

INSPECTORS REPORT

WASTE LICENCE REGISTER NUMBER: 103-1

FACILITY: Knockharley Landfill, Meath County Council

INSPECTORS RECOMMENDATION: The licence to be granted subject to conditions.

(1) Introduction

The application relates to the development of an engineered landfill at a green field site in the townlands of Knockharley, Flemingstown and Tuiterrath Co. Meath and is situated approximately 7km south of Slane on the west side of the N2, National Primary Route and approximately 16km from Navan. It lies within the River Nanny catchment and is underlain by a poor aquifer, which has a moderate to low vulnerability. The landscape of the area is generally flat with some uplands to the north. The existing land use is predominantly tillage with dairy and dry cattle and horticulture. A stud farm is located approximately 800m to the north of the facility.

Most of the dwellings are located to the north and north east along the country road CR384. There are 20 occupied dwellings within 300m of the facility boundary and presently two occupied dwellings within 250m of the footprint of the landfill. The two households will have to be relocated as proposed in Section 8.2 of Vol.2 of EIS. Kentstown national school is located 1 kilometre to the south of the proposed landfill. Road widening works for the N2 to improve the access to the landfill were proposed and are required by *Condition 4.7*.

The facility incorporates an area of 105 ha which includes a buffer zone of 150m within which waste activities may not be undertaken. A location plan showing the outline of the facility to which the application relates and the facility layout including buffer zone is provided in Appendix 1.

Name of Applicant	Meath County Council
Facility Name(s)	Knockharley Landfill
Facility Address	Townlands of Knockharely, Flemingstown and Tuiterrath, Navan, Co. Meath.
Description of Principal Activity	Deposit on, in or under land in a specially engineered landfill.
Quantity of waste (tpa)	76,000 (including 1,000 tonnes per annum for composting and 13,500 C&D waste for recovery only)
Environmental Impact Statement (EIS) Required	Yes

Number of Valid Submissions Received	222
Date of Application	16th July 1999

SITE VISITS:

DATE	PURPOSE	PERSONNEL	OBSERVATIONS
30/7/99	Site notice compliance and inspection	M. Keegan	Site notices erected at existing entrance and at location of new entrance.
16/8/00	Site Inspection	M.Keegan and B. Wall	General walkover of the proposed facility

(2) Facility Development

The associated infrastructure includes leachate collection, storage and control systems, landfill gas collection and flaring systems, a surface water lagoon as well as site accommodation, weighbridge and wheelwash facilities. Infrastructure is controlled under *Condition 4* of the proposed decision. The development of the facility will require the construction of a new access road from the N2. The construction of this road is required prior to construction of the facility (*Condition 4.7.2*). The road will be in a cutting and requires an overpass to be constructed for the existing country road (CR 384). The access road will partition two landowner's holdings however, *Condition 4.7.8* require that alternative access as proposed by the applicant be provided for the landowners with their agreement.

Despite several requests for additional information on the landfill design the applicant did not supply detailed specifications for the development but submitted a general specification of the environmental controls that are proposed to be installed. In the proposed decision the licensee is required to install environmental controls which meet the requirements of the Landfill Directive and BATNEEC and also to supply detailed specifications prior to the commencement of construction under *Condition 4.2*.

Due to the location of the Kentstown National school 1km to the south, traffic will be required to follow a route away from the school proposed by the applicant and required in *Condition 4.7.7*.

The applicant proposes to use part of the site office as a public education area and is required by *Condition 4.9*.

The landfill is to be developed in six phases, each phase consisting of two cells.

The development of these cells will be from north to south to provide the best visual screening during development.

Liner System

There shall be a buffer zone between the footprint of the landfill and the boundary of the facility. No occupied dwelling shall be located within the buffer zone (*Condition 4.16.1*)(Figure 2).

All cells within the landfill area, the surface water lagoon and the leachate storage lagoon shall be lined. The specification is set out in *Conditions 4.16.2 and 4.16.4* in accordance with the requirements of the Landfill Directive 1999/31/EC. The formation levels are controlled by *Condition 4.21.3* to ensure protection of the underlying groundwater by the construction of a hydraulic trap. *Condition 4.16.5* requires a leak detection test of the liner system.

Leachate Management

Condition 4.17.1 requires that leachate be collected by a network of slotted pipes and drain to sumps in each cell. The leachate collection system will be required to operate to a maximum leachate head of 0.3m above the liner as proposed by the applicant.

The leachate will undergo some pre treatment in the form of aeration within enclosed structures on site prior to being tankered off site to Navan Wastewater Treatment Plant. The enclosed structures will minimise the potential for aerosol production and odour problems. *Condition 4.17.7* prohibits the re-circulation of leachate or other contaminated water without the prior agreement of the Agency.

Capping System

Condition 4.19.1 specifies the proposed daily cover and intermediate capping systems. *Condition 4.19.3* details the minimum final capping required for the facility. The above ground infrastructure associated with the landfill gas (and leachate re-circulation system, if permitted) will be accommodated within the capping layer. *Condition 4.19.4* requires filled cells to be permanently capped within twelve months of the cells being filled to the required level.

Restoration and Aftercare

The restoration plan is to restore the facility to a hillock type feature the height of which is controlled by *Condition 8.1*. The applicant applied for a final post settlement contour of a maximum of 75 metres OD. This would result in the top of the landfill being an average of 15m above existing ground level after settlement. Section 7.8 in Vol.2 of the EIS contains photomontages showing the proposed view of the final landform after restoration. The landfill will be visible from the north looking south east and south west, even with the landscaping measures in place. *Condition 8.1* has restricted the highest contour to a maximum of 72 metres OD to mitigate against the visual intrusiveness of the facility for those living within 300m of the boundary of the facility. In addition to this a detailed landscaping programme will be put in place under *Condition 8.7*. In order to provide the maximum amount of screening from the start of the development *Conditions 4.6.2 and 4.6.3* require that the applicant's proposed phases 1, 2 and 3 woodland planting commence within the first planting season after the issue of the licence.

Nuisance Control

Due to the location of twenty occupied dwellings within 300m of the facility strict adherence by the applicant to the controls put in place in the draft proposed decision is essential. A large number of the submissions also relate to nuisance concerns in particular in relation to the proximity of Kentstown national school.

The controls in *Condition 6* include litter fencing, litter picking, the use of falcons and other means to prevent an increase in bird numbers in the area. Vermin will be controlled by means of a control and eradication programme.

Fire Control

Fire control at the facility will be in accordance with the requirements of *Conditions 10.2 and 10.3*. *Condition 10.11* requires a risk assessment of the potential for accidents, emergencies and other incidents and their potential impact on the environment to be undertaken prior to the disposal of waste in the facility. The assessment is required to include recommendations to minimise the number of accidents, emergencies and incidents that might occur and to minimise the impacts of any such events on the environment.

(3) Waste Management

The facility shall only accept the categories of waste and the quantities as outlined below and in *Condition 5.2*. Construction and demolition waste shall not be disposed of at the landfill but can be recovered for use as daily cover and site construction works and restoration (*Condition 5.1.3*). Access to the site for waste disposal or recovery is restricted by *Condition 5.4* which only allows waste to be accepted from local authority waste collection or transport vehicles and vehicles of a similar nature operated by private companies. Private individuals are not allowed to dispose of waste at the facility. Civic amenity facilities for the general public were not included as part of the application, as there is a new Civic Amenity Centre in Navan.

The disposal of 4,500 tonnes of treated sludge per annum is permitted initially at the facility however *Condition 5.14* requires that within six months of the date of commencement of waste activities that the licensee submit a programme for the diversion of sludges from landfill. In addition, *Condition 5.1.4* states that treated sludge shall not be accepted for disposal after two years of the date of waste acceptance.

In addition to the landfill it is proposed to carry out composting of green wastes (including other biodegradable wastes if agreed by the Agency) on a trial basis at the facility and this is limited to 1000 cubic metres at any one time (*Condition 5.22*).

Condition 5 sets out the waste management practices including waste acceptance procedures. The applicant states that it intends to increase waste tonnages annually by 3 % yet they have also committed themselves to recycling targets of 43% in the year 2014 in the Waste Management Strategy. The applicant has stated in its application that the maximum tonnage to be accepted at the facility is 104,383 tonnes for the year 2016. The fee paid for the licence application is for the 40,000 to 100,000 tpa range. The draft proposed decision (*Condition 5.3*) allows a maximum of 76,000 tonnes per year

for the first five year period of operation as set out in the application. The licensee shall be allowed to take 13,500 tpa of inert waste for recovery only.

The limit (76,000 tpa) placed on the waste quantities will encourage the licensee to address waste prevention and minimisation measures within the period of this licence as outlined in the Regional Waste Management Plan adopted by the elected members and in the Government’s Policy document “Changing Our Ways”. The licence shall be reviewed within a four year period, under the requirements of the Waste Licensing Regulations, at which time the limit on the quantities to be accepted may be reconsidered.

The applicant did not specify what working hours they will use therefore similar hours to an existing licensed landfill operated by the applicant have been used. Waste may be accepted at the facility between 8.30 and 17.30 Monday to Friday inclusive and 9.30 to 16.30 on a Saturday (*Condition 5.10*). The facility operating hours have been extended for a half an hour before waste acceptance and an hour after waste acceptance to allow for preparation and covering activities.

WASTE CATEGORY	MAXIMUM TONNES PER ANNUM¹
Household	43,000
Commercial	15,000
Treated Sewage Sludge²	4,500
Inert³	13,500
TOTAL	76,000

Note 1: Unless otherwise agreed with the Agency.

Note 2: Condition 5.1.4 states that treated sludge shall not be accepted for disposal after two years of the date of waste acceptance at the facility.

Note 3: Inert material for recovery to be agreed in advance with the Agency

(4) Emissions to Air

Emissions to air from the facility include landfill gas, combustion products of landfill gas, dust and odours. The general wind direction is from a southwest to west direction.

Landfill gas

Initially, prior to active control, landfill gas will be passively vented to the atmosphere and details will be provided under Specified Engineering Works (*Condition 4.2*). *Condition 4.18.6* requires that any vents shall be fitted with an effective activated carbon filter to reduce any potential odour problems.

The active landfill gas collection system incorporates an enclosed flare unit and in the future the utilisation of landfill gas, both of which will result in emission of landfill gas combustion products to the air. *Schedule F.2* sets emission limit values for the concentration of landfill gas measures in any building or enclosed space on or adjacent to the facility while emissions from the combustion of landfill gas are controlled by ELV’s set in *Schedule F.3*.

Monitoring of landfill gas, the potential off site migration of landfill gas and the emissions from the landfill gas combustion plant are all controlled by *Conditions 9.1 and 9.2* and *Schedule E.1 and E.2*. Landfill gas alarms are to be installed in all buildings on-site as required by *Condition 4.18.5*.

Dust

A background dust deposition survey was carried out at four locations within the facility. Predictive dust modelling was carried out and the results indicated a maximum average monthly deposition rate at one of the houses near the proposed access road of 30mg/m²/day. The main source of dust will be from the roads with a minor contribution from the tipping area. Mitigation measures such as daily cover, speed restrictions, macadam roads, water spraying and a wheelwash will all be put in place prior to waste acceptance (*Condition 6.8*). *Schedule F: Emission Limit Values* sets a ELV of 350mg/m²/day and *Schedule E* requires dust monitoring along the facility boundary and at nearest dust sensitive locations.

Odour

Condition 9.9 requires a monitoring programme to be put in place to monitor and assess any potential odours from the facility. *Condition 6.2* requires the licensee to ensure that odours do not give rise to nuisance at the facility or in the immediate area of the facility. The waste management requirements in *Condition 5* including the application of daily cover (*Conditions 5.11 and 5.12*) will also assist in minimising any potential odour nuisance from the facility.

(5) Emissions to Groundwater

The regional geology indicates that the facility is located in Namurian sandstones, siltstones and shales which is considered to be a poor aquifer that is generally unproductive except for local zones. The groundwater flow direction in the bedrock is considered to be to the south discharging to the Nanny River. There are two public supply wells to the north east of the facility, which are in the same geological unit. There are four public supply wells located to the south, south west and south east of the facility all in the Calp limestone unit. All these wells are more than 1km away from the facility. *Condition 4.21.5* requires, as a precautionary approach and as proposed by the applicant, that all consumers using wells to the west and south west of the facility within 500m be connected to a mains supply.

Elevated levels of iron, lead and arsenic were found during the background sampling programme. *Condition 9.8* requires that an investigation be undertaken, prior to the commencement of waste activities, into the potential sources of the elevated metals content in the groundwater and surface waters in the vicinity of the facility.

(6) Emissions to Surface Water

The upper section of the Kentstown stream will be diverted and this planned diversion shall be undertaken following consultation with the Eastern Regional Fisheries Board and the Agency (*Condition 4.20.3*).

A surface water lagoon will be constructed (*Condition 4.20.4*) to contain all water collected from the facility. The lagoon will have an outlet penstock / valve controlling the discharge to the Kentstown stream. *Condition 9.11* requires a programme for the installation of a telemetry system for the monitoring of the surface water discharge quality and levels. *Schedule F.5* sets surface water discharge limits for suspended solids of 35 mg/l.

Condition 9.6 requires a monitoring programme for the discharge into and from the surface water lagoon. *Schedule E.5* requires monitoring in the Kentstown stream and biological and fisheries assessments of the Nanny catchment.

(7) Emissions to Sewer

There are no direct emissions to sewer from the facility. Leachate is proposed to be stored in a lagoon prior to being tankered off site to Navan Wastewater Treatment Plant as referred to in *Condition 4.17.5*.

(8) Noise Emissions

A survey of the background noise levels at a noise sensitive receptor to the east of the landfill facility and at the nearest sensitive receptor to the proposed access road was undertaken. Similar noise emission levels as those emanating from an active landfill at Baleally Co. Dublin were used to extrapolate the predicted noise levels at these noise sensitive receptors. The predicted levels are below the ELV's set in *Schedule F: Emission Limit Values* of the Proposed Decision for noise emissions at the boundary of the facility. Noise monitoring shall be undertaken at agreed locations off site and at locations along the facility boundary in accordance with the requirements of *Schedule E.4*.

(9) Other Issues

It is noted that the applicant is currently operating a licensed existing landfill facility at Basketstown (Reg. No.10-1) where there have been a number of complaints received and non-compliances issued in relation to cover, litter, odours, birds and landfill gas migration.

Section 7.18 of Volume 2 of the EIS outlines mitigation measures for material assets. The applicant refers to the Government Policy document "Changing Our Ways" and its recommendation that local authorities working closely with local communities should use a proportion of the income generated from waste charges and gate fees to mitigate the impact of such facilities on the community through appropriate environmental

community projects. The applicant in Section 8.2 of Vol. 2 of the EIS proposes to use an unspecified portion of the waste charge and gate fees for environmental improvement projects. *Condition 11.3* of the Proposed Decision requires that 2% of the gate fees charged for waste accepted at the facility or £70,000 whichever is the greater should be used for local environmental/heritage improvement, enhancement and conservation programmes. The charge is related to the scale of the development and the quantity of waste being accepted at the facility.

(10) Waste Management, Air Quality and Water Quality Management Plans

The local authorities in the North East Region have prepared a Draft Waste Management Plan 1999. Meath County Council has adopted the plan with some amendments in July 2000. Not all the local authorities have adopted the plan at this stage. The plan proposes Knockharley as one of the sites for a residual landfill for the medium to long term landfill capacity. The Plan sets regional recycling targets for 2014, which assume that thermal treatment is in place. The target for landfilling of waste is 18% and 43% for recycling by the year 2014.

In addition to the Regional Plan, Meath County Council reviewed their Waste Management Strategy in 1997 and recognised the national policies outlined in “Changing Our Ways” and in particular the waste minimisation and recycling initiatives. Regard has been given to the requirements of the above plans and Strategy.

No relevant air quality or water quality management plans exist.

(11) Submissions

222 valid submissions were received in relation to the facility. A list of the submissions received is given on the attached report from the Waste Licence Application Administration system. I have had regard to the submissions in making my recommendation to the Board.

Appendix 2 contains a list of all submissions received relating to the application. The dates received and the details of the individual, department, group or organisation making the submission are provided. A submission from Kentstown National School included a number of drawings and letters (93) by the school children (junior and senior infants and 1st, 2nd, 3rd, 4th and 5th class) and a detailed submission on behalf of the children, parents, teachers and Board of Management.

[Below I have summarised the main concerns raised in the submissions. The specific details in some submissions are highlighted to give an overview of the concerns raised. Not all submissions are mentioned by name, however, all were equally considered.](#)

ALL SUBMISSIONS BY GENERAL TOPIC HEADING

1. Flies

Concern was expressed about infestations of flies and the perceived nuisance associated with an increase in their numbers particularly during the summer months. It is feared that this would interfere with people's freedom to open the windows in their houses, and to enjoy normal outdoor activities without the nuisance of excessive number of flies. There are also concerns about the disease carrying potential of flies and the increase in risk associated with the increased numbers and the fact that they may have come from the landfill.

Response

Condition 6.9 requires that control and eradication programme and that records be maintained. Conditions 5.11 & 5.12 require that the working face be covered thereby reducing the area available to the vermin and insects.

2. Fires

The risk of the outbreak of fires on the landfill was of concern, particularly with regard the potential for smoke, fumes and ash, which apart from causing nuisance and air pollution may be dangerous or even toxic. It is feared that if household hazardous waste such as paints, varnishes, weed killers etc., or other hazardous wastes disposed of in the landfill were involved in a fire, they would lead to a very toxic cocktail of smoke and fumes. The potential adverse effect of smoke or fumes from fires on the health of sufferers of asthma or other respiratory illnesses, particularly children, is also mentioned. A number of the submitters express concern at the fact that a gas pipeline runs in close proximity to the proposed landfill site and close to homes. They fear that a fire and possibly one occurring spontaneously could lead to an explosion on the gas pipeline.

Response

Condition 5 specifies those wastes that can be accepted or disposed of at the facility. Condition 5.5 requires waste acceptance procedure to be put in place. Hazardous waste is not allowed to be accepted at the facility. **Household waste contains less than 1% hazardous waste component.** Condition 10.2 sets out the contingency arrangements required for the facility and Condition 10.3 requires that an assessment of the fire fighting and fire water retention requirements be undertaken and submitted to the Agency within six months of the date of grant of the licence. Condition 10.11 also requires a risk assessment, which shall pay particular regard to any accidents, emergencies, or other incidents, which might occur on the facility and their potential effect on the environment and the neighbours of the facility. The gas pipeline is located to the south of the facility and have no details as to the exact location but Condition 4.22 does not allow any development within 150m of the gas pipeline.

3. Traffic Nuisance

The issue of increased traffic and the heavy vehicle nature of this traffic in the area associated with the landfill particularly with regard to road safety especially for children attending Kentstown National school and Kentstown Rovers Soccer club and increased exhaust emissions causing air pollution was raised. Other issues perceived as being further nuisances associated with the increase in traffic were noise and the risk of litter and disease from materials falling or spilling off vehicles en-route to the landfill. Some submitters made reference to the general unsuitability of the roads in the area for this type of traffic and made

reference to the perceived failure of the Applicant to properly maintain the existing road network. It is also noted that while the EIS recommends that landfill traffic will be directed away from the R150 in the vicinity of Kentstown School, it does not advise how the traffic will be diverted away from the R150. It does not deal with what alternative routes will be taken when the R153 floods or has icy patches, as it is prone to.

Response

Condition 4.7 requires the road improvements to be put in place prior to the waste acceptance at the facility. The modifications to the N2 at the proposed entrance will have to be completed prior to the construction of the facility. The access road will be for the sole use of construction and waste vehicles and the entrance on the N2 will be the only access point to the facility. The access road will be constructed in a cutting to minimise its impact on the nearby residents. Any lands that will be partitioned will be provided with alternative access subject to the landowners' agreement by Condition 4.7.8. As proposed by the applicant construction and waste traffic are prohibited from using the R150 (passing the Kentstown School) (Condition 4.7.7) and appropriate road signage will be erected as required by Condition 4.7.9.

4. Odours

Concern was expressed that noxious odours would arise from the activities at the site, particularly from decaying/rotten matter within the waste, from landfill gas, which may be generated and from fires, which might occur. The fear is that these odours would be at their worse during the summer months and that windows in homes and at the school would have to be kept closed. A number of the submissions disagreed with the contention in the EIS that odours would not have a significant adverse health effect and stated that the stress caused by regular exposure to obnoxious odours could have implications for overall health and wellbeing of the receptor. One submitter contends that the applicant and the consultant have not given adequate consideration to odour sensitive locations such as his home with respect to the migration of odours and the proximity of odour sensitive receptors.

Response

Conditions 5.11 & 5.12 require that the working face be covered on a daily basis and any cover material that has been removed or eroded be replaced by the end of the working day. Condition 6.2 requires that the activities at the facility shall be carried on such that odours do not result in significant impairment of or interference with amenities or the environment beyond the boundary. Condition 4.18 control landfill gas initially by means of passive venting. The vents will be fitted with filters to reduce the odours. The landfill gas will be controlled by active gas collection and flaring which will similarly reduce the potential of landfill gas odours when the flaring measures are put in place. Condition 5.22 controls the composting operations at the facility. Condition 9.9 requires a programme for the monitoring and assessment of odours from the facility to be agreed prior to waste acceptance.

5. Other Environmental Nuisances

Other issues and concerns about environmental nuisances raised include concerns about rats, scavenging birds, risk to aircraft of bird strikes, dust, litter and scavengers. Particular fears in relation to rats include the potential increase in numbers due to the location of a landfill in the area and the risk to health (especially Weil's disease) posed by the disease carrying nature of rodents. This fear is strongest in relation to the risk of disease posed to

children using Kentstown National School and the soccer club. In relation to birds, the fear is that the landfill will attract large numbers of scavenging/carrion birds that may drop materials picked up at the landfill in the surrounding environment. It is feared that these materials, in addition to being a litter nuisance, may also pose a risk of disease. Some of the submissions express doubt over the efficacy of bird control measures which may be employed. It is also stated that large numbers of birds would cause problems with their droppings possibly fouling clothes on clotheslines. Three submissions also express concern over the risk to aircraft of bird strikes due to the large numbers of birds that may congregate about the landfill site.

Litter, the lack of control measures for litter and litter falling from vehicles using the facility were also items of concern. A number of submitters feared dust from the landfill operation itself or indirectly from vehicles going in and out of the site. One submission expressed concern over scavenging at the site. It states that the BIRA report submitted as part of the application (Appendix 11 of Vol.3 of the EIS) excludes consideration of the health hazards posed by the unauthorised entry by children to the facility. It also states that the report limits itself to consideration of human scavenging and does not consider scavenging by birds and animals.

Response

Vermin controls will be put in place under Condition 6.9 thus controlling the rat numbers and therefore the potential for Weil's disease in the vicinity of the landfill. The covering of the working area and areas previously filled with waste is controlled by Conditions 5.11 & 5.12, which will also reduce the potential attraction of the landfill for vermin. There will be a 150 metres buffer zone between the waste activities and the boundary of the facility thus allowing control of these nuisances within the boundary of the facility. Bird control will be by means of falcons with a combination of bird scaring techniques (Condition 6.10.1). The bird controls shall be put in place prior to any waste being accepted at the facility. A record shall be kept of the bird control actions and the number of birds observed. Within six months of the commencement of waste activities an assessment of the effectiveness of these bird control measures shall be submitted to the Agency in accordance with the requirements of Condition 6.10.2.

The application of daily cover (Condition 5.12) and the application of the control measures required by Condition 6.5 including the erection of litter netting will control litter. All loose litter accumulated within the facility and its environs shall be removed and disposed on a daily basis (Condition 6.5.5). Condition 6.7 requires that all vehicles delivering waste to and removing waste from the facility shall be appropriately covered.

Dust control measures will be applied to the facility. These measures include the use of a mobile water sprayer (Condition 6.8), the installation of a wheelwash (Condition 4.12) and also a speed restriction on the access road of 30mph (Condition 4.7.6). Security and stockproof fencing shall be erected and maintained to prevent unauthorised access as required by Condition 4.4.1. Any defects shall be repaired within 3 working days (Condition 4.4.2). Scavenging is prohibited by Condition 5.9.

6. Water Quality - Groundwater and Surface Water

Concerns about the risk of groundwater contamination and the potential pollution of private well water supplies in areas where there is no public or group water supply scheme available

were expressed. A fear is that despite lining of the cells in the site, that liners will fail at some stage and that this may lead to contamination of groundwater or surface water by leachate from the landfill operation. One submission expressed concern at the risk of bacterial contamination of drinking water supplies particularly by dangerous strains of Escherichia Coli.

The Eastern Regional Fisheries Board (23/06/00) expressed concern at the levels of Total Ammonium, Cadmium and Mercury found in local watercourses and asked that the EPA ensure that the reasons for these high levels are further explored while stating that they found the additional information dealing with the high heavy metal content of the surface water quality totally unsatisfactory. The Board also asked that the EPA ensure that the strictest possible measures are out in place to prevent any pollution from the landfill to the local watercourses. The Fisheries Board also stated that they would like the EPA to put in place conditions to ensure that: if there are spillage's or incidents in the landfill affecting local watercourses or groundwaters, that the Eastern Regional Fisheries Board, should be contacted as soon as possible; any reports or monitoring results relating to waters should be made accessible to the public or any other body in the fullest possible way and the Local Authority should be required to carry out regular water quality monitoring both chemical and biological as often as possible.

Response

Condition 4.21 requires groundwater management for the facility. As a precautionary approach those dwellings with private wells on the CR 383 and those to the west and south west of the facility within 500m shall be connected to the existing mains supply subject to the well owners agreement (Condition 4.21.5). Condition 9.3 requires monitoring of private water supplies.

In addition to this, the design of the landfill will be such that there will be a hydraulic trap in place (Condition 4.21.3). This means that if there was damage to the liner system that instead of having leachate leaking out the groundwater would tend to seep inwards due to the hydraulic head thus providing additional protection to the groundwater.

The background monitoring has indicated that there are elevated levels of metals in the groundwater and surface water. Condition 9.8 requires that the licensee investigate the potential sources of the high metal in the surface and groundwater within three months of the date of grant of the licence. The licensee must also report to the Agency on their findings and actions to be taken in relation to those findings.

There will be no direct discharge to groundwater (Condition 7.8). Any de-watered groundwater and surface water runoff from the facility shall be via the surface water lagoon, which is controlled by Condition 4.20.2. Groundwater and surface water will be monitored in accordance with Schedule E.5 and the results will be made available to the public under Condition 2.1.2 (v). Under Condition 3.3 the Eastern Regional Fisheries Board must be notified in the event of any incident relating to discharges to surface water or groundwater. An annual biological and fisheries assessment of the Nanny catchment is required by Schedule E.5 the methods to be approved by the Eastern Regional Fisheries Board.

7. Leachate Collection, Transport & Treatment

The principal concern regarding leachate is the risk posed to groundwater and particularly drinking water supplies. Concern was also expressed over the level of awareness among residents of Slane and Navan that leachate would be transported through their towns en-

route to Navan Waste Water Treatment Plant. The North Eastern Health Board (22/06/00) notes from the EIS that Meath County Council have not given an undertaking that the Navan Waste Water Treatment Plant can accommodate the required treatment of the leachate. They indicate that the submission should have provided details of the on-site treatment of leachate prior to its transportation to Navan WWTP. It also states that the applicant should submit full compositional details of leachate from a comparable existing landfill. Another submission states that the lack of details of the proposed on-site leachate treatment in the waste licence application is a major omission. In a submission on behalf of Kentstown National School, the school secretary, refers to studies on the cocktail effect in the leachate which may arise when various hazardous wastes enter the landfill undetected. Another submission asserts that it is widely accepted that prevention of contaminants and toxic materials from entering a municipal landfill is virtually impossible, no matter how "state of the art" or highly engineered it is and refers to a study from Texas A. and M. University which shows that the leachate from municipal landfill is as dangerous as that from hazardous waste landfills. This submission also asserts that accidental spillage of leachate during transportation is not satisfactorily addressed in the EIS.

Response

The response above to water quality concerns covers the concern in relation to the risk posed by leachate to groundwater and that landfill liners may leak.

Condition 4.17.5 requires that leachate be tankered off site to Navan waste water treatment plant for treatment. Condition 4.2 and Schedule D requires that the details of the pre treatment process be submitted to the Agency for its agreement prior to the commencement of waste activities. The level of pre treatment will be based on the capacity at the waste water treatment plant in Navan. The local authority encompasses the sanitary authority and therefore pre approval is not required however, Condition 4.17.6 requires operational procedures for the handling of leachate which include handling procedures for the handling of leachate during removal and subsequent transport/discharge to Navan WWTP and monitoring infrastructural details. In addition to this Condition 4.17.4 requires that all structures for leachate storage and treatment be enclosed. An example of the composition of leachate to be produced at the facility is given in Table 5.4.4 in Volume 2 of the EIS. The type of wastes allowed to be accepted at the facility is controlled by Condition 5.2.

8. Landfill Gas

Concerns regarding landfill gas arising from the activity and its potential for migration through the ground were raised. One submission states that landfill gas may have a damaging effect on any vegetation it comes into contact with. Concern was also expressed, in one submission, that potentially dangerous substances to health are generally present in Landfill Gas (LFG) in relatively reduced concentrations. It states that, even if the individual concentrations of compounds were lower than the respective Threshold Limit Values (TLV's), adverse consequences to health cannot be excluded a priori owing to the lack of toxicology knowledge on the co-presence of chemical hazard agents.

There was also concern over the odorous nature of LFG. It was stated that LFG could pose a risk of explosion or could act as an asphyxiant if it built up in confined areas. It is also stated that the release of LFG is contributing to climate change as it contains the "greenhouse gases", CO₂ and methane (methane having 11 times stronger greenhouse

properties than CO₂). There is concern that emissions from the gas flare to be installed for the combustion of LFG may include dioxins.

Response

Landfill gas is controlled by Condition 4.18. Initially landfill gas will be passively vented and the vents will be fitted with an effective activated carbon filter. Within six months of the date on which waste is first disposed of at the facility a landfill gas flare shall be installed (Condition 4.18.2) thus allowing landfill gas to be flared at the earliest opportunity. In the long term the utilisation of landfill gas is the preferred option and provisions are made in Condition 4.18.7 such that an annual assessment on the feasibility of utilising the landfill gas shall be made and submitted to the Agency. The fact that the landfill will be lined and that there will be an active landfill gas system will limit the potential of landfill gas migration. ELV's are set in Schedule F: Emission Limit for landfill gas concentrations in any building or enclosed space on or adjacent to the facility (F.2) and for the landfill combustion plant and flare stacks (F.3).

9. Environmental Pollution (other than nuisance and water pollution)

Concern about dust, which may arise from the activity was expressed. They refer to the possible health impacts particularly on children from increased levels of dust in the environment and the impact on their general freedom to enjoy the environment due to the nuisance associated with dust. Some of the submissions state that the dust problem will be at its worse during dry periods or when there are strong winds. One submission also asks if during the construction stage and later during operation (delivery, dumping, compacting of waste on-site), can it be guaranteed that there will be no increase in dust in their immediate environment. One submission refers to the association between dust and asthma and states that mitigation measures can only minimise the quantity of dust being produced and its impact. It also notes the fact that the report appears to limit the generation of dust to traffic both on the approach roads and on the site itself and the nature of the dust being produced by the contents of the landfill (eg. dust from builder's rubble) is not investigated.

Another main concern is the noise from the waste trucks using the roads in the area and in particular the noise and vibration which will be caused in the vicinity of Kentstown school. It is feared that this would cause a distraction to the pupils and disrupt normal school life. One submission also identifies extra traffic, construction works and the possible use of gas bird scarers as sources of noise which may destroy the quiet rural environment. The submission by Kentstown school refers to the possible psychological effects of increased background noise or of distressing noises such as gas bangers or "bird distress calls" which may be used as mitigation methods at the landfill site. The submission also claims that the application does not deal adequately with the noise generated by other activities applied for. It also claims that the application has not offered satisfactory evidence that mitigation measures will eliminate the hazards.

Response

Dust control measures will be applied to the facility. These measures include the use of a mobile water sprayer (Condition 6.8), the installation of a wheelwash (Condition 4.12) and also a speed restriction on the access road of 30 mph (Condition 4.7.6). The ELV's for dust are set at a number of points within the facility and at the nearest dust sensitive locations along the

access road. The dust monitoring required by Schedule E.3 will commence one month prior to the commencement of construction activities.

The access to the facility will be provided by a dedicated access road from the N2. Condition 4.7.7 does not allow access to the facility via the R150, which passes outside the Kenstown School, and therefore there will not be an increase in noise levels due to traffic at the school. The bird control measures will be primarily by the use of falcons and the use of gas operated bird scaring devices is prohibited by Condition 6.10.1. Condition 7.4 requires that there shall be no clearly audible tonal component or impulsive component in the noise emission from the facility at any noise sensitive location. ELV's are set in Schedule F.1. Noise monitoring will be carried out in accordance with Schedule E.4. The noise control measures are for the facility and not isolated to any particular activity within the facility.

10. Waste Acceptance /Monitoring

I submission was received stating that there are no reliable procedures to control, monitor and audit dumping of irregular materials.

Response

Condition 5.5 controls waste acceptance and handling at the facility. Condition 5.6 requires that all wastes are checked at the working face and that any wastes deemed to be in contravention of the licence shall be removed to the quarantine area. A record of all inspections shall be maintained. Condition 2.5 requires that personnel performing specific tasks shall be qualified and be aware of the requirements of the licence.

11. Air Pollution

Concerns about air pollution were expressed. Fears that certain viruses would be present in the air in the vicinity of the National School due to activities at the landfill were expressed. A general concern was that air pollution caused by the landfill would have an adverse effect on asthmatics and those prone to other respiratory infections particularly children who inhale proportionately more air than adults. It is also generally felt that there will be a basic deterioration in air quality due to odours, fumes and dust from the landfill and it is feared that the odours, fumes and landfill gas may incorporate dangerous compounds arising from the expected failure to exclude all disposal of hazardous waste to the landfill.

Response

These concerns have been responded to in Sections 4,5,8 and 9 above.

12. Health Concerns

A large proportion of the submissions mentioned or highlighted concerns about the health impacts of emissions from the facility and as a result increased emissions due to the increased level of heavy vehicle traffic in the area associated with the landfill activity. Items highlighted in submissions included concerns about viruses and disease spread by flies and rats or materials deposited by birds, concerns about the health implications of smoke or fumes from fires, concern about potential toxic emissions. A number of the submissions stated concerns regarding the possible 'cocktail' effect of dangerous/toxic substances emitted from the landfill on the health of the local population. Many of the submissions indicate that children are at greatest risk of adverse health effects as they are still developing and inhale

proportionately more air than adults. The risk of Weils's Disease due to the expected increase in the number of rats in the area is of particular concern to parents of children attending Kentstown National School and Kentstown Soccer Club. A submission from Kentstown National School states that education of children to avoid rats, particularly dead or dying rats which have made their way to the school environs may instill a fear or phobia into the children and cause undue stress. Many of the submissions also mentioned concern over the possible health effects arising from the contamination of private drinking water supplies.

One submission pointed out that no effort has been made to establish the current health status of children in Kentstown National School and there are no proposals to monitor the health of the children into the future in the event of Knockharley landfill going ahead. A number of the submissions express concern that fumes, odours, dust or other airborne emissions from the site, and possibly toxic emissions will have a significant detrimental effect on sufferers of asthma and other respiratory disorders. It is also feared that the presence of the landfill and its associated emissions could cause an increase in the level of asthma in children, in the current and future generations. There is also concern that the proposed gas flare is going to be installed at the school-end of the site. Pollutants present in flares include methane, nitrogen dioxide, carbon monoxide, sulphur dioxide and carbon dioxide and it is also feared that dioxins may be emitted.

Some submitters referred to the adverse health effect that the stress (physical, emotional, social and psychological) of living beside such an operation will have on people and particularly the children in the area and this stress will be exacerbated by increased levels of noise and odour. One submission referred to a report by Dr. Angela Crow (University of Westminster) which concluded that nasty odours can weaken the immune system. A separate report by David Warburton, from Reading University, explains that the production of an antibody in the saliva – called secretory Immunoglobulin A (Sig A) protects against respiratory infection. Unpleasant smells depress the production of Sig A levels and depress the immune system.

Concern was also expressed at the possible emission of Volatile Organic Carbons (VOC's) due to the disposal of hazardous waste. Some VOC's are considered to be mutagenic, carcinogenic or teratogenic having an adverse health effect on those exposed. One submission refers to a study by the New York State Department of Health, which reports a fourfold increased chance of bladder cancer or leukaemia where landfill gas escapes into the surrounding air. This gas will typically contain chemicals such as dry cleaning fluid (Tetrachloroethylene or PERC), Trichloroethylene (TCE), Toluene, Benzene, Vinyl Chloride and Xylenes among other VOC's. A 1995 study of families living near a large municipal landfill in Montreal, Quebec reported an elevated incidence of cancers of the stomach, liver, prostate and lung among men, and stomach and cervix/uterus among women. There was also a 20% increased likelihood of low birth weight among those most exposed to gases from the landfill. The submission also makes reference to adverse health effects (especially congenital anomalies) reported for studies conducted in the vicinity of Hazardous Waste landfills and the EURHAZCON study.

A submission by the Boyne Valley and Newgrange Environmental Protection League refers to a paper published in Rachel's Environment and Health Weekly in 1998, indicating that

municipal waste landfill leachates contain toxic chemicals in sufficient concentration to be potentially as harmful as leachate from industrial waste landfill.

Response

All the responses above 1-11 address the concerns raised in relation to the control of emissions from the facility. The various conditions in the proposed decision will require the applicant to ensure that the facility is constructed in accordance with BATNEEC standards and the recommendations of the landfill directive. The landfill will be a specially engineered landfill with a hydraulic trap to prevent leachate discharge. It will have environmental controls for leachate, landfill gas, surface water and groundwater as well as bird, vermin, dust and noise controls to minimise any emission from the facility. Stringent emission limits and trigger values are set in Condition 7 and Schedule F for Noise, Landfill gas, dust and surface water discharge. These will ensure that the emissions as a result of this activity will not cause significant environmental pollution and consequently will limit the impact on human health.

The monitoring specified in Schedule E of the proposed decision will ensure that the emissions from the facility are closely monitored.

In addition to the above, in a paper titled “the Health Effects of Controlled Landfill Sites – An Overview” by L. Heasman (Proceedings Sardinia 99, Seventh International Waste Management and Landfill Symposium), it was concluded that the extensive evidence available does not support any causal link between health effects studied and residence near landfill sites.

13. Location of facility and proximity to Kentstown National School

Some of the submissions raised the view that the landfill was located too close to Kentstown National School and to dwellings in the area primarily for reasons associated with the risk to health of their children, particularly risks arising from emissions and nuisances already described above. Others outlined the feeling that the development of the landfill would greatly affect the quality of life for people in the area and particularly for children who’s enjoyment of their youth and school life would suffer.

Response

This will be a modern engineered landfill, which will apply best practice to ensure the protection of environmental resources within and in the vicinity of the facility. The design and operation of the proposed landfill and associated waste activities is such that the potential for impact on the environment is minimised (Condition 4). The facility operated in accordance with the conditions of the licence will not significantly impact on the residents, the amenities and resources within and in the vicinity of the landfill. The conditions attached to the proposed decision require that the environmental controls comply with the Landfill Directive on the landfilling of waste and BATNEEC (best available technology not entailing excessive cost). Emission Limits are set in Schedule F for the following emissions noise, landfill gas concentrations, landfill gas flares and utilisation plants, dust deposition and surface water discharge. These limits are based on internationally recognised best practice. The proposed decision requires monitoring of all emissions (Condition 9) and reporting to the Agency.

14. Negative Impact on Agriculture

Concerns relating to the possible negative impact on agricultural activities in the area if the landfill goes ahead. There is a fear that any leakage or emission from the landfill will cause serious damage to the quality or health of livestock or crops, particularly those farmed adjacent to the proposed site. Crops may be damaged by the large numbers of birds, which

are expected to congregate about the landfill, which could lead to a significant economic impact. Debris from the site and from vehicles carrying waste to the site may be windblown or carried by birds to adjacent agricultural land. This may make it difficult comply with the strict hygiene conditions that are expected from dairy farms. There is a fear that unauthorised disposal of dead animals/carcasses or infectious material could pose a risk to the animal health. There is also concern that groundwater contamination of water supplies used for livestock drinking water could have a negative impact on the health of the livestock and the quality of milk produced by dairy herds. The use of prime agricultural land for the development of such a facility is also matter of annoyance to local people who have been brought up in an area where farming of good quality land in a pristine environment has been the principal economic activity for generations. Mr. Kelly of Kelly's Strawberries states that it is the nature of his business that his farm is subjected to field audits by supermarkets and he is concerned, among other things that the proximity of a landfill site will have a detrimental effect on the quality of his product and the viability of his business.

Response

The landfill operated in accordance with the conditions of the proposed decision will reduce significantly the potential for contamination of farm produce and livestock. There is a 250m buffer zone around the footprint of the landfill and a 150m distance between any other waste activity and the boundary. The provision of the buffer zone is such that the licensee shall be able to control nuisance within the boundary of the facility. *Condition 6.10* requires bird control measures to be put in place these include the use of falcons. *Condition 6.7* requires that all vehicles delivering waste to and removing waste from the facility are appropriately covered. The disposal of animal carcasses is forbidden under the proposed decision. *Condition 5.1.1* prohibits the acceptance of animal by-products or remains at the facility. *Condition 9.3* requires the monitoring of private wells.

15. Flora and Fauna

Concerns were voiced in submissions from the pupils of Kentstown National School and from others in relation to the effect the landfill would have on newly planted trees and other plants as well as on fauna in the area in particular on small birds, owls, foxes, badgers and rabbits.

Response

See responses for items 1,2,5,9,12 and 14 above.

16. Tourism and Proximity to Local Historical Sites

Concerns were raised relating to the proximity of the proposed landfill to local historical sites and its effect on local tourism. One states that the landfill will be constructed on the site of a well associated with St. Patrick were expressed. A number of the submissions state that the proposed site is along one of the main tourist routes to Newgrange burial mound, one of the most important historical sites in Ireland, and is at the centre of a large number of historical sites (including Flemington wood, the Hill of Slane and the Hill of Skyrne amongst many others) located about the Boyne valley area. One submission states that the mound in the "Dump Field" was an ancient burial ground and asks if this site has been properly excavated and analysed by the OPW. Mr. Reinhard Wilkes in his submission, under the heading "cultural heritage", states that the investigation of the archaeological and historical importance of the land under consideration is in his opinion incomplete and insufficient. The

submission by the Boyne Valley and Newgrange Environmental Protection League states the Old Dublin Road (pre George IV) provides access to the site but it is not mentioned in the EIS.

Response

Condition 9.10 of the proposed decision requires the presence of an archaeologist to ensure that archaeological remains are monitored and recorded during the excavation of the subsoil for site development /preparation. The scope of any archaeological investigation and /or mitigation measures shall be agreed in advance with Duchas. Duchas was one of the bodies notified under Article 18 of the Waste Management (Licensing) Regulations, 1997.

17. Devaluation of Property and Quality of Life

Concerns were raised in relation to the location of a landfill beside a dwelling, property or business would significantly devalue it or perhaps make it totally impossible to sell on. One submission stated that Meath Co. Council should have refused them planning permission two years ago when they were planning their home if a landfill was planned for the area. They don't want to live beside a landfill but feel that they wouldn't get a buyer for their home now to facilitate a move to a different area.

Response

See response to item 12, 13 and 14 above.

18. Future of School

Concern was expressed over the future of Kentstown National School and fear that if the landfill goes ahead, several of the teachers will move to different schools and that a number of parents will withdraw their children from the school, perhaps to an extent which will make it not viable to maintain a school at the current location. The Board of Management expect a higher insurance bill if the landfill goes ahead. It is feared that school life will be greatly effected due to emissions, nuisances and increased traffic levels already dealt with above.

Response

See response to item 13 above.

19. Waste Types/Waste Acceptance

A number of submissions expressed concern at the types of waste which are likely to be deposited in the site and the efficacy of the procedures to be put in place to prevent the unauthorised disposal of hazardous wastes of commercial, industrial or domestic origin in the landfill. It is feared that if these types of wastes were deposited to the landfill, they could give rise to toxic emissions, which could potentially have major impact on people in the area as already discussed under the various topic headings above.

Response

Condition 5.2 limits the types of wastes the are acceptable at the facility. Condition 5.1.1 states that **no** hazardous waste (excluding batteries, fluorescent tubes, waste oil, paint and pesticides collected for recovery or disposal off-site), liquid waste, untreated sludges, asbestos waste, ash from thermal treatment of waste, animal by-products or remains shall be accepted at the facility. Condition 5.5 requires that prior to waste being accepted at the facility that waste

acceptance procedures agreed by the Agency are in place. Each load will be visually inspected in accordance with the Agency's draft manual on waste acceptance (*Condition 5.6*).

20. Absence of Strategy for Waste Reduction

Concerns were raised in relation to the absence of details of the applicant's intention to achieve recycling targets as set out in the Government's Policy document "Changing Our Ways" and those outlined in the landfill directive.

Response

Conditions 5.14, 5.20 and 5.22 all include waste reduction, diversion or recovery requirements for different waste streams. Condition 5.1.3 states that construction and demolition waste can only be accepted for recovery. Condition 5.1.4 states that treated sludge shall not be accepted for disposal at the facility after two years of the date of waste acceptance.

21. Visual/Aesthetic Impact and Restoration

Some submissions relate to the visual impact of the "landraise" on the generally flat landscape. They claim that the landfill will be visible from the Hill of Tara and from the Hill of Skreen, Dean Hill and possible Painstown Hill as well as lying on a direct line between Hills of Slane and Tara. Some other submissions question the final profile and contours and subsequent restoration. There are also concerns in relation to the proximity of the development to the existing ESB lines.

Response

The site will be visible from the Hill of Tara to the south west at a distance of approximately 9km but is not considered to be significant as outlined in Appendix 2: Section 1.5 of Vol.3 of the EIS. Condition 8.1 reduces the finished profile by three metres to mitigate against the visual intrusiveness of the development. Condition 8 will control the restoration plan. In addition Condition 4.6 requires perimeter planting to be carried out within the first planting season following issue of the licence and the existing hedgerows shall be maintained and enhanced where possible. The final landform will consist of two hillocks, which are intended to blend into the generally flat landscape. The proposed development will not be located beneath the ESB lines and should not result in any change to their path.

22. Meath Co. Council's Performance at Basketstown

Concern has been raised in relation to the applicant's previous performance in running Basketstown landfill (Waste Licence Reg. No. 10-1)

Response

The proposed development will be a specially engineered landfill with associated infrastructure constructed according to best practices unlike the existing facility at Basketstown. The management of the proposed facility is controlled under Condition 2.2 and 2.4. All personnel performing specifically assigned tasks shall be aware of the conditions of the licence as specified under Condition 2.5.

23. Possibility of 3rd Party Operating Landfill

a) A number of submissions refer to rumours that a third party, and not Meath Co. Council may eventually be responsible for the operating of the landfill site. Concern was expressed over how the County Council proposes to control the operation of the landfill.

- b) *Celtic Waste have in a submission dated the 30th August 2000 stated that they have acquired options over the lands identified by Meath County Council in their application. They claim that Meath County Council (the applicant) has no legal interest in the land and that the High Court has ruled that to be valid an application for development permission, must be made either by or with the approval of a person who is able to assert sufficient legal estate or interest to enable him to carry out the proposed development.*

Response

- a) Meath County Council is the applicant for the waste licence and they have to comply with the conditions of the proposed decision. If a waste licence is granted to Meath County Council and subsequently they request a transfer of the licence to another party then the rights and duties of the licence can only be transferred when the Agency is satisfied that the requirements of Section 47 of the Waste Management Act 1996 have been met.
- b) Legal advice which the Agency has received in relation to this states that it can proceed with a decision .

22. Proximity to pNHA

Concern has been raised in relation to the proximity of the proposed landfill and Balrath Woods a proposed Natural Heritage Area.

Response

In a submission from Duchas they state that the pNha Balrath Woods is 500m away from the landfill boundary. They also state that they have no objection to the granting of a licence as the development is unlikely to have a major impact on the pNha. The conditions relating to nuisance, and surface water and groundwater management will prevent any impact on the pNha. There is a 250m buffer zone around the footprint of the landfill and the boundary. The provision of the buffer zone is such that the licensee shall be able to control nuisance within the boundary of the facility.

23. Design details

Concern has been raised in relation to lack of detail design and issues in relation to the following:

- 1. Formation levels*
- 2. Waste tonnages in line with Government Policy*
- 3. Passive venting of landfill gas not in line with greenhouse gases*
- 4. No specification for the landfill gas flare*
- 5. Article 5 of landfill directive – treatment of waste*
- 6. Surface water lagoon*
- 7. Specification for internal roads*
- 8. Traffic improvement controls*
- 9. Proposed size of each cell*
- 10. Recycling reuse of C&D waste in line with “Changing our ways”*
- 11. Environmental monitoring outdated*

Response

Condition 4.16.3 specifies that the formation levels shall ensure maximum protection for the groundwater. Condition 4.21.3 requires a hydraulic trap to be maintained such that the

piezometric level of the groundwater outside the waste is higher than the leachate head within the waste. Thus providing protection for the groundwater.

Condition 5.3 restricts the waste quantities to 62,500 tpa for disposal to encourage the licensee to address waste minimisation and prevention measures outlined in “Changing Our Ways”.

Passive venting of landfill gas is only permissible until there is sufficient gas generated to operate the flare. Condition 4.18.2 requires that the enclosed landfill gas flare be installed on the facility within 6 months of the date on which waste is first disposed at the facility. The flare shall be designed to achieve the ELV’s in Schedule F.3.

The requirements of the Landfill Directive do not apply until it comes into force in Irish legislation.

Condition 4.20 specifies that the lagoon shall be lined and be designed to a capacity that it is capable of fulfilling the requirements of the licence. ELV’s are set for suspended solids in Schedule F.5.

Internal roads shall be provided and maintained to ensure the safe movement of vehicles in accordance with Condition 4.8.

The traffic control improvements are outlined in the EIS. The Article 16 question related to the provision of layout drawings, which will be provided to the Agency under Schedule D.

The phasing of the development is set out in Condition 5.13.

Condition 5.1.3 restricts the acceptance of C&D waste for disposal however, it can be accepted for recovery for use as daily cover, site construction works and landfill restoration. Condition 5.20 requires a report examining measures to meet the targets in “Changing Our Ways”.

Schedule E requires monitoring of noise, dust, surface water and groundwater prior to waste being accepted at the facility and therefore providing up to date background monitoring results prior to the operation of the facility.

24. Compensation for local community

Some submissions state that there are no concrete provisions to compensate the local community for the siting of the landfill in their community.

Response

Condition 11.3 of the Proposed Decision recommends that 2% of the gate fees charged for the acceptance of waste at the facility or £70,000 per annum, whichever is the greater, be lodged in a fund to be maintained by the licensee for use in local environmental/heritage improvement, enhancement and conservation initiatives. A committee comprising representatives of the licensee, local community representatives and elected representatives shall oversee the selection of project.

25. Access to Local Authority public files and waste licence application procedures

A couple of submissions related to access to the public file held by the local authority and also queries about the waste licence procedure in particular timeframes for receipt of submissions.

Response

These submissions were dealt with at the time of receipt.

Signed _____

Dated:

Name Margaret Keegan

APPENDIX 1

LOCATION PLAN & SITE LAYOUT

*Figure 1 Location Map
&
Figure 2 Site Layout Plan*

APPENDIX 2
SUBMISSION DETAILS