however recently granted permission for a very large landfill at Knockharley. They also decided to grant permission for the incinerator on the appeal site.

The developers have not been truthful in their communications with the local community.

The Progressive Democrats political party in their manifesto of 2002, in the section on waste, state that there is no need for the mass burn incineration which is a 20th century technology.

The proposed plant will operate 24 hours a day for 7 days per week. It will affect the local food industry.

New Zealand is an aggressive competitor in the food industry. That country does not permit incineration.

The site is less than 1 hour from Dublin and a little over 1 hour from Belfast. During 1996 to 1999 there was a 20% increase in visitors to the general area. There is great potential for tourism in the area both from north and south.

The Battle of the Boyne site is important for visitors.

Both Bord Fáilte and Bord Biá are strong in promoting environmental protection.

The cost of the proposal is excessive. Ash from the development is potentially toxic.

The proposed application has very tenuous links with the North Eastern regional waste plan.

Landfill is preferable to incineration.

The developers, at a public meeting almost two years ago, stated that they had not been in contact, at the time, with the then Minister for the Environment. Subsequently under the Freedom of Information Act the third party appellants discovered that not only had the company been in contact with the then Minister but the Minister had visited an incineration plant in Beveren, Belgium and also an incineration plant in France.

The developers had indicated in the Environmental Impact Statement that they had consulted with the North Eastern Health Board however on investigating this the third party appellants have discovered that no such contact took place.

The developers have broken any trust that may have been established with the local community and the neighbouring residents by their activities.

A large incinerator such as proposed generates large volumes of heavy goods vehicles.

Permitting the proposed development would put an unacceptable burden on the local community in terms of existing economic activity of farming and tourism particularly. It would also seriously impact upon property values both of land and buildings.

The storage of ash would have to take place on the site as it would not be removed.

In reply to a question from the inspector Mr Hanratty stated that he would have a preference for properly controlled landfill as opposed to incineration.

The 1997 study of waste management, undertaken on behalf of Meath County Council pointed to the very high cost of incineration.

The location of the proposed development is not one which was chosen either by the North Eastern regional waste management plan or the 1997 study undertaken on behalf of the local authority.

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The site is therefore not one which was recommended at any stage as the location for waste treatment, not to mention the provision of an incinerator.

An Bord Pleanála has a key role in deciding on the proposed development. The proposed development is viewed by most people as an environmental threat.

In the absence of basic infrastructure in the East Meath area it does not seem appropriate that the planning authority would become involved in the incineration process which is very costly.

The proposed development should be rejected as it will too greatly impinge upon the economic viability of the general area and the well-being of the area.

For the third party appellants, No Incineration Alliance, **MS P. CUNNINGHAM** stated that she was a director of Drogheda on the Boyne Tourism. Her organisation were opposed to the proposal on the grounds that the development would have adverse effects on tourism in the Drogheda and lower Boyne Valley region.

Tourists are attracted to this area for heritage and leisure. The proposal would impact on the area as tourists would perceive that the plant would pose potential danger of toxic emissions to public health for those susceptible to respiratory irritants.

The plant will have a visual impact on the area which will decrease the potential of attracting visitors many of whom are attracted to Ireland by green images. The additional traffic would have an effect on the nearby Bru na Boinne centre, one of Ireland's most visited heritage sites.

Tourism plays a big part in the local economy with several hotels, 42 bed-and breakfast facilities and 3 hostels. Local restaurants, pubs, transport services, visitor attractions, entertainment venues and other businesses also depend to some degree on tourism. There is a danger that many jobs would be lost if the plant goes ahead.

Local agriculture and horticulture will also suffer as few people will want to risk their health by consuming products grown in the area adjacent to an incinerator.

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The public do not visit areas with incinerators.

Areas with incinerators are never recommended for tourists to visit.

For the third party appellants MR. H. PHELAN, of the No Incineration Alliance, stated that he was a resident of Drogheda and was opposed to the proposed incinerator.

Under EU Directive 85/337/EEC and its amendment 97/11/EC a full and comprehensive E.I.S. is not available in this case because of the lack of proper public involvement, consultation and cost allocation prior to and including the preparation of the E.I.S.

The development is an Annex 1 category which makes it all the more important for the planning authority not to have rushed through the application, which is a further democratic deficit.

M. Wallstrom, member of the European Commission, in an opinion communicated to the Department of the Environment and Local Government in Ireland and relating to EU Directive 85/337/EEC stated;

"As a consequence of this lack of conformity, Ireland's practical implementation of the Impact Assessment Directive must be considered flawed in the case of projects requiring an IPC licence in respect of Articles 3 and 8.

There is a lack of proper provision of developer information and lack of proper public consultation on environmental information provided by developers in projects involving IPC licence.

The Commission' investigation of complaints F/2000/4002 and P/2000/4799 indicates that Ireland's arrangements for the Environmental Impact Assessment projects involving an IPC licence can also lead to breaches of Articles 5 and 6 of the Impact Assessment Directive.

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Because of the decision making restrictions imposed on Irish local authorities and the Irish Planning Appeals Board by section 98 of the EPA Act, these authorities and the Board would not appear to be in a position to secure from the developer all the information that is reasonable and relevant for the purposes of Article 5(1) or to ensure that the information from the developer satisfies Article 5(2) of the Impact Assessment Directive."

For this reason the third party appellant, as one of 26,000 signatories locally against the development, feels that the appeal decision is vital. It must therefore be referred to the European Court of Justice because of the flawed and breached application of EU Directives 85/337/EEC and 97/11/EC, in this case.

The Waste Management Act 1996 transposes EU Directives 75/442/EEC, 91/156/EC and 75/436/EURATOM regulations into Irish Law. This infringes the third party rights under the EU Treaty Article 174 Part 1 and 2 and Article 175 Part 4 and 5.

The waste hierarchy and its application makes quite clear in the European spirit of compulsory application that reduce, reuse and recycle is the means of waste management. Waste incineration is optional and a dated and soon-to-be obsolete technology in other member states of Europe. The profiteering value of this technology is at the expense of citizens.

On average it costs 5 times more to incinerate a tonne of waste than it does to landfill only. This is the reason companies like the developers' become involved in member states like Ireland which are slow to implement EU waste legislation in the manner in which it should be applied, after taking account of the best practise results from Europe.

The third party appellants' rights are being ignored by the remit An Bord Pleanála must operate under at this appeal. This cannot take account of health and environmental issues which is the third party appellants' main reason for contending that the decision making restrictions on the appeal are both flawed and anti-

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democratic, through no fault of the inspector. The case should be referred to the European Court of Justice so there are rights and fairness in the case.

The Council of the European Union by resolution of 24/2/1997, outlines a cumulative strategy for waste management, 97/C76/01. This, among other things;

calls upon the Commission and member states to ensure the implementation and enforcement of community legislation on waste management and the need to intensify co-operation in this regard.

This invites the Commission to establish, in co-operation with the European Environment Agency and member states a cumulative reliable system of dealing with waste which should be based on common terminology, definitions and classifications and should operate at the lowest public and private cost.

Believes that, in accordance with 'the polluter pays' principle, and the principle of shared responsibility, all economic factors, including producers, importers, distributors and consumers bear their specific share of responsibility as regard to the prevention, recovery and disposal of waste.

Reiterates its conviction that waste prevention should be the first priority for all rational waste policy in relation to minimising waste production and the hazardous properties of waste.

It insists on the need to promote waste recovery with a view to reduce the quantity of waste for disposal and saving natural resources, in particular by reducing, recycling and composting and recovering energy from waste.

For the third party appellants, No Incineration Alliance, **S. McDONAGH** stated that he was a missionary priest who had worked for many years in the Philippines. He was opposed to incineration.

20% of the world's population produces 80% of its waste.

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Incineration represents everything wrong with the way live on the planet. It is an easy option or way out of a waste problem. Ethically incineration is a technology which is not acceptable as it does not accord with the principles of sustainability.

The global environmental outlook produced by the United Nations following the Johannesburg summit of May of 2002 indicates that incineration would not be acceptable over the lifetime of the proposed incinerator, which is 30 years.

The technology exists to retrieve waste other than by incineration. Waste reduction is the only way forward.

To reduce waste products need to be redesigned, including the way they are packaged.

Producers should have responsibility in relation to how products are manufactured.

A well-developed infrastructure is required to properly deal with waste. This does not include incinerating. If incineration is proceeded with it will divert very scarce financial resources into an area of waste disposal which is unsustainable.

The precautionary principle which states;

when an activity raises threat of harm to human health and the environment precautionary measures should be taken, even if some cause and effect relationship are not fully established.

Ethically one generation does not have the right to deplete resources to the disadvantage of future generations. Incineration represents a system of waste disposal which does encourage resource depletion. It is therefore ethically unacceptable.

For the third party appellants, on behalf of the No Incineration Alliance, **MR. T. BYRNE** stated that he was an auctioneer and valuer who had operated in the area for a considerable period of time.

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He stated that he was familiar with the value of residential and agricultural property in the townland of Carranstown and surrounding areas. He estimated the general drop of 20% in property values in the area in the event of an incinerator being built. This was based on his experience as an auctioneer for almost 30 years, during which he had valued and sold many properties in this area.

Earlier in the year he had refused to take on the sale of a superb property just off Carranstown Road. He pointed out to the owner that mere talk of an incinerator would destroy his chances of achieving anything near its full market value. There would therefore be no point placing the property on the market. He advised the client to hold fire until there was a satisfactory outcome to the issue, at which time he was confident the planning authority would refuse permission for the incinerator. The owner was not pleased with the advice but reluctantly accepted it as correct and straightforward.

There must be a balance between the common good and the rights of individuals. The residents and farmers of Carranstown would pay too high a price for the proposal in terms of devaluation of their properties. This is especially so considering that there are clearly many safer alternatives to incineration which do not seem to have been investigated by those responsible for waste management.

The witness stated that he had been involved in the sale of the appeal site a considerable number of years ago. It amounted to approximately 38 acres and he advised that there was a possibility of obtaining permission for one house on the holding. Little did he realise that many years later an application for permission to erect an incinerator on the site would be made.

The witness stated that he was a member of a commercial bank valuation panel for the area. No financial institution would give a mortgage for property in the area because of the possibility of an incinerator being built.

For the third party appellants, **MR. M. O'NEILL** stated that he was a Town Planning Consultant.

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A primary question is the appropriateness of the proposed development in the area.

Many of the points put forward in Mr. Ward's evidence regarding land use are correct and require support.

It is difficult to get permission from the planning authority for one house in the area.

In the light of the difficulty of obtaining permission for very limited types of developments the proposed development being permitted by the planning authority beggars belief.

The proposal is a material contravention to the County Development Plan.

Waste reduction is the key to the waste strategy put forward in the North Eastern Waste Management Plan.

Alternatives to the proposed development were not assessed in the environmental impact statement.

The site is located in a prime agricultural area. Impact on adjoining land use would be mainly on agricultural use. It would also be on existing residential accommodation in the area.

The proposed development should be located in a development centre. Incredibly the planning authority's position is that locating the proposed incinerator in a development centre would be a waste of zoned industrial land.

The adjoining cement plant is resource-based. The proposed development is not.

Any rational land use planning approach to the proposed development would exclude it from the appeal site.

There are a number of development parameters which have to be considered. There are international and European guidelines. There is a National Development Plan.

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There is a Sustainable Development Policy. There is a National Spatial Strategy, soon to be published and a waste strategy which at the national level is outlined in 'Changing our Ways'.

The Strategic Planning Guidelines for the Greater Dublin Area affect the site. The statutory development plan also affects the site.

The North eastern Regional Waste Management Plan affects the site.

The site selection process was highly questionable. The site is located within a strategic greenbelt as set out in the Strategic Planning Guidelines for the Greater Dublin Area. As such the only types of development permitted in such areas are those locally based which provide for local growth.

In the pre-2000 Planning and Development Act situation the type of development proposed, which is a material contravention of the development plan, could be considered by An Bord Pleanála favourably. In the existing situation An Bord Pleanála cannot consider granting permission unless there is an overriding national policy, clearly enunciated, which would permit the development or unless there is an ambiguity in relation to the type of development proposed and how it fits into the scheme of the development plan, and general development policies. An Bord Pleanála is urged to consider the proposed development as a material contravention of the plan and therefore, using the new legislation, permission should be refused for that reason alone. It is recognised that the material contravention section of the new legislation relates only to situations where the planning authority has decided to refuse permission however in view of the unacceptability of the development An Bord Pleanála is urged to consider the proposal a serious material contravention of the development plan.

The National Waste Management Strategy includes incineration within possible methods of dealing with waste however it is not specific.

Waste reduction is the key to future policy.

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The North-Eastern Regional Waste Management Plan is of primary consideration. The basis aim is that waste management would be done, on a self sufficient basis, by each region.

In relation to site selection the World Health Organisation criteria for site selection for incinerators would have excluded the site due to the fact that it sits on an aquifer. Reference has also been made in previous evidence to the adjoining Natura 2000 site containing a peregrine falcon nest and the Newgrange site, which is a UNESCO World Heritage Site.

Alternative sites were not properly assessed in relation to their feasibility, in the environmental impact statement.

The site selection process by the developer seems to have been guided by the specific requirement by the developers, that they should site the incinerator on the appeal site.

The site is located in a rural area of landscape importance. The proposal would impact upon listed views as contained in the development plan.

The area contains a considerable number of residences.

The site is located in a prime agricultural area and the proposed use conflicts with the agricultural use of the area and the residential element.

The proposed development is not sustainable in terms of transport. It should be located on zoned lands, in a highly accessible situation, in the centre of gravity of the North-Eastern Region.

Using a rational land use planning assessment approach to the proposed development the proposal would have to be considered at various levels including international, European, national, regional, and county.

In terms of international it is close to a World Heritage site and permission should be refused. In terms of the European level the environmental impact statement submitted

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is seriously substandard in relation to siting criteria and on that basis permission should be refused.

On a national level the 1997 Sustainable Development, A Strategy for Ireland, and the National Spatial Strategy relates to locational issue. The proposed development has not achieved an adequate level of location analysis and permission should be refused on that basis.

On a regional level the Strategic Planning Guidelines for the Greater Dublin Area and the Waste Strategy for the North-Eastern Area require such developments to be located in growth centres, to reduce traffic and to properly serve the region. The proposed development does none of these things and permission should be refused.

Finally at a county level the proposal should comply with the development plan for the county in relation to objectives, policy and zoning. It does not comply with any of these requirements and permission should therefore be refused.

For the third party appellants, No Incineration Alliance, MR. M. O'DONNELL stated that An Bord Pleanála was not capable of performing an adequate assessment of the proposed development.

Development consent permits the development to proceed however the building could not be used without an Environmental Protection Agency consent.

The Environmental Protection Agency assessment will not be concluded prior to the appeal being dealt with by An Bord Pleanála.

The proposed development, as it is being dealt with, is fundamentally flawed.

The EU Directives are overriding.

Section 98 of the Environmental Protection Agency Act 1992 and Section 54 of the Waste Management Act are of relevance. Under these particular sections of these acts the Board is precluded from dealing with air pollution, water pollution, noise, odour and disposal of waste. Because of this there is a difficulty in making any submission

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on any issue. The disposal of waste may well be excluded, even the transport of waste to the site.

Matters of environmental pollution cannot be taken into account.

EU Directive 85/337 cannot be complied with. Article 3 of the Directive relates to effect on health, homes, property, soil, water, air, landscaping, etc. Interaction cannot be properly assessed in the development.

EU law must be complied with. The oral hearing must be reconstituted and reopened. The Board must refuse permission on the basis of non compliance with the environmental impact assessment regulations and EU Directive 85/337.

There is a conflict between what the European Union law requires and what national law contains. In those circumstances European law must be complied with. An Bord Pleanála is capable of assessing the entire environmental impact statement and should rightly do so under European law.

For the developers, **MS. L. BURKE** stated that she was the project manager of the development. Her background was as a chemical engineer.

The site of 25 acres is located between Duleek and Drogheda. Access to the site is from regional road, R152.

The proposal involves three key elements. The first is a community recycling park. The second element is the material recycling facility. The third is the incinerator.

The community recycling park will be located at the front of the development and will offer as wide a range of recycling opportunities as possible. The community recycling park will be open 6 days a week. In current experience of operating such a park in Navan it is expected that approximately 2,000 tonnes per annum of recyclable domestic waste will be collected. Likely categories of recyclable waste that will be accepted are as follows: cardboard, newspapers, magazines, glass, aluminium drink cans, textiles. footwear, batteries, waste oil.

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The waste recycling plant would provide for the separation of items such as plastics, cardboard etc and their baling for transfer off the site. Approximately 80% of the material to be sorted can be taken off the site. The remaining 20% would be delivered to the incinerator.

The remaining element of the proposal, the incineration plant is based on conventional grate incineration technology. It would have a capacity of 150,000 tonnes per year.

Each waste truck would enter an enclosed waste reception area. Each truck would then discharge waste into the bunker through one of five discharge chutes. The waste acceptance hall would be maintained under negative air pressure allowing air to continually be drawn through the doors of the hall to be used as an air supply for the furnace. This will prevent odours from the waste escaping from the building. The facility for the waste handling and storage operation would include the 12,000 cubic metres bunker, semi automatic grab cranes in the bunker and waste hoppers in the feeding furnace. The bunker capacity of 12,000 cubic metres has been designed to allow the plant to accept waste during periods of shutdown for maintenance and therefore be able to operate for periods such as weekends without delivery. Hoppers which will use grab cranes positioned over the bunker to blend the waste so that despite the variety within non-hazardous municipal waste loads delivered the feed to the furnace will be relatively uniform. The grab crane operator overlooking the waste storage bunker will transfer the waste from the bunker to the hopper of the furnace. The furnace will be the grate type, and waste will be gradually pushed forward on the grate causing a slow, continuous movement. Tiles are designed to allow air to pass up through the waste to ensure complete combustion. The rate of waste movement through the furnace can be controlled to ensure optimum combustion.

This ash waste will be 30,000 tonnes per annum or 20% of the total waste input in the furnace. Approximately 2,000 tonnes per annum of metal will be recovered from the stream using magnets.

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The principle of the boiler is to use the heat coming out of the furnace to generate steam. The gas must have a temperature of 850 degrees centigrade entering the boiler and an exit temperature approximately 230 degrees centigrade. Ash referred as boiler ash will be collected below the boiler and removed by conveyer and transferred to the boiler ash silo. Approximately 1,000 to 3,000 tonnes per annum of this material will be produced. The first stage of gas treatment will also occur in the boiler where either ammonia or urea would be injected. Ammonia will react with oxygen to form nitrogen and water. The steam generated in the boiler will enter a turbine where it will eventually exit and condensate at temperature of 56 degrees centigrade. The turbine will provide an electrical output of 14 Megawatts. As approximately 3 Megawatts will be required on site the net electrical output from the plant for export to the national grid will be approximately 11 Megawatts. Steam will leave the boiler still relatively hot approximately 230 degrees centigrade. It will then be further cooled in the evaporating tower to approximately 170 degrees centigrade. Towers will serve a dual purpose in that they will cool the gases prior to the next step of gas cleaning and they will also reuse any water. This will result in the facility having no waste water effluent discharge. The gas leaving evaporating spray tower will be injected with an activated lime mixture. This will absorb heavy metals, trace levels of organic flue gases.. Any remaining particles carried from the furnace will be removed at the back of the filter. After passing through the filter the two separate gas streams will combine into one.

Waste Flue Gas Cleaning. The purpose of the waste scrubbing is to remove any aftergas and any heavy metals from the flue gases. This will be achieved by passing the gas through a two phase scrubbing system with a solution of lime acting as cleansers. The liquid generated at the waste scrubbers will be recycled in the evaporating spray tower. A by-product of the waste system will be the production of app 1000 tonnes of gypsum per annum. The flue gases leaving the cleaning system will be approximately 60 degrees centigrade. The use of waste scrubbers will both cool the gases and saturate the waste water. The gases will finally be discharged through a 40 metre stack.

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In reply to a number of statements raised by third party appellants Ms Burke stated that Indaver had no plans to extend the facility. It is not intended to take hazardous waste, clinical waste or animal carcasses.

The combined inventory of substances to be stored on site is less than 1% of lower tier threshold for Seveso site.

The site is not a Seveso 1 as the maximum amount of gas in the pipeline as it traverses the site is 649 kilograms. This is more than 50 times lower than the threshold of 50 tonnes required for inclusion as a Seveso site.

A fire certificate is required.

Bottom ash can be recycled/recovered. It is non hazardous. All ash is non hazardous for transport.

For the developers **MR. J. AHERN** stated that he was general manager of the development. He is a chemical engineer. He has been working in the waste industry since 1995.

The developers consider that every individual has the right to information and the right to object.

The witness had stated that if he did not have the requisite information about a company developing an incinerator he would not be satisfied with residing close to one. However if, as in the case with Indaver, all information had been made available, this would be a different matter.

The Indaver company exceeded a license limit in August 2002 in Belgium and had to shut down an incinerator.

A description of the company is given in the first chapter of the environmental impact statement. There has been extensive public consultation in relation to the proposed development.

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There is a need for the development. Alternative sites have been looked at however the site selected is the correct one in the developers' opinion.

The proposal complies with European, national and regional waste policy.

European waste policy is presently on its 6th environmental action programme.

Irish waste policy is based on the "Changing our ways" document of 1998. It is also based on preventing and recycling waste.

The waste management Act 1996 requires the local authority to prepare waste management plans. The purpose of these plans is to provide a framework for the management of waste.

For the developers **MR. T. PHILLIPS** stated that he was a chartered town planner and urban designer.

The proposed development is in full compliance with the Government policy statement, "Changing our ways", 1998. It is also in full compliance with the Waste Management Plan for the North-East Region 1999-2004, the Strategic Planning Guidelines for the Greater Dublin Area 1999 and Sustainable Development, A strategy for Ireland 1997.

In relation to Changing our Ways, this document provides a national framework for the adoption and implementation by local authorities of strategic waste management plans under which national objectives and targets are to be attained.

The principal directives relating to Changing our Ways are the EU packaging Directive and the EU landfill Directive 1999.

Changing our Ways focuses on the need to give clear and practical expression to the requirements of the waste hierarchy by developing and pursuing integrated solutions which combined a progressive policy with a sustainable and cost effective waste infrastructure.

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The policy statement is supportive of waste to energy as part of an integrated approach to waste management. It states;

"In general materials recycling and waste to energy incineration are fully compatible in an integrated approach to waste management and if properly controlled have a considerably lower environmental impact than landfill.

The development of waste to energy capacity is consistent and could make a significant contribution to the implementation of the Government's renewable energy policy which currently aims to increase the share of such energy to 10% of the country's installed electricity generated capacity by the year 2000."

Targets aimed at reducing units of waste going to landfill are as follows;

Diversion of 50% of overall household waste away from landfill.

A minimum of 65% reduction in bio-degradable waste going to landfill.

The development of waste recovery facilities employing environmentally beneficial technologies.

Recycling of 35% of municipal waste.

Recycling of at least 50% of construction and demolition waste within a 5-year period, with a progressive increase to at least 85% over 15 years.

Reduction in the number of landfills.

A reduction of 80% in methane emissions from landfill.

It is clear that Government policies support incineration as part of a regional, integrated approach to waste management in Ireland. The development of waste to energy and materials recycling capacity in an integrated manner will be essential to

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meet national policy and EU targets for reducing the quantity of bio-degradable municipal waste going to landfill. The proposed development would be fully in accordance with objectives for an integrated approach to waste management in the North-Eastern Region.

The local authorities of the North-East Region have prepared a waste management plan as required under Section 22 of the Waste Management Act 1996. Meath County Council adopted the plan on 3rd July 2001.

The purpose of the Waste Management Plan for the North-East Region is to provide a framework for the management of non hazardous waste over at least the next five years in accordance with current and national EU legislation.

The plan provides a strategy for a regional approach to waste management. It recognises that the region does not operate in isolation and will form part of an integrated waste management network in the country.

The Waste Management Plan promotes thermal treatment as part of an integrated solution to waste management. It states;

"Thermal treatment shall be an integral part of the solution to the management of the region's waste. Thermal treatment of the residual combustible waste stream with energy recovery is recommended. One plant would serve the region. This plant would cater for combustible waste transferred from other transfer stations. Estimated nominal capacity of 200,000/300,000 tonnes per annum.

The technical assessment of the thermal treatment indicates that it will satisfy the national policy requirement for diversion of waste from landfill. It will provide a cost effective treatment system in the context of the north-east region, will greatly increase the security of the waste management system and energy recovery is favoured on environmental criteria compared with landfill disposal. The siting criteria for the plant is to have regard to the most efficient use of heat/energy, transportation, industrial zoning and other relevant factors."

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The plan has determined the capacity required for the region. The proposed development, with the capacity to accept only 30% of the non hazardous waste in the north east region is in keeping with this.

M. C. O'SULLIVAN and Company, consulting engineers, acting for the Department of the Environment and Local Government, in 1999, completed a separate feasibility study on thermal treatment options for the north east region. This study looked in more detail at available technologies, energy usage and environmental aspects. It recommends proceeding to the EU procurement process for early provision of such a plant by means of public/private partnership as favoured by current Government policy.

It provides criteria which shall apply to thermal treatment, which will include;

siting criteria including central location close to waste production centre of gravity, proximity to energy users, ideally users of heat, reasonable road access, appropriate development zoning and availability of cooling water and provision for its disposal.

The procurement process should enable the most up to date technologies to be availed in terms of reliability and robustness of the facility, reduction of residuals, high standard of atmospheric emissions and general public safety at a competitive cost.

The contract for thermal treatment was to make provision for the necessary flexibility to cater for variations in the waste stream, volume and characteristics and to meet changing standards over time.

Any thermal treatment plant must be capable of meeting EU emissions standards.

The proposed development fully complies with the criteria identified in the report on the feasibility of thermal treatment.

The Waste Management Plan for the North-East Region 1999-2004 actively encourages the development of a thermal treatment capacity as part of an integrated

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solution to waste management in the region. The proposed development would play an essential role in fulfilling the subject.

The developers welcome An Bord Pleanála's recent decision relating to an application by Celtic Waste Limited to develop and operate an engineered landfill in County Meath PL 17.125891.

Section 16(8)(xviii) of the inspector's report states;

"At the end of 2007 with the coming on stream of alternative and preferred methods of disposal in the waste hierarchy such as thermal treatment/incineration respectively, waste volumes disposed of to landfill will reduce considerably.

This decision clearly supports the development of thermal treatment in Meath as part of an integrated solution to waste management in accordance with the Waste Management Plan for the North-East Region.

The Strategic Planning Guidelines for the Greater Dublin Area includes Meath in the hinterland area of the zone of influence of Dublin and falls within the Strategic Planning Guidelines area.

The Guidelines provide a strategy indicating the boundary of the metropolitan area, the hinterland area, primary development centres, secondary development centres, strategic greenbelts, transportation corridors and future transportation corridors. This is a generic map for further refinement and adoption by the local authorities. In the case of Meath County Council the generic guidelines have not been further refined.

Examination of the Guidelines and the location of the proposed development indicates that the site is located in the hinterland area of Greater Dublin on the edge of the main transportation corridor between Dublin and Drogheda (M1) transport corridor. In terms of transport and ease of access this is considered an ideal location for such a facility. In addition the nature of the facility is not such that it would lead to a physical coalescence of Drogheda and Duleek. It is a self-sufficient facility that will not lead to other ancillary development.

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Navan and Drogheda are designated in the Strategic Planning Guidelines as part of the five primary development centres located within the hinterland area of Dublin, with the longer term objective of developing the towns as self-sufficient centres acting as service centres for small towns in the region. This is likely to result in substantial population growth in an around these urban centres. Furthermore it is likely that the national spatial strategy due for imminent release, will further strengthen this position by identifying Navan and Drogheda as development hubs to support the development of smaller-sized towns and rural areas in the region.

The proposed development is therefore in full compliance with the objectives of the Strategic Planning Guidelines and will provide a strategic resource for the north east region. The proposal would be strategically located to meet the increased demand for waste disposal generated in these primary growth centres.

Sustainable Development – A Strategy for Ireland, 1997;

This sets out Government policy of encouraging more sustainable development in all sectors. It addresses waste produced and highlights the recent increase in domestic waste production. It also highlights the need for improved recycling and better disposal practices to reduce the amount of consumer waste coming directly to landfill. It highlights legislative measures that have been developed to promote a more sustainable approach to waste management including the Waste Management Act 1996 and the introduction of integrated pollution control licensing.

The proposal will assist in achieving these objectives by providing the direct benefit of facilities for community and industrial waste recycling and reducing the amount of waste going directly to landfill. The proposal is required to comply with all current statutory requirements and obtain a waste license from the EPA. In terms of sustainable energy the proposal would produce power in accordance with the strategy objective to promote alternative forms of energy production. The proposal would therefore assist in providing for a more balanced and sustainable solution to waste management in the north east region.

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The Strategic Planning Guidelines do not address the issue of waste management in locational land use terms. The Guidelines refer to the Waste Management Plan for individual planning authorities and highlight the incentives to direct waste away from landfill.

The Meath County Council Development Plan does not specifically zone the site. It is therefore considered rural and agricultural. The closest industrial zoned lands are located to the east of Duleek on the R152 and in the Drogheda environs. The site is located approximately 2 kilometres from the centre of Duleek approximately 5 kilometres from the centre of Drogheda and 2.5 kilometres from Donore.

The proposal is consistent with the primary principles and objectives of the County Development Plan 2001.

Section 2.64 of the development plan relates to the availability of industrial and residential development land. In this regard the proposal by virtue of the scale of development necessitate a large amount of land. The location of such a large scale installation on serviced lands with specific land use zoning for industry would be unsustainable and would not constitute the most efficient use of the county's limited serviced industrial land banks.

Section 2.7 of the plan relates to strategic infrastructure needs. In this regard the proposal is well-served by strategic infrastructure including existing and proposed transportation infrastructure.

Section 2.7.3 relates to solid waste disposal and the proposed development is fully in compliance with the Waste Management Strategy for the North-East Region.

Section 2.8.1 relates to sustainable rural development objectives. In this regard the proposal is consistent with these objectives and the principles of sustainable development.

Section 2.8.4 relates to landscape protection in relation to areas of high amenity. The proposal complies with these objectives. The view from the Bellewstown Ridge V16,

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overlooks the site. However the view is panoramic and the proposed development would only have a slight impact.

The proposed development is compliant with objectives relating to archaeology and heritage at Section 2.8.(8) of the plan.

The Boyne Valley is located some 3 kilometres from the site.

Section 3.2.3 of the plan relates to industry and employment. The proposal complies with the objectives contained in this section as the scale and nature of the development necessitate a rural context.

Section 3.5.4 relates to solid waste. The proposal complies with the plan strategy for solid waste.

The proposed development fully complies with Section 3.5.6 of the plan which relates to thermal power production and power transmission.

It also complies with section 3.5.7 relating to renewable energy.

Section 6.3.5.8 of the plan relates to gas transmission. A gas line runs under the site. This has been fully accounted for in the development proposal and will not impact on the proposed development in any way.

Section 3.6.2 relates to core rural development objectives. The proposal complies with these objectives.

Section 3.6.3 of the plan relates to landscape classification. The proposed development falls within areas VQ11, which is rural and agricultural. This is the most common and least sensitive of all landscape categories and can quite effectively absorb appropriately designed and located development in all categories.

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Section 3.6.12 of the plan relates to European and Heritage sites. The proposal does not impact on any natural heritage areas, special protection areas or special areas of conservation.

Section 6.6.16 relates to extractive industry and building material production. The site is not within a designated limestone reserve.

The proposal complies in full with all of the detailed development standards identified in the County Development Plan.

It is an objective of the development plan to ensure that any commercial or industrial proposals in rural areas are sustainable. Section 3.2. of the County Development Plan allows for the siting of industrial development in a rural area where such a development necessitates a rural context. The County Development Plan recognises the strategic role that the county plays in the regional and national context in terms of ensuring compatibility between regional and national strategies. The Meath County Development Plan Strategy for solid waste is consistent with the objectives and strategies outlined in the Waste Management Plan for the North East Region 1999-2004.

The strategy of the development plan with regard to solid waste management is consistent with the regional plan. One of the four core tenets of the plan is the:

"development of waste handling processes including the consideration of thermal treatment to reduce bulk and landfill need while using an energy return."

The development plan is a key objective of the planning authority encouragement in facilitation of the development of power generation facilities with reference to thermal power production.

The proposed development is fully in compliance with the Waste Management Plan for the North-East Region. This plan was adopted by Meath County Council on 3/7/2001, Louth County Council on 3/8/2001 and Monaghan County Council on 17/7/2002. Cavan County Council adopted the plan on 4/2/2000.

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The proposed development is fully in keeping with the County Council's mission statement for community partnership. The developers have consulted widely with local communities.

The site does not have any specific zoning in the Meath County Development Plan. It is therefore considered rural and agricultural. The closest industrial zoned lands are located to the east of Duleek on the R152 and in the Drogheda environs. However Section 3.2.3 of the County Development Plan allows for the siting of industrial development in a rural area where such a development necessitates a rural context;

"Whilst it is accepted that there are sites suitable for industrial or small business type activities in rural areas, such locations will only be considered where these activities serve the needs of rural and local communities or where there are locational requirements necessitating a rural context."

The proposed development by virtue of the scale of the development necessitates a large amount of land. The location of such a large scale installation on serviced lands with specific land use zoning for industry would be unsustainable and would not constitute the most efficient use of the county's limited serviced industrial land banks. This is also recognised in the submission of Meath County Council to the oral hearing.

In addition industrial zoned lands are almost always located directly adjacent to towns in particular dense residential areas and do not meet stringent siting criteria applied in locating the facility.

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There would be no burden on sanitary services in the area as all domestic effluent will be treated off site during construction. A treatment system and percolation area would be installed for disposal during the operation of the plant. The raw water requirement for the plant will be supplied by retaining rainwater, groundwater, abstraction and a small supply of potable water from the local watermains. It is noted that contact was made on behalf of the developer with the planning authority during the site selection process. The planning authority indicated that there is sufficient capacity in the public water supply to the site to satisfy the requirement of the facility during operation and construction. The proposed development would fully realise and be in accordance with regional policy objectives by providing for recycling and thermal treatment facilities as part of an integrated and sustainable approach to waste management. In this context An Bord Pleanála is urged to grant permission for the proposed development.

Mr. Phillips stated that he did not have a qualification in property valuation. In reply to third party points relating to property devaluation he was concentrating on a response to the issue of the perception of depreciation. This was based on recent house sales and studies on this issue undertaken elsewhere.

A comprehensive assessment of all potential environmental impacts was made through the environmental impact statement including the cumulative impacts of the proposed development with other existing developments in the surrounding area.

The environmental impact statement did not require to make individual assessments unless specific significant adverse impacts are forecast.

The cumulative impact of traffic have been assessed in the E.I.S. Existing traffic, predicted future growth, quantities, traffic generated by the development and traffic generated by the proposed power plant are all modelled. It was concluded that the levels of both construction and operational traffic would not significantly impact on the surrounding road network and would not cause the design capacity to be exceeded. In the unlikely event of the power plant construction phase coinciding with that of the proposed development mitigation measures would be put in place including

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restrictions of heavy goods vehicles during peak hours and staggering the arrival and departure times of site workers.

With respect to the cumulative impact on visual intrusion in the area, photomontages and analysis have been produced. These include the cement plant, the proposed development and the proposed power plant. The photomontage view clearly illustrates the effectiveness of the building colour scheme when combined with the proposed landscaping works. Given the industrial character of the area and the distance to elevated views, it is considered that the impact of the proposed development would be minimal.

It was concluded in the environmental impact statement including additional information that the predominant noise source was traffic on the R152. Given the already high noise level emanating from the R152, the restrictions imposed by the planning authority by way of conditions are suitable, appropriate and in keeping with other development conditions prevailing in the county.

In relation to asset devaluation and property prices, there is no evidence to suggest that property/land prices in the proximity of existing industrial development sites such as the cement works, which has operated in the area since the late 1960s, have been affected. There is no evidence to suggest that property values in the Navan Town Area and environs have been affected by the large industrial installation at Tara Mines. This facility is located in proximity to Navan Town Centre. There is no evidence of property devaluation close to the existing cement plant at Kinnegad. It is recognised by the developers that in developments due to size, type and scale there can be short term impacts on adjoining assets and property prices. This is due to the precautionary nature of people to purchase at a time of construction.

The proposed development would have no impact beyond that likely from any industrial development and afford no long term threats to property prices.

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The perceived belief that there would be long term negative impact due to the location of the incinerator is based on misunderstanding in regard to its environmental effect. Once the incinerator is operational any impact on property value could be eliminated.

This view is supported by the findings of the National Society for Clean Air and Environmental Protection in the United Kingdom. This organisation released a document entitled the Public Acceptability of Incineration, in June 2001. The summary and conclusions in this report states;

"Property values;

This is frequently an issue of concern (when communities are confronted with an actual incineration development proposal) but there is no evidence over time of any real significant impact beyond that likely from any other industrial development."

There is no evidence that property demand or property prices in the area have been affected by the development proposal to date. With the recent substantial improvements in the regional road network there is a very high demand for property located in County Meath within commuting distance of Dublin City Centre. This is reflected in average property prices in the county.

The national house price index (April 2002) published by the Building Society, Permanent TSB, indicates that house prices in County Meath are the highest in the north east region and are among the highest in Ireland.

Property prices in the vicinity of the proposed waste management facility are consistent with average house prices in County Meath. A review of asking prices for houses currently advertised for sale in Duleek has found that, of those assessed, houses currently for sale range in price from circa €165,000. The average asking price is therefore estimated to be approximately €210,000. This reflects a relatively buoyant local property market.

Substantial new residential developments are currently being developed in the vicinity of the proposed development. These include new housing developments in Duleek at

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The Steeples and Copper Beach. It also includes a new residential development at Donore, The Grange.

New residential developments are located at Johnstown including, Athlumney Abbey, Boyne View and Spire View.

There is a development at Lagavorren, Knockbrack Downs.

Substantial new developments are located 3 kilometres south of Drogheda at Grange, Rathoar, Five Oaks, Longwoods and Brianstown.

Advertised property prices in these developments ranging from €142,000 to €275,000 are consistent with those for other similar developments elsewhere in County Meath. They do not appear to have been affected in any way by the proposed waste management facility.

The planning authority received approximately 390 planning applications for new developments in the vicinity of Duleek since January 2002. This clearly indicates that demand for new development in the area remains strong.

Property prices are not likely to be impacted upon by any planning issues. Traffic, visual impact etc. have all been addressed with mitigation against adverse impact. An Bord Pleanála is precluded from a determination on other issues given the provisions of Section 98 of the 1992 EPA Act.

Reference has been made, in a number of third party appeals to the fact that other developments have been refused permission in the area including single houses and the Agri-Park (PL 17.121102), as well as a development at Oberstown, Skreen.

The proposed single house development in Dunboyne/Summerhill, referred to an application refused on the basis of numbers of septic tanks arising, a materially different development and not directly comparable to the current proposal.

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With regard to the Agri-Park development the conclusion of the planning inspector's report states;

"The development which is the subject of the current appeal is essentially an infrastructural development proposed to service what is described as an agri-park That description however given the range of uses proposed on site, is misleading; a number of the uses proposed are retail uses and not associated with agricultural produce or products, nor are they site specific in that they do no require to be located within a rural agricultural area. Rather the majority of the uses would be more appropriately located within the development boundary of Duleek on zoned lands. Their proposed location on unzoned lands outside the development boundary of the village would, I consider, have major implications for the village of Duleek."

With regard to the Mill proposal (Oberstown), the conclusion of the planning inspector's report states;

"I do not consider that the proposed development materially conflicts with the policies and objectives of the current Meath County Development Plan insofar as those policies and objectives pertain to industrial development in rural agricultural areas. I find however that the proposed development is not site specific, it would therefore, having regard to the geographically dispersed supply and customer base be more appropriately located contiguous with/in close proximity to a transportation corridor which would eliminate access to the site via a minor rural road network."

Reference is made to a toxic waste incinerator at Kilcock PL 09.112536. That decision has no relevance to the consideration of the current appeal as it was premature given that the National Hazardous Waste Management Plan had not been published. It is also to be noted that the Kildare Waste Management Plan did not support incineration.

In relation to Irish law and EU directives reference has been made, in third party appeals, to the division of responsibility between the planning authority and the EPA. Reference is also made to the current legal action against the Irish Government by the European Commission regarding Ireland's compliance with the provisions of the Directive 85/337/EC. The European Community is claiming that Ireland is not in

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compliance with the provisions of the Directive, regarding the effects of certain public and private projects on the environment.

Section 98 of the EPA Act of 1992 was the existing legislation at the time of lodgement of the proposed development. This legislation completely precludes planning authorities and An Bord Pleanála from considering any environmental pollution effect as a result of the proposed activity. Any future changes in legislation which may occur cannot be retrospective and current legislation must be upheld. The developers fully acquiesce with the inspector reporting on the Marathon power plant in PL 17.118993, where he stated, in paragraph 13.2.1, that the failure of Irish law to implement EC Directive 85/337/EC is a matter for the Courts to decide.

In relation to the validity of the planning aplication a number of points have been made by third party appellants. In this regard the application is entirely valid and accords with the requirements of the Local Government Planning and Development regulations 1994. The application in no way presupposes that the Environmental Protection Agency will grant a waste license for the proposed development. The two procedures are separate and independent. It is common practice to receive planning permission at the outset of a project conception and to follow with other licensing applications.

The developers have consulted with the Electricity Supply Board who are in full cognisance of the project and the resultant energy output expected. The proposed development requires a 20 KV connection to the national grid. A 20 KV connection is exempted development not requiring permission.

In relation to points of third party appeal referring to a financial contribution by way of condition no. 6 the amount of the contribution, at £1 per tonne of waste delivered would amount to approximately £170,000 or £215,900 towards improving local community infrastructure and amenity. This is a substantial contribution which is likely to have significant direct long-term positive impact on the local economy.

The proposal imposes no monetary burden on the local authority or its neighbours.

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Condition no. 5 refers to a community liaison committee. The representation on this committee is a matter for the local authority to detail and is beyond the scope of the developer to control.

In relation to a cash bond and insurance cover in relation to the development this is adequate. There is no evidence presented as to why the developers should be required to compensate third parties given that the mitigation measures proposed are adequate.

In relation to public/private parternship of waste it has been suggested in a third party appeal that the involvement of private enterprise in the waste sector is at variance with the principle of the Waste Management Plan for the North-East Region.

Waste collection and waste management is normally the remit of the local authority. Public/private partnerships are needed to supplement the funding for waste management enterprise. This is recognised in the Waste Management Plan for the North-Eastern Region at Section 12.4 which supports such partnerships as a means of developing more sustainable and integrated waste management solutions.

"The north east local authorities recognise that increased involvement of the private sector in provision of waste services offers several benefits to the region as outlined in the National Waste Policy Statement, Changing our Ways".

Private enterprise involvement in the waste management sector acts as an aid to the implementation of national and regional policies. There are many privately operated landfills in the region and a privately operated incinerator is in accordance with this.

For the developers **MS. E. LEE** stated that she was employed by the company which prepared the environmental impact statement.

In relation to emissions to air during the construction period every effort would be made to minimise dust from the site. This would include good housekeeping and site management including the proper storage of spoil or loose material. A wheel wash of all vehicles leaving the site would be carried out. Proper containment of loose

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material would be made for all transportation on and off the site. Damping of site roads would be carried out as necessary.

In relation to landscape and visual impact the assessment of the development is based on the EPA Guidelines on the information to be contained in environmental impact statements. It includes a description and evaluation of context, character, significance and sensitivity.

The site lies within an area of lowland undulating landscape which, as defined, in the County Development Plan, can effectively absorb development. It can be viewed from other more vulnerable landscapes with a low visual absorption capacity such as Bellewstown Ridge.

The character of the landscape and views from surrounding areas are already influenced by the cement factory and quarry which lend an industrial character to the landscape. The power plant if constructed would slightly increase the industrial character from existing views.

Given the industrial character and distance to the elevated views, the impact of the proposal will not be significant. Any impact would be mitigated against by effective architectural treatment of the main building and by implementation of extensive landscaping.

In relation to traffic the proposed development would not impact upon existing traffic conditions on the R152, to the detriment of existing road conditions. A traffic management scheme will be implemented during the course of construction.

In relation to flora and fauna the site is located in an area which has for a long period of time been intensively managed for agricultural purposes. This has resulted in a limited number of habitats and a low diversity of flora and fauna. The flora and fauna types encountered on the site are typical of the agricultural area in which the site is located. The construction and operation of the proposed development is not predicted to have a significant negative impact on flora and fauna and mitigation measures will be put into place to prevent any negative impacts occurring.

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In relation to archaeology the study and survey of the site carried out during the E.I.S. did not reveal anything of archaeological significance.

The legal representative for the developers **MR. G. SIMONS** stated that there was no breach of law in An Bord Pleanála dealing with the appeal as it was presently doing. An Bord Pleanála was the respondent in the Martin case.

The developers consider that not only has permission to be obtained under the Planning Act but an integrated pollution control license obtained from the Environmental Protection Agency. The development cannot be implemented until these two consents are available.

There are two competent authorities relating to the proposal. The first is An Bord Pleanála and the second is the Environmental Protection Agency.

Environmental pollution, in definition, has to take the common sense approach. Proper planning and development has to be considered by An Bord Pleanála. The regulations relating both to An Bord Pleanála and to the Environmental Protection Agency are clear.

For the developers **MR. E. HALPIN** stated that he was an archaeologist operating an archaeological development services company for a considerable number of years. He had prepared the archaeological section of the environmental impact statement.

The archaeological impact assessment of the site was based on field walking and desk-based research.

Nothing of archaeological interest was noted during documentary research or the field visit. Nothing of archaeological interest is included in the SMR for the area or in its immediate vicinity.

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The development site is situated in a region that was important in Irish prehistoric and historic times. The fertile nature of this part of Meath also meant that it has been subject to intensive farming over a long period of time. This may have resulted in the destruction of above ground archaeological features, traces of which may still survive beneath the present ground surface.

Given the fact that the development could have a negative impact on any archaeological remains or artefacts surviving below ground it was recommended that;

Topsoil stripping of the site be monitored by a suitably qualified archaeologist, Should any archaeological discoveries be made during construction it is the responsibility of the finder, under the terms of the National Monuments Act, (1930 and amendments) to report the discovery to the duty officer of the National Museum of Ireland. Any archaeological discovery should also be reported to Dúchas, the Heritage Service.

In relation to points of third party appeal, the development would be sited some considerable distance, approximately 3 kilometres to the east of the point on the Newgrange horizon when the sun rises on 22nd December. As far as the events at Newgrange are concerned the entire development would be completely masked by Red Mountain Ridge.

No part of the development, including the stack, would be visible from any part of the Boyne Valley World Heritage site. Objections based on that premise can be discounted.

The development site is a minimum of 3.5 kilometres from the core area of the Boyne Valley World Heritage site as defined by Dúchas. It is approximately 2 kilometres from the nearest boundary of the associated buffer zone. This is of sufficient distance so as to render any archaeological impact on the World Heritage site not significant.

The views of the site from the south at Bellewstown Ridge, would be open, glimpsed and distant. The views are 3 kilometres to the south of the site and therefore not significant.

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The site will not impact upon archaeological sites located well to the north.

The development is 3 to 4 kilometres distant from the closest point of the historic centre of the Battle of the Boyne at Old Bridge. Although noted in the Sites and the Monuments Record as located in the Bend of the Boyne, to Old Bridge obelisk, the battle site could be said to extend southwards as far as Donore Hill, Sheephouse. This is the location of the Jacobite encampment, and as far north as the level ground around Townley Hall/Tullyallen which was the Williamite camp. It may be possible that the top of the stack may be visible from some of these extended areas of the battlefield, however this impact from a cultural heritage point of view, would not be significant.

The site is 2 kilometres from Duleek Village Centre. The village is recognised as an important archaeological and historical site. The early ecclesiastical core of the village has survived down to the present, with the original circular, concentric enclosures, such a distinctive feature of early Christian sites, survives in the village street pattern. The development would have no direct impact on the archaeology of Duleek and no part of the development, including the stack will be visible from any part of the village centre.

For the developers **MR. F. O'MAHONEY** stated that he was the managing director of Wilson Architecture, the company which prepared the landscape and visual section of the environmental impact statement.

A key issue in the design of the development was to maximise integration into the surrounding lands and minimise visual impact of the built form. In site layout terms the development evolved through the requirements of process, material and personnel flows combined with the physical conditions and constraints of the site.

The site is bounded by a public road to the east. It falls generally in a westward direction with a difference in level of approximately 10 metres between the eastern and western sections of the site.

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The main process buildings have generally been located in the lower portion of the site to maximise the benefit accruing to the fall of ground.

To the front of the site a proposed bring bank, which is landscaped, will have skips to which the public has access to deposit recyclable materials.

Immediately behind this is the administration building which houses the public related functions of the proposed development and its administration.

A security and entry permit office is combined with the warehouse and workshop area. Towards the rear of the site is the main process building with an associated open service yard.

The western extremity of the site has some water storage tanks and a large open laydown area located to the north-east.

A natural gas pipeline runs across the site and no proposed structures are located within the way-leave of this pipeline. The main areas of landscaping are located on the eastern sectors of the site, which being the higher ground would give maximum screening benefits.

The building shapes are dictated by their functions and they are expressed in simple clear forms presenting clean parapet lines without visual intrusion of plant or equipment projecting above these lines. The buildings have been located to step visually according to their height from the main road towards the rear of the site taking advantage of the natural ground contour.

In the bring bank mono-pitched shelters cover the skips. These shelters would entirely be covered using planting green roof technology.

The administration building is a design composed of simple shapes and material and projects a quality front of house image to the facility.

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The security office/warehouse/workshop functions are combined in a single building shell.

The waste to energy building is designed as a series of cubic forms, stepping both in height and in plan form.

An important element in helping to break up the shape and mass of buildings is the use of varying external colours and materials on the façade. A colour scheme has been formulated for the entire development. This would be implemented by cladding buildings, tanks etc. in arranged patterns and colours chosen to minimise impact on the landscape. The use of a mix of green, brown and grey panels along with relief features such as, staircases, stepped ancillary blocks, glazing and louvers would assist in reducing the visual mass of the proposed structures.

The administration building would be finished externally in a mixed stone cladding, timber-cladding and paint plaster.

The warehouse/workshop building would be finished externally in colour coated profiled metal cladding.

The waste to energy building would be finished externally in a mix of profiled, and louvered colour-coated metal cladding, arranged in an elevational pattern of texture and colour designed to reduce the visual scale of the building.

In relation to landscaping this takes its reference in the character of the existing local undulating land form pattern of hedgerows, trees and field shapes. The woodland concept of planting large quantities of saplings and semi-mature trees during the early stages of construction provides a nursery of trees on site which can be relocated/replanted as part of an ongoing landscape development programme.

A baseline tree survey was carried out to identify existing species and the planting plan is based on types that are thriving in the area. Existing hedgerows are retained and thickened where possible.

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Large earth berms would be created on the north-eastern and south-eastern boundaries, planted with a mix of shrubs, sapling and semi-mature trees. Open areas are mainly grass. Roads and hard standings are kept to a minimum.

A total of 50,000 trees would be planted on site on completion of the landscape scheme.

A planting scheme of this scale and density will aid the visual integration of the development in the surrounding landscape while providing local screening from key vantage points.

With the proposed development various colours and shapes are included. These combine to break up the outline and visual mass of the buildings. The pattern and colours vary. They were selected from the landscape in which this site is located.

The process of selecting and combining various colours of cladding panels, breaks down the apparent scale and form of the building.

Works already implemented by the witnesses practice include a large business park and warehouse facility in Blarney, County Cork. This recently won a European award for innovative use of colours. It was also integrated into the area.

The witnesses submission includes a series of drawings, photomontages and illustrations, amplifying the presentation.

Photomontages illustrate the visual impact of the development.

The impact of external site lighting will be minimised by using light fittings with a high cut off value.

For the developers MR. J. KELLY stated that the was an architect who had worked intensively in the area of photomontage and visual impact assessment, and in the survey and recording of structures.

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He had assessed the site and surrounding landscape in order to identify views. He was also involved in the photography of the site and area and for the preparation of the photomontages from a representative number of vantage points.

The Boyne Valley is 3 to 5 kilometres to the north-west however it is separated from the site by the intervening Red Mountain.

Bellewstown Ridge is 4 to 5 kilometres to the south-east. The cement factory is just to the north of the site.

The site is at a level of circa 35 metres O.D. This is one of the lowest ground levels in area surrounded by Red Mountain, Drogheda, Bellewstown Ridge and Duleek.

The R152 adjoins the site on its eastern side. The road levels along the site frontage vary from 33 metres to 41 metres. Within the site the ground falls away from the road at different rates to 31 metre OD and rises again slightly to 32 metres OD along the western boundary. Beyond the site boundary there is a railway line on an embankment which is elevated to 37 metres. Beside this there are substantial mature trees.

The larger parts of the proposal are to be located at the lower, western end of the site, 175 to 300 metres from the road, with the smaller warehouse and administrative facilities nearer the road. The highest part of the proposal, the stack, to the west of the site will rise to 70.3 metres O.D. This level corresponds to less than one-fifth of the existing chimneys at the Platin cement factory which rise to approximately 156 metres O.D.

There are a number of listed views in the 1994 development plan to the east of the Boyne Valley including V5, 6,7, 8, 13 and 16. In addition there are views within the west of the Boyne Valley including V2, 3, 4, 9 and 10.

The higher ground at Red Mountain, Sheep House and Donore to the east of the Boyne Valley block views towards the site from listed views 3, 4, 8, 9 and 10. View

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13 is from Stameen, East-Drogheda and is view looking eastwards towards the sea. Listed view two is near Slane, some 9 kilometres from the site.

The only listed views which might be considered to be impacted upon are views 5, 6, 7 and 16.

Views 5, 6 and 7 ranging from Red Mountain to Old Bridge, are considered in photomontages 15, 16, 17 and 18 (submitted by the witness).

View 16 is from Bellewstown Ridge. For most of the length of the road along the top of the ridge, there are no views northwards towards the site by virtue of the road being slightly south of the highest ground of the ridge.

Photomontage 12 is presented from the road to the east of the racecourse.

Photomontages 13 and 14 are from the northern slopes of the Ridge. All three views are taken at locations from where there are open panoramic views northwards.

In all 23 photomontages are presented.

These are as follows;

Views 1-8 along the R152 from Platin to Duleek

Views 9-14 to the east of the R152 from Bellewstown Ridge to the N1 south of Drogheda.

Views 15-16 to between the R152 and Red Mountain.

Views 19-21 from distant locations north of Drogheda, at Tullyallen and north of Slane.

View 23 from Dowth and Bru na Boinne

The photographs were taken either using a Corfield WA67 (47 mm lens) or a Hassleblad with a 15 mm lens. These have a horizontal field of vision of 73.5 degrees and 57 degrees respectively. Every effort was made to take the photographs in bright conditions with good visibility.

A topographic survey of the site was made available to the witness in digital form. This together with a copy of the 6 inch and 1/50000 Ordnance Maps of the area were used. All maps were overlaid on each other in national grid.

The position and levels of close-up camera points were surveyed electronically using a total station and were tied into the original site survey grid. Medium distance camera positions were located relative to features represented on 6 inch Ordnance Maps. Distant camera locations were located on the 1/50000 Ordnance Maps.

In the case of medium and distant views the camera level was established by reference to the contours on the Ordnance Survey Map and by measuring the vertical angle from the camera position to the tops of the two stacks at the cement factory, using a theodolite. The national grid coordinates are for both stacks together with levels for the tops of the stacks.

For each camera location, angular measurements were taken with theodolite to a number of features visible from the camera position. These features as they appear in the photographs were then marked on the photographs. The sight line from the camera positions to these features were then plotted together with the outer edges of the fields of vision.

For each photomontage these sight lines were then taken and overlaid onto the map of the area and positions sought to align with the corresponding points on the maps.

A digital model of the proposals was built, based on drawings supplied by the architect. This model included the camera positions and known existing features in the landscape such as the Platin chimneys. Prospective views were then generated for each camera position and overlaid onto the corresponding background photographs. An accurate fit was achieved by matching the surveyed features in the rendering to the corresponding points in the background photograph. The images were then cropped to remove any parts which would be screened by existing obstructions.

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In mitigation of the proposed development, berming and planting was also represented in the model at different heights depending on the predicted growth rate. The only views which would benefit from the planting proposals are views 1, 2, 3 and 4. As such these are shown at the post construction stage with 2 years' growth and at 5 years' growth. The photomontages are printed on A3 paper with an image width of 396 mm. At this size photographs taken with a 73.5 degree and 57 degree lens would appear the same size as reality if viewed from a distance of 265 mm and 365 mm respectively.

As photography cannot mimic how the eyes see, it is intended that the photomontages are used as a tool to aid visual assessment which should be viewed and compared with the real scene.

Views 1, 2, 3 and 4 are presented on three sheets each to demonstrate the proposed development and mitigation measures along the Regional Route R152. It is intended to carry out the berming and planting works at the commencement of construction so that the planting will be 2 years old on completion of construction.

In the remaining views the primary image is the 'as proposed' image with the 'as existing' shown for reference purposes. While the site of the proposed power plant would be visible in a particular view, the cumulative effect is also shown as a separate photomontage for reference.

Where only a red outline is shown the proposal would not be visible as it would be screened by existing topography or vegetation.

In reply to third party points of appeal the site of the proposed development is not visible from the Boyne Valley, Tullyallen or from Old Mellifont.

At the time of the preparation of the environmental impact statement construction of the M1 motorway had not commenced. Views 9 and 10 from the west of the line of the motorway were submitted. They are representative of the views from this area. Much of the motorway to the east of the site is in cutting which would restrict views from it towards the site.

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Another point of third party appeal indicated that no photomontage from surrounding residential properties had been submitted. In this regard view two is taken from outside the front boundary of a house directly opposite the site. Views 3 and 4 are from the R152 in the vicinity of properties north of the site. View 6 is taken from the R152 directly opposite the closest residential property to the south of the site, on the R152. View 16 is taken from the Donore Road at Clunlusk adjacent to two houses. View 18 is taken from a residential road on the outskirts of Donore to the north of the site.

Many of the remainder of the 23 photomontages were taken in the vicinity of residential properties. The photomontages which were submitted are representative of the range of views from all distances and directions.

In the preparation of the E.I.S. it was considered that the impacts from site lighting would be negligible by virtue of the use of light fittings with a high cut-off value. View 12 from Bellewstown Ridge has been prepared to demonstrate the effect of lighting.

The proposed development is generally insignificant in the landscape.

For the developers **DR. B. MADDEN** stated that he was the principal in Biosphere Environmental Services, a company set up in 1994 which specialised in environmental impact assessment and nature conservation related work. The witness had worked as an ecologist with Dúchas, the Heritage Service.

The witness assessed the baseline ecological conditions pertaining at the site. He identified sites of ecological interest in the locality. The survey concentrated on habitats, flora and fauna with particular emphasis of the possible occurrence of habitats with conservation value. Based on the results of the field survey and considering information from the heritage service related to designated sites of conservation importance in County Meath, an assessment was made of potential impacts of the proposal on the flora and fauna of the area. Where necessary,

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mitigation measures were outlined to prevent or lessen potential adverse impacts. Recommendations to enhance the area for wildlife were also made.

The site is agricultural land with a low habitat diversity. Habitats identified are improved grassland, hedgerows and drainage ditches. The grassland is not of significant scientific interest. The hedgerows are generally of relatively low interest due to low species diversity and poor structure.

Of particular note is the hedgerow which forms the eastern/northern townland boundary, the hedgerow or tree line which forms of the boundary of the road and of the hedgerow or tree line which forms the north-western boundary. All of the other hedgerows have limited value.

The survey area does not appear to support any rare or protected plant species. No animal species of high conservation importance occurs within the site. Of some local interest is that of a rookery in one of the ash trees in the western hedgerows.

The surrounding lands are predominantly agricultural. A feature of ecological importance is the River Nanny, which is an important fishery for trout. A drainage ditch immediately west of the site flows into a tributary of the Nanny.

No part of the site or its immediate surroundings is within a designated site of conservation importance. The nearest such site is the Duleek Commons proposed Natural Heritage Area located 2 kilometres to the south-west. This proposed Natural Heritage Area is a calcarious marsh and fen system with important botanical interests. Two further sites of conservation importance are located on the River Boyne approximately 5 kilometres to the north-west of the site. These are the Boyne River Islands and the Dowth Wetlands. Both of these are proposed Natural Heritage Areas while the Boyne River Islands is also a candidate Special Area of Conservation.

The site represents fairly typical intensively management agricultural land. The main ecological interest lies in some of the better developed hedgerows or tree lines.

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Impacts and mitigations are dealt with in relation to habitats and water pollution. Habitat loss would be the principal direct impact due to the construction works. Much of the improved grassland would be lost as well as the internal hedgerows and the hedge along the R152. The loss of improved grasslands is not of significance. The hedgerows which would be lost, apart from the one along the R152, are of poor quality and the loss is considered only of minor significance. The loss would be mitigated by extensive planting of trees and shrubs of mixed species which would result in an overall enhancement of the site for local wildlife. A new hedgerow will also be laid along the north-western boundary. The other boundary hedgerows will be retained and any disturbance caused during construction works repaired using the same species as already present.

In relation to water pollution the entering of polluting substances into the tributary of the River Nanny, the drain to the west of the site, during the construction and operation phases is identified as a potential adverse impact pointing to the importance of this water course. Appropriate measures, such as use of a silt trap etc. would be taken to avoid contaminants from entering the drains.

In relation to designated sites of conservation it is considered that the proposal would not have any impact on Duleek Commons nor on the important sites along the River Boyne.

In reply to points of third party appeal the impact of the construction of the development will be the loss of existing habitats which comprise improved grasslands and hedgerows. These are not considered significant.

Peregrine **falcons**; a specific reference has been made to possible adverse impacts on peregrine falcons which nest at the nearby cement works. Concerns relate to disturbance to nesting birds caused during construction and birds feeding on poisoned rodents.

One of the third party witnesses noted that the peregrines are not mentioned in the environmental impact statement. In relation to this, at the time of the survey, the railway line was taken as the boundary of the survey area, as it was considered

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unlikely that there would be impacts beyond this well defined physical marker. During approximately 6 hours in the field in June 2000 no sightings of peregrines were made. This might suggest that the birds did not breed at this site in the 2000 season. There are several alternative quarries in the Drogheda area where peregrines nest in some years. Even if the birds had been recorded it could be considered reckless to identify the specific site, in the EIS where breeding was occurring as the taking of falcons or destruction of nests is a problem in eastern Ireland. If it had been considered that the birds could be affected this would have been dealt with.

In August 2001 a submission to An Bord Pleanála, on peregrine falcons, containing detailed information was made. This also referred to potential vulnerability.

Approximately 20% of the national peregrine population now nests in quarries. The proposed development could not have any significant impacts on the nesting peregrines at the quarry of Platin. This is principally because the proposal would not lead to any physical interference or disturbance, either direct or indirect, to the birds.

In the third party submission it was noted that disturbance coming from above the level of the nest rather than below would cause disturbance to the birds. While the witness agreed that disturbance at the top of the quarry cliff or a few metres from the top could be a problem, in this case the proposal is 200 metres from the quarry edge and with the railway line in between. The construction of the proposal would not have any adverse impacts on the nesting peregrines.

In recent years peregrines have adapted to nesting in urban areas usually on tall buildings. In 2002 nesting was recorded in Dublin City, Limerick City and several other towns. At some of these sites there are active construction sites within several hundred metres of the nesting birds.

In relation to peregrines feeding on poisoned rodents, pests such as rodents would be controlled in a normal way using the services of a professional pest control company. There is no significant possibility that peregrines, either adult or fledged young birds, would pick up a rat after it had ingested poison bait. This is because peregrines in the wild feed almost exclusively on living birds which they invariably strike at high speed

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while in flight. When the young leave the nest the adults continue to feed them for several weeks until they are capable of catching birds themselves.

Peregrines have been known to take an assortment of ground prey, mostly rabbits. Rats however are not mentioned in the list of mammalian prey items in a book on peregrines by Dr. D. Ratcliffe, the acknowledged world authority on peregrines.

The witness stated that in his experience of visiting the nesting sites of peregrines he had never seen the remains of rodent near the nest of a peregrine.

The peregrine is listed on Annex 1 of the EU Birds Directive (Council Directive 79/409/EEC). This means that the state has a special responsibility to maintain a favourable conservation status for peregrines and other Annex 1 species. The way this is usually exercised is the designation of special protection areas. These sites form part of the Natura 2000 networks. Peregrine populations in some parts of the country are within a special protection area such as the Wicklow Mountains National Park. The witness was not aware of any site which had been designated by Dúchas to protect just one or two pairs of peregrines nor of any quarries or other man-made structures that have been designated a special protection areas for peregrines. The witness would not consider that the Platin quarry would merit designation as a special protection area merely due to the presence of a pair of peregrines.

Reference in a third party appeal was made to the removal of a stand of mature native trees at the site frontage. This tree line of ash adjoins the roadway. While the loss of any hedgerow or tree line is always of some ecological significance, ash is the commonest tall tree of Irish hedgerows and the loss of a tree line of ash could only be considered as of local significance.

None of the sites referred to as proposed Natural Heritage Areas could be affected by the development due to the distance of site from these proposed sites. Hydrological studies carried out have shown that the proposed development would not have any impacts on the hydrology of the wetland at Duleek Commons and therefore there could be no changes in existing conditions of the wetland due to the development.

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For the developers **MR. S. McGEARAILT** stated that the was a civil engineer and a director of the consulting engineering practice which carried the traffic section of the environmental impact statement. He had been actively involved in traffic engineering and road and bridge construction in Ireland for a considerable amount of years.

Road access to the site is of primary importance. It would be from the R152 Regional Road which links the village of Duleek to the south-west of the site with the town of Drogheda to the north-east.

At the site the alignment of the R152 is both straight and level as is clearly illustrated in the photomontage site entrance shown in the environmental impact statement.

The M1 northern motorway bypass at Drogheda will open to traffic in 2003. When the scheme is completed there will be continuous motorway between Dundalk and the Duleek Road interchange of the south-western side of Drogheda. That will provide high quality road access from much of the proposed catchment area of the facility. The Ardee link road facility also connects the N2 corridor to the M1 near Dunleer, thus providing motorway access to the towns of Monaghan and eastern Cavan.

Traffic conditions on the R152 are of considerable importance.

The degree of saturation of the R152 under existing traffic conditions in 2000 was 53% on average at peak times. There remains therefore a substantial reserve capacity available for traffic arising from local developments.

When the M1 motorway is completed it is expected that large volumes of traffic will be attracted away from parallel routes, including the N2/R152 routes. Heavy commercial vehicles would be particularly attracted to the motorway where a consistent cruising speed can be maintained.

Approximately 40% of the existing traffic on the R152 Regional Road is expected to divert to the M1 motorway.

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The 40% estimate takes account of the proposed tolling of the motorway which is expected to cause somewhat of a lower attraction for traffic. Experience to date on the East Link and West Link toll bridges in Dublin has been that drivers are willing to pay modest tolls in return for savings in terms of time and convenience even when there are queues and delays at the tolling station. The deterrent effect of the decision to toll the M1 is likely therefore to be limited. Drivers on longer trips, from for example Dundalk or Northern Ireland to Dublin are most unlikely to divert from the motorway before Drogheda to find a slow a circuitous route to avoid the toll. The traffic that might be deterred from using the M1 because of the tolls would be that originating or terminating in Drogheda. This accounts for only a proportion of the overall traffic on the R152. Significant diversion of traffic off the R152 is therefore expected as a result of the M1 motorway.

The existing spare capacity on the R152 would therefore increase substantially in the near future as a result of the M1 motorway.

The predicted peak hours traffic to and from the proposed development is estimated at 60 vehicles per hour (98 PCU/hour), which is equivalent to 6.5% of the 1,500 PCU/hour capacity of the route. With the proposed development expected to come on stream after the opening of the motorway, there would be a very substantial net reduction in traffic flows in the R152. Proposed developments such as on the appeal site would therefore not contribute to an increase in traffic volumes on the R152 over the present volumes on the route.

A high quality priority controlled junction is proposed for the development in accordance with requirements of the National Roads Authority design manual for roads and bridges. A photomontage of the proposed road layout was included in the E.I.S. The design conforms to the requirement for a route with a design speed of 100 kph (60 mph). This matches the national speed limit which applies at the location. The provision of deceleration lanes on all approaches, including a right turn lane in the centre of the R152 will allow for easy movement for trucks in and out of the site without affecting through traffic flows.

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A number of third party concerns relate to the proximity of the proposed site entrance to a bendy section of the R152. The third party appellants consider that this makes the site unsuitable.

The overall alignment and layout of the R152 is of reasonably high quality over most of the 15 kilometres length between the N2 junction at Kilmoon Cross and the new motorway interchange at the south-western outskirts of Drogheda. The quality of the road alignment in the immediate vicinity of the proposed development site must be considered in the context of the overall road section between Drogheda and the N2. The availability of adequate straight sections of road on which to overtake will lessen the temptation for drivers to attempt unsafe overtaking manoeuvres on bendy sections of road.

The witness stated that a series of photographs were being submitted as part of the presentation. These are contained in Appendix A of the typed submission. They indicate the condition of the road along a considerable number of sections and are contained in approximately 40 photographs.

The submitted photographs illustrate the generally high quality of the R152 alignment which provides ample opportunity for faster traffic to overtake slower traffic. It is reasonable to assume that drivers would feel less inclined to overtake on the busier sections of road between Drogheda and Duleek in the knowledge that there are quieter sections of road to the south where overtaking could be undertaken more comfortably. This is of relevance when considering the likelihood of dangerous overtaking activity on the bendier and busier northern sections of the R152. There is no base to third party concerns about the general suitability of the R152 road alignment. The standard of the road exceeds that of many regional roads and would compare favourably with most of the national secondary routes and even with several national primary routes.

The site entrance will be located on a straight and level section of the R152. However to the east of the site there is a bendy section of road with a series of horizontal curves combined with a crest curve. A continuous white centre line marking prohibits overtaking on this section of road. This extends past the site entrance to prevent eastbound traffic from overtaking on the approach to the bendy section.

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The proposed road layout at the site entrance would involve the addition of islands and a central right turn lane. The effect of these measures would be to extend the non overtaking section a short distance further westwards. In terms of road safety the proposed location for the site entrance immediately after a bendy section of road is better than if it were to be located on a long straight section. It is better to have a junction located where overtaking is already prohibited, rather than on a section where drivers might ignore the road markings and overtake because of the attraction of a long straight section of road.

Regional roads are normally designed for a speed of 85 kph. In making a change to an existing road layout the designer is required to take account of the actual operational speed on the specific section of road in question. On the basis that there is a straight section on the R152 at the proposed site entrance, where traffic can safely and legally drive at 100 kph, the design of the entrance to the site was based on a higher than normal design speed of 100 kph.

The sight lines to both left and right from proposed entrance will exceed the 250 metres required length for a design speed of 100 kph in accordance with the appropriate design standards. This was demonstrated to the satisfaction of the planning authority in the drawings and documentation submitted in the planning application process. Submitted photographs 28 and 9 in Appendix A illustrate the suitability of the road alignment at the entrance.

The existing crest curve of the R152 at a distance of 300 metres east of the proposed site entrance does give rise to a short section of road with restricted forward sight visibility for through traffic. This is indicated in submitted photographs. The design standard for a 100 kph design speed permits relaxation of the stopping sight distance to a minimum of 120 metres. The available sight distance drops below this requirement to a minimum of 100 metres over a 50-metre long section of road on the approach to the crest of the hill in both directions. The effective design speed on the crest is therefore 85 kph which is the standard usually applied for the design of new sections of regional roads. In practical terms, most drivers respond to the obviously bendy character of this section of road by slowing down slightly. While the existing

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alignment on this section is lower than on the adjacent high quality sections of the R152 it still complies with the minimum requirements for a regional road and it cannot therefore be regarded as substandard.

The alignment of the R152 in the vicinity of the development site complies with the appropriate design standards and is suitable to cater for the traffic which would arise from the proposal. The existing road alignment of the R152 in the immediate vicinity of the proposed entrance is of a very high geometric standard which would permit the provision of a junction layout in excess of normal requirements for a regional road.

In relation to traffic capacity on the R152 it is only moderately busy at present with a saturation ratio of just 53%.

Traffic arising from the proposal would be equivalent to only 6.5% of the road capacity.

With the expected 40% decrease in traffic on the R152 arising from the M1 motorway there will be a substantial net reduction in traffic flows even with the proposed development. A traffic capacity problem will not therefore arise.

There are a number of third party appeals related to alleged traffic hazard.

The third party appellants consider that the proposal would exacerbate an existing traffic hazard on the R152 which arises due to the poor road alignment at the location. Mention has also been made of three fatal accidents on the road in recent years.

Traffic accident data was acquired from Meath County Council for the 12-year period from 1990 to 2001. There were 10 accidents recorded on the R152 at Carranstown. Of these one was fatal, involving a cyclist in 1991 and six involved serious injury.

On the overall road section between Drogheda and Duleek, including Carranstown there was a total of 53 reported accidents of which 9 were fatal. Specific clusters of accidents occurred at the R151 junction and in the vicinity of the Platin cement factory. Of the total number of recorded accidents 9% occurred along the section of

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the R152 through Carranstown. While it can be difficult to arrive at specific conclusions from statistical analysis of accident data, it is clear from the record that this section of road at Carranstown is no worse than the rest of the R152. The results show no marked difference in accident rates on the sections of road north or south of Duleek. It is understandable that there might some concern about the road geometry between Carranstown and Platin where the alignment contains a combination of tight horizontal and vertical curves. This section of road is clearly of a lower standard than the generally high quality section of the R152 at Duleek and further south.

Submitted photographs show that the road has a suitable carriageway width for significant volumes of two way traffic on the whole section from Duleek to the M1 motorway junction. In most locations the carriageway is approximately 9 metres way. It is also clear from the photographs that there are straight sections of road where overtaking might safely take place.

The non overtaking sections of the road are clearly identified through road markings. The existing road alignment complies with the general requirements of National Roads Authority design manual for roads and bridges in that it is clear to drivers at all times that overtaking is either safe or unsafe without ambiguous sections. Lack of certainty over the safety of overtaking is widely recognised as one of the main traffic hazards on rural single carriageway roads. This problem does not occur on the R152.

The alleged traffic hazard on the R152 does not relate to any specific feature on the road such as a bend or a humpback bridge. The existing road alignment conforms with the design standard for 85 kph appropriate to regional roads. The general road alignment cannot be described as constituting a traffic hazard. It is not appropriate for appellants to claim that a traffic hazard will arise as a result.

Drawing ref. no. 2666/49/DR/005 was submitted to the planning authority showing the relative positions of the entrance to the appeal site and to the proposed power station site. These entrances would be separated by a distance of 200 metres. The central right turn lane for the proposed development and the associated ghost island taper and will not overlap with the power station entrance.

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Increased wear and tear on the R152 resulting from heavy traffic to and from the site has been addressed by the planning authority in condition no. 10. This requires a levy. The residual life of the existing road pavement will be considerably extended despite any additional traffic resulting from the proposed development, as a result of a large reduction in traffic due to the M1 motorway.

In relation to haul routes the E.I.S., at Appendix B details the catchment area of the proposed facility. A table gives the percentage of waste estimated for each town in the catchment area. This was then matched with the most direct haul routes as indicated in Appendix B of the witness' brief of evidence.

The M1 corridor and the R152 from the north-east will carry traffic from Drogheda, Dundalk, Monaghan and Kingscourt, Coothill, Ardee, Carrickmacross, Castleblaney and Clones. This will account for 64% of the waste.

The N3 corridor and the R150 through Duleek will carry traffic from Navan, Cavan, Duleek, Bailibrough, Belturbet, Kells and Trim. This will account for 25% of the waste.

The R152 south from the N2 at Kilmoon will carry traffic from Ashbourne, Dunboyne, Dunshughlin. This will account for 8% of the waste.

The R150 east from Laytown will account for 3% of the waste.

The haul routes and the volumes of traffic on each have been identified on this basis throughout the traffic section of the environmental impact statement.

Concern has been expressed in relation to traffic impact in Duleek Village.

There would be an increase of 6.8% in peak hour. Traffic flows through Duleek were expressed in terms of passenger car units per hour. The proposed facility would have no appreciable traffic impact in Duleek Village.

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The existing heavy commercial traffic passing through Duleek is approximately 80 trucks per hour in both directions. The proposed development would generate 19 two way truck movements per hour of which 25%, 5 per hour, on average, would pass through Duleek. This is equivalent to an increase of 6% in truck traffic through the village.

The main street in Duleek is generally straight and wide with parking along both sides of the road. The presence of street parking along both sides of the street is evidence that the road is sufficiently wide to accommodate truck traffic passing in both directions. There are many more important roads in Ireland with narrower streets that carry considerably greater volumes of truck traffic.

As part of the County Development Plan there is a proposal to construct a relief road on the south side of Duleek. This road would remove through truck traffic from the village.

The National Roads Authority has recognised that there will be a future need for a high quality road to link Drogheda and Navan. Such a road will draw traffic away from the R150 passing through Kentstown and other communities along the route to the west of Duleek.

The proposal would give rise to a modest increase in truck traffic flows through the village of Duleek. This will add to the low existing traffic flows around the main street, which is suitably wide to perform its function as the route to cater for commercial traffic originating in the general vicinity.

West of Duleek the R150 extends to a junction with the N2 at Flemingstown, over a distance of 5 kilometres.

The overall alignment and layout of the R150 is of reasonably high quality between Duleek and the N2. This is indicated in photographs submitted.

The R150 is highly suitable as a haul route from the west to the site.

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The developers will ensure that trucks coming to and from the site will avoid the section of the R150 which passes in front of Kentstown national school west of the N2. The haul route from the west will therefore travel along the N2 for 2 kilometres between Flemingstown and the Balrath Cross junction with the R153 heading for the N3 at Navan.

In relation to traffic estimates the E.I.S. provided details of the traffic movements associated with each element of the proposed development. These figures were derived from the projected tonnages of materials. They are contained in table 7.2 of the environmental impact statement. The total amount of traffic entering the site on an annual basis would be approximately 47,000.

Ash would be removed off site by the waste delivery trucks. As a result no additional heavy commercial vehicular traffic would be generated by this activity.

The location for ash disposal would be determined within the context of the North-Eastern Regional Waste Strategy. As the volume of ash will be only a small residue of the inbound waste volume, it is expected that the delivery of this material to a suitable landfill will not affect traffic patterns to and from the site.

The predicted traffic flows in the R152 after 20 years from year of opening will remain lower than the existing traffic levels, because of the expected large diversion of traffic to the M1 motorway. The small volumes of traffic generated by the proposed development will not noticeably diminish the improvement to the residential amenity of the area that will arise from the motorway scheme on the M1.

Reference has been made, in a third party appeal by An Taisce, that the proposed development did not envisage any use of the adjacent railway line and that this did not represent a sustainable approach.

There might be scope for the delivery of some materials to the site from towns that are served by railway. For example Dundalk from where 25% of the waste will come from and Navan which will supply 10% of the waste, could possibly make use of rail deliveries. However as all of the waste is collected by truck from dispersed sources

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any use of rail transport would require associated waste transfer sites at the nearest railway access points. These facilities would require their own planning approvals separate from the current proposal. It would be misleading therefore for the developer to propose delivery of materials by rail in the absence of approved transfer stations.

The haul distances that could be undertaken by rail are very short. In the case of Navan it is 18 kilometres and in the case of Dundalk 36 kilometres. It would not be economical to undertake double handling of waste involving the use of two modes of transport and of dedicated waste transfer stations for such short haul distances. The rail alternative is therefore not feasible for this development.

In reply to a question from the inspector Mr. McGearailt stated that on single carriageway roads it was safer to provide a deceleration lane, rather than an acceleration lane for left turning traffic. This was to prevent heavy commercial vehicles trying to accelerate and merge into the traffic stream on a single carriageway road.

Traffic using the R152 could not access the M1 motorway without passing a tolling booth. The R152 would therefore be used as an interconnector between the N2 and the M1 by motorists to avoid paying tolls.

Platooning of traffic along the R152 permits local people to enter and exit their properties as it provides for considerable gaps in traffic. This effect results from the fact that traffic cannot overtake.

The R152 as it passes through the village of Duleek is wide enough to cater for the safe passage of traffic in both directions.

For the developers MR. K. CULLEN stated that he was a geologist of long standing.

His office had carried out soil and groundwater studies on the field site. The baseline soil and groundwater conditions were determined during these investigations. These are outlined in section 8 of the environmental impact statement.

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The plant has been designed so that there would be no discharge of trade effluent to either the ground on the site or to any sewer linking the site. All trade effluent could be retained within the vicinity and disposed of as part of the process within the facility. There would be no risk to water resources as a result of trade effluent discharges.

Water runoffs from hard surfaced areas and building roofs will be collected and used within the process. Runoffs from some of the non hard surfaced areas will also be collected and used in the process.

The storage and usage of water would cater for the volume of this runoff during most wet periods with the need to discharge water from the storage facility only arising in extremely wet periods such as those which would exceed a one in twenty year storm. In these wetter periods the excess runoff may be discharged from the storage tanks into the local drainage network. The storm water will already have passed through interceptors and so will not pose a threat to the local drainage network. The developers will ensure that any discharged runoff from the water storage facility will meet quality standards so there will be no significant impact on the water quality in the receiving drainage ditch, the River Nanny or the associated ecosystem. Surface runoff water generated on the remaining non hard surfaced areas on site will be diverted to the local drainage network. Monitoring measures will be implemented to ensure that the runoff water meets quality standards.

It is proposed to discharge domestic effluent, after suitable treatment, to a percolation area on the development site. The percolation area will be designed according to current guidelines with the effluent quality maintained at the required levels. The impact on the receiving groundwater will be consistent with the accepted impacts associated with other developments which are acceptable in un-sewered areas.

The site is located in an area where the groundwater regime has already been impacted by the de-watering associated with the nearby quarry. The volume of groundwater to be abstracted to the site together with the location of the abstraction with respect to Duleek Commons, the River Nanny and the quarry are such that the

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proposed groundwater abstraction at the waste facility would not materially alter the current groundwater flow regime in the vicinity of the development site.

The proposed abstraction rate will not materially impact on the flows in the River Nanny or on the groundwater levels at Duleek Commons.

Groundwater protection schemes developed by the geological survey are based on the development status of aquifers, their capacity to supply groundwater and their vulnerability to pollution which in Ireland is a function of the type and thickness of the overburden. The Geological Survey have published planning responses for a number of potential pollution activities which can be used in conjunction with groundwater protection schemes such as that prepared for Meath County Council by the Geological Survey. Responses have been published for the siting of landfill sites and the land spreading of organic waste.

Planning responses for developments such as incinerators or similar facilities have not as yet been published by the geological survey.

The development site is underlain by karst limestone which by its nature can pose difficulties for building foundations. However, as is demonstrated by the nearby cement works, the ground conditions here can accommodate the type and scale of industrial building proposed for this development. A detailed site investigation programme will be carried out in advance of the building works.

The facility is located in a wide expanse of limestone strata. The development of the facility will not materially impact on the available reserves of limestone in the East Meath area.

During construction and operation storage of potentially polluting substances will be in structures which are suitably bunded. The containment of sewage for off site disposal during the construction phase will also be provided for. The provision of silt traps will also be provided to prevent the discharge of muddy waters into the local drainage system,

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The design parameters applied to the proposed development have removed in some cases and limited any potential impact on the surrounding natural environment by discharges from the plant. The retention of the trade effluent within the process eliminates any impact on local water quality by trade effluent generated in the plant.

Studies carried out on the site have shown that a suitable percolation area can be constructed to comply with national guidelines.

Two trial pits were dug on the site of the proposed percolation area. These were excavated to a depth of 2.8 and 3 metres respectively. Both encountered similar overburden deposits 1.2-1.8 metres of boulder clay and then a clayey gravel which became more gravely with depth. No seepages were encouraged during the digging and after 48 hours no water had entered the holes. Four percolation pits were dug at the site of the proposed percolation area. The site failed the percolation test as the T value obtained was greater than 50(E.PA wastewater manual). This is due to the presence of clays beneath the site which had become highly saturated during bad weather.

In accordance with E.P.A. Guidelines the site can be engineered to meet the required specifications for percolation areas. This would involve the removal of the existing overburden material over an area of 300 square metres and the importing of material with a suitable T value, preferably a fine sand or clayey sand with a T value of between 5 and 15. A reserve percolation area should also be constructed in the event of the main area malfunctioning.

Alternatively a sand filter could be constructed with an associated polishing filter. The advantage of this of type of sand filter is that it takes up considerably less area than the trenched percolation area. The disadvantages are that a polishing filter is necessary and pumping of wastewater might be needed to transfer effluent from the sand filter to the polishing filters.

De-watering at the quarry has lowered the water table beneath the development site. The developer recognises that the abstraction of groundwater from the site has the potential to impact on other users of groundwater in the area. The developer will co-

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operate with the planning authority regarding the monitoring of groundwater levels on the development site and at nearby residences and is willing to mitigate any impacts attributed to the withdrawal of groundwater from beneath the development site.

Possible mitigation measures include the deepening of domestic wells or the connection to main water supplies where this is a practical option.

The planned site investigation programme will define the geo-technical conditions on the development site. The construction of the facility will incorporate the findings of the geo-technical study to ensure that the plant is built to the highest structural standards. Construction and operation of the cement works confirms that it is possible to construct a major plant safely in this geological environment.

The World Health Organisation Siting Guidelines refer to hazardous waste facilities. The proposed development facility is for non hazardous waste.

The 12,000 cubic metres contained in the waste bunker would be used for the storage of fire water, in the event of fire.

For the developers **MR. E. O'KELLY** stated that he was an acoustic engineer with over 30 years' experience in the assessment of environmental noise in relation to planning aspects of industrial development.

The witness stated that he was involved in the preparation of the E.I.S. in the carrying out of a baseline noise survey. He was also involved in the assessment of environmental impact due to noise from construction and the review of the environmental impact of the operation of the proposed plant. The baseline noise survey consisted of continuous unattended noise measurements of existing ambient noise levels over 10-24 hour periods from 0700 to 1900 at a location on site 30 metres back from the R152 Regional Road.

The witness was particularly concerned with replying to third party objections relating to noise arising from construction activity.

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Condition no. 22 of the planning authority decision states that site noise as defined in BS522A-1997 shall not exceed L(aeq, 1 hour) of 65 DbA over the time period 0700 hours to 1900 hours Monday to Saturday inclusive including public holidays and Sundays and 45 dBA at any other time.

This condition is identical to condition no. 2 of planning permission ref. 99/1317 granted to Irish Cement Platin and to condition no. 11(1) and 11(2) of the permission of An Bord Pleanála in PL 17.111198, granted to Lagan Cement.

Ambient noise is defined as total sound in a given situation at a given time usually composed of sounds from many sources near a site.

Ambient noise levels are as follows;

Laeq level.

Less than 30 dBA: very quiet, rural area at night.

30-40 dBA: quiet suburban area (away from major roads at night).

40-50 dBa: quiet suburban area during daytime.

50-60 dBA: suburban area (proximate to roads) during daytime.

60-70 dBA: urban areas, city centre with heavy traffic during daytime, areas along motorway, national primary routes and busy regional roads.

The baseline noise study monitored the existing ambient noise on site at a location 30 metres back from the edge of the R152. Results show that over daytime periods, which are defined by the Environmental Protection Agency as being from 0800 to 2200 hours, the mean value of L(aeq) 15 minutes was 61.3 dBA and the standard deviation 1.6 dBA. Residences which are closer than 30 metres from the edge of the carriageway experience higher ambient noise levels.

The predominent source of noise is due to road traffic along the R152. The comparatively low level of value of the standard of deviation, 1.6 dBA is typical of road traffic noise. These ambient noise levels would pertain along the length of the R152 where the traffic flow conditions do not substantially vary. It is noteworthy that for traffic conditions with similar mean speed and percentage of heavy goods

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vehicles, a doubling of traffic is required to increase the ambient noise level due to traffic by 3 dBA.

The most effective mitigation method for the control of construction noise is restricting the hours of operation. Construction operation will be limited to 0700 to 1900 hours Monday to Saturday inclusive excluding public holidays and Sunday. There may be a limited number of occasions when construction, of necessity, has to be carried out outside these hours. This will be agreed with the planning authority.

All construction equipment shall comply with ISO.320 of 1988, European Construction Plant and Equipment Regulations 1998. BATNEC techniques shall be employed to minimise the sound from the construction operation with a view to achieving a noise limit target of 65 dBA.

The berm along the eastern boundary would be constructed as soon as possible during the early stages of site infrastructural works. During the construction of the berm it will not be practical to stay within the noise target of 65 dBA outside the nearest houses, one of which is located immediately beside the north-eastern boundary of the site. The noise level is likely to rise during this phase to an L(aeq, 1 hour) level of 75 dBA for relatively short periods over approximately 2 to 4 weeks. The construction of this berm shall be continued for a distance of about 30 metres along the road and boundary of the site at the north-eastern corner to provide acoustic screening to the house located there and to other nearby houses. The purpose of these berms is to provide acoustic screening to reduce the noise particularly during the construction phase. The berms would also provide visual screening.

It is recommended that An Bord Pleanála consider incorporating a condition similar to that given in their decision PL 11198 i.e. condition no. 11(3) as follows;

"During construction of the screening berms noise levels of up to L(aeq, 1 hour) of 75 dBA will be permitted for a period not exceeding 14 working days relative to any particular sensitive location subject to prior notice and the written agreement of the planning authority."

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For earth moving works, other than the construction of the berm along the eastern boundary, the target noise level limits of Laeq 65 dBA may be exceeded on occasions at the nearest house depending on the proximity of the earth moving operation. If this occurs consideration will be given to the use of lower powered equipment although this may result in the works taking longer to complete.

Piling may be required on site in the vicinity of the process building which is located at a distance approximately 250 metres from the nearest houses. The code of practice for noise and vibration control applicable to piling operations set out in BS522A-1992 Part 14, Code of Practice for Noise and Vibration Control Applicable to Piling Operations, would be followed. The type of piling to be used on site would normally be governed by such criteria as load to be carried, strata to be penetrated and economics of system. In this instance it may not be practical to use bored piles and driven piles may be used. The expressed noise levels due to this activity is L(aeq, 1 hour) level of 56 dBA. Piling, if required, is likely to take place over 2-3 weeks.

Noise due to construction traffic, including heavy goods vehicles and employees' vehicles, is estimated to cause an increase of up to 1 dBA over existing road traffic noise in morning and evening peak hours. This is probably over-estimated as most employees' journeys will take place outside the morning and evening peak hours.

Noise monitoring due to construction would be carried out by utilising continuous unattended monitoring either at selected sections of the boundary by agreement with nearby residential properties. The results of noise monitoring would be reviewed on a weekly basis and reported to the planning authority on a monthly basis.

At residential properties located along the R152 and at a distance of 30 metres from the edge of the carriageway the existing ambient noise levels are relatively high with a mean daytime L(aeq, 15 minutes) level of 61.3 dBA. These levels are typical of those encountered along busy regional roads or national primary roads. The overall cumulative effect of road traffic noise and construction noise other than that for the construction of the berm, will be 66.5 dBA. This would be a temporary increase of approximately 5dBA over the existing ambient noise. The expected environmental impact will be slight.

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For the developer **Mr. T. PHILIPS** stated that this completed the direct evidence on behalf of the development company.

At this stage third party direct evidence was presented on behalf of the Newgrange Growers' Assocation by MR. M. LAWLOR, who had not attended the hearing previously.

The growers group grow tillage crops on 10,000 acres in the area. The crops are grain, potatoes and vegetables. The radius around the site is approximately 5 kilometres. There is full traceability on all of the produce.

The quality of food grown in the region is first class.

The economy of the area depends very much upon agriculture.

Farmers are now liable for the production of defective food on their farm.

History tells its own failed safety measures as far as incineration is concerned. Incineration will increase the levels of air pollution. Pollutants will find a way into the food chain.

MR. F. SHUTTER stated that he was an observer who was totally opposed to the proposal. His observation related to the unacceptable increase of levels of heavy traffic through Duleek which the proposed waste management facility would bring.

The witness said he rejected the developers' submission that the main street in Duleek was wide enough for two trucks to pass. There are currently many incidents where a bottleneck is created due to one truck having to pull in and allow another to pass in the opposite direction.

The problem in the village could easily be resolved if the prohibition of waste vehicles was extended to the R150 between Kenstown and Duleek Cemetery. This would afford the residents of the village the same protection as Kenstown school

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children. The possibility of accidents must be greater in congested Duleek than in the proximity of Kentstown school. This suggestion would result in the approved route from Navan to Carranstown being by way of the R153, the N2 and the R152. This is a relatively minor diversion and will only be necessary until the east/west bypass of Duleek is completed. The developers have already confirmed what a good road the R152 is.

MR P. O'BRIEN stated that as an observer to the proposal he was completely opposed to the development. He lived with his family of 6 in the village of Duleek. Three of his five children are asthmatic.

The real issues relate to health.

There is a very serious problem with existing heavy traffic levels. This results from the large number of quarries particularly at the Platin cement works. This problem will increase with the building of the power plant adjoining the appeal site. It will become unbearable if the proposed development was carried out.

East Meath appears to be a dumping ground for problem industries. The residents of the area naturally want to know why East Meath has been particularly chosen in this way. Local residents do not want to have to move out of the area in order for the developers to move in. If the developers move in and if other industries move in, as seems highly logical, the residents may seriously have to consider moving away from the area, in the interest of safety.

Given the presence of existing industries in the area the local residents could not be expected to accept more.

The witness stated that he was an executive member of the local soccer club. This club had received public funding for improvement. This would be put at naught if the proposed development was carried out due to the greatly increased danger to players, particularly children, accessing the sporting facility.

Incineration is an out of date and failed technology.

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Alternatives to incineration must first be given a chance.

Planting trees around the site will not control pollution or save lives. The only way of doing that is to prevent it being built.

If An Bord Pleanála decided to grant permission the Environmental Protection Agency might feel obliged to grant a license. This would be most regrettable.

It is not clear who would monitor and police conditions contained in the decision of the planning authority to grant permission. It is also of concern in relation to conditions which might result from the granting of a license.

MR. J. BEHAN stated that he was an observer to the proceedings and lived in Drogheda. He was concerned that the proposed development did not comply with the Seveso Two Directive. Article 12 of this directive relates to land use planning and states;

"Member-states shall ensure that the objectives of preventing major accidents and limiting the consequences of such accidents are taken into account in their land use policies and/or other relevant policy. They should pursue these objectives through controls on; (a) the siting of new establishments.

Member-states shall ensure that their land use and/or other relevant policies and the procedures for implementing those policies take account of the need in the long term to maintain appropriate distances between establishments covered by this directive and residential areas, areas of public use, and areas of particular natural sensitivity or interest."

The planning authority have had the opportunity to get this greenfield site right first time. Instead they have allowed a facility to be located along a main gas route containing a dangerous substance. It would have been more feasible to locate such a facility away from the main gas pipeline and eliminate the potential for hazard.

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The natural gas pipeline from Drogheda to Navan runs under the site. It is situated between the warehouse and the reception hall/sorting plant.

Natural gas is listed as one of the 55 named substances under the first schedule of the regulations in SI 476.

The developers are not responsible for the gas line outside of their establishment however they are accountable for any major accident which may occur within their site boundary involving the substance.

The Seveso Directive states that;

"The transmission of dangerous substances through pipelines also has a potential to produce major accidents.

Major accidents shall mean an occurrence such as a major emission, fire or explosion resulting from an uncontrolled development in the course of the operation of any establishment covered by this directive."

There is an access and service turning area yard to the warehouse located directly over the main gas pipeline. Deliveries will be unloaded in this area using fork-truck equipment. There was the potential that a spillage of any of the many corrosive hydrocarbon inventories may occur in this unloading area. If this occurs it may enter the surface water drain and penetrate through the pipe work to the underlying gas main. A degradation of the pipeline may occur over a period of time which could result in an uncontrolled emission of natural gas. This gas leak could follow the route of the surface water drain into the main process building resulting in a main explosion fire in this building.

The major emission, depressurisation of the gas line could result in inventories being emitted in excess of the lower tier threshold value of 15 tonnes. This would classify the site as a Seveso site. The gas line is operated at 60 bar pressure and has a mass of 3.6 kilograms per metre.

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Boiler and flue gas residues contain dangerous substances. Both of these materials, after solidification would be disposed of in hazardous land fill facilities.

The developers would hold up to 300 tonnes of such ash and residue on site. It takes about one week to do analysis for lechate. If the inventory is classed as toxic, class 9, then the inventory on the site falls within the category of exceeding the lower tier threshold and is therefore classified as a Seveso site.

In reply to a number of questions from **MR. S. WARD, MR. KILLEEN** stated that the land was not zoned in the county development plan.

The land was classified as rural agricultural in the county plan, consisting of lowland pasture, undulating land forms and ridges. The development plan landscape characterisation is area VQ11.

Section 3.2.3 of the County Development Plan states in relation to industrial development;

"While it is accepted that there are sites suitable for industrial or small business type activity in rural areas such location would only be considered where these activities serve the needs of rural and local communities or where they are considered to have locational requirement necessitating a rural context."

It is in that context that the planning authority considered that the proposed development has a locational requirement necessitating a rural location, within what is an infrastructural corridor close to gas mains, the road infrastructure, the M1, regional roads R152 and proximate to the centre of gravity of the waste. These are the primary site considerations in the study prepared for the planning authority and outlined in the Thermal Treatment Study, Thermal Treatment Options and Waste Recovery in the north east region. It also includes criteria contained in the North- Easter Regional Waste Management Plan.

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The proposed development is an infrastructure project comparable to a wastewater treatment plant. It is a resource which is different to other industrial activities where there is an industrial process for producing certain types of good and material.

In reply to further questions from MR. WARD, MR. KILLEEN stated that the proposed development would be inappropriate, because of the scale and the bulk of the structure, to locate in industrial zoned land. It would also be an unsustainable use of costly serviced industrial zoned land. Industrial zoned lands normally generate 100 jobs per hectare. The four hectares of the appeal site would generate 50 jobs. This would be wasteful use of costly serviced land.

Normally industrial zoned lands are on the edge of development centres. Because of the nature and scale of the development, attempts to screen it would be unsuccessful and there would be an abrupt transition from one scale of development to the next. It is for that reason that this development, located beside another industrial development, the tall high rise structures of the Platin plant, gives it a further locational requirement.

In reply to a number of questions from the inspector **MR. KILLEEN** stated that there was an element of piggy-backing in the development due to the presence of the adjoining cement works.

The location of the site proximate to the centre of gravity of waste production was of importance.

Proximity to the M1 was of importance as was the presence of a gas main on the site.

In reply to further questions from **MR. WARD, MR KILLEEN** stated that he was unaware of the amount of industrial zoned lands within the north east region.

In reply to a question from the inspector Mr. Ward stated that he did not have precise figures for the amount of lands zoned for industrial purposes in the four counties comprising the North Eastern region however he was certain that there were very significant amounts of industrial zoned land. There were several hundred acres of land not only zoned for industry but also serviced within the region. An example of

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that was in Dundalk. There was also land zoned for industrial purposes in Ardee and in other locations within the region.

In reply to further questioning by **Mr Ward, Mr Killeen** stated that the site was located in an area which was highlighted as a strategic greenbelt in the Strategic Planning Guidelines for the Greater Dublin Area. It is open to the local authorities for each region to define the strategic greenbelts. There is a specific policy objective in the Meath County Development Plan for that purpose. The planning authority is currently going through the process of identifying the strategic greenbelt areas within the county. The local authority is presently defining specific areas as strategic greenbelts. In the summer of 2000 An Bord Pleanála decided to grant permission for the Marathon Power plant close to the appeal site. This is a development which the planning authority considered had a locational requirement it being an infrastructural resource. This is also located within the strategic greenbelt area as indicated in the Strategic Planning Guidelines.

Leisure and recreation are the main types of development which the Strategic Planning Guidelines for the Greater Dublin Area indicate as being suitable uses in the strategic greenbelt area as well as local requirements. While the proposed development is not a local facility it has a locational requirement as it is a piece of insfrastructure. The Strategic Planning Guidelines would not prohibit the local authority locating a water treatment plant in a strategic greenbelt area. Local need has not been defined in the Strategic Planning Guidelines.

The proposed development is a piece of waste management infrastructure for the region.

Mr Ward stated that, the Strategic Planning Guidelines do not state that one can locate waste management facilities in the strategic greenbelt. The Guidelines refer to local needs only. This is a regional scale development.

Mr Killeen stated that he did not agree that it was in breach of the Strategic Planning Guidelines.

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Mr Ward stated that it was quite clear from the Guidelines that one cannot locate regional scale activities in the strategic greenbelt as outlined in the Guidelines.

In reply to further questioning from Mr. Ward Mr Killeen stated that the proposed development was not submitted to Dúchas, the Heritage Service, for comment. Dúchas did write to the planning authority subsequent to the additional information having been received by the planning authority. They did not express any objection to the proposal subject to appropriate archaeological conditioning. Dúchas did however recommend that a visual impact of the proposed stack be sought, particularly when viewed from the Boyne Valley. Mr Killeen stated that he was satisfied that having assessed the E.I.S. that the stack would not be visible from the Boyne Valley World Heritage Site. Mr. Killeen stated that he did not consider it necessary that anyone other than himself make an assessment of the impact of the stack from the Boyne Valley.

To be consistent with the planning authority and An Bord Pleanála's decision in relation to Knockharley waste landfill site, traffic traversing section of the R152 from Kenstown to Flemington should be changed. An Bord Pleanála is requested to change the haul route to comply with condition as contained in the Knockharley decision. While no environmental impact of the proposed development had been prepared for the alternative haul route the planning authority were nonetheless willing to recommend the haul route.

Mr Ward stated that as no environmental impact of the use of an alternative haul route was made, third party involvement was precluded in terms of this aspect of what was now proposed by the planning authority.

Mr Killeen stated that, the planning authority in condition no. 10 of the decision to grant permission required the developer to pay a contribution for the improvement and alteration to the public roads serving the development. It is intended to provide for traffic calming measures on the R152.

The provision of the access to the site was described in the public notice. Other works on the R152 such as the traffic calming were not included in any public notice.

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There are however two separate issues, the provision of an access point on the site and the carrying out of traffic calming measures and road improvement to the R152.

The proposal to carry out road improvements to the R152 coincidentally occurs at the same time as the proposed development.

The planning authority did not carry out any environmental impact resulting from the change to the haul route as it did not constitute part of the planning report for the proposal. It was only as the planning authority further considered the traffic implications of the proposed development that they now consider that a changed haul route would be preferable to that originally proposed. In reply to further questioning from Mr. Ward Mr Killeen stated that residents living along the alternative haul route would have been unaware that it was now the planning authority's stated choice that traffic from the proposed development would use the alternative route. Mr. Killeen agreed that there could have been no third party input by such residents, into the planning appeal.

Mr Killeen stated that the lowering of the crest of the incline, on the R152 to the north of the site was covered by condition no. 10. This also included entrance details onto the site.

Traffic calming measures are covered by way of condition requiring monetary contribution.

The proposed traffic calming on the R152 is desirable with or without the proposed development.

The traffic calming measures were never included in any public notification relating to the development. The traffic calming measures are a proposal from the planning authority. The traffic calming proposed relate to 1.3 kilometres of the R152.

Mr Killeen stated that the proposed changes by way of traffic calming to the R152 would in future be the subject of part 8 of the Planning and Development Regulations 2001. This relates to the construction of a new road and, the widening or realigning

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of a road. There had been no notification of this to the public as yet. The proposal would not constitute widening or realignment. It would provide for delineation of the road surface, installation of no overtaking signs. The lowering of the road is provided for by way of condition.

The planning authority did not accept that there was necessarily a part 8 requirement relating to the traffic calming measures proposed on the R152. This would depend on the cost of the proposed works. This is estimated by the planning authority at €26,000.

In order to clarify issues Mr Ward quoted part 8 of the Planning and Development Regulations 2001, S.i.600.

"Requirements in respect of specified developments by or on behalf or in partnership with a local authority;

the construction of a new road, widening or realignment of an existing road where the length of the new road or the widened or realignment portion of an existing road as the case may be. In the case of a road in an urban area 1 kilometre or more".

In reply to a question from the inspector Mr Killeen stated that condition no. 7 did not specifically refer to the lowering of the level of the road. This was referred to in a submitted drawing to the planning authority, by the developer.

Mr Ward stated that the point he was making related to the realignment, widening, surface change, traffic calming etc. on the R152 over a distance of approximately 1.3 kilometres. This would have required a part 8 notification to the public. The public notices relating to the proposed development did not refer to this. No public notice was published by the local authority relating to the section 8 procedure.

Mr Killeen stated that he disagreed with Mr Ward's interpretation of the proposed works contained in traffic calming and the provision of the proposed access. While the road is being widened for approximately .3 of a kilometre in the vicinity of the entrance to the site this was covered by the details provided in the application.

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The £250,000 roads contribution related mainly to junction improvements and road improvements on the road network serving the area. Contributions for the improvement of the junction of the R150 and the R152. There are road improvement proposals on the R150 between Duleek, and Julianstown.

In reply to a question from Mr Ward, Mr Gibney of the planning authority stated that traffic safety and capacity were the main considerations relating to the proposed development and its impact on the R152.

In reply to further questions from Mr Ward Mr Killeen stated that there were various land use zonings in the development plan for Duleek Village.

Mr Ward stated that there was no environmental impact assessment of traffic resulting from the development, in the village of Duleek. The zoning for the centre of Duleek was to protect and enhance the special physical and social character of existing town and village centres and for new and improved town centre facilities.

Mr Ward stated that in spite of the fact that considerable amounts of heavy goods vehicles would pass through the centre of Duleek village as a result of the development no account was taken on the impact of this traffic on the village centre, other than a traffic safety and capacity inventory.

In reply to a number of questions from **Mr Ward, Mr Ahern** for the developers stated that the developers were advised in site selection by a project management company. The company does not contain any professional planners.

The developers looked at alternative sites. This work was actually done by Mr Ahern. The zoning and development plan maps for East Meath, Ardee, Drogheda and various other places were examined.

In looking at Ardee the project management company was used. There were no professional planners working in that company.

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Mr Philips' company were engaged at a very early stage however they were not involved in site selection.

For the developers Ms Lee stated that there were no professional planners involved in her company, Project Management.

In reply to further questions from Mr Ward, Mr Ahern stated that his job was to find a site suitable for the proposed development. Mr Ahern stated that not only did he look at the site which he eventually chose but he also looked at possible alternatives.

Mr Ward stated that, there were areas zoned for industrial development in Ardee other than the site which Mr Ahern referred to as being the one looked at as a possible location for the proposed development. To the west of Ardee there is also some industrially zoned lands.

Mr Ahern stated that, having looked at the Ardee area the size of the buildings would have totally dominated the town. The developers did not consider that this was acceptable to the planners. This was Mr Ahern's opinion in view of his experience in siting installations over a considerable number of years. There was no industrially zoned lands in Ardee suitable for the proposal.

While there was an area of land zoned for industrial development on the northern side of Ardee the developers considered that the scale of the proposed development would be inappropriate to this land.

Mr Ward stated that Mr Ahern alone had been involved in initially deciding that land, zoned for industry, which covered quite a large area, was not suitable for the proposed development. He had assessed all of the impacts of the proposed building on such land and came to the conclusion that the proposed development was not suitable to industrially zoned land in Ardee.

There were no professional planners advising the developers at this stage.

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Mr Ahern stated that in visual impact terms he had assessed existing available industrially zoned land. The scale of the proposed development would be too extreme on any of the land.

No site investigations have been carried on any of the lands in Ardee.

In reply to a further question from Mr Ward Mr. Ahern stated that he had looked at the land and decided that it did not suit him.

Mr. Ahern stated that the developers were not required to look at alternative sites.

Mr Ward stated that by just taking one possible alternative, Ardee, it is quite clear that the developers did not consider alternatives to the site of the proposed development. One had to draw one's own conclusions from this fact.

In reply to further questions from Mr. Ward Mr Ahern stated that the developers did not discuss the possible location of the proposed development on the appeal site with the planning authority. At the early stage the developers did discuss with a number of local authorities, including Louth as to whether there was land that would be suitable for the project. This would have been at a very early stage. This was done before any specific sites were looked at.

Mr Ahern stated that he had looked at the Ardee site and it would have not been suitable. This was done using the experience gained by him over a considerable number of years.

Mr Ahern did not speak to the Area Planners in Louth County Council. He did not have any professional planning guidance. Access was not investigated. Site conditions were not investigated.

The centre of gravity is only one of the considerations relating to the choosing of the site.

Mr Ahern stated that no sites zoned for industrial use were examined in Dundalk.

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Mr Ahern stated that he considered that the Ardee site was suited to the proposed development from a traffic point of view however this was only one criterion.

Mr Ahern stated that in relation to the Ardee site he was unaware of any development plan details relating to it, other than the zoning.

Sites to the east and west of Drogheda were examined by the developers. There were a number of sites which with only one or two criteria examined, would have been suitable, however no site was found which complied with all of the developers' criteria relating to site selection.

Locating the proposed development on industrially zoned lands on the western side of Drogheda, close to the Donore Road, such development would look totally out of character and out of place in the area.

Mr Ward stated that the developers obviously considered that the proposed development would be less out of place and out of character in a rural landscape than on industrial zoned lands.

Mr Ahern stated that the proposed development would not be out of place on the appeal site when viewed against the quarry and the cement works. That is why the site was chosen. The developers have never said anything but that.

The proposed building would have been out of place in Ardee.

The developers wanted to find a site that the building would fit into.

Mr Ahern stated that one did not need to be a planner to know that the proposed development would not have fitted into a site in Ardee which was zoned for industrial development.

Mr Ward stated that he disputed this fact vehemently.

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Mr Ward stated that the direct evidence of Mr Ahern was that the developers, at the initial stage, were looking for a site with an industrial character.

Mr Ahern stated that he considered the appeal site to be industrial in character because it is right alongside probably one of the biggest structures and quarries in the north east region.

The developers have not justified the proposal on the basis that it requires a rural character. While there was nothing wrong with putting an incinerator into a city there was also nothing wrong with putting an incinerator into a rural area. The developers were trying to find a site where the building would fit into the surrounding area and would be acceptable.

The World Health Organisation guidelines state that there is no problem putting an incinerator into an urban area.

Waste would come from many customers. It would be collected by either local authorities or by private contractors.

Waste collected in the remoter parts of the region such as Cavan and Monaghan would be taken to transfer stations and subsequently taken to the site.

Any type of waste could go into the furnace. The furnace could be burning hazardous waste although it would possibly be in small quantities. There is a risk of explosion. The same is however true of Kenstown in relation to the type of waste going to that landfill.

The gas cleaning facility for an incinerator burning hazardous waste and non hazardous waste is the same while a license had not been applied to burn hazardous waste nevertheless the incinerator could burn such waste.

The developers have a second project in Cork to deal with hazardous waste.

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There would be no problem with a gas cylinder going into the furnace. It would not result in a fire or damage.

Mr Ward stated that one of the developers witnesses, Ms Burke had stated in evidence that an exploding gas cylinder could damage the walls of the furnace and the furnace would have to be closed down for repairs.

Mr Ahern stated that there was a separate section contained in the North Eastern Waste Management Plan dealing with the collection of hazardous waste material including gas cylinders.

The plant had the capacity to burn 30% of the 516,000 tonnes (1998 figure) of the waste generated in the North Eastern region.

Mr Ward stated that 200,000 tonnes of this waste was in fact construction waste. This would leave 316,000 tonnes of other waste to be disposed of. If the incinerator burnt only 150,000 tonnes per year this accounted for approximately 50% of the remainder of the waste arising in the North Eastern region.

Of the 316,000 tonnes remaining this also includes industrial sludges, commercial waste, household, bulky waste. It includes contaminated soil, water treatment sludge, waste treatment sludge, it also includes mining, quarrying and healthcare waste.

Mr Ahern stated that waste amounts had grown considerably since 1998. There have been a lot of new developments in the region since 1998.

Mr Ward stated that he was taking the figures contained in the environmental impact statement.

These are the figures on which the whole assessment was made.

Mr Ward stated that looking at the North Eastern Regional Waste Management Plan of the 80,000 tonnes of household waste generated in 1998 approximately 20,000 would be in the household hazardous waste category. This leaves approximately

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60,000 tonnes in the normal household waste category. The amount of waste available to burn at the facility would be so low that it would be below the minimum that the developers believe is necessary to run the facility.

If one looked at the Kenstown facility (Knochharley) and looked at the proposed facility there is no need nor any requirement for this facility at the present time.

There is a period of 5 years in which to provide for a proper collection system of waste and there is no need for an incinerator until a proper collection system is up and running.

Mr Ahern stated that the need for thermal treatment in the North Eastern region was a recommendation contained in the feasibility study on waste disposal in the North Eastern region carried out on behalf of the Department of the Environment in 1999. This clearly refers to a requirement of 150,000 to 200,000 tonnes of waste requiring thermal treatment in the North Eastern region. This waste is non agricultural waste. If agricultural waste was included the study refers to 200 to 300,000 tonnes.

Mr Ward stated that the North Eastern Regional Waste Management Plan required careful assessment.

In reply to a number of questions from Mr Ward, Mr Phillips stated that the site was located within an area indicated in the Strategic Planning Guidelines as a strategic greenbelt. However reference to page XII of the Guidelines states that strategic greenbelt areas should be identified in individual county plans to protect areas outside of the development areas from excessive development.

The document instructs the various planning authorities to designate strategic greenbelts. That exercise is currently being carried out by Meath County Council. The process should be put before the council of Meath Council in early November 2002. It therefore has not been completed.

Mr Phillips stated that he had spoken to the consultant planners who are preparing the strategic greenbelt designations for the planning authority and he was told that it was

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unlikely that the area in which the site is located would be included as a strategic greenbelt. It was not known how the planning authority were going to proceed in relation to public consultation regarding the strategic greenbelt. The map contained within the Strategic Planning Guidelines in which the appeal site is located within a strategic greenbelt is an urban design type of map. One cannot take the map literally. It is a conceptual map. However the village of Duleek is also within the strategic greenbelt.

A lot of County Meath is located within the strategic greenbelt as indicated in the Guidelines. It would include places such as Dunboyne, Dunshaughlin, Ashbourne.

In reply to a question from the inspector Mr Killeen for the planning authority stated that it would require a variation of the County Development Plan to define the strategic greenbelt in detail. This would require public consultation.

In reply Mr Ward stated that prior to the definition of the strategic greenbelt without doubt the proposed development was very definitely premature.

In reply to a question from Mr Ward Mr Phillips stated that it would not be appropriate to prepare a local plan and define a strategic greenbelt without public consultation.

In reply to a question from Mr Ward Mr J. Kelly for the developers stated that the photomontages were produced from photographs taken at positions indicated as protected views, referred to in the Meath County Council Draft Development Plan of 2000.

Listed view 16 is the most important one. The 1994 development plan identifies a very small triangle. The text in the plan refers to 14 or 15 townlands around the Carranstown/Bellewstown Ridge area. The 2001 development plan is somewhat more specific in relation to listed view 16. The photomontage is of the view listed as 16 and not of the precise location as indicated in the development plan. To do this would require a much larger area to be covered by the view triangle contained in the development plan map.

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Mr Ward stated that it is therefore apparent that none of the photomontages were generated from the actual listed views.

Mr Kelly for the developers states that the views represented in the photomontage were taken from the 1994 County Development Plan and the 2000 Draft Development Plan.

Mr Ward stated that the developers had looked up the wrong development plan and not the current 2001 Plan.

Mr Phillips for the developers stated that the application to the planning authority was made in January 2000. At that time the 1994 development plan was the statutory plan for the area. The current plan was only made in 2001.

In reply to further questions by Mr Ward, Mr Kelly stated that at the time the photomontages were produced the line of the motorway, M1, did not exist. Had the motorway existed at the time views from it would have been assessed relative to the appeal site.

The motorway at its closest to the appeal site is approximately 2 kilometres from it. The view from the motorway bridge of the M1 was not modelled.

Mr Kelly stated that he did not know at this particular point in time whether the view from the motorway would include that of the proposed building.

In reply to a question from the inspector Mr Killeen for the planning authority stated that in his opinion a view of the site would not be available from the Boyne Bridge crossing at the motorway.

In reply to questions from the inspector Mr Ward stated that one was dealing with a extremely sensitive location at the Boyne River crossing. It was across a World Heritage site. As such every possible impact, however remote, has to be assessed. It would appear that the planning authority and the developers have not assessed the possibility of such a view.

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For the developers Mr Kelly stated that a photograph of the view would be required in order to provide a basis for assessment.

Three views of the north side of the River Boyne were submitted. The developers did not consider a view from the Hill of Rath, which is located well to the north of Drogheda.

Looking eastwards from the entrance of the shaft at Newgrange, the view is of Red Mountain. Mr Ward stated that from this view at Newgrange a substantial part of the chimneys at the Platin cement works can be seen. It is an extremely sensitive location and it does not appear that the developers are 100% certain as to whether the stack of the proposed development would be visible or not.

Mr Kelly stated that Red Mountain was directly in line with the view from Newgrange towards the site. Red Mountain arises to 120 metres. A submitted section indicates that the stack would not be visible from Newgrange. Mr Kelly stated that he had been involved in the preparation of material relating to the visual impact of the proposed Marathon Power plant. He was quite familiar with views available in the area. He was also very familiar with the topography of the area. The Boyne Valley was part of the topographic assessment terrain model which was prepared and this was based on a 1:50,000 scale Ordnance Survey sheet. This generated a view shedding analysis. The developers were firmly of the opinion that the proposed development would not be visible from within the Boyne Valley.

Mr Kelly stated that the proposed berming is a visual impact mitigation feature. After 2 years planting would be 2 metres high. After 5 years the planting would have reached a height of 5 metres. This would provide a total of 7 metres from ground level, 5 metres for the planting and 2 metres for the berming.

In reply to a number of questions from **Mr Ward, Mr McGerailt** stated that he conducted traffic counts in Duleek village on two occasions. These consisted of two rough counts. They were observations rather than counts.

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90% of the traffic generated by the waste which would be going to the site would pass Ardee.

Traffic could exit the M1 at Monasterboice to access the site.

Tolling is an unknown quantity, relative to traffic generated by the proposed development.

Mr McGerailt stated he dealt with traffic engineering suitability in relation to the proposed development.

Because of the nature of the proposal truck movements these would be on a continuous basis into and out of the site. There would therefore be continuous truck movements through the village of Duleek. Truck movements in particular would be noted in the traffic surveys.

The only traffic counts taken by the developers in the village of Duleek consisted of two half hour counts taken almost a year apart. They were not strictly counts as such, more visual surveys of the amount of heavy goods traffic passing through the village.

Mr Ward stated that it was obvious that no specific or detailed traffic analysis of the impact of the development on the village of Duleek had been carried by the developers.

63% of the traffic would travel down the M1 motorway to the site. There would be approximately 25% of this 63% travelling from Dundalk. If one shifted the appeal site to approximately 3 kilometres north of Drogheda one would be at the centre of gravity in relation to the generation of waste relative to haul distance.

The majority of traffic to the site would be coming from points to the north of the site.

No specific analysis in relation to the impact of tolling on the M1 has been carried out in relation to the proposed development. Information was available to the developers relating to the likely impact of tolling generally on the M1 and the diversion of traffic

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from the R152. The R152 would see a reduction in traffic of the order of 40% when the M1 was opened.

In reply to a number of questions from Mr Ward, Mr Cullen for the developers stated that the limestone in the area is quite uniform. It forms part of one large group of limestone.

The information available in relation to the Platin quarry, which information is in the public domain, indicates wells in the area which are used and those not in use. The drawing showing this was produced in the attachment to the environmental impact statement. The developers did not discuss monitoring the wells with the relevant landowners.

A third party appellant **Mr. J. Rogers** stated that he had written to An Bord Pleanála in August of 2001. A preliminary objection to the proposal was raised in the letter. This objection was against the appeal proceeding. It relies on a contention that by virtue of the effect of Section 98 of the Environmental Protection Agency Act and the exclusion by that section of the competence of An Bord Pleanála to take into account that which it is obliged to take into account by virtue of EU Directive 337/1985, in particular that three clauses of that directive, nos. 5, 6 and 7. These would indicate that the Board does not have competence lawfully to proceed with the appeal consideration.

The third party appellant stated that he asked for a reply from An Bord Pleanála in relation to the initial objection. No reply was made.

The third party appellant had suggested that the Board might take advice on the issue.

The third party appellant stated that he was a resident of the area and also a farmer in the area, with land 3 to 4 kilometres from the site.

The site would be visible from the Mound at Dowth. The proposal would intrude into an archaeological cemetery in the most fundamental way.

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It would be wrong for An Bord Pleanála to proceed with consideration of development without the advice of the court.

An observation, relating to the development was submitted by **M. Cullinane** who stated that he was deeply concerned with the proposed development and the impact it would have on Mount Hanover National School. The Board of Management of the School wish to strongly object to the building of the proposed development in close proximity of the school. The school had been serving the community for over 150 years. It caters for 100 students. It has a caretaker and secretarial support and is an integral part of the local community.

The building of an incinerator within a stone's throw of the school is inappropriate and dangerous. It would put the future viability of the school in doubt. The proposal could have a wide variety of toxic effects either as a result of inhalation or through water and food sources.

The health risk would make the school less attractive to potential pupils.

There is a real and perceived risk of potential spillage from the transport of waste and toxic ash from the plant.

There is a real possibility of accidents at the plant.

Noise levels associated with the building and running of the plant would be significant and disruptive.

There would be a marked increase in heavy traffic which would have the potential to significantly increase the risk to students and to parents.

Within an 8 kilometre radius of the plant there are approximately 8,000 students attending primary and secondary schools. These schools have made a tremendous effort in improving the environment in and about their schools by recycling and planting.

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In reply to a number of questions from **Mr. D. Keegan**, on behalf of the Carranstown Residents' Group, **Mr. Gibney** of the planning authority stated that he was satisfied with the traffic figures which were given in the E.I.S. The traffic figures for the R152 are National Roads Authority figures from 1995.

The most up to date figures for the R152 are from the year 2000 and indicate 7 to 8,000 vehicles annual average daily traffic.

Resulting from the proposed development there would approximately 100,000 extra traffic movements per annum. This extra 100,000 movements would be of traffic into and out of the site.

The proposed development will result in an increase in the order of 10 vehicles per hour through Duleek. This will occur 6 days per week.

The main street in Duleek is wide enough for trucks to pass comfortably. The road is either a 6 or 7 metre carriageway through the village. This is adequate for trucks to pass comfortably. Trucks vary in width from 2-2.5 metres (6 to 8 feet) and mirror to mirror 2.74 metres. Double 2.7 metres is 5.48 metres. This is the minimum required to permit two trucks to pass.

Mr. Keegan stated that the bridge in Duleek was 5.48 metres wide. As a result trucks cannot pass comfortably on the bridge.

Mr Gibney stated that the village street is sufficiently wide for trucks to pass. However at the bridge for trucks to pass mirrors would have to be pulled in.

The village street is however sufficiently wide for traffic to pass.

Mr Keegan stated that there would be traffic hazard in the village resulting from the proposed development. While the village street is wide enough to permit two trucks to pass, if there is any parking on the street this is not possible.

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Mr Gibney in reply to further questions stated that he considered that there was adequate room generally within the village for trucks to pass.

Mr Keegan stated that there would be greater traffic hazard on the R152. The main source of accidents on the R152 is its junction with the R150.

In reply Mr Gibney stated this junction was being improved.

Mr Keegan stated that the traffic consultant's report prepared for the developers indicated that for the period 1990 to 1992 there had been 53 recorded accidents on the R152. 9 of these accidents were fatal. Along this stretch of road there would be an increase in traffic movements of 100,000 per annum, over the next 25 years. It is reasonable to assume that with such an increase in traffic the proposed development would create greater traffic hazard with the possibility of greater numbers of accidents and greater numbers of fatalities.

Mr Gibney, in reply to a question from the inspector, stated that the location of the greatest number of accidents was the junction of the R150 and the R152. The planning authority is at present redesigning the junction. The junction would be covered by a traffic calming scheme. There would also be provision for a right hand turning lane.

Mr Gibney stated that there was a slight chance of an increase in accidents resulting from traffic generated by the proposed development, however this would be countered by the proposed traffic calming measures. Traffic calming, including the provision of a right turn lane should offset any slight increase in the likelihood of traffic accidents.

The proposed development would generate little if no traffic on the R150 in the vicinity of Mount Hanover School. It should therefore not impact upon the school.

In reply to a number of questions from **Mr Keegan, Mr Killeen** for the planning authority stated that landfill was part of the waste disposal industry. Celtic waste would be operating at Knockharley. This landfill is for residual waste. Landfilling is the least favoured method of waste disposal.

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The Changing Our Ways document realises that there will always be a need for the landfilling of residual waste. The decision to grant permission for a landfill at Knockharley was therefore in compliance with the North Eastern Regional Waste Management Plan as it is for residual waste.

The Changing our Ways policy also requires that waste be dealt with on a regional planned basis. Condition no. 3 of the decision of the planning authority to grant permission recognises the fact that all regions have their own waste plan. Each load of waste being accepted into the site will have to have a waste certificate.

Mr Keegan stated that 14 counties including Northern Ireland counties, bordered the North Eastern region. The planning authority would have an extremely difficult task in policing condition no. 3.

All of the other regions would have their own waste management plans which would be implemented on a regional basis.

Mr Keegan stated that Mr Ahern, for the developers, had stated in earlier evidence that it would not be possible to police condition no. 3. In reply Mr Killeen stated that each load of waste would have to have a waste certificate. Mr Killeen stated that he disagreed with the position adopted by Mr Ahern in this regard.

The certificate has to show the origin of waste, and from where it was generated.

In relation to condition no. 5 the proposed liaison committee is democratic and would be representative of local people. People to serve on committees make themselves known to the local authorities following the placing of advertisements seeking members for such committees, by the local authority.

Mr Keegan stated that the planning authority had refused permission for a crèche for 9 children, approximately 1 kilometre from the appeal site, close to the soccer pitches between the site and Duleek.

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The site of that development lay on the side of the R152 and directly accessed the R152. The register reference was 01/4178, with the manager's order being dated 28/6/2001. This decision which refused permission for a very limited form of development was taken by the planning authority one month before permission for the incinerator was granted by the planning authority.

Reg. Ref. 01/4178 had included a decision to grant permission for the erection of a single-storey extension to the rear of an existing dwellinghouse. It also refused permission for a detached single-storey crèche and proprietary waste water treatment system.

In refusing permission under reg. ref. 01/4178 the planning authority cited three reasons for refusal. These are;

- "1. Having regard to the policy of the planning authority relating to the provision of crèche facilities as outlined in section 3.5.1(iii) of the County Development Plan and the location of the proposed crèche facility to the rear of existing property the proposed development represents haphazard, non-integrated backland development which would be injurious to the residential amenities of adjoining properties by reason of the additional traffic and noise generated by the proposed development. The proposed development would establish a very undesirable precedent and would thus be contrary to the proper planning and development of the area.
- 2. The development would endanger public safety by reason of traffic hazard because if would give rise to traffic movements which would interfere with the safety and free flow of traffic on the adjoining heavily-trafficked regional road at a point where the maximum speed limit applies.
- 3. Taken together with the existing excessive concentration of individual effluent disposal systems in the area and notwithstanding the use of a proprietary effluent treatment system, the planning authority are not satisfied on the basis of the submissions made in relation to this application that the ground would be

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suitable for the disposal of effluent. The proposed development would therefore be prejudicial to public health."

In reply to a number of questions from Mr Keegan relating to the decision of the planning authority to refuse permission for a much smaller development as opposed to the proposed incinerator, Mr Killeen stated that the principle of the development of a crèche was contrary to the County Development Plan and as such was not acceptable.

Mr Keegan stated that the position adopted by the planning authority was irrational. It could not be understood by third party appellants in relation to the scale of the proposed development being permitted and the relatively minor scale of development being refused. The crèche would also provide for a local need. It would access onto the R152. It would generate no heavy goods traffic. It would be strictly limited. When compared to the proposed development the third party appellants were astonished that permission was refused for the crèche while being granted for a massive incinerator.

It appeared to the third party appellants that the planning authority were stating that a crèche catering for 9 children would generate more noise and be more of a disturbance to residential amenity than an incinerator catering for 150,000 tonnes of waste per year.

That position was totally untenable. The planning authority suggests that the traffic generated by the parents of 9 children would result in the creation of a traffic hazard on the R152 yet the proposed development, which would generate 100,000 traffic movements, most of which would be of heavy goods vehicles was deemed acceptable by the planning authority. That position was not understood by the third party appellants.

Mr Killeen for the planning authority stated in reply to further questions that the proposed crèche was located to the rear of the residential property and would have impacted upon the residential amenities of adjoining properties. It constituted haphazard backland, non-integrated development.

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In reply to further questions Mr Killeen stated that he was aware that there was a waste recycling facility in the Carranstwon area which catered for approximately 1,000 tonnes of paper waste generated in the Drogheda area. He was not sure the development was authorised.

Mr Keegan stated that the area, apart from the cement factory, was characterised by agricultural and residential development. The development of an incinerator did not fit in the existing form of development.

In reply to a number of questions from **Mr Keegan, Ms Burke** stated that the incinerator in Bevern was located in an industrial area. An incinerator in Ghent was located in a residential area. Incinerators operate in rural, urban and industrial areas. The incinerator proposed on the appeal site was the same as those in Bevern and Ghent.

In reply to a question from Mr Keegan, Ms Burke stated that the developers had an option of buy 25 acres which constituted the appeal site. The total landholding appeared to be 48 acres.

In reply to the inspector, Ms Burke stated that the owners of the land did not live in the area. They were resident in Dublin. The developers had an option to purchase the land.

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Ms Burke in responding to questions from Mr Keegan stated that she had confidence that the Environmental Protection Agency could monitor, the proposed development, on a continuing basis. Mr Keegan doubted this very much in view of the fact that it had taken the authority, in one specific instance locally, a number of months to reply to a query relating to a sample. Mr Keegan stated that the sample relates to a private individual and not to a company.

In reply to a question from Councillor Lynch, Dr. E. Madden stated that a proposed Natural Heritage Area at Duleek Commons, was located 2 kilometres from the appeal site.

In reply to a further question from Councillor Lynch Ms. Burke stated that the developers intended to plant 50,000 trees on the appeal site. It was not intended to carry out any development on the site other than that which had been applied for.

Councillor Lynch stated that it appeared to the local residents that a very large area of the site would remain undeveloped, and that, if the proposed development, was permitted, there would be a likelihood that further development would occur given the fact that such a large area of the site would have been undeveloped.

Replying to questions from Mr. N. McCabe, Ms Burke stated that incineration was preferable to landfill purely on the basis that it generated far less greenhouse gas. It was for this reason that incineration was widely held preferable to landfilling.

In reply to a number of questions from Mr. Keegan, Mr Killeen stated the Meath County Development Plan was adopted on 5th March 2001. The decision to grant permission for the proposed development was taken on the 31st July 2001.

The planning authority had refused a considerable number of applications for permission, of various types, including single houses in the general area, over the last several years.

Mr. Keegan stated that applications for single houses had been turned down in the immediate vicinity of the appeal site in the recent past. In reply Mr. Killeen stated

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that not only were permissions refused for single houses but permissions were also granted within the area.

Mr T. Rooney stated that he represented Drogheda Chamber of Commerce. The Chamber appreciated that the proposal represented a significant level of new investment in the area, they had however a number of concerns.

The development would result in the erosion of the proposed greenbelt in the area set out in the Strategic Planning Guidelines prepared for Government by Brady Shipman and Martin.

There are question marks against the legitimacy of the environmental impact statement.

There are local concerns regarding the suitability and timeliness of some elements of the Waste Management Plan for the North Eastern Region.

There is concern relating to the impact of the development on future volumes of traffic on the R152 which is the key access road into the Duleek and Drogheda areas. There is concern relating to the commercial impact the project may potentially have for food and drink manufacturers operating in the area.

There is a lack of any major co-ordinated approach to recycling.

There is concern in relation to the wide potential impact of the proposed development on the tourism base for Drogheda and Meath.

Drogheda Chamber of Commerce expressed concern regarding the commercial benefit, suitability and overall long term impact the project would have on the image of the immediate areas of Drogheda, South Louth and East Meath.

For the third party appellants **Ms E. McKenna** stated that she bought a new car in 1997. The car gets covered in dust from the Irish Cement factory on a regular basis.

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That is only part of the existing pollution in the area. It has not been addressed in the environmental impact statement.

In reply to questions from Ms McKenna, Mr. J. Ahern stated that he did the initial scouting for the site. He did not at that stage use of all the experts now available to look at the site in depth. His job was to find a site which he expected to be suitable, in conjunction with the Project Management team who were assisting at the time. Mr Ahern however stated that he did not look at it in the kind of depth which specialists would carry out.

Mr Ahern stated that the site was located within a valley. Ms McKenna stated that an incinerator was proposed to be built in a valley. In relation to air quality Mr Ahern stated he relied on the expert advice available in the company.

In reply to a number of questions from Ms McKenna, Mr E. O'Kelly for the developers stated that the planning authority conditions would be complied with in the building and operation of the plant. These relate to noise levels and hours of operation. There would be continuous noise monitoring on one location on site or in the vicinity of nearby residences, with the agreement of the residents.

This would be done on a continuous basis.

Data would be reviewed each week and reports submitted to the planning authority, every month, for their consideration.

Ms McKenna stated that under Ref. Ref. P.A. 99/1317 an application by Irish Cement dated 28/6/1999, a condition relating to noise, 2(b) required a maximum noise level of 65 dBA and a 45dBA noise level at night time.

Ms McKenna stated that the cement company had indicated to local residents that the results of a noise survey daytime ambient noise level was 57 dBA and night time ambient noise level was 47 dBA.

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In reply to further questions Mr. O'Kelly stated that noise comes from many sources. Noise levels in the area are presently high. This is due mainly to road traffic.

Part of the E.I.S. contained a continuous noise survey over 12 days and 12 nights, in a position 30 metres back from the R152, on the appeal site. The average value of equivalent continuous noise level sampled every 15 minutes was 61.3 dBA. This is comparatively high but not unusual to find along this type of road. The road is comparatively busy from a traffic viewpoint. Such noise levels are common all over the country adjoining such roads.

The 2 houses on the opposite side of the R152 at the appeal site are set back 30 metres from the R152. The house immediately adjoining the North Eastern corner of the site is set back 5 metres from the R152. There is a house further north set back only three metres from the R152. Noise levels due to road traffic are comparatively high in these residences.

There would be an increase in ambient noise levels during construction, of 5dBA. This is not significant. To get an increase of 3 dBA one would need a doubling of traffic.

Construction traffic would add approximately .8 of a dBA to existing levels.

The minimal increment of noise that the normal ear can discern is 2-3 dBA.

In reply to a number of questions from Ms McKenna Mr McGerailt stated that the accident record for the R152 was obtained by statistics covering the years 1989 to 2001.

There were 10 accidents recorded on the R152 at Carranstown. One of these was fatal which involved a cyclist. These accidents were in the vicinity of the Platin cement factory and at the junction of the R152 and R150.

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Ms McKenna stated that there was no record of the fatal accident which occurred to the north of the appeal site, on the R152. There was, to her knowledge, a further fatal accident within the last 10 years, in the immediate vicinity of the site.

Ms McKenna stated that she carried out a one hour traffic survey along the R152. She recorded over 1,000 vehicles, over a one hour period, on a Monday morning.

In reply to further questioning from Ms McKenna, Mr McGerailt stated that the townlands mentioned in the 53 accident statistics were Lagavoree, Platin, Carranstown, Commons, and Bellewstown. Mr McGerailt stated that he looked at all of the accidents over the entire length of the R152 for the 12 year period, within 2.5 kilometres of the site to either side. This was to give an accurate reading on existing conditions of the road in relation to safety. He looked at specific clustering in the vicinity of the proposed junction.

It is difficult to specifically locate individual accidents having regard to the way the data is presented.

The purpose of the developers' analysis was to demonstrate the range of accidents and cumulative number that had occurred on a complete road section.

Ms McKenna stated that at times it can take 13 to 15 minutes to cross the R152, due to the heavy volumes of traffic using it.

In reply to further questions Mr McGerailt stated that the traffic calming measures and road improvements should result in safer road conditions.

Ms McKenna stated that she had undertaken a one hour traffic survey on a weekday morning 10.15 to 11.15. She counted 1,000 vehicles passing in both directions during that time. The count was taken within 100 metres of the appeal site.

In reply Mr McGerailt stated that that would be consistent with the volumes of traffic counted in the environmental impact statement. This recorded an average of 850 p.c.u's per hour. Traffic volumes counted vary between 15 and 20 percent allowing

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for the different times of counting. Mr McGerailt stated that he had come back to Duleek and done two separate counts to particularly look at truck numbers passing through the village. There is no capacity issue in Duleek as the village is lightly trafficked. The survey carried out in Duleek Village was one of the slowest the witness had carried out in his professional career due to the lightly trafficked nature of the street. The main village street is not busy. Day truck volumes going through the village are in the order of 10% of total traffic. That is in the normal band one would expect of trucks as a percentage of total traffic, on a regional road. Truck percentages are between 5 and 10% normally on such roads.

The N2 at Slane carries considerably greater volumes of heavy goods vehicles, of the order of 25% of total traffic.

Ms McKenna stated that the R152, while being a regional road, was also a link road between 2 national primary roads the N1 and the N2.

In reply to a number of questions from the inspector, Mr Killeen for the planning authority stated that permissions had been granted for a number of quarries in the general area. This also included permission for a very large extension to the Platin quarry. This permission had not as yet been implemented.

The other two quarries which were originally extended were the Roadstone quarry and the Irish Asphalt quarry.

In reply to a number of questions from Mr M. O'Neill, representing the East Meath Dairy Farmers, Mr Killeen for the planning authority stated that one pre-planning meeting had been held with the developers. This related to the scoping of the E.I.S. and the documentation to be included in the application. The meeting would have been held in November 2000. There was also a brief introductory meeting with the company prior to the November meeting. No minutes were kept of the first meeting. The County Engineer and Mr. Killeen attended the first meeting. It also included a representative of the local authority environment section and the roads section. This was not a technical meeting as such. That meeting took place in November 2000. The first meeting was an explorative meeting.

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In reply to question from the inspector Mr Killeen stated that at the introductory meeting the site had already been chosen by the developers as the location of the proposed development. The inspector stated that this tied in with the earlier evidence of Mr Ahern for the developers, in which he stated that the site had been chosen by the developers prior to any meeting with the planning authority.

Mr O'Neill stated that when the developers first approached the planning authority the site of the proposed development had already been chosen. The planning authority did not have any part in the site selection process. They had no part in the selection of which county the proposed development would be located in given the fact that there are three other counties involved, Louth, Cavan and Monaghan, reflecting the regional nature of the proposal. The developers approached Meath in relation to the original facility.

The November meeting was a full technical meeting attended by the developers including the project management company who were advising the developers. The witness was unaware as to whether a town planner, an economist or a sociologist attended the meeting.

The developers proposed an integrated waste management facility. The witness did not consider the possibility of providing only the sorting and recycling facility on the appeal site and locating the proposed incinerator on another site.

The site was suitable for the proposed three uses.

The developers put forward the proposal and it was their problem to make the application for that proposal.

When the environmental impact statement was submitted to the planning authority as part of the application the planning authority did not engage any external consultant to assess the environmental impact statement. The E.I.S. was referred to the various technical departments in the local authority. It was also referred to the various prescribed bodies.

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Mr Killeen stated that the gravity model assessed haul distances. Also included in the assessment was population centres.

Mr Killeen stated that he assessed this section of the site selection in relation to population distribution in the north east region in accordance with the table contained in the Waste Management Plan for the North East Region.

Mr O'Neill stated that this line of questioning was being undertaken as he was dissatisfied with the haulage distance figures provided in the environmental impact statement. The figures, in his opinion, did not add up. He was therefore interested in finding out who adjudicated upon these figures in the local authority.

Mr Killeen, in reply to further questions, stated that he did not have any experience in assessing the models or modelling. Generally nobody in the local authority who dealt with the proposal had experience in modelling. The analysis carried out by the planning authority related to the population distribution in the north east region and the haul distances involved.

Waste is obviously collected in towns but also in rural areas. It also arises as a result of industrial activity.

In relation to the gravity model figures Mr O'Neill stated that there was a considerable difference between the usage of urban population and the usage of the entire population in the north east region. In reply Mr Killeen stated that most of the industrially zoned lands are contiguous to urban areas. The planning authority realised that one was not only talking about industrial waste as there would obviously be residential waste arising from rural areas. This could amount to a considerable percentage of the waste for instance in the south Meath area where there is a high density of one-off rural housing. The planning authority did not check the population distribution figures against the district electoral population figures contained in the census.

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Mr O'Neill stated that there was no technical assessment of the population figures in the North Eastern region in the gravity model presented as it only included the urban areas.

In reply to further questions from Mr O'Neill, Mr Killeen stated that the Strategic Planning Guidelines for the Greater Dublin Area is a settlement strategy. The strategic greenbelts are a buffer. The site is outside the strategic greenbelt, based on the fact that the Platin cement works, the Marathon generating station and the proposed development are infrastructure provisions.

Cavan County Council in a submission to Meath County Council stated that they saw the haul distances as a problem. They also considered that there was a problem with the location due to its proximity to the Dublin Region.

Without condition no. 3 as contained in the decision to grant permission the proposed development, in the opinion of the planning authority, is a material contravention of the County Development Plan as it does not comply with the regional waste management plant.

Industry was normally located in industrially zoned areas. The proposed development is an industrial use.

The location is suitable as it is proximate to waste arising. There are good transport links to the site. The site is proximate to the electricity grid. A gas main runs underneath the site. The gas main is not however relevant to the proposed development.

There may be no need to obtain permission for an electricity line to serve the development if it is less than 20 k.v. as a line of such power is exempted development.

Finally in reply to a question from Mr O'Neill, Mr Killeen stated that no consideration was given by the planning authority to alternative sites either in Meath or in the remainder of the region, for the location of an incinerator.

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In reply to a number of questions from Mr O'Neill, Ms Lee for the developers stated that Project Management were the consultants employed in selecting the site. The company did not employ town planners. It did employ engineers who were experienced in site selection. There were no economists employed by the company nor sociologists.

Mr Phillips for the developers stated that Mr G. Lawlor a town planner and a member of the staff of T. Phillips and Company had been employed by the development company in early 2000. In reply to a question from the inspector Mr Lawlor stated that he was not involved in site selection.

Continuing Ms Lee stated that the summary section in the environmental impact statement was prepared by P.M. the material asset section of the E.I.S. was also prepared by P.M.

Mr O'Neill stated that he had difficulty in finding out who was involved in the site selection. This problem arose as he wished to ask questions in relation to selection.

For the developers Mr J. Ahern stated that he would answer any questions in relation to site selection and the various issues raised by that selection.

The witness stated that he had been involved in site selection for approximately 12 years for sensitive installations.

The witness stated that he was the person most heavily involved in the gravity model although other inputs were involved.

Microsoft Excel was the computer package used by the developers for measuring distances between towns. This is a mapping process. It can be used for obtaining the shortest distance between two points using particular routes. It is quite versatile.

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Mr O'Neill stated that, just to be clear, the package used by the developers is not a gravity model, merely a distance calculator. In reply Mr Ahern stated that while distance was used, population figures were also used.

The cut-off used in relation to the model was towns containing a population greater than 1,000, in the north east. The 1996 census was used as well as Development Plan information where it was available.

In relation to Drogheda for instance, Drogheda Urban and Drogheda Rural figures were used.

Bettystown was not used in the model however there had to be a grouping of populations in certain instances.

In reply Mr O'Neill stated that Mr Ahern statement that all urban areas containing a population of over 1,000, being used, was therefore incorrect.

Mr Ahern stated that the source of the information relating to towns greater than 1,000 was contained in the North Eastern Regional Waste Management Plan. Page 9 of that plan gives population figures. There was no independent research undertaken by the developers in the production of population figures.

The model used presented a weighting of towns in the region. The quality of roads was also taken into account by the developers.

While it was 40 kilometres from the site to Dundalk, the developers assumed that the weighting of the M1 was the same as the R152 or any other road whereas in actual fact if one looked at road transport the number of kilometres to Dundalk would be discounted because of the quality of the road. None of those discounts were used by the developers. No weightings relating to the quality of roads were carried out by the developers in the model. Weighting was carried out in relation to population growth projections.

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Comparisons have already been made in relation to the suitability of Ardee as compared to Drogheda.

In this regard Drogheda would grow at a much greater rate than Ardee and would obviously contain a far greater population in the future. This is obvious from the large scale housing development occurring in Drogheda at present. The developers therefore put in various figures and the model allowed them to do that.

The second part of the model was also Microsoft, Excel. This allowed the developers to do the 'what if' calculations. This allowed discounting of for instance the 40 kilometres to Dundalk and the use of a higher population for Drogheda. All of these gave the developers the same answer.

The answer that the developers obtained from the modelling was Drogheda or its environs as the most suitable location for the proposed development. This gave the indication required by the developers of the centre of gravity required of the plant. The centre of gravity is part of the selection criteria. It cannot be used just on its own. If the centre of gravity was for instance Newgrange nobody would suggest that an incinerator should be located there. All of the other factors therefore have to be taken into account. A weighting has to be assigned to that.

Mr O'Neill stated that the witness had already indicated that no weighting had been given. In replying Mr Ahern stated that only the raw data was given. The developers were not required, in the E.I.S., to give alternative sites for the proposal. Some installations are site specific as indicated by the planning authority. Only one incinerator is required in a region for industrial, commercial and household waste.

Mr O'Neill stated that the developers had used the figures to distort the centre of gravity in the region.

Mr O'Neill stated that the model was merely a distance measurement. Mr Ahern stated that the model was weighted because if one takes population and distance and multiply the two figures, one arrives at a weighting. The developers were not looking

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for the geographical centre of the north east region. They were looking for the centre of gravity of waste. This required assigning a weighting to it.

The developers made the assumption that people in general would produce the same amount of waste. This is a reasonable assumption. This allied to miles to be travelled provided the weighting. It was only part of that process.

For the developers Mr Ahern stated that the recycling facility was for the people of the local area in Duleek and Carranstown and Donore. It was a local facility and had no relevance to the centre of gravity.

Mr O'Neill stated that he wanted to emphasise that the model used by the developers did not reflect population distribution in the region. This is presented in a table submitted by Mr O'Neill which represented the proportion in each county. The population of the region was 360,000 in 1996. 36% in Meath, 30% in Louth, 17% in Cavan and 17% in Monaghan.

In 2002 the Meath proportion has increased to 39%, 30% in Louth, 16% for Cavan, and 15% for Monaghan. The increase in each of the counties is 22% in Meath, 11% in Louth, 7% in Cavan and 3% in Monaghan. As a result of the latest census figures one could state that the centre of gravity for the north east region was veering to Meath/Louth, in terms of population.

The model used by the developers does not represent the populations in the counties or in the region generally. 8 of the towns were in Meath, 3 in Louth, 5 in Cavan and 4 in Monaghan.

In terms of population in towns, 26% is in Meath, 58% occurs in Louth, 19% is in Cavan and 27% is in Monaghan.

Mr Ahern in reply stated that the 2002 census figures show that the centre of gravity is moving towards Drogheda or to Meath and Louth in particular. While Louth has a higher percentage of population and the proposed plant is in County Meath, its closest population centre is Drogheda. The location was also connected by means of motorway to the largest centre of population in the region, in Dundalk. Future

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population growth in the region will merely reinforce the location of the proposed development as being the most suitable.

Mr O'Neill stated that in terms of drive time, the condition and status of the road network is of importance. In this regard local road networks should be considered.

In reply Mr Ahern stated the M1 motorway was an ideal means of accessing the site.

He agreed that the model could have been improved substantially however the model was presented in its simplest form as the location was considered to be suitable.

Mr O'Neill stated that 58% of the population of the model was given in Louth while only 30% of the population actually lives in Louth. The model is weighted in an unfair way towards Louth therefore the centre of gravity analysis suggests a location close to Louth.

In reply Mr Ahern stated that the location was very close to County Louth.

Mr Ahern stated that the model could have been weighted in the developers' favour if bulking up of waste was accounted for in the various towns throughout the region.

Mr O'Neill stated that the model was so simplistic as to be unusable. The population for County Louth was represented as being more than a double what is actually was. There is an element of post-hockery. The developers picked the site, and then tried to justify it as the suitable site for the proposed incinerator.

In reply Mr Ahern stated that he disagreed with that point. One of the first steps to be taken in relation to a development such as proposed was to find the centre of gravity.

It is not possible to find out the exact centre of gravity for a region. Even if one was to find the point it may not be suited to a development of the type proposed. In this regard the centre of gravity calculation should not be viewed on its own. To just use the centre gravity would be totally irrelevant.

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In reply to a number of questions from the inspector, Mr Ahern stated that the centre of gravity was pulling northwards to Ardee. If one included Balbriggan, which is in Fingal, the centre of gravity would obviously be pulled further south. However Balbriggan was not considered as it was in another region.

In reply to a number of questions from Mr O'Neill Mr Ahern stated that Ardee was the centre of gravity for the region, using the modelling technique employed by the developers.

In reply to a number of questions from Mr. Sweetman for An Taisce, Mr Killeen for the planning authority stated that he did not stand in the exact position from which the photomontages were taken. The locations were visited by him. He could not explain why one or two of the photographs taken were so dark.

Mr Killeen stated that he had no training in environmental impact assessment. He had practical experience.

The proposed development requires a fire certificate.

Mr Sweetman stated that the development was exempt from the need for a fire certificate.

Continuing Mr Killeen stated that the proposal did not have to have a the license from the electricity regulator. The witness was not aware of problems with the electricity grid in the area. That was a matter for the developers. Planning permission would be required possibly for an electricity line connection to the development. This is covered in condition no. 2 of the planning authority decision.

Project splitting had not occurred in this case.

A condition similar to condition no. 2 of the decision of the planning authority in this case was included by the planning authority in relation to the nearby proposed electricity generating station. This was included by An Bord Pleanála in their decision.

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In reply Mr Sweetman stated that decisions of An Bord Pleanála had been questioned by the European Commission. The law in relation to environmental impact assessment was called into question, in its application in Ireland.

In reply Mr Killeen stated that such an issue was a matter for the courts.

The electricity line connecting to the national grid from the plant would most likely require its own environmental impact statement. The permission could not be implemented without the power lines being in place. This is if permission is granted for them. This is covered by way of condition no. 2 of the planning authority decision.

In reply Mr Sweetman stated that the planning authority should know that environmental impact statements could not be done by way of condition.

Mr Sweetman stated that in the 1990s the planning authority were shortlisting sites for landfill, to be operated by the council. One of those sites was Wilkinstown, in the north east of the county. At that time the planning authority stated to the opponents of the Wilkinstown development that that site was the centre of the gravity for the North Eastern region.

Mr Killeen stated that he was unaware of that. He was not party to the proposed development in Wilkinstown.

Mr Sweetman stated that he represented the objectors to the proposal in Wilkinstown. They had great difficulty in disproving the fact that Wilkinstown was not the centre of gravity for waste arising in the North Eastern region, because it actually was. Wilkinstown and Ardee are not too far apart. The centre of gravity for Louth and Meath was Wilkinstown. The centre of gravity for the North Eastern region must include two further counties Cavan and Monaghan to the north of both Louth and Meath. The developers, in this case have moved the centre of gravity a considerable distance to the south.

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Mr. Killeen stated that Carranstown was well to the east of Wilkinstown.

Mr Sweetman stated that including Cavan and Monaghan moves the centre of gravity considerably away from Carranstown.

Continuing in reply to Mr Sweetman Mr Killeen stated that Platin cement plant was built in 1970. The UNESCO site in the Boyne Valley is post 1970. Mr Killeen stated that the area was industrial in character as a result of the cement works. The area had been degraded.

The public had been listened to and all objections to the development had been taken into account.

Annex two in priority afforded protection for species. Annex One affords absolute protection for species.

There was no specific research done by the planning authority in relation to Duleek Commons relative to the proposed development. The site of the Commons was considered to be a sufficient distance from the site as not to warrant special study.

It is approximately 2 kilometres from the site.

Mr Killeen stated that landfill was the least favoured option for waste disposal having regard to the amount of methane which it generates. The proposed development would reduce methane emissions.

Mr Sweetman stated that methane could not be released into the atmosphere from landfill. Such gases had to be flared.

The figures the local authority used in relation to methane are totally out of date and irrelevant.

In reply to further questions from Mr Sweetman Mr Killeen stated he did not know of any contracts for the supply of waste to the proposed plant. The minimum throughput for which the plant is designed is 45,000 tonnes per annum. The maximum is 180,000 tonnes. Operational output is approximately 150,000 tonnes per annum.

The landfill at Knockharley is permitted to take 132,000 tonnes per annum for the first three years and 88,000 tonnes thereafter.

The total amount of waste generated in the North Eastern region is 320,000 tonnes per annum. If one added the Knockharley amount and the amount proposed to be incinerated on the site one would arrive at 280,000 tonnes approximately.

Mr Killeen stated that North Eastern Waste Management Plan recognises the need for a thermal treatment facility. Recycling is included as part of the Waste Management Plan for the North East Region. This also takes into account incineration and landfill. It is an integrated waste management strategy. The targets to be achieved are the targets as set out in the document Changing Our Ways.

It is an objective of the planning authority to implement the waste recycling targets set out in the Regional Waste Management Plan. If it was possible to get beyond those targets that would also be done.

In reply Mr Sweetman stated that when the recycling targets are surpassed there would be no need for the proposed development. However, fortunately with the large landfill at Knockharley and the proposed incinerator at Carranstown there would be no incentive to recycle.

In reply to further questions Mr Killeen stated that there was no facility in Ireland for the disposal of hazardous waste.

There was no district heating proposed resulting from the development as there is no district to heat.

Mr Sweetman stated that was no requirement for a district heating system. Unlike the Danish system which provided district heating there was no district to be heated as a result of the proposal, because of the location of the site in rural area.

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In reply to further questions from Mr Sweetman Mr Killeen stated that he did not assess the earthquake fault line which Mr Sweetman referred to as running from Kingscourt to Holyhead. If such a fault line ran under the site it would be unsuited to the proposed development, subject to examination by a structural engineer.

Even if the development proposed on the appeal site does not go ahead the traffic calming measures proposed for the R152 would be implemented.

In reply to a number of questions from Mr Sweetman, Dr. Madden stated that he did no winter research on the fauna using the site.

He was however sure that there were no Greenland white fronted geese in the area. The site was not a regular lapwing site.

Mr M. O'Donnell stated that he acted for the No Incineration Alliance, one of the third party appellants. He also acted for Mr E. Martin, an observer.

In reply to a number of questions from Mr O'Donnell Mr Killeen for the planning authority stated that the Strategic Planning Guidelines for the Greater Dublin Area must be taken into account.

If the planning authority are to designate the area in which the site is located as a greenbelt area then the decision to grant permission is incorrect.

Mr O'Donnell stated that the planning authority had determined the application on the basis that it had a discretion as to what constituted the greenbelt in the Strategic Planning Guidelines for the Greater Dublin Area. The application was determined by the planning authority on an incorrect premise. The planning authority decided to grant permission on the basis that they had a discretion in relation to the appeal site, that it was not and could not be affected by a greenbelt designation. In effect the planning authority decided not to include the site within the greenbelt notwithstanding the fact that it is already in the Strategic Planning Guidelines and that the planning

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authority are presently in the course of defining strategic greenbelt areas for the purposes of the Meath County Development Plan.

Mr O'Donnell stated that the Meath County Development Plan at 2.8.3 provides that to facilitate the expansion of towns in the county, while protecting rural areas from uncoordinated rural sprawl, it is proposed to designate greenbelts responsive to the Strategic Planning Guidelines.

If An Bord Pleanála finds that the Strategic Planning Guidelines call for greenbelts between the particular growth centres identified in the Strategic Planning Guidelines the inspector can also come to the conclusion that the planning authority determined the application on an incorrect premise.

Mr Killeen agreed with this point.

Mr O'Donnell stated that it would be extraordinary if the Strategic Planning Guidelines for the Greater Dublin Area indicated that there is no need to provide a greenbelt in the area between Drogheda, Navan and Ashbourne, in that triangle on the outskirts of Dublin. That would be unbelievable.

Mr Killeen stated that he did not necessarily agree with that point. It was for each local authority to designate greenbelts.

Mr O'Donnell stated that the Strategic Planning Guidelines was based on the premise that there would be primary development centres, secondary development centres and local growth centres. In between these centres of development there would be strategic greenbelts.

If this is accepted as being the structure and basic format of the Strategic Planning Guidelines the planning authority have most definitely been in error. The Strategic Planning Guidelines, in Mr O'Donnell's opinion, could not be read in any different manner.

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In reply to further questions from Mr O'Donnell, Mr Killeen stated the proposed development could be located on any category of land, in an urban area, in a suburban area or in a rural area.

In reply to a question from the inspector Mr Killeen stated that the planning authority had no part in the selection of the site or in the site selection criteria in spite of the fact that such criteria are referred to in some detail in the North Eastern Waste Management Plan.

In reply to further questions from Mr O'Donnell, Mr Killeen stated that Ardee was the centre of gravity for waste however the North East Waste Management Plan referred to the suitable site for a thermal treatment plant being proximate to the centre of gravity. The appeal site is 10 miles from Ardee. This is considered, by the planning authority, to be proximate.

Ardee is traversed by a national route. This national route adjoins zoned industrial land. The Ardee land is more proximate to a national route than the appeal site.

The site is at least as close to an ESB substation as zoned industrial land is in Ardee.

Mr Killeen stated that there were no site selection criteria considered by the planning authority as the site had already been chosen.

The planning authority simply accepted the developers' site. There were no alternatives given in the environmental impact statement.

In reply Mr O'Donnell stated that if this was the case it was the fault of the developers. However as no alternatives were indicated in the E.I.S. this obviated the need for the planning authority to carry an assessment of alternatives.

Mr O'Donnell stated, in reply to a question from the inspector, that as a matter of Irish and European law the only way in which the regulatory authority, in this case An Bord Pleanála could come to a conclusion is by a comparison of alternate sites to

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determine if this site is in fact the best in comparison to a range of other sites. An Bord Pleanála did not have before it any information in relation to other sites.

In reply to further questions from Mr O'Donnell, Mr Killeen for the planning authority stated that the land was not zoned although the North Eastern Waste Management Strategy referred to zoned land. The site selection criteria relates to zoned land. The regional plan states that such facility should be located on zoned lands.

Mr Killeen stated that the area has an industrial character. There would be a very abrupt transition between the proposed development by reason of its scale and bulk, if it was located in close proximity to other developments. Mr Killeen stated that he was unaware of the distance from industrially zoned land in Ardee to the nearest residences.

Mr O'Donnell stated that there was absolutely no relationship between the industrially zoned lands in Ardee and the town of Ardee, in relation to proximity to residences. If Meath County Council had done any investigation in relation to this matter it would have been very clear to them what the position was. Mr Killeen stated that he did not carry out any investigation of any other location, particularly Ardee.

Mr Killeen continuing stated that there would be too abrupt a change between the scale of development proposed on the appeal site and adjoining zoned land. This did not occur on the appeal site due to the presence of the vary large cement works beside it. While the Waste Management Plan recommended that such a facility be located on industrially zoned land this was not considered by the planning authority to be appropriate having regard to the scale and massing of the proposed development.

In reply to a further question from Mr O'Donnell, Mr Killeen agreed that in all of the site selection criteria the location of the proposed development on industrially zoned lands in Ardee scored much higher than the appeal site. However the planning authority assessed only the appeal site as no alternative site was given.

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In reply Mr O'Donnell stated that this approach by the planning authority was incorrect as the planning authority is also required to consider what alternatives are available. Mr Killeen stated that there were no alternatives given. To which Mr O'Donnell replied that the proposed development should not have been accepted by the planning authority on the basis on which it was.

In reply to a question from the inspector, Mr Killeen stated that he considered that the proposed use was heavy industry.

In reply to further questions from Mr O'Donnell, Mr Killeen stated that he was familiar with the inspector's report relating to the electricity generating station for which permission was granted both by the planning authority and on appeal. He was also aware that the inspector, in his report, stated that the assertion by the third parties that the area would develop as an industrial zone should not be accepted as the area was not serviced, and it is remote from both Drogheda and Duleek. The only reason that that particular development was being recommended for permission was that it was locationally tied to that site.

Mr Killeen stated that that was his contention in relation to the proposed development.

In reply Mr O'Donnell stated that it had already been accepted by Mr Killeen in previous evidence given by him that the proposed development could be erected in urban, suburban or rural areas.

Mr Killeen stated that he did not accept that the proposed development would be better suited to industrially zoned land in Ardee.

In reply to further questions from Mr O'Donnell, Mr Killeen stated that the electricity connection to the site would most likely be from the Rathmullen substation, which is approximately 2 kilometres to the north east of the site. It did not cross the Boyne Valley or a heritage area. The environmental impact statement did not outline any details in relation to the connection of the site to the electricity grid.

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Interjecting for the developers Mr F. Simons stated that the relevant section of the E.I.S. should have been put to the witness, however notwithstanding this all An Bord Pleanála is required to consider is likely significant effects. The E.I.S. discussed this.

Mr O'Donnell stated that the E.I.S. clearly indicated that an over ground 20 k.v. line either to Rathmullen or Duleek substation was what was proposed.

In reply to a number of questions from Mr O'Donnell, Mr O'Mahoney, for the developers stated that anyone viewing the building would see it as a large industrial type building. It would contain a 40 metre high stack.

The average industrial estate would have buildings approximately 11 metres high, large production buildings in industrial estates would contain heights of 22-25 metres. The highest parapet portion of the proposed development is 30 metres which is considerably higher than the average industrial type estate. Large pharmaceutical buildings which have been designed by the witness have contained parapet heights of 25 to 30 metres.

The witness stated that he would not be happy putting in a building of the scale and height of the proposed building, into an average industrial estate.

In reply to a question from the inspector Mr O'Mahoney that it was not unusual in large process buildings to have parapet heights of 20-25 metres.

In reply to a question from Mr O'Donnell, Mr Kelly for the developers stated that the proposed building would not be visible from Dowth. This is view no. 22 in the developers' submission. Red Mountain blocks any view of the building even at its highest section, in the stack.

If a plume was rising from the stack it would be visible.

Mr O'Donnell referred to photomontages of the proposed incinerator building superimposed on a site in Ardee, which is zoned industrial. These photomontages had been prepared by the developers.

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In reply to a number of questions relating to the Ardee lands and the photomontages Mr Kelly stated that he prepared the photomontages. The site photographs at Ardee were taken approximately 3 weeks before the opening of the oral hearing.

Another photomontage indicated a site in the North Eastern sector of Drogheda also with the proposed process building superimposed.

The available industrial land in Ardee is 2 hectares. The footprint of the building proposed on the appeal site would not fit onto the Ardee lands.

The Industrial Development Authority has a land bank of only 2 hectares in Ardee.

Mr O'Donnell stated that there was a substantial area of land zoned for industry in Ardee.

In reply Mr T. Phillips for the developers stated that while there was quite an area of land indicated on the development plan it was land which could possibly be used for industrial purposes however that was for the future as it was not serviced at present. In reply to a request to provide information in relation to industrial zoned land in Ardee Mr S. Ward, a third party appellant said that in his submission, Appendix 6 contained a development plan zoning map for Ardee. The E6 zoning is "identified as area in the town for future industrial development pending the provision of drainage".

3.8 and 3.9 of the Ardee Development Plan relates to previously zoned lands being developed.

3.9 states that having regard to current unemployment levels in Ardee the shortage of available industrial land and planned improvement to the transportation network in the area it is considered that additional land should be identified for industrial development in the short term. As public mains drainage is not widely available, land to be zoned for such would not be less than 17 hectares.

Mr. Ahern for the developers stated that this area had not been examined.

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In reply to further questions from Mr O'Donnell, Mr Kelly stated that the site examined in Ardee, by the developers, was not contoured in the photomontage. The site is however flat. The building would not physically fit onto the land.

Mr Kelly stated that he was unaware that a permission for quite a large chemical factory had been granted on the land until being told so by Mr O'Donnell.

Mr Kelly stated that the purpose of preparing the photo montages in Ardee was to indicate the impact of putting a building of the scale of the proposed development onto that land.

Mr O'Donnell stated that the Ardee photomontages had to be looked at in a completely different way to those in the E.I.S. as they were not contoured onto the site. The detail of the building was not designed to the site. They are simply the plans of the proposed building superimposed on the site without any detailed examination.

Mr Kelly in reply stated that the developers took the building as proposed, in Carranstown, and superimposed it on top of the site. The site is generally flat, slightly lower than the particular road level. The building was placed on site on that basis. The western part of the building extended well beyond the development plan zoned area, onto residentially zoned land to the west.

The proposed building was shown on the Ardee site purely to set its scale and massing into context. In reply Mr O'Donnell stated that it would appear that it was somewhat meaningless choosing a site that was too small to accommodate even the footprint of the building as an illustration of anything.

In reply to a number of questions from Mr O'Donnell, Dr. Madden stated that he was not aware that there was a peregrine falcons nest close to the appeal site.

Dr. Madden stated that he had not consulted with Mr D. Norris of Dúchas, who is the expert on birds of prey. Dr. Madden stated that he had a list of sites of birds of prey

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in the east of Ireland. The site referred to by the third party appellants was not one of them.

At present there are power lines in the vicinity of the nesting site as indicated by Mr Lattimer. A large number of power lines could have some impact on the flight patterns of falcons in the area. There is a risk of casualty.

Mr O'Donnell stated that no reference is made to any of these facts in the environmental impact statement.

In reply to a number of questions from Mr O'Donnell, Ms. E. Lee stated that nobody was employed in the preparation of the environmental impact statement to make an assessment of the impact of the development on property values in the area.

No agronomist was engaged to assess the impact of the proposal on agriculture in the area. A specialist economist was not employed to assess the impact of the proposal on tourism and heritage.

In reply to a number of questions from Mr. O'Donnell, Mr K. Cullen for the developers stated that there were a million fault lines running under this countryside. The major fault lines in the area at Duleek and Slane are very much to the north and south of the plant.

It is somewhat unusual to use roof water from buildings as part of the process water which will be recycled on site.

The water table in the area is lowered by the adjoining quarry. Water flows to the quarry from the appeal site. The site abstraction of water will be from water which would have gone to the quarry site.

The mitigation measures for wells in the area is to deepen them or to replace wells with watermains.

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Landowners have a right to well water. If such water is affected the developers are obliged to mitigate the supply situation.

Mr Cullen stated that he had worked in this area, in relation to the adjoining Platin quarry since 1985. He was fully familiar with ground water conditions in the area and the impact of development on such conditions. He was currently employed by Platin quarry in relation to ground water monitoring. The developers had not discussed any of these issues with adjoining landowners.

In reply to a number of questions from Mr P. Butler representing Meath County Council, Mr S. Ward stated that detailed consideration was not given to the Strategic Planning Guidelines for the Greater Dublin Area by Mr. Killeen of the planning authority in his report on the proposal. Page 20 of the Strategic Planning Guidelines for the Greater Dublin Area deals with solid waste. The Guidelines are concerned primarily with settlement patterns and settlement structures. This is the only area of the Guidelines in which solid waste is referred to. The County Development Plans, the North Eastern Regional Waste Management Plan and the Strategic Planning Guidelines, together, form the basis for dealing with solid waste. The Guidelines also relate to primary transport corridors and strategic greenbelts. The reference to solid waste would have to be taken on the basis that the remainder of the document refers to the location of growth, transportation and the various facilities in the Greater Dublin Area. The Strategic Planning Guidelines do not give the go ahead to local authorities to consider waste disposal on a footloose basis. It is however accepted that there is very limited content in the Guidelines relating to solid waste.

In reply to further questions from Mr Butler, Mr Ward stated that the location of the proposed development is in breach of the Strategic Planning Guidelines as the site is located in the greenbelt. The Guidelines do identify greenbelts, without doubt.

The Strategic Planning Guidelines are clear in relation to greenbelts on page X11. What it says is the strategic greenbelt does obviously not include a primary growth centre but outside of and between primary growth centres there are strategic greenbelts. This is clearly outlined in map no. 2 of the Guidelines. The area between Drogheda and Navan is a strategic greenbelt. While the planning authority position

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would appear to be that there is no designated strategic greenbelt between Drogheda and Navan for instance both of which are primary growth centres, the witness fundamentally disagreed with that position.

The proposed development, in the absence of the planning authority outlining the strategic greenbelts for County Meath, is at best premature.

Mr Butler stated that the witness wished to have it both ways. Firstly it was a strategic greenbelt. Secondly if the local authority was to designate it a strategic greenbelt it was, at best, premature.

In reply Mr Ward stated that all that was happening was the planning authority was implementing the Strategic Planning Guidelines as they were required to do. The planning authority would designate strategic greenbelts, in accordance with the Strategic Planning Guidelines. The greenbelt would be between Drogheda and Navan. The planning authority must have regard to the Guidelines. The witness understood what having regard means.

Mr Butler stated that a recent High Court case in which Meath County Council was involved turned on the effect of the phrase that "having regard to" actually means. The judgement was that having regard to a development plan does not mean that the development plan has to be followed.

Continuing Mr Butler stated there are no outlined greenbelts. The Strategic Planning Guidelines have themselves not said what constitutes greenbelt land.

The recent High Court case, McEvoy and Smith versus Meath County Council, challenged the Strategic Planning Guidelines. The judgement was to the effect that while the planning authority had to have regard to the Guidelines, the Guidelines did not have to be followed.

In reply to another question from Mr Butler, Mr Ward stated that he had not read the judgement.

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Mr Ward, in reply to further questions, stated that he had not read the updated Guidelines, which were published in April 2001.

In reply Mr Butler read from page 14 of the update as follows;

"the Strategic Planning Guidelines uses terms such as local need and strategic greenbelt. Work will be undertaken with each of the constituent local authorities preparing a common understanding of these terms through the hinterland area."

Mr Butler stated that the people who drew up the Guidelines and the Guidelines themselves do not contain a common understanding for the local authority in relation to the term local need and strategic greenbelt.

In reply Mr Ward stated that the strategic greenbelts were indicated in the Guidelines. The Guidelines are a strategic scenario. There were particular exceptional circumstances, outlined by the inspector, in the case of the marathon power plant. These exceptional circumstances were accepted by An Bord Pleanála.

In reply to questions from Mr T. Phillips for the developers, Mr S. Ward stated that the proposed development was the least favourable in terms of the waste disposal hierarchy. Planning permission has been granted at Knockharley. This will provide sufficient disposal facilities. The proposed incinerator is not required. Other options also need considering such as composting and general recycling. Landfilling should continue for possibly 5 years to give the other options an opportunity to get up and running.

Mr Phillisp stated that Mr Ward had indicated the site on a specific map with his initial submission to An Bord Pleanála and his presentation to the oral hearing, which showed the site approximately 1 kilometre closer to Duleek than it in fact is.

In reply to a question from Mr Phillips, Mr Killeen, for the planning authority, stated that the Waste Management Plan for the North East Region refers to four appropriate development criteria for a thermal treatment plant. One of these is zoning. The

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planning authority considered that the use is permitted on the site as it is not specifically excluded, as a result of the fact that the site is not zoned for development.

CONDITION NO. 3:

For the first party appellants, in relation to condition no. 3 Mr Phillips stated that the first party appellants requested that this condition be omitted or alternatively amended. While the developers accept the principle of the condition they consider it to be inappropriately worded. Because of this it may lead to potential legal problems outside of the developers' control if it is left unchanged.

The first party appellants concur with the objective of condition no. 3 in ensuring the regional approach to waste management planning.

The proposal would fully realise and be in accordance with the regional approach to waste management as well as current EU, national and regional legislation and policy objectives.

The developers intend to provide the facility to meet the waste disposal needs of the north east region. The plant will have capacity of 61 MW which is equivalent to 150,000 tonnes per year. Any expansion of capacity would require a new planning application and an operating license. The manner in which condition no. 3 is worded could subvert its intention and expose the developers to potential future enforcement proceedings.

Waste collection and delivery is controlled by the Waste Management Act 1996 and the Waste Management (Collection) Permit Regulations 2001. The imposition of the condition in its current form is not appropriate and, if imposed, will have an effect that is different from that of the specific control provisions. This could give rise to undesirable duplication, conflict and confusion.

The condition would negate the opportunity for cross-regional cooperation with regard to waste management at such a time when waste management facilities are developed in neighbouring regions. It is therefore in breach of section 13.3 of the

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Waste Management Plan for the North East Region. The condition is therefore ultra vires.

The wording of condition 3 is unenforceable. It may lead to potential legal problems outside the developers' control if left unchanged. The condition in its current form relies on the applicant having control over pick up location of the waste being delivered to the site. The developers question the legality of the imposition of such a condition.

The condition relies on the developers having control over the waste being delivered to the site. The developers cannot be expected to determine conclusively where every piece of waste arriving at the facility has come from. Three scenarios illustrate this point.

Scenario 1;

If a waste collector using the facility operates close to one of the north east region county borders and collects waste from across the county border as part of the collection route, this would result in waste being accepted at the facility from outside the region.

Scenario 2:

It is anticipated that waste collectors in the region will compact and bale their waste prior to transferring it to the facility in order to minimise traffic volumes on the road network. The facility will accept materials from baling stations located throughout the region. If waste material entering the baling station is generated/produced from outside the region the operator again will technically be in breach of condition 3.

Scenario 3;

If a resident from outside the north east region is driving by the facility and decides to use the community recycling park, for example to recycle glass bottles, this will result

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in the developer accepting waste generated outside the region thereby contravening the condition.

The developers have clearly stated that the facility will always give priority to waste generated in the north east region. Through verifiable adherings to throughput limits, waste identification and registration of waste collection operators, the developers will ensure that waste produced within the north east region is always given priority at the facility. The company cannot with certainty exclude scenarios at 1, 2 and 3 referred to earlier.

Condition no. 3 does not take due cognisance of the nature of existing waste collection pratices in the region. The region adjoins a considerable number of counties. Commercial collection of waste has become trans-county. The movement of waste between of counties is dynamic. It is reasonable to state that some waste generated within the region is also disposed of outside the four counties constituting the north east. While the impact of these trans-county collections will have no effect in overall waste levels received at the proposed development, they would nevertheless constitute a breach of condition no. 3.

Subsection (1) of Section 26(1) of the Local Government (Planning and Development) Act 1963, gives a planning authority the power to attach conditions to a grant of planning permission. Section 26(2) also enables the planning authority to impose a number of specific conditions which is without prejudice to the generality of subsection (1).

A condition should fairly and reasonably relate to the proposed development. It should be imposed for a planning purpose and not for an ulterior one. They should not be so unreasonable that no reasonable authority could have properly imposed them. They should not abdicate the jurisdiction of the planning authority or of An Bord Pleanála.

Development Control and Advice Guidelines issued by the Department of the Environment in 1982 suggests that planning conditions should be necessary, relevant

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to planning, relevant to the development to be permitted and enforceable. They should also be precise and reasonable.

Condition no. 3 does not meet these criteria. Therefore it cannot be considered legally valid.

The condition is unreasonable. It is unenforceable as it relates to matters outside the control of the developers which are more properly the subject matter of other legislation.

For a condition to be considered legally valid it must not be unreasonable. The origin of waste delivered to the proposed development will clearly be outside the control of the developer and the condition is therefore ultra vires.

As the condition is not enforceable it therefore ultra vires.

A condition should be imposed for a planning purpose and not for an ulterior purpose. A condition should not be attached to where the matter is the subject of more specific legislation especially which is out of the control of the developers.

The DOE 1992 advice and guidelines suggest that in determining whether the use of a planning condition was appropriate there may be circumstances where it may be necessary to impose planning conditions to avoid negative impacts to other proposed developments despite the availability of a more regulatory code.

Management and control of the collection and delivery of waste is the responsibility of the local authority. It is provided for under the Waste Management Act 1996 and implemented under the regulation of 2001.

Section 33(1)(a) of the Waste Management Act 1996 provides that;

"each local authority shall collect, or arrange for the collection of, household waste, within its functional area.

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The local authority is required in granting a waste collection permit to ensure that the activity will comply with the provisions of the relevant waste management plan."

Section 34(4) of the Waste Management Act 1996 states;

"A local authority should not grant a waste collection permit unless it is satisfied that the activity in question would not, if carried out in accordance with such conditions as may be attached to the permit, cause environmental pollution, and that the grant of the permit is in accordance with any relevant provisions of that authority's waste management plan, as the case may be."

Section 34(1)(a) provides the local authority with power to grant a waste collection permit to a person or business for collection. Section 34(7) provides a general power for a local authority to attach conditions to a permit granted under separate section (1)(a). Conditions attached to a waste collection permit granted under this section may include requirements in relation to the types and quantities of waste which may be collected (waste concerned).

Place or places to which waste concerned may also be delivered for recovery or disposal,

documentation that shall accompany each consignment of waste concerned or shall be carried on each vehicle which is used for the activities concerned.

Keeping and preservation of records and the information to be supplied to the local authority concerned.

The Waste Management Act 1996 and the Permit Regulations 2001 are the current and therefore relevant legislation relating to the proposal. A requirement for the developers to control the collection of waste will have an effect that is different from that of the specific control provisions of the Waste Management Act. It will cause conflict and confusion. Condition no. 3 in its current form is therefore ultra vires.

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The Waste Management (Collection) Permit Regulations 2001 came into force after the planning authority decided to grant permission for the proposed development. The planning authority now has the power to control waste movement in the region which was not available previously.

The primary aim of EU, national and regional waste management legislation and policy is the attainment of waste management objectives for the state as a whole. This is clearly indicated in Changing our Ways 1998. It is further recognised in the Waste Management Plan for the North East Region and Article 5 of EU Directive 75/442/EEC discusses the establishment of a network of waste treatment facilities in the countries. It states;

"Member states shall establish an integrated and adequate network of disposal installations, taking a BATNEC appraoch. The network must enable the community as a whole to become self sufficient in waste disposal and the member states to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste.

A network must also enable waste to be disposed of in one of the nearest appropriate installation by means of the most appropriate methods and technologies in order to ensure a high level of protection for the environment and public health.

Section 10.1 of Changing our Ways refers to waste management plans and states;

"It must provide a vital rational framework within which various players can interact and achieve clearly understood objectives. Attainment of Ireland's overall waste management objectives will require dynamic changes at all levels and the planning process must reflect this dynamism. Waste management plans should be subject to ongoing review and refinement.

The Waste Management Plan for the North East recognises integration where it states at section 12.3 that;

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"The local authorities of the north east recognise the need for cooperation with local authorities in the region, including local authorities in Northern Ireland. Cooperation in relation to waste collection, recycling, recovery or disposal will be pursued in instances where this provides a sensible approach to waste management and respects both the proximity principle and the polluter pays principle."

In the absence of cross regional cooperation with regard to waste management limitations on the geographical origin of waste disposed of in County Meath is considered necessary. However condition no. 3 will negate the opportunity for cross regional cooperation when waste management facilities are developed in neighbouring regions.

The Waste Management Plan for the North East Region does not require the complete independence of the region in terms of waste collection and disposal. The plan provides clear controls in waste disposal in the region through capacity limitation. The proposed development would provide for 30% of the region's current waste production. Its location at the centre of gravity of the region will ensure that it primarily receives waste collected in the region.

Some trans-boundary movement of waste will have no effect on the overall waste levels received in the development. The facility will not have the capacity to meet the thermal treatment needs of neighbouring counties.

Condition 3 negates any opportunity for cooperation with neighbouring authorities. It does not recognises the reality of waste collection practices and waste disposal in Ireland and does not provide for a sensible approach to waste management in accordance with the Waste Management Plan for the north east region.

Condition 3 as imposed is in breach of the Waste Management Plan for the North East Region and is therefore ultra vires.

A waste certificate for use of the operation of the community recycling park would be unreasonable. A resident in the local area who wishes to recycle a number of glass bottles in the community recycling park, upon arrival at the park would be required to

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produce a waste certificate detailing the origin, source and area in which the waste was produced. The collection schedule involved in bringing the bottles to the park, the weight of the bottles, the residents' name and address and the composition and nature of the material to be recycled will also have to be outlined. Because of this full participation in recycling at the park would not be achieved.

The appellants wish to have this part of the condition amended to exclude the need for waste certification of any waste being deposited in the community recycling park.

The appellants consider that condition no. 3 should be omitted.

If it is not intended to omit condition no. 3 it should be amended as suggested in the wording below;

"Waste for acceptance at the waste management facility shall be limited to that selected by operators that obtained a waste collection permit for the north east region counties of Louth, Meath, Cavan and Monaghan.

The annual tonnage for thermal treatment shall not exceed that stated in the E.I.S., 150,000 tonnes per annum at 11 MG/KG.

Each and every consignment of waste arriving at the waste to energy and materials recycling facilities shall have a waste certificate which shall identify;

Waste origin, source and area in which it was produced/generated.

Weight of consignment.

Collection contractor name and address.

Composition and nature of waste.

The developers shall submit to the planning authority on a monthly basis records of all waste delivered to the site on a daily, weekly and monthly basis, in accordance with the aforesaid waste certificate."

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For the planning authority, in reply, **Mr Butler** stated that condition no. 3 should be maintained. A similar condition was used by An Bord Pleanála in relation to the landfill appeal permission in Knockharley.

The development is based on an environmental impact statement which purports to show that waste to be disposed of originates in the North Eastern area. The site is put forward as the centre of gravity of the waste.

The arguments put forward by the first party appellants in this case are the same as those in the Knockharley case. The only difference is the proposed recycling facility on the appeal site as opposed to straightforward landfilling in the other case.

An amended condition could possibly exclude recycling. Any waste for the thermal treatment operation has to be restricted to the North Eastern region.

The developers are obliged to ensure that waste going to the site is fully certified just as a publican operating a drinks license has to ensure that underage drinking does not take place on his premises.

Mr S. Ward stated that without condition no. 3 the permission is open-ended. Waste could be taken onto the site from anywhere within the state.

Mr M. O'Donnell stated that the matters addressed in condition no. 3 are ones to which the Board cannot have regard to. The transportation and disposal of waste are matters which are included within the definition of environmental pollution.

In reply **Mr Phillips** for the developers/first party appellants stated that the planning authority has not responded to the different scenarios set out in the first party appeal. The first party appellants agree with the principle of condition no. 3 however there is another mechanism by which it can be achieved.

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CONCLUDING STATEMENTS:

Mr S. Ward in concluding remarks stated that the proposed development did not comply with the Strategic Planning Guidelines for the Greater Dublin Area. The Guidelines direct new development to development centres.

The proposal conflicts with the County Development Plan which also directs new development into development centres.

The developers have not established a need for the development.

The planning application is flawed because the public have not been properly notified in terms of improvements on the R152 and also in terms of the amendment to the haul/route.

Too little is known about the content of the waste which will be delivered to the site and the subsequent risk of fire and explosion on the site. There is a strong possibility that hazardous waste will be transported to the site perhaps even unknown to the operator.

Inadequate assessment has been made in relation to the environmental impact of traffic. There is inadequate assessment of the impact of traffic in Duleek.

Given the proximity of the site to a World Heritage site in terms of landscape no possible chances or gambles can be taken here.

The site sits on the same limestone reserve that is present north of the railway line, in the adjoining quarry. That limestone is effectively a part of that strategic reserve and should be retained for the purpose given the presence of the adjoining quarry.

The proposed incinerator is a very unsustainable form of development as it starts at the top of the waste treatment pyramid.

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In conclusion **Mr P. Sweetman** stated that the environmental impact assessment process adopted by Ireland in relation to developments of the type proposed is contrary to the EU Directive. The European Commission and Ireland are in conflict on the matter. The High Court has found that there is a case to be tried by judicial review. It is the submission of An Taisce that An Bord Pleanála cannot legally grant a consent to this environmental impact assessment under the EU Directive and should state a case to the European Court of Justice because, an An Bord Pleanála has always claimed it is the court of final appeal in planning matters. As such An Bord Pleanála has access to the European Court of Justice.

In conclusion **Mr M. O'Donnell** stated that he wanted to re-emphasise the legal difficulty. He considered that the inspector should recommend to An Bord Pleanála that An Bord Pleanála should state a case to the High Court so as to determine the matter. This is a matter which should be resolved before the determination of the appeal which would allow construction works to commence if the appeal decision was a grant of permission.

The site was selected by what best can be described as a 'drive-by' exercise. The entire environmental impact statement has been based on that particular selection. An Bord Pleanála could not accept such an environmental impact statement having regard to the evidence given by the third party appellant on the premise on which it has been based. The environmental impact statement is fundamentally defective. Permission should be refused on that basis alone. Even if that were not to be the case the E.I.S. is entirely inadequate.

There has been no assessment of the impact on property value, no assessment is made of the impact of power lines. No assessment is made of the impact on agriculture. There is a range of matters which are unaddressed in the E.I.S. It is therefore not appropriate for An Bord Pleanála to consider the development due to the inadequacy of the E.I.S.

In fairness to Mr Killeen of the planning authority he accepts that he could not do an assessment in the circumstances of the inadequate environmental impact statement. An Bord Pleanála is in precisely the same position. It would not be appropriate for

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An Bord Pleanála to effectively carry out an environmental impact statement and on that basis carry out an assessment of the proposal.

By virtue of the restrictions in the legislation there is one key issue that has arisen during the course of the hearing. The evidence has shown that the proposal is not a resource-based development. It is not tied to a particular location. It is a footloose industry. This point was accepted by Mr Killeen for the planning authority. The development could be located in an urban area, in a suburban area or it could be located in the countryside. The planning authority also accepted that the proposal was not an appropriate site relative to other indices in the local authority's own documentation upon which the matter was based. In those circumstances the obvious decision is to refuse the appeal on that basis.

What is proposed is the development in an unzoned area, as a matter of law in the County Development Plan, with no services and in an area that is identified in the Strategic Planning Guidelines as an area which is a greenbelt, a strategic greenbelt.

There are many reasons to refuse the proposal.

A regional waste centre is proposed located a short distance from the Dublin area. This seems, particularly in the context of the first party appeal against condition no. 3 in locational terms, to be a recipe for disaster. The difficulties referred to in the first party appeal against the condition are the very matters to which this location gives rise to.

There has been no support from any of the adjoining counties in the north east region for the proposed development. County Cavan are in fact opposed to the proposed scheme. This is a particularly relevant factor.

The Strategic Planning Guidelines for the Greater Dublin Area identify how land is to be used. Regard has to be had to these Guidelines. The Guidelines have to be regarded as part of the Meath County Development Plan. Having regard to the County Development Plan the proposed development has to be refused.

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An Bord Pleanála has to have regard to the Strategic Planning Guidelines and to the County Development Plan. An Bord Pleanála should formally deal with the Strategic Planning Guidelines as if they were part of the Meath County Development Plan. The legislative provisions are exactly the same. An Bord Pleanála normally takes the view that where there are specific designations for land it is only in circumstances where those designations are unreasonable that they will depart from what is contained within them. An Bord Pleanála must adopt the same approach in relation to the Strategic Planning Guidelines.

It is only where An Bord Pleanála consider the Strategic Planning Guidelines in object and content to be unreasonable that they may depart from them.

If An Bord Pleanála was to accept the approach adopted by Mr Killeen of the planning authority it would lead to catastrophe. One would have a situation where the very essence of the Guidelines which require strategic greenbelts between major centres of population, close to Dublin, would simply have no controls. Control is what the Guidelines require.

In concluding **Mr M. O'Neill** for the third party appellants stated that the site is inappropriate in land use and planning terms.

The proposal does not simply stand up in land use and planning terms. The locational strategy is flawed. If one was to consider a development in a primarily agricultural area, on unzoned land and within a strategic greenbelt, and if one is to take Mr Killeen's argument that infrastructural projects may be permitted at times in rural areas, the type of infrastructural project that could exist in these areas would possibly be a wastewater treatment plant. Such plants are however locationally tied to where the population is, where the outflow is.

A water treatment plant would also be another infrastructural project which could be considered in a rural area however that is determined by the source of the water and the location of the population which the water is to serve.

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In relation to landfill sites and incinerator sites, they are footloose to the extent that the only criteria which should be used in this regard is central place. It is for the developer to prove the drive time for the population where the development proposed is minimised. This has not been done with the proposed development.

Given that what is proposed is a special industry there are procedures within the development plan process to zone appropriate land if that is the wish of the planning authority. However given that this is a regional facility that can only be done after a regional locational strategy has been developed for this particular use. This omission of any strategic input at the E.I.S. level or at the local authority level is remiss.

The first party in the power plant asserted that the area would develop as an industrial zone. The An Bord Pleanála inspector in that case clearly recommended that this should be rejected as the area is not serviced and is remote from both Drogheda and Duleek.

Refusal of the current proposal is therefore advocated.

Concluding for the planning authority **Mr Butler** stated that Article 1 of the 1985 EU Directive, relating to development consent, refers to competent authorities. Such authorities are those which the member-states outline. This may be more than one authority.

The proposed development does not rely, for planning consent, on any other forum. An Bord Pleanála can grant permission for the proposed development. The development cannot however go ahead if a license is not obtained for integrated pollution control.

The planning authority consider that a fire certificate is required.

Project splitting is based on a legal opinion. The proposed development is a unified project.

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The proposed development is within the remit of the Strategic Planning Guidelines for the Greater Dublin Area. In that regard the planning authority is engaged in outlining the strategic greenbelt for the area.

E.I.S. control is outlined in the 1989 Regulations as amended. The first part of the Regulations state at paragraph 3, in the second schedule, that an environmental impact statement for the purposes of these regulations or of any enactment as amended or adapted by these regulations shall contain the information specified in paragraph 2 and may also contain the information specified in paragraph 3 of the second schedule.

Paragraph 3 deals with matters which may be included by way of explanation and amplification in the E.I.S. One of these, at paragraph 3(d) states the main alternative if any studied by the applicant, appellant or authority and the main reasons for choosing the development proposed taking into account the environmental effects.

It is not mandatory to outline alternatives. The planning officer of a local authority is only obliged to assess an alternative if such alternative is provided. No alternative was provided. This is a constantly argued point in relation to environmental impact statement which goes against the plain meaning and wording of the regulations. For that reason it does not have any substance.

An Bord Pleanála is urged to uphold the decision of the planning authority, including condition no. 3.

For the developers **Mr G. Simons** stated that he wished to conclude on legal points raised during the course of the evidence.

The existing legislation shows An Bord Pleanála in its proper context. The Board is not to consider the risk of environmental pollution. Third party appellants have sought to put a very artificial definition forward and to say that anything that touches on air or noise cannot be looked at. In a quite extraordinary situation objection was made to certain evidence. This is incorrect. The 1996 Waste Management Act gives force to the EU Directive in environmental impact assessment. Section 2 of the Waste Management Act contains a list of the directives which it is intended to give

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effect to. An Bord Pleanála is entitled to take these into account when interpreting the legislation. This legislation was specifically enacted to have regard to the EU Directive therefore if an expansive interpretation of the legislation is required An Bord Pleanála is entitled to do so.

When one examines Section 54 of the 1996 Act it states the Board shall not consider environmental pollution issues. The alternative legal definition is "shall have regard to". That was the issue in the McEvoy and Smith versus Meath County Council case.

In relation to Section 26 of the main planning act, An Bord Pleanála shall consider proper planning and development and shall have regard to the development plan.

That is a hierarchy. Consider is the more serious duty. An Bord Pleanála must adjudicate.

There is a lesser requirement, shall have regard to, as noted in the recent High Court case.

The requirement that An Bord Pleanála shall not consider environmental pollution, means that it does not have to adjudicate on environmental pollution issues. The definition of environmental pollution itself is unusual in that it carries an element of adjudication. Under Section 5 of the Waste Management Act it is indicated that environmental pollution in relation to waste is the holding, transport, covering or disposal of waste in a manner which would to a significant extent endanger human health or harm the environment. This is a very unusual definition as it does not simply list out noise or air pollution, it involves in the overall definition. Environmental pollution is a qualitative definition which involves an adjudication as to whether or not there is a significant effect in terms of pollution. That is the whole purpose of section 54 of the Waste Management Act. Equally under Section 98 of the Environmental Pollution Act An Bord Pleanála is absolved from entering into a consideration of that qualitative definition. An Bord Pleanála has to approach this development on the basis that there will be no environmental pollution in that sense of an adverse effect. Under each piece of legislation the Environmental Protection

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Agency cannot grant a license if it considers there will be environmental pollution. It is prohibited from doing so.

The proposed development will only ever get off the ground if the E.P.A. is satisfied that there would be no environmental pollution in the qualitative sense.

An Bord Pleanála is therefore free to approach the matter without considering any environmental pollution. If there is such an issue a license would be refused by the Environmental Protection Agency. In that context An Bord Pleanála is perfectly entitled to deal with all of the planning issues which have arisen.

From the outset these key issues were identified by the inspector as a land allocation issue, in terms of the Development Plan, the Strategic Guidelines, the location, visual amenity and the traffic impact. Those are the key issues. They have been debated at length. An Bord Pleanála is perfectly entitled to look at those issues and should in no way feel constrained by the foolhardy legal definitions put forward by the third party appellants.

Under environmental impact assessment An Bord Pleanála is required to consider the main likely significant effects.

The electricity connection element is a matter for a separate development consent. In that context it can be separately assessed.

In concluding for the developers/first party appellants Mr Phillips stated that what was proposed was an integrated treatment of waste including a recycling park, a recycling plant for non-hazardous waste and a thermal treatment plant for non-hazardous waste. In terms of sustainable development it would generate electricity in excess of that required by the development itself.

The proposal accords fully with the feasibility study on thermal treatment undertaken for the North Eastern regional authority in 1999.

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The need for a thermal treatment plant has been identified in Changing Our Ways, the North East Regional Waste Management Plan and also by the planning authority in the development plan.

The location of the site within a strategic greenbelt does not preclude the proposed development. The development is not footloose. It needs to be located in the North Eastern region.

To preclude the development entirely from areas between growth centres would preclude developments such as wind farms or a meat rendering plant which could not be built in an agricultural area if the strict definition of strategic greenbelt was adopted. What is proposed is an industrial facility that has a locational requirement. A footloose development is something like Hewlett Packard. That company, if it did not obtain permission for development in this country could go abroad. The proposed development is not footloose as it needs to be in the north east region. It also needs to be close to primary growth centres, the source of the primary growth of waste.

The site is close to the centre of gravity. It is proximate to an appropriate transport infrastructure. It is close to an electricity grid. It is also relatively close to two primary growth centres in the North Eastern part of the Greater Dublin area, Navan and Drogheda. Drogheda is particularly close to the site. Navan is not a significant distance from it.

The area can accommodate the proposed development due to its established industrial character.

In relation to the proposed nearby power plant Mr Phillips stated that he considered the inspector's reference to industrial development taking place referred to possible spin off industrial development. The planning authority rightly referred to the proposed development as a piece of industrial infrastructure such as a treatment plant for water. The development is a waste treatment plant and could be compared to a wastewater treatment plant.

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By reason of design, site, and landscape, the area has the capacity to accommodate the proposal. Quite a high degree of design had gone into the proposed buildings to secure a development that accords with the colours and the topography of the area and would blend in as best as could possibly be achieved having regard to the sensitivity of the location.

There would be no significant impacts on the amenity of the area having regard to flora and fauna, noise, visual impact, archaeology and surface and ground water.

The existing road infrastructure is capable of catering for the traffic generated by the proposal. There would be no adverse impact resulting. There would only be a small increase in traffic on the R152 resulting from the proposal. This would be offset to a large degree by reductions in traffic on the R152 resulting from the opening of the M1 motorway.

The addition of 100,000 movements per year on the R152, resulting from the development has to be taken in the context of the existing annual traffic of 2.9m vehicles, catered for on the R152.

While the planning authority made the correct decision the developers/first party appellants are concerned with condition no. 3. This condition could render the entire scheme unbankable. It needs to be omitted. While An Bord Pleanála could change the wording of the condition it would be preferable to omit the condition.

Permission should be granted having regard to national, regional and local policy.

Mr Simon for the developers stated that the alternative wording to condition no. 3 should state that;

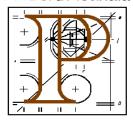
there would be a list of collectors to be agreed by the local authority, their consent not to be unreasonably withheld.

As this concluded the evidence the hearing was formally closed.

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Board Direction

An Bord Pleanála



Board Direction

Ref: 17.126307

The submissions on this file and the Inspector's report were further considered at a Board meeting held on 27th February,2003.

The Board decided, by a majority of 7 to 2, to grant permission for the following reasons:

Having regard to -

- (a) the provisions of Section 54(3) of the Waste Management Act,1996 and Section 98 of the Environmental Protection Agency Act,1992, which preclude An Bord Pleanala from consideration of matters relating to the risk of environmental pollution from the activities,
- (b) the national waste management policy framework and strategy as set out in Government policy statements "Changing Our Ways" and "Delivering Change" published by the Department of the Environment and Local Government in September, 1998 and March, 2002, respectively,
- (c) the waste management strategy for the North-East region as set out in the North-East Regional Waste Management Plan, 1999-2004, which includes thermal treatment as an integral part of the solution to the management of the region's waste and identified the need for one such facility in the region,
- (d) the provisions of the current Meath County Development Plan (which by virtue of Section 4 of the Waste Management (Amendment) Act,2001, is deemed to include the objectives contained in the Regional Waste Management Plan),
- (e) the location of the proposed development in an area where there is an established and permitted industrial land-use pattern ,and
- (f) the strategic location of the proposed development in terms of transport infrastructure.

it is considered that, subject to the conditions in the second schedule, the proposed development of a necessary public utility would not seriously injure the amenities of the area, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and development of the area.

Conditions: See attached draft Second Schedule.

In deciding not to accept the Inspector's recommendation to refuse permission, the Board

- (a) recognised the special siting requirements of a thermal treatment facility,
- (b) had regard to the pattern of existing and permitted industrial development at this location ,
- (c) had particular regard to the provisions of the Waste Management Plan for the North East Region 1999-2004 which recognised the role of thermal treatment in the management of the Region's waste and identified the need for one such facility in the region ,
- (d) noted that the Regional Plan did not identify any particular site for such a facility but loosely identified four possible locations (one in each county of the region),
- (e) considered that the proposed site was generally suitable as a location having regard, inter alia, to the present and future distribution of waste arisings in the region and its proximity to the M1 and accessibility to the N2,
- (f) did not consider that the proposed development of a public utility with special siting requirements would conflict with the objectives of the Strategic Planning Guidelines for the Greater Dublin Area,
- (g) considered that while the development would have some visual impact the landscape is capable of absorbing the development particularly against the backdrop of the Cement Works and large scale quarry operation and the landscaping /screening measures proposed,
- (h) considered that while the development would have some impact on the residential amenities of property adjacent to the site this was not so serious as to warrant refusal of permission for a development of such public importance, and
- (i) agreed with the inspector's views regarding the unsuitability of the location for the proposed community recycling park and that such a facility should be located in Duleek, the nearest population centre.

A copy	or this	Board	Direction	(excluding	conditions)	to be	issuea	with	Oraer.

Board Member		Date 3	3 rd March, 2003.
	Margaret Byrne		

SECOND SCHEDULE

1. The development shall be carried out in accordance with the plans and particulars lodged with the application as amended by the particulars received by the planning authority on the 7th and 27th days of June, 2001 and the 23rd day of July, 2001, and in accordance with the provisions of the Environmental Impact Statement as amended, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

2. Appropriate arrangements for the connection of the proposed waste to energy facility to the E.S.B. National Grid transmission lines and the diversion of the 110 kV overhead power lines traversing the application site, to the satisfaction of the planning authority, shall be in place prior to commencement of development.

Reason: In the interest of orderly development.

3. The proposed community recycling park shall be omitted and the area shall be landscaped in accordance with the requirements of the planning authority.

Reason: It is considered that this aspect of the proposed development, which is to serve a local need only and would attract unnecessary car-borne traffic, would more appropriately be located in the local population centre of Duleek.

4. Waste for acceptance at the waste management facility for incineration and recycling/treatment shall be strictly limited and confined to waste generated and produced in the North East Region area of counties Meath, Louth, Cavan and Monaghan. The annual tonnage for thermal treatment/recycling shall not exceed the quantities as identified in the Environmental Impact Statement on an annual basis, that is, 170,000 tonnes per annum.

Each and every consignment of waste, howsoever arriving at the waste management facility, shall be accompanied by a waste certificate, which shall identify the following –

- Waste origin, source and area in which it was produced/generated.
- Waste collection schedules.
- Weight of each consignment.
- Waste collection contractor name and address.
- Composition and nature of waste.

The developer shall submit to the planning authority, on a monthly basis, records of all waste delivered to the site on a daily, weekly and monthly basis, in accordance with the aforesaid waste certificate.

Reason: In the interest of development control and to ensure that the principles of regional waste management as set out in the Regional Plan are adhered to.

5. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details of the proposed public education area as outlined in the revised Environmental Impact Statement section 2.6.3. submitted to the planning authority on the 7th day of June, 2001.

Reason: In the interest of orderly development.

6. A Community Liaison Committee shall be established consisting of a minimum of eight representatives (two officials from the planning authority, two representatives for the developer, two local residents and two elected members of Meath County Council). The composition of the committee shall be subject to the agreement of the planning authority.

Reason: To provide for appropriate on-going review of waste disposal/recycling operations in conjunction with the local community.

7. The developer shall pay to the planning authority an annual contribution towards the cost of the provision of environmental improvement and recreational/community facility projects in the vicinity of the proposed waste management facility. The amount of the contribution, which shall be based on a payment per tonne of waste thermally treated and recycled calculated on annual waste inputs, shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála. The identification environmental/recreational/community facility projects shall be decided by the planning authority having consulted the Liaison Committee as provided for in condition number 6.

In the case of expenditure that is proposed to be incurred, the requirement to pay this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental/recreational/community facility projects which will mitigate the impact of the waste facility on the local community in accordance with Government Policy as set out in the "Changing Our Ways" published by the Department of Environment and Local Government in September, 1998.

8. The developer shall pay a sum of money to the planning authority as a contribution towards the expenditure that is proposed to be incurred by the planning authority in respect of the provision of a community recycling park in Duleek. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Payment of this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered that the provision of a community recycling park, which is proposed as part of this development, would more appropriately be located in the local population centre of Duleek.

- 9. Prior to commencement of development, the developer shall submit to the planning authority for written agreement design details of the proposed new junction of the waste management facility access road with the Regional Road R152, to include the following
 - (a) Junction layout in accordance with Design Manual for Roads and Bridges,
 - (b) surfacing and road construction materials,
 - (c) junction marking, delineation and signage,
 - (d) drainage details,
 - (e) fencing/roadside boundary treatment and landscaping, and
 - (f) lighting.

The full costs of the proposed new junction shall be borne by the developer and the works shall be carried out under the supervision of the Road Design Section of Meath County Council.

Reason: In the interest of traffic safety and development control.

- 10. (1) Prior to commencement of development, the developer shall submit to the planning authority for written agreement details of a Traffic Management Plan for the control and operation of the proposed new junction during the construction phase.
 - (2) The proposed junction and access road inclusive of dust free surfacing shall be carried out and completed to the satisfaction of the planning authority within two months of the commencement of the development.

(3) The Traffic Management Plan shall be subject to on-going review with the planning authority during the whole of the construction period with review periods being directly related to the levels of construction employees on site.

Reason: In the interest of development control and traffic safety.

11. The developer shall submit to the planning authority for written agreement details of a Traffic Management Plan which shall prohibit traffic associated with the proposed facility from travelling along Regional Road R150, between its junction with Regional Road R153 to the west and the N2 to the east.

Reason: In the interest of traffic and pedestrian safety and to protect existing educational and recreational facilities associated with the village.

- 12. The developer shall facilitate the planning authority in the archaeological appraisal of the site and in preserving and recording or otherwise protecting archaeological materials or features which may exist within the site. In this regard, the developer shall:-
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
 - (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:-

- (i) the nature and location of archaeological material on the site, and
- (ii) the impact of the proposed development on such archaeological material.

Prior to commencement of development, a report containing the results of the assessment shall be submitted to the planning authority. Arising from this assessment, the developer shall agree with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be determined by An Bord Pleanála.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.

13. The developer shall fully comply with the "Special Requirements in Relation to Bord Gais" conditions relating to the executing of any works in the vicinity of the Bord Gais distribution mains, which traverse the site.

Reason: In the interest of development control.

14. Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health and to ensure a proper standard of development.

- 15. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details in relation to temporary car parking facilities for construction employees to include
 - (a) Location and number of spaces to be provided,
 - (b) construction details in include road base materials, surfacing details and markings,
 - (c) surface water drainage details,
 - (d) proposals for the reinstatement of the area on completion of the construction phase.

Reason: In the interest of traffic safety and development control.

- 16. In addition to the landscape proposals submitted with the application, the proposed screening mounds and landscaping on the perimeter of the waste management facility site shall be carried out during the initial construction phase. Prior to commencement of development, the following shall be submitted to the planning authority for written agreement
 - (a) detailed landscaping of proposed screening mounds to include the proposed types/variety of native species, density of planting, maintenance programme and planting to supplement and strengthen hedgerows and tree belts that are to be retained, and
 - (b) a programme outlining the timescale for the implementation of the proposed landscape scheme.

Reason: In the interest of visual amenity.

17. All permanent screening bank side slopes, unless otherwise agreed with the planning authority, shall be topsoiled and grass seeded as soon as practicable

after their construction. Dust suppression sprays shall be used during periods of dry weather until a stable grass covering has been established.

Reason: In the interest of orderly development and the amenities of the area.

18. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, a detailed lighting design and layout on drawings at scale 1:1,000 for the lighting of the waste management facility to include all internal roads, storage and hardstanding areas, circulation areas between buildings and pedestrian walks.

Details to accompany the above shall include numbers and type of light fittings, locations and orientation of fittings, wattages and height of lighting standards and a planned maintenance programme.

Reason: In the interest of public safety and the amenities of property in the vicinity.

19. Prior to commencement of development, the method and type of markings and the provision of aviation warning lights for the emissions stack shall be agreed in writing with the Irish Aviation Authority and the planning authority. The co-ordinates of the as constructed position of the stack and the as constructed elevation shall be submitted to the Irish Aviation Authority.

Reason: In the interest of public safety, development control and the protection of light aircraft using the surrounding area.

20. The site construction working hours shall be confined to between 0700 and 1900 hours Monday to Saturday, inclusive (excluding public holidays and Sundays) unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential amenity.

21. During the construction phase of the proposed development noise levels at the site when measured at noise sensitive locations in the vicinity shall not exceed 65dB(A) between 0700 and 1900 hours Monday to Saturday inclusive, excluding public holidays and Sundays, and 45dB(A) at any other time.

Noise monitoring locations for the purposes of the construction phase of the proposed development shall be agreed in writing with the planning authority prior to commencement of any development on site.

Reason: To protect the amenities of property in the vicinity of the site.

22. Dust deposition during the construction phase shall not exceed 130 mg/m2/day measured at the site boundaries and averaged over 30 days.

Reason: To prevent airborne dust and to protect the amenities of the area.

23. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, details of temporary settlement ponds/silt traps/oil interceptors to control discharges of site surface water run-off during the construction period in advance of the construction of the proposed permanent attenuation tanks. The concentration of suspended solids (SS) of the surface water run-off from the site construction works, for discharge to surface waters, shall not exceed 30 mg/litre.

Reason: To prevent surface water pollution and to protect the amenity value of watercourses.

24. The developer shall monitor noise, dust deposition and suspended solids of surface water run-off associated with the construction phase and shall submit to the planning authority on a monthly basis a summary report of all such monitoring. The developer shall pay a contribution to the planning authority towards the cost of supervision of check monitoring the development for the duration of the initial construction phase. The amount of the contribution shall be agreed between the development and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: To ensure a satisfactory monitoring of the development. It is considered reasonable that the developer shall contribute towards the cost of check monitoring of the development in the interest of prevention of pollution.

25. The developer shall submit to the planning authority a monthly report of all monitoring in relation to the construction of the development.

Reason: In the interest of development control.

26. During the construction phase of the development, oil and fuel storage tanks, chemicals and all other materials that pose a risk to waters if spilled, shall be stored in designated storage areas, which shall be bunded to a volume of 110 per cent of the capacity of the largest tank/container within the bunded area(s). Filling and draw-off points shall be located entirely within the bunded area(s). Drainage from the bunded area(s) shall be diverted for collection and safe disposal. The use of bunded pallets for storage of drums is acceptable.

Reason: In the interest of orderly development and the prevention of groundwater and surface water pollution.

27. During the construction phase, all vehicles, other than private cars and vans, exiting the construction site shall pass through a wheel-wash facility, the details of which shall be submitted to the planning authority for written agreement.

Reason: In the interest of development control.

28. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, detailed plans and proposals for the restoration and reinstatement of the entire site following decommissioning of the plant. The restoration works shall be completed within two years of the closure of the plant.

Where the planning authority is of the opinion that the plant has ceased to operate for a period in excess of one year and where the developer can offer no reasonable grounds to dispute this opinion, the planning authority shall be empowered to notify the developer to activate the restoration plan as provided for in this condition. In the event of the developer's failure to activate the restoration works, the planning authority shall be empowered to notify the developer of their intention to activate the restoration plan and of their intention, within a period of 60 days, to call upon the financial guarantees referred to under condition 29 hereof.

Reason: To ensure satisfactory restoration of the site in the interest of the amenities of the area and proper planning and control.

29. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit or other security to secure any final restoration measures required to be undertaken under the terms of condition number 28, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the restoration plan. The form and the amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: To ensure satisfactory completion of the restoration plan in the interest of orderly development.

30. The developer shall pay a sum of money to the planning authority as a contribution towards the expenditure that is proposed to be incurred by the planning authority in respect of road improvement works facilitating the proposed development. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Payment of this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered reasonable that the developer should contribute towards the expenditure proposed to be incurred by the planning authority in respect of works facilitating the proposed development.

31. The developer shall pay a sum of money to the planning authority as a contribution towards expenditure that was and/or that is proposed to be incurred by the planning authority in respect of the provision of a public water supply facilitating the proposed development. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

In the case of expenditure that is proposed to be incurred, the requirement to pay this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered reasonable that the developer should contribute towards the expenditure that was and/or that is proposed to be incurred by the planning authority in respect of works facilitating the proposed development.

Board Order

An Bord Pleanála



LOCAL GOVERNMENT (PLANNING AND DEVELOPMENT) ACTS, 1963 TO 1999

Meath County

Planning Register Reference Number: 01/4014

APPEAL by An Taisce of The Tailors' Hall, Back Lane, Dublin and by Indaver Ireland care of Frank L. Benson and Partners of Hainault House, 69-71 Saint Stephen's Green, Dublin and by others against the decision made on the 31st day of July, 2001 by the Council of the County of Meath to grant subject to conditions a permission to the said Indaver Ireland for development comprising a waste management facility consisting of a main process building of 13,480 square metres incorporating a waste reception hall, waste sorting plant, bunker, operations/turbine building, boiler, grate furnace, ash bunker, demineralisation unit, boiler feed pumps, flue gas treatment building solidification unit, AC unit, turbine cooler and 40 metre high stack, ancillary structures will consist of a pump house building of 200 square metres, water storage tank, warehouse building of 890 square metres incorporating security and drivers rest area, administration building of 770 square metres, transformer compound, laydown area, car parks and an on-site puraflo effluent treatment system. The facility will also include a community recycling park incorporating a security building, container storage area and canopied area, road access will be via a new entrance from the R152 approximately three kilometres from Duleek and four kilometres from Drogheda at Carranstown, Duleek, County Meath in accordance with plans and particulars lodged with the said Council:

DECISION: Pursuant to the Local Government (Planning and Development) Acts, 1963 to 1999, it is hereby decided, for the reason set out in the First Schedule hereto, to grant permission for the said development in accordance with the said plans and particulars, subject to the conditions specified in the Second Schedule hereto, the reasons for the imposition of the said conditions being as set out in the said Second Schedule and the said permission is hereby granted subject to the said conditions.

FIRST SCHEDULE

Having regard to -

- (a) the provisions of Section 54(3) of the Waste Management Act, 1996 and Section 98 of the Environmental Protection Agency Act, 1992, which preclude An Bord Pleanala from consideration of matters relating to the risk of environmental pollution from the activities,
- (b) the national waste management policy framework and strategy as set out in Government policy statements "Changing Our Ways" and "Delivering Change" published by the Department of the Environment and Local Government in September, 1998 and March, 2002, respectively,
- (c) the waste management strategy for the North-East region as set out in the North-East Regional Waste Management Plan, 1999-2004, which includes thermal treatment as an integral part of the solution to the management of the region's waste and identified the need for one such facility in the region,
- (d) the provisions of the current Meath County Development Plan (which by virtue of Section 4 of the Waste Management (Amendment) Act, 2001, is deemed to include the objectives contained in the Regional Waste Management Plan),
- (e) the location of the proposed development in an area where there is an established and permitted industrial land-use pattern, and
- (f) the strategic location of the proposed development in terms of transport infrastructure,

it is considered that, subject to compliance with the conditions set out in the Second Schedule, the proposed development of a necessary public utility would not seriously injure the amenities of the area, would be acceptable in terms of traffic safety and convenience and would be in accordance with the proper planning and development of the area.

SECOND SCHEDULE

1. The development shall be carried out in accordance with the plans and particulars lodged with the application as amended by the particulars received by the planning authority on the 7th and 27th days of June, 2001 and the 23rd day of July, 2001, and in accordance with the provisions of the Environmental Impact Statement as amended, except as may otherwise be required in order to comply with the following conditions.

Reason: In the interest of clarity.

2. Appropriate arrangements for the connection of the proposed waste to energy facility to the E.S.B. National Grid transmission lines and the diversion of the 110 kV overhead power lines traversing the application site, to the satisfaction of the planning authority, shall be in place prior to commencement of development.

Reason: In the interest of orderly development.

3. The proposed community recycling park shall be omitted and the area shall be landscaped in accordance with the requirements of the planning authority.

Reason: It is considered that this aspect of the proposed development, which is to serve a local need only and would attract unnecessary car-borne traffic, would more appropriately be located in the local population centre of Duleek.

4. Waste for acceptance at the waste management facility for incineration and recycling/treatment shall be strictly limited and confined to waste generated and produced in the North East Region area of counties Meath, Louth, Cavan and Monaghan. The annual tonnage for thermal treatment/recycling shall not exceed the quantities as identified in the Environmental Impact Statement on an annual basis, that is, 170,000 tonnes per annum.

Each and every consignment of waste, howsoever arriving at the waste management facility, shall be accompanied by a waste certificate, which shall identify the following –

- Waste origin, source and area in which it was produced/generated.
- Waste collection schedules.
- Weight of each consignment.
- Waste collection contractor name and address.
- Composition and nature of waste.

The developer shall submit to the planning authority, on a monthly basis, records of all waste delivered to the site on a daily, weekly and monthly basis, in accordance with the aforesaid waste certificate.

Reason: In the interest of development control and to ensure that the principles of regional waste management as set out in the Regional Plan are adhered to.

5. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details of the proposed public education area as outlined in the revised Environmental Impact Statement section 2.6.3. submitted to the planning authority on the 7th day of June, 2001.

Reason: In the interest of orderly development.

6. A Community Liaison Committee shall be established consisting of a minimum of eight representatives (two officials from the planning authority, two representatives for the developer, two local residents and two elected members of Meath County Council). The composition of the committee shall be subject to the agreement of the planning authority.

Reason: To provide for appropriate on-going review of waste disposal/recycling operations in conjunction with the local community.

7. The developer shall pay to the planning authority an annual contribution towards the cost of the provision of environmental improvement and recreational/community facility projects in the vicinity of the proposed waste management facility. The amount of the contribution, which shall be based on a payment per tonne of waste thermally treated and recycled calculated on annual waste inputs, shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála. The identification of environmental/recreational/community facility projects shall be decided by the planning authority having consulted the Liaison Committee as provided for in condition number 6.

In the case of expenditure that is proposed to be incurred, the requirement to pay this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered reasonable that the developer should contribute towards the cost of environmental/recreational/community facility projects which will mitigate the impact of the waste facility on the local community in accordance with Government Policy as set out in the "Changing Our Ways" published by the Department of Environment and Local Government in September, 1998.

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8. The developer shall pay a sum of money to the planning authority as a contribution towards the expenditure that is proposed to be incurred by the planning authority in respect of the provision of a community recycling park in Duleek. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Payment of this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered that the provision of a community recycling park, which is proposed as part of this development, would more appropriately be located in the local population centre of Duleek.

- 9. Prior to commencement of development, the developer shall submit to the planning authority for written agreement design details of the proposed new junction of the waste management facility access road with the Regional Road R152, to include the following
 - (a) Junction layout in accordance with Design Manual for Roads and Bridges,
 - (b) surfacing and road construction materials,
 - (c) junction marking, delineation and signage,
 - (d) drainage details,
 - (e) fencing/roadside boundary treatment and landscaping, and
 - (f) lighting.

The full costs of the proposed new junction shall be borne by the developer and the works shall be carried out under the supervision of the Road Design Section of Meath County Council.

Reason: In the interest of traffic safety and development control.

- 10. (1) Prior to commencement of development, the developer shall submit to the planning authority for written agreement details of a Traffic Management Plan for the control and operation of the proposed new junction during the construction phase.
 - (2) The proposed junction and access road inclusive of dust free surfacing shall be carried out and completed to the satisfaction of the planning authority within two months of the commencement of the development.

(3) The Traffic Management Plan shall be subject to on-going review with the planning authority during the whole of the construction period with review periods being directly related to the levels of construction employees on site.

Reason: In the interest of development control and traffic safety.

11. The developer shall submit to the planning authority for written agreement details of a Traffic Management Plan which shall prohibit traffic associated with the proposed facility from travelling along Regional Road R150, between its junction with Regional Road R153 to the west and the N2 to the east.

Reason: In the interest of traffic and pedestrian safety and to protect existing educational and recreational facilities associated with the village.

- 12. The developer shall facilitate the planning authority in the archaeological appraisal of the site and in preserving and recording or otherwise protecting archaeological materials or features which may exist within the site. In this regard, the developer shall:-
 - (a) notify the planning authority in writing at least four weeks prior to the commencement of any site operation (including hydrological and geotechnical investigations) relating to the proposed development, and
 - (b) employ a suitably-qualified archaeologist prior to the commencement of development. The archaeologist shall assess the site and monitor all site development works.

The assessment shall address the following issues:-

- (i) the nature and location of archaeological material on the site, and
- (ii) the impact of the proposed development on such archaeological material.

Prior to commencement of development, a report containing the results of the assessment shall be submitted to the planning authority. Arising from this assessment, the developer shall agree with the planning authority details regarding any further archaeological requirements (including, if necessary, archaeological excavation) prior to commencement of construction works.

In default of agreement on any of these requirements, the matter shall be determined by An Bord Pleanála.

Reason: In order to conserve the archaeological heritage of the site and to secure the preservation of any remains which may exist within the site.

13. The developer shall fully comply with the "Special Requirements in Relation to Bord Gais" conditions relating to the executing of any works in the vicinity of the Bord Gais distribution mains, which traverse the site.

Reason: In the interest of development control.

14. Water supply and drainage arrangements, including the disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health and to ensure a proper standard of development.

- 15. Prior to commencement of development, the developer shall submit to the planning authority for written agreement details in relation to temporary car parking facilities for construction employees to include
 - (a) Location and number of spaces to be provided,
 - (b) construction details in include road base materials, surfacing details and markings,
 - (c) surface water drainage details,
 - (d) proposals for the reinstatement of the area on completion of the construction phase.

Reason: In the interest of traffic safety and development control.

- 16. In addition to the landscape proposals submitted with the application, the proposed screening mounds and landscaping on the perimeter of the waste management facility site shall be carried out during the initial construction phase. Prior to commencement of development, the following shall be submitted to the planning authority for written agreement
 - (a) detailed landscaping of proposed screening mounds to include the proposed types/variety of native species, density of planting, maintenance programme and planting to supplement and strengthen hedgerows and tree belts that are to be retained, and
 - (b) a programme outlining the timescale for the implementation of the proposed landscape scheme.

Reason: In the interest of visual amenity.

17. All permanent screening bank side slopes, unless otherwise agreed with the planning authority, shall be topsoiled and grass seeded as soon as practicable after their construction. Dust suppression sprays shall be used during periods of dry weather until a stable grass covering has been established.

Reason: In the interest of orderly development and the amenities of the area.

18. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, a detailed lighting design and layout on drawings at scale 1:1,000 for the lighting of the waste management facility to include all internal roads, storage and hardstanding areas, circulation areas between buildings and pedestrian walks.

Details to accompany the above shall include numbers and type of light fittings, locations and orientation of fittings, wattages and height of lighting standards and a planned maintenance programme.

Reason: In the interest of public safety and the amenities of property in the vicinity.

19. Prior to commencement of development, the method and type of markings and the provision of aviation warning lights for the emissions stack shall be agreed in writing with the Irish Aviation Authority and the planning authority. The co-ordinates of the as constructed position of the stack and the as constructed elevation shall be submitted to the Irish Aviation Authority.

Reason: In the interest of public safety, development control and the protection of light aircraft using the surrounding area.

20. The site construction working hours shall be confined to between 0700 and 1900 hours Monday to Saturday, inclusive (excluding public holidays and Sundays) unless otherwise agreed in writing with the planning authority.

Reason: In the interest of residential amenity.

21. During the construction phase of the proposed development noise levels at the site when measured at noise sensitive locations in the vicinity shall not exceed 65dB(A) between 0700 and 1900 hours Monday to Saturday inclusive, excluding public holidays and Sundays, and 45dB(A) at any other time.

Noise monitoring locations for the purposes of the construction phase of the proposed development shall be agreed in writing with the planning authority prior to commencement of any development on site.

Reason: To protect the amenities of property in the vicinity of the site.

22. Dust deposition during the construction phase shall not exceed 130 mg/m2/day measured at the site boundaries and averaged over 30 days.

Reason: To prevent airborne dust and to protect the amenities of the area.

23. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, details of temporary settlement ponds/silt traps/oil interceptors to control discharges of site surface water run-off during the construction period in advance of the construction of the proposed permanent attenuation tanks. The concentration of suspended solids (SS) of the surface water run-off from the site construction works, for discharge to surface waters, shall not exceed 30 mg/litre.

Reason: To prevent surface water pollution and to protect the amenity value of watercourses.

24. The developer shall monitor noise, dust deposition and suspended solids of surface water run-off associated with the construction phase and shall submit to the planning authority on a monthly basis a summary report of all such monitoring. The developer shall pay a contribution to the planning authority towards the cost of supervision of check monitoring the development for the duration of the initial construction phase. The amount of the contribution shall be agreed between the development and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: To ensure a satisfactory monitoring of the development. It is considered reasonable that the developer shall contribute towards the cost of check monitoring of the development in the interest of prevention of pollution.

25. The developer shall submit to the planning authority a monthly report of all monitoring in relation to the construction of the development.

Reason: In the interest of development control.

26. During the construction phase of the development, oil and fuel storage tanks, chemicals and all other materials that pose a risk to waters if spilled, shall be stored in designated storage areas, which shall be bunded to a volume of 110 per cent of the capacity of the largest tank/container within the bunded area(s). Filling and draw-off points shall be located entirely within the bunded area(s). Drainage from the bunded area(s) shall be diverted for collection and safe disposal. The use of bunded pallets for storage of drums is acceptable.

Reason: In the interest of orderly development and the prevention of groundwater and surface water pollution.

27. During the construction phase, all vehicles, other than private cars and vans, exiting the construction site shall pass through a wheel-wash facility, the details of which shall be submitted to the planning authority for written agreement.

Reason: In the interest of development control.

28. Prior to commencement of development, the developer shall submit to the planning authority for written agreement, detailed plans and proposals for the restoration and reinstatement of the entire site following de-commissioning of the plant. The restoration works shall be completed within two years of the closure of the plant.

Where the planning authority is of the opinion that the plant has ceased to operate for a period in excess of one year and where the developer can offer no reasonable grounds to dispute this opinion, the planning authority shall be empowered to notify the developer to activate the restoration plan as provided for in this condition. In the event of the developer's failure to activate the restoration works, the planning authority shall be empowered to notify the developer of their intention to activate the restoration plan and of their intention, within a period of 60 days, to call upon the financial guarantees referred to under condition 29 hereof.

Reason: To ensure satisfactory restoration of the site in the interest of the amenities of the area and proper planning and control.

29. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit or other security to secure any final restoration measures required to be undertaken under the terms of condition number 28, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory completion of any part of the restoration plan. The form and the amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be determined by An Bord Pleanála.

Reason: To ensure satisfactory completion of the restoration plan in the interest of orderly development.

30. The developer shall pay a sum of money to the planning authority as a contribution towards the expenditure that is proposed to be incurred by the planning authority in respect of road improvement works facilitating the proposed development. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

Payment of this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered reasonable that the developer should contribute towards the expenditure proposed to be incurred by the planning authority in respect of works facilitating the proposed development.

31. The developer shall pay a sum of money to the planning authority as a contribution towards expenditure that was and/or that is proposed to be incurred by the planning authority in respect of the provision of a public water supply facilitating the proposed development. The amount of the contribution and the arrangements for payment shall be agreed between the developer and the planning authority or, in default of agreement, shall be determined by An Bord Pleanála.

In the case of expenditure that is proposed to be incurred, the requirement to pay this contribution is subject to the provisions of section 26(2)(h) of the Local Government (Planning and Development) Act, 1963 generally, and in particular, the specified period for the purposes of paragraph (h) shall be the period of seven years from the date of this order.

Reason: It is considered reasonable that the developer should contribute towards the expenditure that was and/or that is proposed to be incurred by the planning authority in respect of works facilitating the proposed development.

Member of An Bord Pleanála duly authorised to authenticate the seal of the Board.

Dated this day of 2003.

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