



**OFFICE OF
LICENSING &
GUIDANCE**

INSPECTORS REPORT ON A LICENCE APPLICATION

To:	DIRECTORS
From:	DONAL HOWLEY
Date:	23/06/05
RE:	APPLICATION FOR A WASTE LICENCE FROM PADRAIG THORNTON WASTE DISPOSAL LTD. (PTWDL), LICENCE REGISTER 179-1

Application Details

Type of facility:	Integrated Waste Management Facility including non-hazardous residual waste landfill and Recycling Centre
Class(es) of Activity (P = principal activity):	3 rd Schedule: 1, 4, 5 (P), 6, 7, 11, 12 & 13 4 th Schedule: 1, 2, 3, 4, 8, 9, 10, 11 & 13
Quantity of waste managed per annum:	220,000 tonnes at landfill & 47,740 tonnes at Recycling Centre
Classes of Waste:	Dry recyclable non-hazardous household, commercial & industrial wastes, construction and demolition wastes, non-hazardous residual waste, End-of-life vehicles, wood waste, tyres, vegetable/cooking oil.
Location of facility:	Calf Field, Ballynadrummy, Co. Kildare & Boolykeagh, Co. Meath
Licence application received:	30/09/02
Third Party submissions:	12 valid submissions
EIS Required:	Yes.
Article 14 Notices sent:	06/10/03 & 26/02/04
Article 16 Notices sent:	26/02/04
Article 14/16 Acknowledgement:	29/04/05
Site Inspection:	29/10/02, 26/05/04 & 07/07/04

1. Facility

The facility is proposed as an Integrated Waste Management Facility including non-hazardous residual waste landfill and Recycling Centre. The principal activity proposed is that of landfilling with the landfill proposed to cover approximately 25.4 hectares of the total facility area (approximately 82.5 hectares). The landfill is proposed to be constructed over thirteen years, to accept waste at a rate of 220,000 tonnes/annum (t/a) and have a capacity of in the region of 2.855 million tonnes. The components of the Recycling Centre comprise of;

- (i) End-of-Life Vehicle (ELV) processing facility (25,000 vehicles/annum – 30,000 t/a)
- (ii) Dry Recyclables sorting facility (5,000 t/a)
- (iii) Biodiesel Recovery Facility (5,200 t/a)
- (iv) Wood (6,500 t/a) and Tyre (1,040 t/a) treatment facility.

The site is located in a rural setting in the townlands of Calf Field, Ballynakill and Boolykeagh and straddles the county boundary between Kildare and Meath. Approximately two-thirds of the facility is located in Kildare with the remaining northern section in Meath. With the exception of approximately 3.1 hectares of the landfill (Phase I and the majority of Phase II) all waste activities are to be carried out in the Kildare part of the proposed facility. The remainder of the Meath part of the facility is to be left as a buffer area with some landscaping to be carried out therein. The applicant had initially indicated that a compost facility might be located in the northern section of the site i.e. in Meath section, but subsequently discounted this as an option.

The Royal Canal, which runs north of the facility boundary, is to be in the region of 450m from the landfill footprint. The Great Mid-Western Railway Line runs alongside the Royal Canal to the north of the facility. The facility lies within the catchment area of the River Boyne, a designated salmonid river and candidate Special Area of Conservation, with two minor streams running northwest through the facility towards the river. The River Boyne runs from south to north over 400m northwest of the nearest part of the facility boundary and in turn approximately 1.0km from the proposed landfill footprint.

The facility is located approximately 1.4km north of Broadford (Co. Kildare), 1.6km southwest of Longwood village (Co. Meath) and 8km west of Enfield (Co. Meath). The nearest residence is located approximately 260m from the proposed landfill footprint. The wood chipper proposed is to be located 250m from the nearest residence with the tyre shredder approximately 280m. A mushroom facility is located close to the south west corner of the site. Twenty-two houses were identified within 500m of the proposed landfill footprint with sixty-nine houses and two nurseries within 1.0km.

The applicant has indicated that up to forty-five people will be employed at the proposed facility. The site opening hours proposed by the applicant are 0600 – 1800 Monday to Friday and 0800 – 1600 on Saturdays with an additional hour on either side of these times to allow for preparation/closure activities. The hours of waste acceptance applied for have been limited due to the potential for noise nuisance in the period 0600 – 0800 (condition 1.8).

PTWDL was refused planning permission by Meath County Council for the Meath section of the development. Kildare County Council has proposed to grant planning permission in relation to the section located in Kildare. Both decisions have been appealed to An Bórd Pleanála (ABP). An Oral Hearing to consider both appeals was held by ABP in April 2005 and a decision has yet to be made.

Facilities operated by PTWDL include a licensed waste facility at Killeen Road, Ballyfermot, Dublin (Reg. No. 44-2) and a waste facility at Dunboyne, Meath which currently operates under a waste permit and is subject to a waste licence application (Reg. No. 206-1).

2. Operational Description

The facility as proposed comprises the following five elements;

- (i) Recycling Building No. 1 – End-of-Life Vehicles Recycling Building and administration offices, canteen, locker and wash room facilities as well as small laboratory facility.

This enclosed building is to provide for the storage of up to 300 vehicles prior to treatment, a pre-treatment bay area, a de-pollution area, a dismantling bay area, a crushing area and a storage area for the final products.

- (ii) Recycling Building No. 2 – Biodiesel Recycling Facility.

The Biodiesel Recycling Facility is to be located in the eastern section of the enclosed Recycling Building No. 2. A bunded tank farm is to be located south of the building for the storage of oils and raw materials, including Methanol in two 68m³ steel storage vessels. It is proposed to accept waste cooking and vegetable oils by road tanker, which is to be pumped to contained tanks (nitrogen inerted bulk storage vessels). These oils are to be mixed with methanol at ambient temperature and pressure in the presence of an alkali (catalyst). The transesterification process, which occurs results in;

- crude glycerine which is separated, treated, and stored for use off-site (e.g. cosmetic industry). Excess methanol, which is heated off is recondensed for reuse in the process.
- the remaining methyl esters which are to be stored for use as biofuel onsite in site machinery and the applicant's trucks. Trace amounts of catalyst are removed for reuse in the process.

All oil processing is to be carried out in a contained area in sealed self contained units such that no liquids can escape and there will be no significant atmospheric emissions.

- (iii) Recycling Building No. 2 – Dry Recyclable Sorting Area.

The Dry Recyclable Sorting Area is to be located in the western section of Recycling Building No. 2 which is enclosed and separated from the Biodiesel Recycling Facility by a concrete wall. Dry recyclables including paper, cardboard, ferrous and non-ferrous metals from household collections in Meath and Kildare will be loaded onto a conveyor belt for sorting by handpicking and use of magnets and trommels. Sorted material will be sent off-site for recycling with any soiled/unrecoverable material to be landfilled on site.

- (iv) Wood & Tyre Treatment Area – including wood shredding/chipping area and tyre shredding building.

The wood treatment area was proposed to be a bunded concrete yard comprising a storage area for raw wood and timber, a wood shredding area and a storage area for the shredded wood. Metals such as nails and staples are to be removed by magnet. It is considered that this activity should be carried out in an enclosed building to mitigate against potential dust and noise nuisance (Condition 3.20.1). All run-off from this area is to be collected and diverted to the leachate lagoon unless agreed otherwise by the Agency.

The tyre treatment area proposed is to be in an enclosed building and comprising a tyre storage area, a tyre shredding area and an area for the storage of shredded tyres. Shredded tyres are proposed to be initially landfilled, subject to other reuse and/or recycling options which become available.

- (v) Non-hazardous residual waste landfill

The proposed landfill of 25.4 hectares comprises six phases with the first two phases to be developed initially. Each phase is to be divided into cells of approximately 0.5 hectares. The landfill is proposed to be developed from the northeast and developed away from the Royal Canal in a southwestern direction to mitigate against potential

visual impacts to the Royal Canal. The capacity of the proposed landfill is in the region of 2.855 million tonnes of waste. It is proposed to operate the landfill for thirteen years at a rate of filling of 220,000 t/a [comprising in the region of 81,500 t/a Baled Municipal Waste, 112,000 t/a Commercial/Industrial Waste and 26,500 t/a Construction and Demolition Waste].

A buffer area of minimum 60m between the landfill footprint and the facility boundary is proposed. A leachate lagoon (1,000m³ capacity) with dedicated tanker loading area is to be located to the southwest of the landfill. A gas flare compound is to be located near the southeast corner of the landfill. Waste Inspection and Waste Quarantine Areas are to be located adjacent to and southwest of the landfill. A Machinery Maintenance Building and Yard Area is to be located near to the leachate lagoon. A 6,000 litre bunded diesel tank is to be in this yard.

3. Use of Resources

- Fuel – the applicant estimates that diesel oil consumption will be in the region of 400,000 litres/annum.
- Electricity – the applicant estimates electricity usage at in the region of 1,200,000 kilowatt hours/annum.
- Water – potable water supplies are to be supplied from a dedicated onsite well(s). Water will be pumped via a buried water main to the site buildings and fire water tanks.

4. Emissions

4.1 Air

Point source emissions from the facility will comprise of emissions from landfill gas flares/utilisation plant. Uncapped areas of the landfill are to passively vent gas to atmosphere prior to capping. Landfill gas produced by the landfill is to be collected by gas extraction wells from capped areas and either flared off or used for energy production. Monitoring requirements for landfill gas flares and utilisation plant are specified under Condition 6.1 and Schedule C.1 with emission limit values set by Condition 5.1 and Schedule B.1 Following landfill closure, passive landfill venting will be implemented when gas production rates fall below levels which can be flared.

Odours – The licensee is required to ensure that the facility does not cause an odour nuisance at or in the immediate area of the facility. Various conditions of the RD relate to odour control measures such as the requirements for the working face, covering of waste and operational controls including the provision of final capping of completed cells. The requirements for collection and flaring of landfill gas and to enclose the leachate lagoon(s) also serve to reduce potential odour nuisance. Condition 6.17.1 implements the applicant's proposed measures and infrastructure for the control of odours from the date of commencement of waste acceptance for disposal at the landfill. Condition 6.17.5 requires an ongoing review of odour control measures to be carried out on a monthly basis.

Dust – potential sources of dust/particulate emissions include internal roads, landfill area, wood recovery area, tyre shredding area and dry recyclables area. Both the tyre shredding and dry recyclable processing activities are to be carried out within buildings. Internal roads and other areas to be used by vehicles are to be sprayed with water from a mobile bowser as and when required to minimise airborne dust nuisance. Landfill operations are to be such that the working area is kept to a minimum and covered over, completed uncapped areas/stockpiles are to be grassed over/kept moist as appropriate and capped areas to be grassed. A dust suppression system is to be used at the wood chipping area to minimise potential dust emissions. Condition 5.1 and Schedule B.1 sets dust deposition limits at various locations along the facility boundary.

4.2 Emissions to Sewer

There are to be no emissions to sewer. Foul waste water generated at the administration areas from staff facilities will be directed to a stand alone proprietary treatment system with the

treated water being directed to the leachate lagoon. Three wheelwashes are proposed for the facility with all discharges to be directed to the leachate lagoon. Silt desludged from these systems will be directed to the landfill. In addition the discharge from the wood treatment area is to be directed to the leachate lagoon. Leachate is to be collected and tankered offsite to a wastewater treatment plant agreed in advance with the Agency (Condition 5.3).

4.3 Emissions to Surface Waters / Storm Water Runoff

Two minor streams run through the facility and ultimately meet up with the River Boyne in the region of 1km downstream from the facility boundary. One of the streams running through the facility in the proposed development areas, along with associated drains, is to be diverted from its present course around the northern edge of the landfill footprint to rejoin the stream at the location the stream currently exits the site. A surface water retention pond is to be located on the western side of the landfill and connect to the stream near this exit location. This work is to be carried out as part of the initial development works and is to be subject to consultation with and compliance with directions of the Eastern Regional Fisheries Board. Surface water generated on site is to be directed to the surface water retention pond to allow for settlement and subsequent controlled discharge to the stream. The retention pond will have an oil interceptor and a hydrobrake at the outlet. Condition 6.8 specifies a continuous monitoring programme for the inlet to the surface water retention pond including criteria/trigger levels to determine when the hydrobrake is to be closed off, if necessary. The capacity of the pond and control of the hydrobrake are to be such that the discharge rates from the pond are comparable to pre-development flow conditions. In addition silt traps and oil interceptors are to be installed downgradient of all hardstanding areas prior to discharging to the surface water retention pond. Surface water runoff from the capped landfill will also drain via surface water swales to the surface water retention pond. Condition 5.1 and Schedule B.2 specifies an emission limit values for the outflow from the surface water retention pond of 35mg/l for suspended solids. Monitoring requirements for emissions from the surface water retention pond are specified by Condition 5.1 (and Schedule B.2) as well as for upstream and downstream monitoring (Condition C.4).

Drainage from the floor areas of the waste buildings are to drain to underground storage tanks/sumps from where they are to be emptied to tanker for transport off-site to an appropriate facility. A large firewater tank is proposed near to and to the south of the recycling buildings to provide water for fire fighting. Another firewater tank is to be located at the wood and tyre treatment area. Foam fighting equipment is to be provided in both recycling buildings. The recycling buildings are to be designed to act as containment structures to provide for firewater containment.

4.4 Emissions to ground/groundwater:

Underlying the landfill area in general is the following subsoil sequence –
clay till with bands of silts and gravels (thickness 6.7m to 9.8m)
dark grey limestone bedrock (Lucan Formation).

Rockhead is variable ranging from approx 6m to 10m. Trial pits excavated at the proposed landfill footprint indicate water bearing zones in the subsoils. A well survey shows up to 69 private water supply wells lie within a 1km radius of the landfill (their Fig 2.6.2). Nine new monitoring wells were installed in rock around the proposed landfill by the applicant. The water within the bedrock aquifer is semi-confined.

Data supplied by Komex (attached to Submission 13 – EMS Jack O’Sullivan) supplies a revised aquifer classification for the ‘Calf Field’ facility directly from the Geological Survey of Ireland (10/9/2003). The rock type underlying the site is assigned a resource protection rating by the GSI of ‘Lm’ (Locally important aquifer moderately productive, and the soils have a High Vulnerability. The arising rating ‘Lm/H’ is assigned an aquifer protection response of R3¹, indicating that the development of a landfill is not generally acceptable, unless it can be shown that:

- the groundwater in the aquifer is confined; or
- there will be no significant impact on the groundwater.

One implication arising from the proposed landfill is:

Aquifer Vulnerability & Landfill Liner Requirements

For the landfill, the EIS proposes that subsoils over the entire site area will largely be removed to a depth of 4m (the formation level) to make way for the composite lining and provide soils for the 1m thick basal clay liner. However this action will cause a groundwater vulnerability rating of Extreme (E) as the existing natural protection of subsoils will be reduced to approx <3m across the site. The EIS (which includes computer modelling, using a *LandSim* package) considered the soil removal and concluded that the site is still suitable for development as an engineered landfill (with a leakage rate of 405m³/year) with no extra design requirements.

Such soil removal will cause the site to fall into the aquifer protection response of R3² before landfill lining works even starts¹. This is not acceptable, nor is it BAT as per Sect 40(4)(c) of the Acts, to reduce the thicknesses of natural subsoils and cause an unnecessary risk to the environment and receiving groundwater resource.

The RD recommends that the Drawing entitled 'Landfill Sections' shall be amended so that subsoil thickness above rockhead shall be a minimum of +4m above rockhead. Furthermore the design of the landfill lining system shall incorporate this design change and QA/QC and final Agency agreement of the works as per Condition 3.5 (specified Engineering Works) shall have regard to this. Condition 3.6.1(f) sets the +4m requirement. This and the semi-confined nature of the aquifer will meet the R3¹ requirements.

4.5 Noise:

The site is located in a rural setting. In addition to increase in traffic using the road network key noise sources on site from the proposed facility include, mobile plant/vehicles, compactors, wood chipper, tyre shredder, baler, trommel, gas flare/utilisation plant.

Information submitted indicates that in the absence of any noise mitigation measures typical daytime noise levels from the facility at the nearest noise sensitive location would exceed 55dB(A) [L_{Aeq}(30min)] during operations in Phases 5 & 6 of the landfill. Various measures have been proposed by the applicant to mitigate against the potential to cause noise nuisance and to reduce noise levels at the noise sensitive locations. These include for provision of berms and including planting at key locations between noise sources and noise sensitive locations. In order to minimise noise from the landfilling operations during the final phases further temporary screening bunds are to be constructed. Mitigation of tonal noise sources proposed by the applicant include using "Back Alarms"/ "Smart Alarms" for mobile plant such as compactors rather than typical reverse alarms. The RD requires that the wood chipping area be housed in an enclosed building. The tyre shredder will be housed internally with all buildings to be steel framed buildings comprising 2m high concrete bases and walls and roofs of insulated Kingspan Panels. Noise emission limits are set at 55/45 dB(A) [L_{Aeq}(30 minutes)] for daytime/night-time respectively. The hours of waste acceptance applied for have been limited due to the potential for noise nuisance in the period 0600 – 0800 (Condition 1.8).

4.6 Nuisance:

The landfill footprint is located such that no residence is located within 250m of it. A landscaping programme has been prepared which along with the preservation of many of the existing hedgerows will help mitigate against any potential visual intrusion onto the local landscape and against nuisances due to dust and litter. Condition 5.5 of the RD requires the licensee to ensure that vermin, birds, flies, mud, dust, litter and odours do not give rise to nuisance at the facility or in the immediate area of the facility. Litter controls are specified under Condition 6.15 of the RD. Dust and odour control measures are discussed in Section 4.1 of this report.

¹ The aquifer protection response of R3² determines that the development of a landfill is not generally acceptable unless there is 3 metres of low permeability subsoil present.

5. Restoration/Landscaping

The landscape of the site and its surrounds is a gently undulating lowland of rural and agricultural land-use apart from the “engineered” line of the Royal Canal. The topography slopes gradually from south to north. The level at the top of the canal is 7-8m above ground level.

The potential of the facility to adversely impact on the visual aspect of the Royal Canal was identified and mitigation measures were proposed as part of the application and are incorporated in the RD. These measures include, *inter alia*;

- location of the landfill in excess of 400m from the canal
- prior to commencement of landfilling berms of 4-5m are to be provided along the northern side of the landfill area, as immediate screening
- proposed planting between the landfill and the canal including the berms are to cover in excess of seven hectares and comprise plants of primarily native woodland species
- the phasing of the landfilling is to progress from northeast to southwest in a manner of moving away from the canal with the outer bund of the of the landfill area to provide screening of the active landfill area. As additional phases move toward higher ground screening is to be provided by way of the proposed planting and the capping and restoration of previous phases including grassing of restored cells/areas and woodland planting along lower slopes.

The completed landfill is to be primarily grassed, with some lower slopes having woodland planting and some hedgerow planting at other parts to reflect surrounding landscape. The main buildings and waste receiving area are to be located at the southern end of the site within an area to be screened by proposed berms and screen planting.

A compost facility, which had been initially proposed to be located to the northeast of the landfill and closer to the Royal Canal was subsequently discounted by the applicant. The activities to be carried out between the landfill and the Royal Canal are the provision of 4-5m berms just north of the landfill footprint along with in the region of seven hectares of woodland planting for screening purposes. All existing hedgerows in the northern portion of the site are to be retained as well as the stream and associated drains.

6. Cultural Heritage, Habitats & Protected Species

There are no proposed NHA/SPA/SAC or other areas of scientific interest on site. Designated areas within 5km of the proposed development are the proposed Natural Heritage Areas associated with the Royal Canal and the Ballynabarney Fen as well as the River Boyne a candidate Special Area of Conservation (SAC) and designated salmonid water.

It is considered that the proposed development will not have any significant impact on the flora/adjacent habitats of the Royal Canal.

The Ballynabarney Fen is located in the region of 2km from the proposed facility. Having regard to Section 4.3 & 4.4 of this report and that the fen is located on the opposite side of the River Boyne it is considered that the proposed facility will not have any significant impact on the fen or the River Boyne.

The principal habitats recorded at the site are improved grassland, arable land, wet grassland with scrub, hedgerows, streams and drains. No EU Annex I priority habitat types were recorded at this site. A number of protected species such as the badger, bat and frog were recorded during ecological surveys of the site. The RD specifies actions to be taken at the facility to provide for the protection of these species (Condition 3.10) and for annual surveys to be carried out (Condition 6.23).

7. Waste Management Policy and Plans / Water Quality Management Plans

The Waste Management Plan (WMP) for County Kildare (2000), Waste Management Plan for the North East Region and the Three Rivers Project were considered. The various waste

recovery/reuse operations proposed by the applicant are in line with National Waste Management Policy such as “*Recycling for Ireland*” (1994), *Changing Our Ways*” (1998) and “*Delivering Change*” (2002).

The Waste Management Plan (WMP) for County Kildare (2000) reflects the government waste management policy and refers to the need for provision of a new engineered landfill capable of accepting residual waste generated in the county over a twenty year period. This plan also provides for consideration of sending waste to waste facilities outside of Kildare County and acknowledges the role of private interests in the various waste management activities within the county. The government’s “*National Overview of Waste Management Plans*” published in association with “*Waste Management – Taking Stock and Moving Forward*” (2004) notes that steps need to be taken to in relation to providing or securing the provision by others of an engineered landfill to meet the needs over the next twenty years and notes that private sector landfill proposals are of crucial importance.

The Waste Management Plan for the North East Region (including County Meath) also reflects government waste management policy. The plan acknowledges the role of the private sector in waste collection and recycling and advocates further involvement with the private sector with regard to the provision of new waste collection, recovery and disposal operations as appropriate. The government’s “*National Overview of Waste Management Plans*” (2004) notes that the North East Region appears to be well served in terms of landfill capacity.

The Regional Planning Guideline for the Greater Dublin Area (GDA) [2004-2016], which includes Meath and Kildare, advocates that waste strategies should be coordinated across the region to allow flexibility in the management of waste services. The guidelines refer to a need to review regional Waste Management Plans as a matter of urgency and recommends; the promotion of development of new integrated waste management facilities in the GDA in the short term, interregional transfer of waste to give appropriate economies of scale to new waste management facilities, provide for growth in capacity to mitigate escalating costs of waste disposal and development of biological treatment facilities for organic waste, further recycling and waste to energy plants to serve the need for the GDA.

8. Environmental Impact Statement

I have examined and assessed the EIS and am satisfied that it complies with the EIA and Licensing Regulations in so far as environmental pollution from the activity is concerned.

9. Compliance with Directives/Regulations

The facility as conditioned by the RD complies with the requirements of the Landfill Directive. The systems specified/conditioned by the RD for lining, leachate collection and capping comply with the BAT principle.

The End-of-Life Vehicles Directive (2000/53/EC) includes aims for the collecting and treating of ELVs in an environmentally sound manner and for recovery targets of 85% by 2006 and 95% by 2015. The ELV recycling operations proposed at this facility are in keeping with these aims. The shredding of tyres prior to landfilling is in keeping with the short-term requirements of the Landfill Directive ((1999/31/EC) although alternative options will be required from 16/07/06 which is acknowledged by the applicant.

10. Fit & Proper Person Assessment

The applicant has worked in the waste business for over twenty years and currently handles in the order of 300,000 tonnes of waste per annum. The proposed management structure includes for a site manager and assistant/environmental manager who will be professionally qualified engineers or technicians and responsible for the day-to-day operation of the site and the environmental monitoring programme. The applicant will be required to submit details of site management personnel to the Agency prior to commencement of waste activities.

The company's accounts for the year ending 2002 indicate that the company is capable of meeting the requirements of a waste licence. A Recommended Decision was issued by the agency to the applicant for a waste transfer facility at Dunboyne, Co. Meath (Reg. No. 206-1) in March 2005 with objections to this decision having been subsequently received.

In April 2001 the applicant was convicted of offences under the Waste Management Act, 1996 regarding the applicant's licensed waste facility at Killeen Road, Ballyfermot, Dublin (Waste Licence Reg. No. 44-1 (now 44-2)). These offences related to failing to restrict waste activities to the area of land permitted by the licence, non-submittal of reports and exceedances of emission limit values to foul sewer. The applicant paid the fine in full.

11. Recommended Decision

Key issues regarding this facility include the hydrogeological setting of the area, stream diversion, River Boyne, presence of protected species such as badgers, bats and frogs on the site, the potential for visual impact particularly with regard to the Royal Canal Corridor as well as emissions/potential emissions from the facility such as landfill gas, leachate, contaminated water, noise, and dust.

Surface water and groundwater controls are discussed in Sections 4.3 & 4.4 of this report and include requirements set out by Conditions 3.9 & 6.8 and Conditions 3.6, 3.7, 6.13 & 10.3 respectively. Condition of the RD including 3.10 set out protection measures to be taken with regard to badgers, bats and frogs. As mitigation against the potential for visual impact the initial phase of the development is to include the screening measures proposed by the applicant such as the provision of berms at various locations to the north and south of the proposed waste facilities and including landscaping/planting measures (Conditions 3.4 & 10.2). The phasing of the landfilling is such that the landfill activity will progressively move further away from the Royal Canal, the key sensitive visual receptor identified, and such that waste will not be visible from the canal at any stage. Landfill gas management and monitoring requirements are set out in conditions 3.8 and 6.15 and include the requirement for vertical landfill gas collection wells at a maximum of 35m intervals throughout the landfill in line with documentation submitted as part of the application. Odour control measures as discussed in Section 4.1 of this report are primarily set out under Condition 6.17 of the RD. Limits with regard to noise and dust levels are specified under Conditions 4.5 and 5.1 and Schedule B of the RD.

I consider that the carrying on of the waste activities in accordance with the conditions of the RD will not cause environmental pollution.

12. Submissions

There were 12 valid submissions made in relation to this application. A full schedule of those who made submissions is appended.

13.1 Submissions from/on behalf of local community

The majority of submissions were made by members of the local community or on behalf of the local community including, Broadford-Longwood Environmental Concern and Mr. Jack O'Sullivan, Environmental Management Services. There are a number of common themes in relation to these objections. These will be considered as follows.

- (i) Groundwater. *Issues raised include, inter alia*
 - *Inadequate aquifer classification, located on a locally important aquifer, higher water output than indicated by applicant. Aquifer reclassified by GSI to Lm/H (generally moderately productive high vulnerability) in Meath, with it classified as Lm/M in southern portion of Kildare and Lm/H in northern. Unsuitable soil conditions.*
 - *Requirement of nearby nurseries for large volumes of chemical free water*
 - *Implications of and measures regarding prior dewatering of site for landfill construction*

- *Predicted leachate leakage will have adverse effect on groundwater, would ultimately leave mark on local communities*
- *All houses in area use private wells, no mains supply*
- *Insufficient monitoring*
- *EIS implies that contamination of aquifer would result in contamination of Johnstown bridge, which is to supply new reservoir in Carbury Hill, Co. Kildare.*
- *Provision of alternative water supply through use of tankers unsatisfactory, reference made to such a situation with the applicant due to a landfill in Trim*
- *Leakages/spills from chemical storage/transfer areas, site machinery, HGVs transporting old leaky cars, oil, chemicals etc.*

The applicant contends that with the proposed mitigation measures the proposed landfill will pose no risk to the local wells and that during construction dewatering will be restricted to overburden deposits. The applicant refers to the groundwater flow at the proposed facility being to the north whereas Johnstown Bridge is located to the east approximately 8km away.

Comment:

See Section 4.4 of this report.

- (ii) Surface Water/ River Boyne. *Issues raised include, inter alia*
- *Within River Boyne Catchment*
 - *Two streams run through site and ultimately to River Boyne, a candidate SAC*
 - *Risk of contamination of surface waters (and groundwater) and ultimately River Boyne*
 - *Risk of silt pollution.*
 - *Proposed development lies in a flood plain*
 - *Water of large area flows through site. Not enough consideration given to these volumes*
 - *River Boyne important for domestic supply and as successful salmon fishery.*

Comment:

See Sections 4.3, 4.4 & 6 of this report.

- (iii) Royal Canal. *Issues raised include, inter alia*
- *Proposed landfill site at the edge of the Royal Canal. Proposed site would be directly adjacent to the banks of the Royal Canal*
 - *Royal Canal is a proposed NHA comprising central channel and banks on either side with various habitats and species. Threat of contaminating the canal habitat.*
 - *Royal Canal a number one tourist amenity area use for walking, horse riding, pleasure boating, coarse fishing. “Policy paper on the Future of Ireland’s Inland Waterways” recognises the visual sensitivity of inland waterway corridors and should refuse as would adversely affect the views from and amenity value of the canal.*
 - *Need to consider impact of landfill and ensure no leachate leakage causing damage to the site.*
 - *Concern about construction risks to the integrity of the canal. Reported by experts that the proximity of the proposed landfill may soften canal banks and further weaken them. Reference made to three breaches of the banks of the canal occurring in the past fifteen years and need to consider potential impact.*
 - *Proposed berms to screen off landfill site will redirect water within the close vicinity of the railway line and the Royal Canal. Coupled with water from Longwood area flowing under Royal Canal to River Boyne means a risk of undermining Royal Canal & silt to River Boyne.*

The applicant submits that the Royal Canal runs approximately 50m from the facility boundary and that a 400m buffer is to exist between the facility developments and the Royal Canal (proposed NHA). The applicant also refers to the Royal Canal being 8m

above ground level on an embankment, which is hydraulically isolated from both surface water and groundwater. The applicant submits that the adverse impact on the canal will be a very minor and temporary visual impact which will be limited to short term views of clay berms at a distance of at least 300m. The applicant also submits that waste will not be visible from the canal.

Comment:

See Section 6 of this report. The land between the proposed berms to the north of the landfill and the Royal Canal drains to the northern stream running across the site. These berms will not have any significant effect on the drainage pattern of this area, which is to remain undeveloped, or on the integrity of the canal. The Office of Public Works is charged with the maintenance of the canal including measures to mitigate against any canal bank failure or results thereof.

- (iv) *Ballynabarney Fen. Concern is raised with regard to the proximity of this fen, a proposed NHA located in deep artificially created valley between embankments of Royal canal and railway line, 3km northwest of Longwood and consideration of the impact of the landfill and to ensure no leachate causes damage to the site.*

The applicant contends that the River Boyne is the main discharge point for both groundwater and surface water from the site and that as the fen is situated on the opposite side of the of the River Boyne any potential leachate spill would have no impact of the fen.

Comment:

Refer to Section 4.3 & 4.4 of this report regarding groundwater and surface water. The fen is located approximately 2km northwest of the proposed facility and is separated from the site by the River Boyne. It is considered that the facility will have no impact on this fen.

- (v) *Ballyna Bog
This bog, a candidate SAC, is only 1.5km away.*

The applicant contends that the bog (a proposed NHA) is located too far from the proposed facility to be impacted by the development.

Comment:

The Ballyna Bog is located upstream of the facility with regard to both surface water and groundwater. It is considered that the facility will have no impact on this bog.

- (vi) *Odours. Issues raised include, inter alia*
- *Concern raised about outdoor exposure to odours*
 - *Staff at nearby nursery will not want to work near a landfill*
 - *Application admission that landfill does emit odours (application) means that area will have to expect foul odours for many years, especially those living down-wind such as the rapidly increasing village of Longwood.*

The applicant refers to the report of Odour Monitoring Ireland (August 2003), included as additional information to the application, and the conclusions that there will be no significant odour impact on the amenity of the Royal Canal or on the local community.

Comment:

The RD requires the licensee to ensure that odours do not cause a nuisance at or in the immediate area of the facility. See Section 4.1 of this report.

- (vii) *Noise. Issues raised include, inter alia*
- *Noise monitoring carried out is queried*
 - *Impact of different noise sources at the same time*

The applicant contends that the level of activity monitored at Balleally landfill in 2003 was a lot higher than can be expected at the proposed landfill.

Comment:

Refer to Section 4.5 of this report. In considering potential for noise impacts from the facility noise attenuation measures have been proposed by the applicant. In addition to these considerations the RD does not permit waste acceptance at the facility during the period of 0600 to 0800 due to the potential for noise nuisance. Various conditions of the RD specify measures for noise control e.g. Conditions 3.20 (regarding housing wood chipper in enclosed building) & 6.10 (work practices). The RD also specified noise limit values for the facility at noise sensitive locations of 55/45 dB(A) [daytime/night-time] in line with the various BAT Guidance notes for the Waste Sector.

- (viii) Dust. *Issues raised include, inter alia*
- *High dust levels reported queried*
 - *Concerns about dust from facility impacting on nearby nurseries*

Comment:

See Section 4.1 of this report.

- (ix) Vermin. *Concern is raised with regard to outdoor exposure to vermin as a result of the facility as well as to the vermin control measures proposed.*

Comment:

The RD requires the licensee to ensure that vermin do not cause a nuisance at or in the immediate area of the facility. Conditions 6.21, 6.22 & 11.14 of the RD require a programme be implemented and maintained to this effect and that written records of the programme be maintained.

- (x) Fauna – Including Badgers, Otters, Bats. *Issues raised include, inter alia*
- *Noted that badgers and otters have been observed on the site*
 - *Also has been sighting of pine martin and a litter of stouts in nearby nursery*
 - *Original flora and fauna survey should be carried out in June-July (not January-February). The site was already interfered with prior to the survey being carried out.*
 - *Salmon, otter, freshwater crayfish and freshwater mussels are all known to be present within 30m to 1km of the proposed site boundary. Ireland required to provide more protection of species such as salmon and otter as well as range of habitats.*
 - *Proposals for dealing with wildlife inadequate. Proposal to relocate badger setts naïve.*
 - *At nearby nursery have numerous newts, frogs, swallows, which clean up many insects. Concern that these will disappear and be replaced by rats and seagulls. Seagulls known to do a lot of damage to nurseries*

Comment:

Noted. Further surveys were carried out as part of the application. Conditions 6.20 & 6.21 specify bird and vermin/fly control measures to be implemented at the facility. See Sections 4.3, 4.4 & 6 of this report

- (xi) Health. *Issues raised include, inter alia*
- *With reference to “The Lancet” (February 2002) it is contended that there is proven evidence that living in close proximity of a landfill site will create physical health problems and that there is a big increase in birth defects in people living near a landfill site. Also reference to EUROHAZCON study published in “The Lancet” (August 1998) findings including; living within 3km of a landfill site was associated with a significantly raised risk of congenital anomalies, and there was a fairly consistent decrease in risk with distance away from the site and that there is a raised risk on congenital anomaly in babies whose mothers live close to landfill sites that handle hazardous chemical wastes, and the study noted that municipal waste landfills were equally hazardous.*

- *Reference is also made to a study undertaken by the Small Area Health Research unit in Trinity College Dublin and that it found increased risk of abnormal births or congenital anomalies among families living close to landfill sites in the Eastern Regional Health Board Area.*
- *Reference is also made to a British study analysing statistics of births between 1982 and 1997, published in the British Medical Journal and reported in the Irish Times on 17/08/01 as having revealed significantly increased risks of birth defects among people living within 2km of landfill sites and that it found no differences between domestic refuse dumps and hazardous waste dumps.*

The applicant includes a copy of a letter from Dr. Alan Kelly, Trinity College Dublin dated 20/10/02 in relation to the Trinity College Dublin study, which refers to the “draft” and “preliminary” nature of the study and that had been informed that the study remains unpublished. The applicant also refers to the Health Research Board’s study published in February 2003 entitled “*Health and Environmental Effects of Landfilling and Incineration of Waste – A Literature Review*” highlighting the risks associated with old landfill sites and refers to the following comment in the Executive Summary - Epidemiological studies of the health effects of landfilling and incineration; “*As there is a paucity of literature relating to modern landfill and incineration sites, nearly all of the studies identified in this report relate to older technologies. It can be assumed that as emission controls improve, risks of adverse effects diminish.*” The applicant further submits that the residual landfill proposed will be state of the art with management systems for the control of all emissions to air, soil, and water and that the provision of adequate void space in modern sites will allow for the closure of older sites with a net reduction in health risks. The applicant also submits that the *EUROHAZCON study* relates to hazardous waste landfill sites and is not relevant to the proposed non-hazardous residual waste landfill and further submits a press release from the Chartered Institution of Wastes Management (CIWM) in relation to this study being contended to be inconclusive. The applicant also submitted a copy of the third study referred to above as being published in the British Medical Journal along with a further article published in the same volume of the British Medical Journal to support the contention that the study’s findings were inconclusive and related to landfills predating modern landfills constructed and operational in accordance with the Landfill Directive of 1999. The applicant further submits that even if the findings of the study were conclusive, which they were not by the authors’ own admission and comments from their peers, the use of modern landfills with a high level of environmental control clearly poses less risk than the use of older sites.

Comment:

Noted. The conditions of the RD regarding the development and operation of the facility are such that in accordance with the principles of BAT any risk to the environment and human health are mitigated.

In a recently published major study by the UK Government² it was concluded that:

“... we found no consistent evidence that people living close to landfill sites accepting MSW suffered worse health than people living further away from such sites. In particular, we found that the weight of evidence is against any increased incidence of cancers in people living near to landfill sites.”

- (xii) *Fit & Proper Person. A number of submissions express concern at the suitability of the applicant to operate such a facility as that proposed. Details of the applicant’s previous history is given including, inter alia*
 - *The applicant is convicted several times and conditions at the Foxtown Waste Site in County Meath are still not solved (synopsis of legal history included). It is also*

² Review of Environmental and Health Effects of Waste Management: Municipal Solid Waste and Similar Wastes. Department for Environment, Food and Rural Affairs, London. 2004.

contended that fines awarded against the applicant regarding the Foxtown site were not paid to Meath County Council.

- *Alleging poor record in operating landfills, both legal (Foxstown, Trim) and illegal (Barrockstown, Maynooth) - resulting in wells being contaminated, property devaluation and residents' lives being made a misery.*
- *Details regarding High Court Order in relation to Barrockstown site.*
- *Reference made to applicants conviction for breaches of conditions of applicant's Waste Licence Reg. No. 44-1*
- *Matter of public record that applicant incapable of adhering to planning conditions when operating landfill sites and has shown disregard for the environment and residents.*
- *The applicants offering of €6,500 (per annum over 13 year operation of landfill) to each household on the R160 is considered derisory and a cynical gesture.*

The applicant acknowledges that the company was convicted of the offence relating to groundwater pollution from Foxtown landfill. The applicant contends that this was operated during the 1980's when very little technology was used in landfilling and that it was similar to the operation of by Meath and Kildare County Councils of Basketstown and Silliot Hill landfill respectively. The applicant submits that the decision regarding the Barrockstown site was strictly on planning grounds and that the "mound" in question was subsequently removed to a permitted site for land restoration. The applicant states that it is the third largest waste management company in Ireland, employing in the order of 150 people and that the Councils of Meath, Kildare, Dublin City, Fingal and Wicklow have all entrusted the company to handle household waste in their functional areas on their behalf. The applicant also states that the company has not been refused a permit, licence or planning permission based on its fitness to own or operate a waste management facility or business.

Comment:

See Section 10 of this report.

- (xiii) *Property Value. A number of submissions contend that the proposed development would result in property devaluation.*
- *Issue is taken with the Auctioneer's Report (Carey Auctioneers, Enfield), submitted as part of the application, addressing only landfill activities and not longterm effects of recycling facilities.*
 - *Reference is made to a ruling of ABP regarding proposed landfill in Killucan, Co. Meath "proposed development would likely to ... depreciate the value of property in the vicinity".*
 - *It is stated that three other local auctioneers have all confirmed in writing that it would have a significant negative impact on property value locally.*

Comment:

The devaluation of property is not within the scope of the waste licensing process.

- (xiv) *Housing/Population. It is contended in submissions that due to the density and proximity of housing to the proposed development the application should be refused. Details in this regard include, inter alia*
- *Understates the number of houses in the area*
 - *There are 20 houses within 500m of landfill footprint and 69 within 1km*
 - *From the centre of the landfill footprint there 2 houses within 500m and additional 39 within 1km, 325 within 1.5km, 179 within 3km and 750 within 6km.*
 - *New housing developments in Longwood are now no further than 1km from the proposed site with it population having increased significantly since 1996 (52%)*
 - *Reference is made to site selection process of Kildare CC ruling out site in Ballinakill beside proposed one due to dense settlement*

Comment:

Noted. The licensee is required to operate the facility in a controlled manner such that the activities do not cause significant environmental pollution or nuisance to nearby sensitive receptors.

- (xv) Traffic/Road Infrastructure. A number of submissions refer to inadequacies of the road infrastructure, excess travelling due to location and dispute information/figures submitted in the application including, inter alia
- Site is far removed from local areas
 - additional unnecessary traffic and air pollution due to location 40 miles from the applicants site in Kileen Road, Ballyfermot and also cars would primarily come from Dublin and would then have to be transported to seaside port
 - traffic movements largely underestimated
 - N4 couldn't cope with the traffic, application premature until the motorway is built
 - Applicant states that the R160 will not be widened as doesn't own
 - Comparisons with Arthurstown and Kilcullen landfills disputed as traffic is uni-directional for Arthurstown and the landfill at Kilcullen is old and contended that would not be granted planning permission today.

Comment:

Traffic/road infrastructural issues are a matter for the Planning Authority.

- (xvi) Zoning/Visual. A number of submissions express concerns about the zoning and potential visual impacts of the facility such as, inter alia
- Site is located on pristine agricultural farmland
 - Industrial nature of the proposed development e.g. timber and oil recycling activities. Area has no industrial zoning
 - Royal Canal is 8m above ground level while the proposed landfill is to be 16m above ground level.
 - Creating screening on a landfill site 16m high with 5m berms and trees within six years is not possible. It is estimated that it would more likely take 10 years with what proposed, and 16 years in relation to the Royal Canal.

Comment:

The zoning of areas for development or otherwise is a matter for the planning authority. The application recognises the potential for such a development to cause visual impact and has proposed measures to mitigate such impacts and this is discussed in Section 5 of this report.

- (xvii) Fire hazards. A number of concerns are raised with regard to fire hazards including, inter alia
- Contention that response to fire more likely to be 45 minutes rather than distance of 20 minutes referred to with regard to Edenderry Fire Service
 - Personnel on site not trained to fight fires
 - Due to nature of materials proposed at landfill and recycling centres personnel would be a danger to themselves, emergency services and nearby residents
 - Danger of fires/explosions to properties due to proposed recycling facility being within 100m of many houses.

The applicant notes that prior to opening the development will need the approval of Kildare County Council's Chief Fire Officer. The applicant contends that there are no houses within 100m of the recycling activities and that the nearest house to any waste recycling or processing activity are approximately 200m away.

Comment:

The risk of fire and fire control in the area is a matter for the relevant local authority. The licence specifies the types and quantities of wastes to be accepted at the site and at the various areas of the facility. The recycling buildings are designed to act as containment structures to provide for firewater containment. A large firewater tank is proposed near to and to the south of the recycling buildings to provide water for fire fighting. Another firewater tank is to be

located at the wood and tyre treatment area. Foam fighting equipment is to be provided in both recycling buildings. Condition 9.1 & 9.2 of the RD set out requirements for Accident Prevention and Emergency Response.

- (xviii) Planning status. *Details in the planning status of the proposed development was provided in submissions including, inter alia*
- *Refusal of planning permission for the proposal by Meath County Council for two reasons*
 - a) *On periphery of North Eastern Waste Management Region, annual tonnage, proposed waste catchment areas would materially contravene Meath CDP 2001, would be contrary to and in conflict with provisions of the WMP for NE Region, with government policy "Changing Our Ways", and with the proximity principle*
 - b) *Proposed residual landfill by reason of siting, context, scale, height and bulk Would have a detrimental impact on visual amenity, heritage, tourism, recreational and environmental values of designated areas of visual quality identified in the Meath CDP 2001 and would therefore be contrary to policies & objectives of CDP and the proper planning and development of the area.*
 - *KCC notice of intent to grant planning permission indicated that in opinion of County Manager proposed development would materially contravene Kildare CDP*

Comment:

Noted.

- (xix) Waste Management Plans
- It is contended that the proposed development would be contrary to provisions of Kildare Waste Management Plan with points and reference to aspects of the plan such as, inter alia*
- *In short term Kildare County Council to dispose of solid waste arisings through landfill in adjoining counties*
 - *In short to medium term Kildare County Council to provide a materials recovery facility, waste transfer facilities, biological treatment centre and residual landfill to enable the government to achieve the recycling targets as outlined in the Government Policy Document "Changing Our Ways".*
 - *The Council will provide, or arrange for the provision of, a new engineered landfill site capable of accepting residual waste material generated in the County over a twenty year period*
 - *The Council has already initiated site selection for a waste management facility.*
 - *The Council has always sought to implement the proximity principle in its management of waste and will continue to do so during the currency of the Plan. The site is located in the extreme north west of the area covered by the Waste Management Plan.*
 - *If divert amount of waste going to landfill in accordance with plan then a second large-scale landfill in Kildare not necessary.*
 - *Based on the proposed tonnage for the landfill it would have to depend on waste from outside any justifiable catchment area.*
 - *A decision would be premature pending outcome of planning and licensing process for two other landfills in the county with reference to proposed facilities at Timahoe South/Drehid, (Bord na Móna) and Usk (Waste Licence Register Number 168-1)*
 - *It is contended that Kildare County Manager's use of the procedure in Section 22(10B) was not appropriate and should be invoked due to the proposed development's inconsistencies with the Waste Management Plan.*

It is contended that the proposed development would be contrary to provisions of the North East Region's Waste Management Plan with points and reference to aspects of the plan such as inter alia

- *One of the reasons for Meath County Council’s decision to refuse planning permission for part of the development was that it “would be contrary to and in conflict with the provisions of the Waste Management Plan for the North East Region”.*
- *Meath County Council’s correspondence to Kildare County Council regarding the proposed development of 29/08/04 noting the development of a residual waste landfill at Knockharley, Kentstown (Waste Licence Reg. No. 146-1) to service the needs of County Meath and other counties comprising the North East Region and that this landfill is located approximately thirty miles from the proposed development.*
- *The plan refers to medium to long term having three landfills and a thermal treatment plant to serve the region with the landfills being Knockharley, Scotch Corner (Waste Licence Reg. No. 20-1) and Corranure (Waste Licence Reg. No. 77-2). Nothing in the plan refers to having a fourth landfill in the region.*
- *Proposed development is in the extreme south of the region and remote from principle centres of population.*

Comment:

Noted. See Section 7 of this report.

(xx) County Development Plans

It is contended that the proposed development would be contrary to provisions of Kildare County Development Plan with points and reference to aspects of the plan such as inter alia

- *The County Manager’s conclusion that the grant of planning permission would contravene materially an objective of the County Development Plan*
- *Site is in an area not designated for development, land-use deemed primarily agricultural*
- *It is noted that the Royal Canal is a proposed NHA and that in relation to Areas for Preservation the plan states the objective to “ensure the protection of these areas, and to exclude from them any development which would be inimical to the preservation of their essential characteristics. Applications for developments which would affect these areas will be considered in light of this policy”. It is contended that the proposed development will negatively impact on this proposed NHA and undermine the amenity value of the canal walk.*

It is contended that the proposed development would be contrary to provisions of Meath County Development Plan with points and reference to aspects of the plan such as inter alia

- *One of the reasons for Meath County Council’s decision to refuse planning permission for part of the development was that “by reason of its siting, context, scale, height and bulk ... would have a detrimental impact on visual amenity, heritage, tourism, recreational and environmental values of designated areas of visual quality identified in the Meath County Development Plan”.*
- *Conflict with objectives to Protect Areas of High Amenity and objectives on Conservation, Leisure, Amenity and Tourism – decision by Meath County Council to refuse permission cites as a reason for refusal the listed areas containing landscape of exceptional value and sensitivity - VQ3 “River Valleys” (including valleys or corridors of rivers such as the Boyne and Blackwater) & VQ4 “The Royal Canal Corridor”*
- *Objective to create a green belt in South Meath*
- *Solid waste disposal objectives*
- *Aquifer protection includes for the application of groundwater protection policies in respect of waste management activities.*

Comment:

Noted. See Sections 4.4, 5, 6 & 7 of this report.

- (xxi) EIS inadequacies. A number of submissions refer to inadequacies of the EIS included as part of the application as well as contending that the Site Selection procedure was flawed.

Comment:

Further information was submitted at various stages of the application process including additional information as part of the EIS. As referred to in Section 8 the EIS was assessed and considered to comply with the EIA and Licensing Regulations in so far as environmental pollution from the activity is concerned.

- (xxii) Recycling. It is contended that a minimum amount of recycling is proposed for the development and that it is not clear what items are to be recycled at facility in Killeen Road or of the End-of-Life Vehicles. Also stated that tyres should not be landfilled.

Comment:

Various recovery activities are proposed to be carried out at the facility including those relating to end-of-life vehicles, tyres, wood, cooking/vegetable oils and dry recyclables from house waste collections. The AER required by the RD requires a report on the waste recovery activities carried out for the year as well as an evaluation of the potential for further recovery of the wastes accepted at the facility.

- (xxiii) Relationship with applicant's other facilities.

- The amount of waste to be landfilled is queried based on the proposal to accept residual waste from the applicant's licensed facility at Killeen Road, which has a limit (150,000 tonnes per annum) less than that proposed to be landfilled (220,000 tonnes per annum).
- Concern is expressed that the applicant's proposal coupled with existing and further planned facilities will lead to a monopoly of waste collection, processing and disposal and that this is against Agency recommendations (ref. National Waste Database Report 2001) with regard to having a "competitive environment exists in the waste management business and that waste generators have a choice of service provider".

Comment:

The RD specifies limits on the waste types and quantities that can be accepted at the facility. The acceptance of waste is to be in accordance with various conditions included in the RD but which does not include a restriction on waste being only from the applicant's facilities. It is noted that there are a number of existing and proposed waste management facilities in Meath and Kildare operated and proposed to be operated by other waste operators.

- (xxiv) Location of the site with respect to Section 1 of Annex I of Landfill Directive. Having regard to the above the following points are made

- Section 1.1(a) - proposed site is within 250m of nearby residences, beside Royal Canal (pNHA) and River Boyne (SAC) including tributary of the Boyne running through the site as well as two of the largest horticultural nurseries
- Section 1.1(b) - GSI designation of aquifer beneath the site as Lm/h, nature protection areas around the site of River Boyne (SAC), Royal Canal (pNHA), Ballynabarney Fen (SAC), Royal Oak Bog (SAC), Listed view of the Boyne Aquaduct overlooking the site.
- Section 1.1(c) - aquifer beneath the site (Lm/h)
- Section 1.1(d) - site was subject to extensive flooding due to Royal Canal's banks bursting and fact that 30kms between locks along this stretch of canal.
- Section 1.1(e) - River Boyne and Boyne Valley are internationally renowned for their unique cultural characteristics and fishing value. Environmental risk both to the immediate area and everywhere downstream including towns of Trim and Navan who derive drinking water from River Boyne.

Comment:

Noted. Refer to Sections 4.3, 4.4, 4.5, 4.6, 5, 6 & 9 of this report.

13.2 Submission from Ms Eileen Loughman, Senior Environmental Health Officer, South Western Area Health Board.

Ms. Loughman submitted a copy of the following points made to Kildare County Council in relation to the planning application.

- (i) Water supply in this area is totally dependent on groundwater resources*
- (ii) The area is close to and in the catchment area of the River Boyne, which is used as a major drinking resource*
- (iii) Refers to odour problems at Arthurstown Landfill and envisages odour nuisance complaints as result of development.*
- (iv) The hours of operation – first operatives at 5.00a.m., waste loads at 6.00a.m. will contribute to the noise nuisance in this relatively quiet rural location.*
- (v) In the event of a grant of planning permission, recommend that F. coliforms or E. coli and Total coliforms be monitored monthly, as consider annual monitoring pointless.*

Further information was indicated as being required in number of areas, including inter alia

- Longwood Group Water Scheme,*
- Address the provision of a bentonite layer as an additional component of the landfill liner system,*
- How an alternative piped water supply, fit for human consumption, could be provided (and an undertaking to provide same),*
- Further odour controls*
- Further consideration of noise impact and control regarding traffic to the facility*
- Predicted cumulative noise levels at boundary of proposed development at construction phase and operational phase of landfill at the elevated heights proposed*
- Notes unusual dust monitoring results and recommends further monitoring*
- Further details regarding lighting to ensure no intrusion on residents during darkness, adequate ventilation for staff, disabled access*
- Proposals regarding biological waste treatment referred to in the application.*

Comment:

Further information was submitted at a number of stages of the application process following the making of this submission. Sections 4.3 & 4.4 refer to surface water and groundwater issues respectively. The RD obliges the licensee to ensure that the facility activities do not cause odour nuisance. Odour controls are discussed in Section 4.1 of this report. Condition 1.8 specifies the hours of operation and of waste acceptance. The hours of waste acceptance applied for have been limited due to the potential for noise nuisance in the period 0600 – 0800.

13.3 Submission from Ms Catherine Buchanan, NPW-Site Protection, Dúchas (now Department of the Environment, Heritage & Local Government)

Ms Buchanan copied reports issued to Kildare County Council and Meath County Council in relation to the respective planning applications for the proposed development making the following points and requesting additional information

- (i) The proposed development is in close proximity to four designated sites – Royal Canal (proposed NHA 2103), Ballynabarney Fen (proposed NHA 1573), Ballyna Bog (proposed NHA 390) and Carbury Bog (proposed NHA 1388) as well as the River Boyne, a salmonid river, which is to be designated an SAC.*
- (ii) That Dúchas has very serious concerns about the location of the landfill in this site and consider that the EIS is inadequate in a number of areas.*
- (iii) Any disturbance to badger setts would have to be subject to consultation and licensing from Dúchas.*

Further information was requested to be submitted in relation to

- the hydrology of the area and impact of any leachate spill on the adjacent designated sites,*
- further vegetation study in summer months,*
- complete bat survey.*

Comment:

Noted. See comments under Submissions 13.1(iii), (iv), (v) & (ii) above. Carbury Bog is located approximately 7km south of the site, at an elevation above that of the site and hydraulically upgradient of the site with regard to groundwater and surface water. It is considered that the proposed development would have no impact on this bog. Condition 3.10 of the RD sets out requirements with regard to the protection of badgers and including the requirement to consult with Department of Environment, Heritage & Local Government. Further information was submitted at a number of stages of the application process following the making of this submission.

13.4 Submission from Mr Alan McGurdy, Chief Executive Officer, Eastern Regional Fisheries Board

Mr. McGurdy on behalf of the Eastern Regional Fisheries Board objects to the application on the following grounds

- (i) Likelihood of contamination of the River Boyne. Due to close proximity with the site boundary around 600m from river, attenuation pond around 1200m from river and network of surface water channels directly linked to the river. Also notes that groundwater on site is directly linked to the River Boyne and that during winter the overburden water table lies within 2.5m of the surface.*
- (ii) EU Directives may be breached due to such a development*
 - Main channel of River Boyne designated as Salmon Waters (EU Council Directive 78/659/EEC – S.I. No. 293 of 1988. Places an obligation to maintain certain environmental standards. Acknowledged that in last few years River Boyne has become under serious environmental threat, mainly due to eutrophication. Reference is made to Agency reports in this regard and to the Three Rivers Project.*
 - Reference is made to the implementation of the Water Framework Directive (2000/60/EC) and to likely stricter obligations regarding water quality standards in aquatic habitats (Eastern River Basin District).*
 - Likely designation of River Boyne as a Special Area of Conservation (SAC). Notes that the following protected species (EU Directive on Natural Habitats – 92/43/EEC) are present in the river – Atlantic Salmon (*Salmo salar*), Lampern (*Lampetra fluviatilis*), White-clayed crayfish (*Austropotamobius pallipes*) as well as the Frog (*Rana temporaria*) which is present on site.*
- (iii) The Royal Canal a proposed NHA situated north of the facility may be under threat from the activity such as from undermining the structure of the canal and contamination of the canal habitat.*
- (iv) Concern about the proposed diversion of the watercourse if not done properly may cause problems to both the watercourse itself and the River Boyne. Notes that any interference with any watercourse would require prior consultation with the Eastern Regional Fisheries Board.*

Comment:

Noted. See Sections 4.3, 4.4 & 6 of this report.

13.5 Submission from Ms Aoife O'Shea, Development Application Section, Department of the Environment, Heritage & Local Government.

Ms O'Shea made the following points

- (i) *Proposed development lies totally within the catchment of the River Boyne and has two streams crossing it and a number of ditches, that these flow into the River Boyne and River Blackwater a candidate Special Area of Conservation (cSAC) approximately 1km from the site.*
- (ii) *Main concern relates to water quality with the cSAC being the habitat of salmon (Salmo salar), Lamprey species and otters (Lutra lutra) all of which are listed under Annex II of EU Habitats Directive [92/43/EEC]. The water quality should not be adversely impacted on by either surface water or groundwater pollution from the proposed development.*

Comment:

Refer to Sections 4.3, 4.4 & 6 of this report.

13.6 Submission from Mr Conor Walsh, Environmental Director, Padraig Thornton Waste Disposal Limited (the applicant)

Mr Walsh made a number of comments in relation to some of the issues raised in a number of the above submissions.

Comment:

These were considered along with the various submissions and are discussed above, where appropriate.

13. Charges

Condition 12 of the RD requires that the applicant shall pay an annual contribution of **€32,048**.

14. Recommendation

I have considered all the documentation submitted in relation to this application and recommend that the Agency grant a licence subject to the conditions set out in the attached RD and for the reasons as drafted.

Signed

Mr. Donal Howley

With assistance from Mr. Malcolm Doak

Procedural Note

In the event that no objections are received to the Proposed Decision on the application, a licence will be granted in accordance with Section 43(1) of the Waste Management Acts 1996-2003.

Appendix 1 – Submissions

179-1 Padraig Thornton Waste Disposal Ltd - Submissions						
Sub No	Stat.	Specified body Authority	Name	Job Title	Address	Organisation
1	N		Entered in Error			
2	Y		Ms Eileen Loughman	Senior Environmental Health Officer	South Western Area Health Board, Environmental Health Officer's Service, The Crossings, Dublin Road, Naas	
3	Y		Ms Catherine Buchanan	NPW – Site Protection	Duchas, The Heritage Service, 7 Ely Place, Dublin 2	
4	Y		Flip Schram		Flip Schram Nurseries, Royal Oak, Moyvalley, Co Kildare	
5	Y		Mr Michael McCormack		Ballinadrimna, Broadford, Co Kildare	Broadford-Longwood Environmental Concern
6	N		Mr Alan McGurdy – <i>INVALID – MISTAKE – Corrected in Sub 7</i>	Chief Executive Officer	Eastern Regional Fisheries Board, 15a Main Street, Blackrock, Co Dublin	
7	Y		Mr Alan McGurdy	Chief Executive Officer	Eastern Regional Fisheries Board, 15a Main Street, Blackrock, Co Dublin	
8	Y		Mr Donal O'Dwyer		donalowsyer@eircom.net	
9	N		Entered in Error			
10	Y		Mr Donal O'Dwyer	Chairman		Broadford Longwood Environmental Concern
11	Y		Mr Conor Walsh	Environmental Director	Thornton's Recycling Centre, Killeen Road, Dublin 10	Padraig Thornton Waste Disposal Ltd
12	Y		The Manager	Development Applications Unit	Dun Sceine, Harcourt Lane, Dublin 2	Department of the Environment, Heritage & Local Government
13	Y		Mr Jack O'Sullivan		Outer Courtyard, Tullynally, Castlepollard, Co Westmeath	Environmental Management Services
14	Y		Mr & Ms Donal & Fiona O'Dwyer		"Ocaire", Ballinadrimnagh, Broadford, Co Kildare	
15	N		Mr M McCormack – <i>INVALID – EMAIL OF ORIGINAL – NO 16</i>		Ballindrimnagh, Broadford, County Kildare	Broadford Longwood Environmental Concern Ltd
16	Y		Mr M McCormack		Ballindrimnagh, Broadford, Co Kildare	Boardford Longwood Environmental Concern Ltd
Total Valid Submissions = 12						

