

1 INTRODUCTION

1.1 Background

1.1.1 Background to Proposed Extension and Intensification

With respect to this application, Bord na Móna proposes to intensify and extend the already permitted Drehid Waste Management Facility. This facility was granted permission by Kildare County Council (KCC) in April 2005, under KCC Reg. Ref No. 04/371 subject to a number of conditions. In November 2005 An Bord Pleanála (ABP) upheld that planning decision with revised conditions (ABP Ref No. PL.09.212059), following an appeal and an Oral Hearing. The Environmental Protection Agency (EPA) issued a Waste Licence for the facility in August 2005 (EPA Ref No. W0201-1).

Under that planning permission and in accordance with that Waste Licence, 120,000 TPA of waste can be disposed of to the engineered landfill site with an additional 25,000 TPA permitted for disposal at a composting facility. The operational life of this facility is 20 years. That permission also provides for all associated site development works including the development of an access road from the R403 Regional Road to the site.

Construction of the facility commenced in August 2006 and the facility commenced accepting waste in February 2008.

This proposal would enable an additional 240,000 TPA of waste (over and above that already permitted) to be disposed of for 7 years. After 7 years the development will revert back to receiving the permitted 120,000 TPA for the remaining permitted operational life of the facility.

The provisions of the Planning and Development (Strategic Infrastructure) Act 2006 (the 2006 Act) came into effect on 31st January 2007. The 2006 Act, which amends the Planning and Development Act 2000, provides generally for applications for permission/approval for specified private and public strategic infrastructure developments to be made directly to An Bord Pleanála.

Part 18 of the Planning and Development Regulations 2006 (S.I. No. 685 of 2006) (the 2006 Regulations) relating to strategic infrastructure development also came into effect on 31st January 2007. The 2006 Regulations amend the Planning and Development Regulations 2001.

Private strategic infrastructure developments, to which the 2006 Act and Regulations apply, are listed in a new 7th Schedule to the 2000 Planning Act (inserted by section 5

of the 2006 Act). These generally refer to projects classified as major energy, transport and environmental infrastructure, the applications for which are to be made to An Bord Pleanála instead of to local planning authorities.

An initial application and submission was lodged with An Bord Pleanála on the 2nd July 2007. Following this the first pre application consultation took place on the 11th September 2007. A second submission was sent to An Bord Pleanála prior to this first consultation. A second pre application consultation took place on the 27th November 2007. (Details of this pre-application consultation can be found in Appendix 1.1.1)

In the context of detailed pre-application discussions with An Bord Pleanála as required under the relevant legislation, it is noted that this application is:

- For development classified within the 7th Schedule of the Principal Act (ref. Para. 3) namely:
*“3. – Development comprising or for the purposes of any of the following:
–an installation for the disposal, treatment or recovery of waste with a capacity for an annual intake greater than 500,000 tonnes.”*
- For development within the functional area of Kildare County Council.

Following on from the making of the initial submission and two pre application consultation meetings, An Bord Pleanála has determined that the proposed development is regarded as Strategic Infrastructure and therefore subject to the provisions of the Planning and Development (Strategic Infrastructure) Act, 2006.

1.1.2 Company Background

The Bord na Móna group is founded on complementary skills and experience acquired over 50 years. Established to develop Ireland’s peat resources in the immediate post-war years, it is now active across a range of peat based and other industries.

It has strong skills in resource management and development, manufacturing, distribution, science, engineering and human resource development. It owns 80,000 hectares (ha) of peatland, employs approximately 1,800 people and operates out of 30 localities mainly in Ireland, but also in the United Kingdom and eastern United States. It has a turnover of nearly €296 million.

Bord na Móna supplies peat as a fuel for the generation of electricity; a range of peat-based fuels, coal and oil for residential and industrial heating; horticultural products for commercial horticulturists and home gardeners; and pollution abatement products, environmental consultancy and commercial laboratory services to industry and public

authorities. It is a leading international supplier of products and services based on peat.

Bord na Móna's Strategic Vision is to profitably meet its customers' needs for high-quality products and services in the energy, horticultural and environmental markets. It will continuously anticipate and adapt to changing needs in these and related markets.

Each subsidiary is expected to demonstrate sustained profitability through enterprise and creativity; to exercise responsibility to customers; to show continuous improvement through the development and involvement of its people; to operate with care for the environment and society and to carry on its business with integrity and fairness.

1.1.2.1 Business Development

Bord na Móna has developed over a period of more than sixty years, in a manner which reflects the changes which have taken place in the Irish economy. It is a profitable, diversified and innovative company. It has a wide range of technical skills, combined with an infrastructure which includes a huge landbank, workshops and first class laboratories.

The company, with the support of its shareholder, is focused on growth. It sees this growth coming from organic development of its existing, complementary businesses but also by an aggressive policy of acquisition and joint venture. It is actively seeking partners for a wide range of business opportunities.

1.1.2.2 Waste Management

It is Bord na Móna's policy to utilise appropriate sites in its ownership, as well as its engineering and environmental competencies, to develop a substantial waste management business.

The achievement of this objective took a significant step forward with final approval for the waste management facility near Drehid, Timahoe, County Kildare. Planning permission was obtained from Kildare County Council in April 2005. The Permission was confirmed following an appeal to An Bord Pleanála which concluded in November 2005. The project has also received the required waste licence from the Environmental Protection Agency (EPA). The facility will comprise a fully enclosed composting plant primarily to handle biowaste from household, commercial and industrial sources and a residual landfill. Construction of the initial stage of the facility has been completed and operations have commenced in February 2008.

Bord na Móna has designed, constructed and operates engineered landfills for the environmentally friendly disposal of peat ash from Ireland's 3 peat-fired powerstations. The facilities are operated under the terms of the EPA licensing regime and, between them, approximately 120,000 tonnes of waste is managed each year.

Bord na Móna also operates a licensed composting facility near Athy, County Kildare. The facility is licensed to process 96,000 tonnes per annum (TPA) of green waste, predominantly from the Greater Dublin Area, as well as by-products from the brewing industry, cocoa shell and other biowaste. The final product is used to enhance the company's range of growing media products. In addition, a significant volume of industrial biowaste is composted annually in the U.K.

The company also provides consultancy services to the waste management industry. A case in point is the design and construction of an extension to the engineered landfill at Derryclure near Tullamore, County Offaly – on behalf of Offaly County Council.

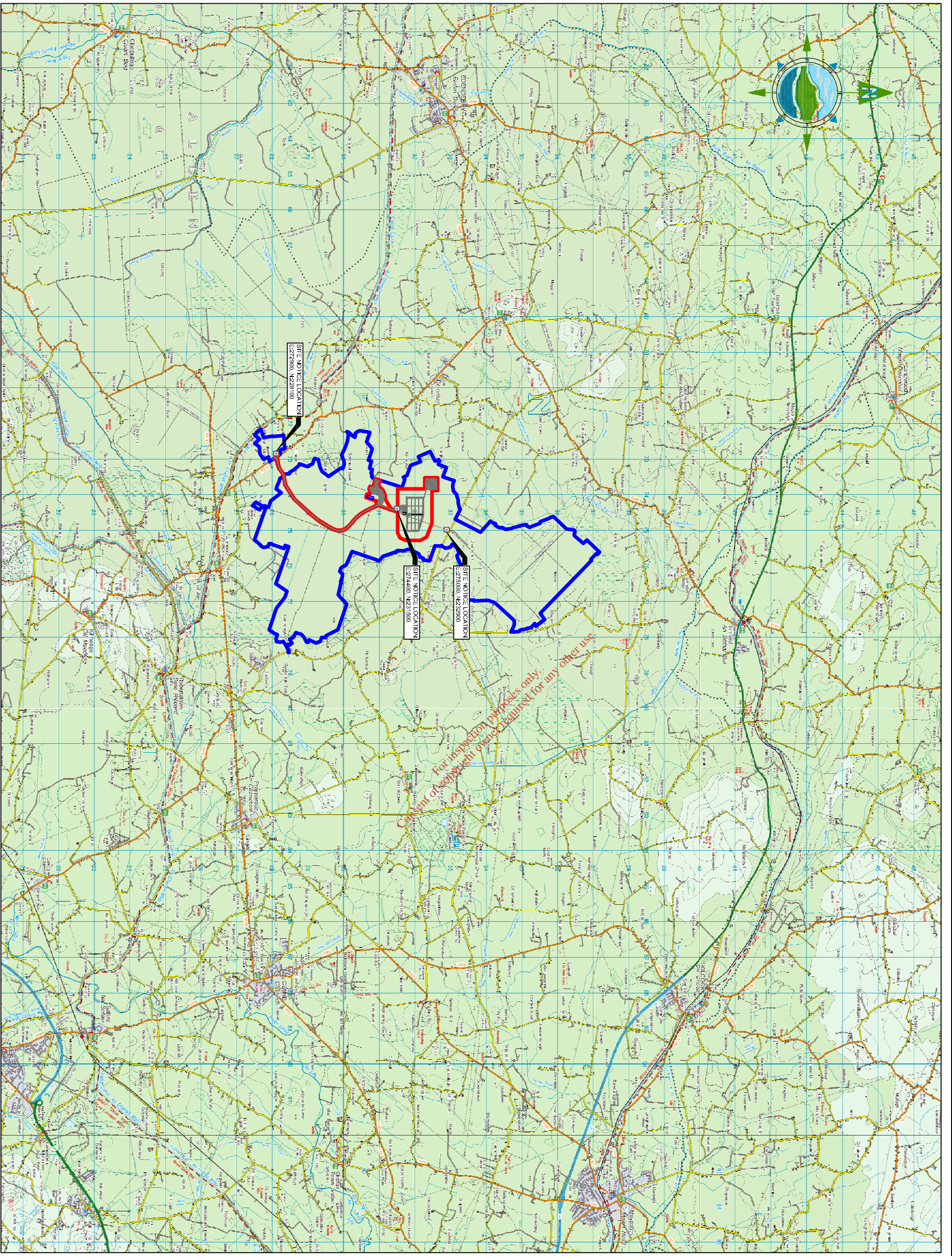
In May 2007, Bord na Móna completed the acquisition of Advanced Environmental Solutions (Ireland) Ltd (AES), one of Ireland's largest Waste Management businesses, serving over 6,000 commercial customers and some 55,000 households through a network of Waste Transfer Centres and Recycling Facilities. The business provides an integrated waste management offer encompassing consultation, collection, recovery and disposal with a strong emphasis on recycling.

This acquisition is a key element of Bord na Móna's strategy of diversification to Waste Management and is an important step for the Company in establishing a strong presence in the Waste Management sector in Ireland. Bord na Móna is committed to high quality products and services in all of its operations and will continue this policy in Waste Management with special emphasis on raising standards. The Group continues to explore other opportunities in the waste management sector.

1.1.2.3 Regulatory Compliance

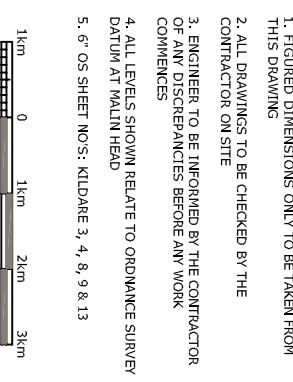
Much of the Bord na Móna's activities are carried out under the terms of a significant number of licenses issued by the Environmental Protection Agency. In its 2005 assessment of the original waste licence application for the Drehid Waste Management Facility, the Agency noted:

“Bord na Móna are one of the largest holders of EPA authorisations (IPC and Waste) and have demonstrated themselves to be technically competent and financially capable to operate a licence. They are also free of any relevant convictions.”



GENERAL LEGEND
 BORD NA MÓNA
 OWNERSHIP BOUNDARY
 SITE NOTICE LOCATION

- NOTES**
1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
 2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
 3. ENGINEER TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
 4. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD
 5. 6" OS SHEET NOS: KILDARE 3, 4, 8, 9 & 13



Issue	Date	Description	By	CHKD
A	17-04-08	ISSUED FOR TRAINING	JLN	PCN

Client:
BORD NA MÓNA

Project:
 INTENSIFICATION AND EXTENSION TO DREDGED WASTE MANAGEMENT FACILITY

Title:
 SITE LOCATION MAP

Scale @ A3:
 1:100,000

Prepared by: M. Nolan
 Checked: P. O'Neill
 Date: April 2008

Project Director: D. Gleehan

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Drawing No: **Figure 1.1.1**
 Issue: **A**

1.2 The Proposed Development

As outlined in Section 1.1, Bord na Móna has planning permission and a waste licence for the deposition of 120,000 TPA of waste to the engineered landfill site and for the composting of 25,000 TPA of biodegradable waste in the composting plant at the Drehid Waste Management Facility. The operational life of this facility is 20 years. That permission also provides for all associated site development works including the development of an access road from the R403 Regional Road to the site. Construction of the facility commenced in August 2006 and the facility has commenced accepting waste in February 2008.

The current proposal relates to the extension and intensification of the permitted landfill facility to accommodate an additional 240,000 TPA of waste (over and above that already permitted) for 7 years. After 7 years the development will revert back to receiving the currently permitted 120,000 TPA for the remaining permitted operational life of the facility.

This facility provides an engineered, managed and environmentally safe facility for the disposal of residual waste while the composting facility will provide a cost effective alternative to landfill for a variety of bio-waste streams. This facility forms an integral part of the long-term waste management infrastructure in County Kildare and the wider geographical area. Bord na Móna employs 'Best Available Techniques' (BAT) in all aspects of the design and management of the site.

The proposed development necessitates additional physical works namely;

- The extension of the permitted landfill footprint on immediately adjoining lands;
- The development of additional ancillary facilities- such as surface water lagoons, site roads etc.

The extent of this new landfill footprint area is shown on Drawing No. 3369-2401 and Drawing No. 3369-2402.

No modifications to permitted facilities such as general administration areas, access roads, site entrance, composting facility etc. are proposed. The proposed development will be entirely located within the landholdings of Bord na Móna.

The landfill will continue to accept non-hazardous residual waste, which has been subjected to treatment, including waste arising from the operation of waste recovery facilities and initiatives. The waste treated at the composting facility will be biowaste separately collected from households including vegetable, fruit and garden waste. Waste of a similar municipal nature derived from commercial and industrial premises will also be treated at the composting facility.

For the purposes of construction of the facility, a clay borrow area and a sand and gravel area have been developed within the confines of the site and these will also be utilised for the construction of the proposed landfill extension. These elements of the facility already have planning permission from An Bord Pleanála (Ref No PL09.212059) and do not form part of this application.

The site, as shown on Figure 1.1.1 (General Site Location Map - *extract from Discovery Series Sheet No. 49*), is located approximately 3 kilometres (km) north of Allenwood and 9 km south of Enfield, County Kildare.

The site/activity outlined by the red line on Drawing No.3369-2401, including site access and ancillary services, is situated within the townlands of Parsonstown, Loughnacush, Kilkeaskin, Drummond, Timahoe West, Coolcarrigan, Killinagh Lower and Killinagh Upper.

The facility is located within the confines of the Timahoe Bog, which is owned by Bord na Móna and which comprises 2,544 hectares (ha), as outlined in blue on Drawing No. 3369-2401. The activity boundary of the facility is outlined in red on the Site Layout Plan Drawing No. 3369-2402 and comprises 179ha. The location of the proposed facility is outlined on Drawing No. 3369-2403. All drawings referenced in the course of this EIS are those included in Volume III, which accompanies this EIS.

The site is accessible via a network of regional routes which in turn link with the National Primary Road / Motorway network. The R403 lies south, and southwest and west of the site: the R403 joins the R402 at Carbury to the northwest of the site. The R402 connects to the N4/M4 while the R403 connects to central and south County Kildare. The N4/M4 (Dublin to Sligo/Galway) National Primary road / Motorway is located some 8km to the north of the proposed facility, while the N7 /M7 (Dublin to Limerick/Cork) National Primary road / Motorway is located some 14km to the south of the proposed facility.

As shown on Drawing No. 3369-2403, site notices are erected adjacent to the regional road (R403) at the site entrance (Grid Ref. E2729, N2281), at the facility entrance (Grid Ref. E2744, N2315), and adjacent to the local road (L5025) to the north of the site (Grid Ref. E2750, N2329).

The landfill footprint encompasses 39ha as outlined on Drawing No. 3369-2402. which includes the proposed extension of 17.8ha. A 500m and a 1000m radius around the footprint is also shown on Drawing No. 3369-2405.

The permitted landfill will be constructed in 8 phases and the proposed landfill extension will be constructed in 7 phases. Stripping of the peat layer and preparation

of the ground to the formation levels required will take place prior to the development each phase. The total void space capacity of the landfill is estimated to be 5 million cubic metres. This void space does not however allow for settlement of the waste, which will take place over time.

On average the landfill will be 15-20m deep and the maximum final height, post settlement, of the landfill will be approximately 103.25 metres above Ordnance Datum (mOD). The site will be managed and landscaped to reflect the specific attributes of the surrounding landscape.

The facility is designed, constructed, operated and monitored in accordance with European Council Directive 1999/31/EC on the landfill of waste, the EPA Landfill Manuals, BAT guidance notes for waste facilities and licence and planning conditions.

A leachate collection system has been installed for Phase 1 of the landfill and a similar system will be installed for all future phases. Collected leachate is treated off-site at an approved wastewater treatment plant.

Landfill gas is generated on all landfill sites and if uncontrolled can be a cause of odour as well as being a fire risk and a contributor to greenhouse gas. It is proposed to install a landfill gas collection and flaring system, which will collect gas from the waste body. Landfill gas will be collected and flared during operation as well as after the cessation of landfilling, as gas production can continue for some years post-closure. If sufficient quantities of landfill gas can be harnessed at the site, and if economically feasible, this landfill gas will be utilised to generate electrical energy.

The landfill will be progressively capped on completion of each phase, with ongoing landscaping taking place throughout the lifetime of the site. On final capping, the site will be allowed to recolonise to natural species.

The landfilling operation will be carried out in a planned and controlled manner, thereby minimising potential nuisances such as odours, dust, noise, litter, vermin, etc. Environmental monitoring stations, in accordance with EPA requirements, have been established at the site and monitoring will be continued post closure of the facility.

Under the original permission, a biowaste composting facility forms part of the overall waste management facility at Drehid, County Kildare. Once operational, this facility will deal primarily with separately collected biowaste from household, commercial and industrial sources. The biowaste will include a source separated organic fraction from household waste, food waste from the service industry and retail outlets and other commercial and industrial biowaste as available.

The initial short-term objective of the facility will be to produce compost suitable for usage for landscaping and for the restoration of the landfill. The facility will be designed for an overall capacity of biowaste of 25,000 tonnes per annum (TPA). The composting facility will be located to the south-eastern edge of the landfill footprint as shown on Drawing No. 3369-2402 and Drawing No.3369-2408.

For the purposes of construction of the landfill extension, the existing clay borrow area and a sand and gravel area will be utilised. These areas are located within the confines of the site. The location of both borrow areas are as presented on Drawing No. 3369-2401 Plans and sections of the sand and gravel borrow area and the clay borrow area are presented on Drawing No. 3369-2431 and Drawing No. 3369-2432 respectively. Planning Permission has already been granted for the clay borrow area and the sand and gravel area under the original planning application (Ref No PL09.212059).

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1.3 Planning Policy and Strategy and Context

1.3.1 Strategic Planning Considerations and the Need for the Development

As a significant operator in the waste management business, Bord na Móna has identified a need for the development of landfill capacity to meet existing capacity constraints in the functional area of the Greater Dublin Area Regional Authority.

This ‘need’ has been established and recognised in a number of key planning policy documents as well as through a significant body of planning decisions and precedent.

Critically, this need is established in:

- National Policies in relation to Waste Management;
- The Regional Waste Management Plans;
- National and Regional Spatial Plans and Guidelines;
- Planning Decisions in Relation to Waste Management Facilities;
- A Supplementary Study by Bord na Móna to Assess the Existing Waste Management Capacity.

1.3.1.1 National Policies in relation to Waste Management

Key papers setting out National Waste Management Policies have been published since the late 1990s by the Department of Environment, Heritage and Local Government (DoEHLG).

Changing Our Ways (September 1998) sought to secure and progress rationalisation of the municipal landfill network, the ultimate target being an integrated network of some 20 state-of-the-art facilities incorporating energy recovery and high standards of environmental protection.

Preventing and Recycling Waste: Delivering Change (March 2002) established a series of objectives in terms of the implementation of the waste hierarchy based on minimisation of waste generation and improving levels of recycling of generated waste.

Taking Stock and Moving Forward (April 2004) addressed a key emerging issue – namely the strict interpretation of the proximity principle as applied by a number of Planning Authorities which effectively prohibited the movement of waste between waste regions. Specifically, the document noted that the wholesale attachment of conditions prohibiting trans-regional movement of waste was not always appropriate and that such conditions should be carefully considered by the Planning Authority before being attached. The *Policy Guidance Notes under Section 60 of the Waste Management Act, 1996 (as amended)* issued by the Minister for the Environment,

Heritage and Local Government, significantly changes the context for the interpretation of the proximity principle in terms of the inter-regional movement of waste, stating:

'The Minister confirms that one of the fundamental components of policy in regard to the regulation of the movement of waste is the application of the proximity principle. However, relevant authorities, in preparing waste management plans, determining the necessary statutory authorisations and in regard to other waste management functions, should recognise that the application of the proximity principle does not entail interpreting administrative waste management planning boundaries in such a manner as to inhibit the development of waste infrastructure which will support the attainment of national waste management policy objectives through the rational development and use of such infrastructure.'

This Guidance has had a significant impact on a number of planning decisions in the interim and has ultimately led to an appreciation that waste can be disposed of outside the region in which it is generated where it can be shown that this movement supports the attainment of national objectives and is in-line with the rational development and use of waste management infrastructure.

Concluding Remarks

At a national level, the movement of waste between regions is acceptable where it brings about the rational development and use of waste management infrastructure and where it can be shown that this supports the attainment of national objectives. It is a national objective to develop a rationalised network of municipal landfills. Therefore the proposed extension and intensification of the Drehid Waste Management Facility is compliant with this objective and therefore in-line with national policies.

1.3.1.2 The Regional Waste Management Plans

The waste management objectives of the seven authorities, which make up the Greater Dublin Area Regional Authority are outlined in four waste management plans (WMPs) – the Dublin WMP (for Fingal, South Dublin, Dun-Laoghaire and Dublin City); the County Kildare WMP; the County Wicklow WMP and the North-East WMP, which includes County Meath.

Having regard to the hierarchy of national – regional – county / city and local plans established within the Planning Legislation, it is the intention of the Regional Guidelines that strategic objectives outlined therein are translated into more meaningful and specific local objectives. With respect to waste management this would ultimately lead to the inclusion of county policies that reflect the regional

planning policies referred to in Section 1.3.1.3 herein.

At the time of the original planning application for the development of a waste management facility located on the subject site, the Waste Management Plan for County Kildare, 2000 – 2005 was in-place. That WMP established ‘Current Waste Generation’ (Section 2) and ‘Waste Generation Forecasts’ (Section 6). Having regard to these estimates, the closure of the landfill at Silliot Hill, County Kildare and the limited capacity of the landfill at Arthurstown, Kill, County Kildare it concluded that there is a need for new engineered landfill.

In order to advance the provision of this infrastructure, the County Council completed a site selection process for a new, engineered residual landfill site in 2000. Arising from this site selection process and a subsequent planning application by Bord na Móna, permission was granted, in-line with the provisions of the Waste Management Plan, for the development of a landfill site near Drehid, capable of accommodating 120,000 tonnes of municipal waste per annum with an operational life of 20 years.

The facility was granted permission given that it was in accordance with the County Kildare Waste Management Plan, 2000 - 2005, the Landfill Site Selection Process carried out by the Council, the Kildare County Development Plan, 2005 – 2011, and the Regional Planning Guidelines for the Greater Dublin Area, 2004-2016.

The current Waste Management Plan for Kildare is for the period 2005 – 2011. While the publication of that Plan pre-dates the grant of permission for the permitted facility it contains two key objectives with respect to landfill activities, namely:

- it is not the intention of Kildare County Council to directly provide its own landfill in the County; and
- to consider (where necessary) alternative arrangements for the disposal of residual waste in co-operation with neighbouring regions and / or the private sector.

The Dublin Waste Management Plan, 2005 to 2010 adopted for Fingal, Dun Laoghaire-Rathdown, South Dublin and Dublin City Councils identifies the need for new landfill capacity to cater for municipal waste. It notes that a ‘critical shortage’ of municipal landfill capacity is imminent and that even with the diversion of waste streams to the proposed Waste to Energy facility at Poolbeg, there will remain a ‘significant requirement for residual landfill disposal’ (para 18.9).

The Plan establishes objectives to:

- Provide a landfill (of up to 10 million tonnes capacity) with the Fingal site at Tooman/Nevitt the preferred location;

- Develop additional waste management infrastructure;
- To 'provide for the use of other available landfills within the greater Dublin Region in the event of lack of capacity within the Dublin Region'. It is noted that these facilities may be licensed/permitted on a short term basis and be of a limited nature, linking with the delivery of the integrated regional infrastructure – including Waste to Energy capacity, so as not to erode the long term objectives of Dublin Waste Policy;
- To recognise the likely need for waste arising in Dublin to be disposed of in other counties in the GDA; and,
- To utilise 'spare capacity' in facilities in other Regions where infrastructure deficits arise in the Dublin Region, until those deficits are corrected.

The *Annual Progress Report, 2007* (published 9th April 2008) provides a commentary on the progress made by the Authority and Constituent Councils in the first two years of the Waste Management Plan for the Dublin Region. That documents notes:

- A commitment to the landfill target of 16% by 2013;
- A commitment to the overall recycling target of 59% by 2013 notwithstanding the existing household recycling rate for 2006 was 28% with the commercial and industrial recycling rate up to 48% in that year (within the context of increase waste generation of 22% since 2003), a municipal waste recovery rate of 40% and a packaging recovery rate of 48%;
- That the region remains reliant on landfill for the disposal of municipal type waste with 74% of waste landfilled in 2003, falling to 60% in 2006.

In that context the report notes that in relation to the provision of large-scale waste management infrastructure the following developments are reported:

- **Biological Treatment Facilities** – two such facilities are being developed at Ballyogan and Kilshane Cross with a total treatment capacity of 70,000 tonnes and an anticipated operational date of 2009;
- **Materials Recovery Facilities** – the construction of a facility for the processing of household recyclables with a capacity of 100,000 tonnes per annum is underway and the facility is expected to be operational from mid 2008;
- **Energy Recovery** – the report notes that an oral hearing was completed by An Bord Pleanála and planning permission was granted by the Board in November 2007. The EPA issued a Proposed Decision for the Waste Licence

in November 2007. An EPA Oral Hearing on the Proposed Decision will be held in April 2008.

- **Landfill** – the two Local Authority operated landfill sites in the Region (at Arthurstown and Balleally) are expected to be closed by 2009-2010, based on existing operational characteristics. The report recognises that a critical shortage of municipal landfill capacity is imminent with the closure of these facilities.

The report notes that the long-term landfill target of 16% by 2013 remains *a considerable challenge* as does the reduction in the levels of Biodegradable Municipal Waste being landfilled in the region. It also states that a decision is still pending in relation to the development of a residual waste landfill in Fingal (as proposed at Tooman/Nevitt) and that *unless alternative landfill capacity is made available, a critical shortage of municipal landfill capacity is imminent*. In particular, the report notes that *the (Waste Management) Plan policy is to provide for the use of other available landfills within the greater Dublin Region, with changes to Planning or Licensing status of these facilities of a short term and limited nature*.

Concluding Remarks

As noted above, waste management policies for the relevant constituent authorities of the Regional Authority reflect to a varying extent the objectives and policies of the larger region.

The Waste Management Plan for County Kildare notes that arrangements could be made between neighbouring regions for the use of waste management facilities. More specifically, the Dublin Waste Management Plan outlines that such arrangements will be essential – certainly in the short-term, to meet deficits in landfill capacity in Dublin, although it does note that consideration should be given to establishing these arrangements over a short-term period such as to protect the longer-term objectives of that waste region.

Having regard to the progress made in the initial stages of the Dublin Waste Management Plan, it is noted that the targets for 16% waste diversion to landfill by 2013 coupled with the reduction in the levels of Biodegradable Municipal Waste being landfilled in the region remain a considerable challenge.

In conclusion therefore, it is noted that the need for the use of landfill facilities within Kildare is recognised within the relevant Waste Management Plans albeit to address short-term needs such as to ensure that additional facilities are developed within the four Dublin authorities.

The proposed extension and intensification of the existing Drehid Waste Management Facility, is compliant with these policies. It protects the long-term and strategic nature

of the facility itself, in compliance with the planning permission previously granted, as well as the commitment of the Dublin Authorities to develop additional waste management infrastructure.

1.3.1.3 National and Regional Spatial Plans and Guidelines

The National Development Plan (NDP) 2007 to 2013 '*sets out a strong framework for the promotion of regional development with a particular focus on investment in the National Spatial Strategy (NSS)*'.¹ This document notes the significant changes in terms of population and economic growth that have taken place in the Greater Dublin Area (GDA) and notes that this growth '*has also brought challenges, particularly in the area of infrastructure*'.

Set within the context of the NDP and NSS, the *Regional Planning Guidelines for the Greater Dublin Area (GDA) 2004-2016* provides a statutory planning framework for the functional areas of Dublin City Council, and the County Councils of Fingal, South Dublin, Dun-Laoghaire Rathdown, Wicklow, Kildare and Meath. In turn these provide a strategic framework for the implementation of individual County, City and Local Plans. To achieve this, the Guidelines – and the Regional Authority, have sought to co-ordinate Development Plans within this region as required by Part II, Chapter III of the Planning and Development Act 2000.

Published in July 2004, the Regional Guidelines aim to facilitate economic and population growth in a sustainable manner. Critically, they identify the waste management needs of the Planning Region – as well as individual waste regions, as being critical in guaranteeing sustainable economic and social growth within the Region. Indeed waste management is noted as an essential factor in providing the infrastructure necessary to facilitate sustainable growth and the provision of '*efficient and cost effective water services and waste management infrastructure*' is identified as a necessary objective for the region.

Section 8.6.3 of the Regional Guidelines specifically deals with the issue of waste disposal in some detail. It notes that there is an objective to reduce the dependency on landfill as a means of waste disposal. Critically however, it notes that the targets in the various Waste Management Plans within the Region will *not be met* for reasons due to:

- increasing population;
- increasing economic growth; and,
- overly ambitious recycling targets.

¹ National Development Plan 2007 – 2013, Section 4: *Integration of National Development Goals and Investment Strategies; Regional Development*

It further notes that the lack of waste management infrastructure to serve the GDA will become critical beyond 2008 and in particular emphasises the need for waste management infrastructure to work at a wider Regional level. In that regard it states:

'Private sector proposals to develop landfill sites in Wicklow, Kildare and Meath are likely to be developed in the medium term. Should such proposals proceed, the transferring of waste between regions could be reconsidered so as to give flexibility in dealing with waste management at a regional level. New facilities should be allowed to perform their required function in one region and also form part of the wider strategy that includes waste management in another region.'

With regard to new waste management facilities, the Regional Guidelines emphasise the need for a pragmatic consideration of waste disposal and management – including the provision of integrated waste management facilities and the development of facilities which can serve constituent waste regions as well as the wider Planning region. The guidelines state:

'From a strategic perspective the waste management industry (which includes Planning Authorities and private operators) should aim to develop integrated waste management facilities infrastructure in the GDA. This infrastructure includes new landfills, waste to energy plants, biological treatment and recycling facilities. In developing this infrastructure provision should be made to:

- *Provide for growth in the regional capacity for integrated waste management so as to mitigate the escalating costs of waste disposal;*
- *develop the biological treatment facilities for organic waste, further recycling and waste to energy plants to serve the needs of the GDA;*
- *permit interregional transfer of waste to give appropriate economies of scale to integrated waste management facilities;*
- *consider the requirement for new infrastructure in the context of the GDA, rather than the existing waste management regions; and*
- *consider the examination of other viable options, for example the identification, promotion and recommendation of potential Strategic Development Zones (through Part 9 of the Planning and Development Act 2000) to facilitate the development of integrated waste management facilities.'*

Concluding Remarks

The *National Development Plan* promotes regional development and notes that there have been significant challenges in the delivery of infrastructure in times of significant population and economic growth.

The *Regional Planning Guidelines for the Greater Dublin Area (GDA)* indicate that waste management, and the need for waste management facilities within the Greater Dublin Area, has been established as key infrastructure, which must be developed on a strategic and regional basis in order to facilitate the sustainable growth of the Region.

The Regional Planning Guidelines have identified that there are constraints within the Region and that the most appropriate way to address this is the provision of facilities, which meet the need of constituent waste regions as well as the wider Region.

The proposed extension and intensification of the Drehid Waste Management Facility complies with these regional planning objectives in that it can provide for the needs of the wider planning Region and the relevant waste authorities in a sustainable, planned and rational manner. Moreover, the facility is capable of meeting both long-term and short-term strategic needs thereby enabling regional growth and development – a key objective of the Guidelines.

1.3.1.4 Planning Decisions in Relation to Waste Management Facilities

The planning assessments of a number of planning applications for the development of waste management facilities in the Greater Dublin Area have established the need for additional landfill facilities in the region.

The ABP Inspector's Report relating to the development of a proposed facility at *Calf Field, located in Counties Kildare and Meath (An Bord Pleanála Reference PL17.203801 and PL17.209320)* by Padraic Thornton Waste Disposal Limited, contained a number of key conclusions:

- The Inspector noted that any assessment of the development must take place at a strategic and site specific level and that this included consideration of the application in the context of the Greater Dublin Area as well as prevailing National, County and Waste Region policies.
- The parallel Inspector's report dealing with the Kildare County Council application (ABP Reg. Ref. PL17.209320) noted that the facility at Calf Field was a development which would "*facilitate waste disposal capacity in the GDA*" and that from 2008 onwards, landfill capacity in the GDA would be critical, with the closure of existing landfill sites at Arthurstown and Kilcullen

(KTK Landfill). In that regard, the Inspector noted that *“in the context of the GDA ... it would appear that the landfill capacity proposed at the Calf Field is not excessive when the waste arisings in the Dublin region and Kildare are taken into account”*.

- In the report relating to the Meath application (Reg. Ref. PL17.203801), the Inspector noted that it was essential that a broader, strategic approach was taken to the development stating that it was *“totally inappropriate to consider the development simply in terms of the Meath Development Plan and Waste Management Plan policies and that it must be considered in relation to the GDA, of which Meath itself forms part.”*
- The Inspector further notes that those Regional Guidelines recommend that the development of integrated waste management facilities infrastructure in the GDA – including landfills should be carried out in the context of the Planning Region while also having regard to the changing policy (at that time) in favour of the movement of waste across waste regions where appropriate.

On the basis of these comments, the Inspector, and An Bord Pleanála, ultimately accepted the need for the facility. The fact that the development itself was ultimately refused is noted to refer solely to the location of the subject site within an area of high amenity and also due to prevailing geological and hydrogeological characteristics of the site as well as traffic issues.

The ABP Inspector’s Report relating to the intensification of the *existing waste management facility at Knockharley, Co. Meath (An Bord Pleanála Reference PL17.220331)* by Greenstar Holdings Limited also contained a number of key conclusions, namely:

- In assessing the Applicant’s submission in relation to the deficit of waste management facilities within the Greater Dublin Area, the Inspector noted in accordance with Condition No. 2 (a) of the parent permission (PL 17.125891) that there was a regional restriction on the source of the waste being treated at this facility. In addition to seeking an intensification of use of the Facility, the applicant was also seeking a removal of that restriction. The Inspector noted that in the context of policy changes in the interim period, the imposition of this restriction was no longer appropriate.
- The Inspector noted that the landfill capacity of the Region had been significantly expanded since the original planning decision – with the reduction in the volumes of waste being diverted to landfill and also the development of additional facilities throughout the North-East Waste Region. As a result the Region had sufficient capacity to cater to estimated waste

streams for 30 to 40 years

- The Inspector further noted that the Region's Waste Management Plan "*makes provision for the available overcapacity to be used to landfill waste from outside the region*" and notes that this scenario is dependent on a shortfall in disposal capacity within neighbouring regions. It is noted that the Applicant wished to avail of this and to accept increased tonnages at the facility in addition to waste from the Dublin Region.
- With respect to capacity within the Dublin waste region, the Inspector stated:

"I note from the Waste Management Plan for the Dublin Region 2004-2010 that a critical shortage of landfill capacity is imminent with the closure of the landfill facilities.

The policy of the Plan is to aim to become self reliant in terms of waste management infrastructure ensuring that waste generated in the Dublin Region should be managed in Dublin as far as possible.

To this end it is perceived that the development of a Waste to Energy Plant at Poolbeg Peninsula is a critical element of waste infrastructure for the Region to ensure continued diversion of waste from landfill.

Even with the diversion of waste from landfill to the WTE facility there will remain a significant requirement for residual landfill disposal. The urgent delivery of the proposed Fingal landfill (10 million tonne capacity at Nevitt which should provide sufficient capacity from 2009-2030) is required to replace existing landfills and to provide adequate safe disposal capacity for residual waste.

It is clear from the Plan (Section 18.9) that the short term waste disposal requirements for the Region are reliant on facilities outside the region i.e. extension of Athurstown facility in Co. Kildare, maximising the use of available disposal (or energy) recovery facilities in the Greater Dublin Area i.e. Kildare, Meath and Wicklow if feasible and seeking options for disposal capacity in other regions if necessary."

- The Inspector concluded that – as set out in the Waste Management Plans, the North–East region "*has the capacity to address the landfill deficiencies that exist in the Dublin Region in the short-medium term.*" With regard to the Applicant's assertion that availing of this excess capacity to redress the imbalance and increasing the permitted tonnage would '*support the attainment of national waste management policies through the rational use of such*

infrastructure’ in line with the Ministerial Directive, however, the Inspector concluded that this was not acceptable where such a development would undermine the long-term waste management infrastructure of the North-East Region:

“as the designated residual landfill for the region, the facility should be protected as an important long-term infrastructural resource..... (and) permitting increased tonnages would shorten the operational life of the facility which would be inconsistent with the core objectives of the waste plan.”

Having regard to these considerations, the Inspector effectively recognised the capacity shortfall in the Greater Dublin Area and the ability of facilities in the North-East Region to address this. A proposed relatively minor extension of the landfill was permitted as was the removal of the regional restriction on the origin of waste but the intensification of its use was refused as this was considered to shorten the operational life of the facility therefore undermining its status as a long-term facility to serve the North-East Region.

An Bord Pleanála Inspector’s Report relating to the grant of permission for the limited extension of the operational life of the landfill at Arthurstown, Kill, Co. Kildare ² (*An Bord Pleanála Ref. No. PL09.224032*), included the following:

- The Waste Management Plan for the Dublin Region made specific reference to the additional short-term extension to the facility – *“along with examination of options within the Greater Dublin Area or other regions if necessary”*;
- The Kildare Waste Management Plan (WM7) noted the need to ensure the provision of a residual landfill facility for the County and that this objective could, to an extent, be achieved with the construction of a new private facility at Drehid by Bord na Móna.

The Inspector further notes:

“Under the terms of that [the original] permission, the Drehid facility can accept 120,000 tonnes per annum of unbaled waste, over a 20-year period. In addition 25,000 tonnes of bio-waste can be composted annually. Whilst this may be sufficient for the needs of Co. Kildare, it would not be sufficient for the Dublin and Kildare regions – estimated requirement of 445,000 tonnes per

² Note that the facility at Arthurstown is permitted to accept waste from the Dublin and Kildare regions only. Arising from a recent decrease in waste volumes being disposed of at the site, an extension of the operational life of the facility was required to enable it to be utilised to its permitted capacity.

annum (both public and private). In any event, there is no condition on the permission limiting the regions from which waste can be accepted, and it is likely that, having regard to the proximity principle, some waste may come from adjoining regions – Wicklow, Midlands and North East”.

Most recently, in relation to the assessment of the *Waste-to-Energy facility at Poolbeg, Ringsend, Dublin 4 (An Bord Pleanála Ref. No. PL29S.EF2022)*, the need for waste management infrastructure has been accepted and established in the context of the estimated wastes arising and the available management infrastructure:

- In relation to the information submitted on waste arisings, the Inspector notes: *“The total residual waste arising would be 793,172 tonnes, whilst 604,909 tonnes would be recycled. The residual waste for the year 2020 is indicated to be 846,547 tonnes. The figures used ... are similar to those contained in ... the Waste Management Plan 2005 – 2010. The total residual figure for the year 2020 allowing for 46.9% recycling of household waste and 49% recycling of commercial and industrial waste would be 846,547 tonnes.*

If this waste is to be disposed of within the Dublin region, as provided for in the Waste Management Plan, facilities either in the form of additional landfill facilities, waste to energy or other facilities will be necessary.

... the figures consistently indicated 800,000 per annum available for residual treatment, whether incineration or landfill, allowing for the regions’ commitments to recycling, including the proposed biological treatment plants.”

- In relation to the need to plan for future waste management needs based on these figures, the Inspector notes: *“I consider that waste disposal/recovery facilities for residual waste approaching the scale of that proposed must be put in place to cater for waste arising in the Dublin region.*

Concluding Remarks

It is noted that the deficit in waste management facilities in the Greater Dublin Area is acknowledged by An Bord Pleanála, as is the importance of addressing such deficits at the strategic level of the Planning Region.

With the most optimistic commencement of operation of the largest permitted (but as yet undeveloped) waste management facility – namely the Waste to Energy facility at Poolbeg, estimated as being 2012, there is clearly a need to identify interim solutions to the Region’s waste management infrastructural deficit as a matter of priority. The recent grant of permission for the extension of operations at the existing landfill at

Arthurstown in some way meets this demand, but only until 2010 and with restricted annual tonnages. Moreover, the Inspector's assessment of the Arthurstown application states, in relation to the Drehid Waste Management Facility, that the permitted capacity would not meet the needs of Kildare and Dublin. This application for permission to extend the capacity and operational life of the Drehid Waste Management Facility will therefore ensure that it can reach its regional potential.

It is clear that An Bord Pleanála does not consider the shortening of the lifespan of existing facilities to be appropriate, as this in effect compromises the strategic and long-term aspects of these waste management facilities leading ultimately to a capacity deficit in the future.

Therefore short-term waste management capacity should be provided in parallel with longer-term capacity. The current proposal to provide for existing needs, while ensuring that longer-term waste management objectives are protected and maintained, is wholly in-line with these policies.

1.3.1.5 Supplementary Study by Bord na Móna to Assess the Existing Capacity Deficit

As part of the assessment of the need for increased capacity at the Drehid Waste Management Facility, Bord na Móna commissioned an Initial Feasibility Report which included a detailed analysis of the future disposal/incineration capacity of the Greater Dublin Area (GDA) and North East Waste Management Region to accommodate waste arisings.

This report is included in its entirety in Appendix 1.2.1 and clearly outlines and quantifies the need for this development. It should be noted that the report, which was initially prepared in December 2006, has been updated primarily to take into account relevant planning decisions, which have been made since that time.

The report provides an assessment of the capacity at existing and proposed facilities and forecasts future capacity requirements for the regions. The report provides an overview of the actual tonnage of waste accepted in 2004, 2005 and 2006 including a breakdown of the types of waste that were deposited at each site.

It outlines (*Section 2*) *capacity* based on the currently operational facilities and facilities which are either in the regulatory process or have secured the necessary permissions/licences but (as of yet) have not been constructed. Specifically the report (as per *Section 2.6*) concludes that the potential waste disposal/incineration capacity of the GDA could be of the order of 1,507,275 TPA in 2007, increasing to 2,093,000 TPA in 2012 and decreasing again to a total of 1,570,000 TPA in 2020.

Section 3 of the Initial Feasibility Report provides an overview of data presented in the waste management plans and assesses the quantity of residual MSW which will be presented for disposal/incineration up to 2020. It is concluded therein (see Figure 3.6) that with the implementation of all proposed recovery facilities and the achievement of the proposed recycling targets, the quantities of MSW available for landfill/incineration in the Greater Dublin Area will be of the order of 900,000 to 1,100,000 TPA.

Section 3.3.3 of the report outlines the future capacity of all current and planned facilities in the GDA, as presented in Figure 3.15 therein.

Figure 3.16 was derived by presenting the data on the quantity of residual waste available, together with the data available on the MSW incineration/disposal capacity currently operational combined with potential capacity which is either in the regulatory process or has secured the necessary permissions/licences but (as of yet) has not been constructed in the GDA.

As shown on *Figure 3.16*, there will be adequate landfill capacity in the GDA only where three key criteria are fully met, namely where:

- a recycling rate as high as 65% can be achieved in the constituent waste management regions;
- for example, the two large facilities – the Poolbeg Waste to Energy facility (with planning permission for a capacity of 600,000 tonnes per annum but, as yet, not licensed) and the Nevitt/Tooman landfill facility (with a proposed capacity of 500,000 tonnes per annum, but, as yet, not permitted or licensed) - are developed and operated to their proposed capacities; and,
- the various facilities will be constructed and operated in accordance with envisaged timescales.

Critically it is shown in some detail (see *Section 3.3.3*) that the capacity of the waste management infrastructure of the GDA will be significantly undermined, should the Nevitt/Tooman landfill and/or the Poolbeg Waste to Energy facility (for example) not be developed or their construction be delayed, thereby affecting the Region's capacity to both continue and grow in an economically and environmentally sustainable manner.

In particular, if the Nevitt/Tooman landfill is not constructed by its envisaged date of 2010, or if it is not developed at all, then there will be a significant deficit in landfill capacity in the Region. As of early 2008 planning and licensing decisions with respect to the facility are awaited. Similarly, if the Poolbeg incinerator is not constructed by its envisaged date, or if its is not developed at all, then there will be a significant deficit in disposal capacity in the Region.

Where such a situation arises the significant deficit of waste management capacity in the GDA is clearly shown in the report. Given that the need to provide waste management infrastructure has been identified as being critical to enabling sustainable regional growth, this is clearly an area of significant concern.

1.3.1.6 Concluding Remarks - Strategic Planning Considerations and the Need for the Development

Drawing together the comments noted above, the need for this development is based on the following considerations:

- The subject proposal supports the national policies of developing a rational, national network of municipal landfill sites while protecting the long- and short-term needs of the relevant regional waste authorities. The proposal is therefore compliant with national and regional waste management policies.
- The Waste Management Plans for the Kildare and Dublin Waste Authorities recognise the need for inter-regional transfers of waste and in respect of the Dublin Plan, note that such arrangements will be essential, certainly in the short-term, to meet deficits in landfill capacity in Dublin.

Both plans emphasise the importance of planning for short-term needs while protecting the longer-term objectives of that waste region – which in the case of Dublin means developing additional facilities within the Region. The proposed development perfectly complements these objectives providing an immediate solution to an identified short-term capacity deficit as well as protecting the long-term function of this waste management facility.

- Regional Planning is a key element of both The National Development Plan and the associated National Spatial Strategy. The Regional Planning Guidelines for the Greater Dublin Area (GDA) indicate that waste management facilities must be developed on a strategic and regional basis in order to facilitate the sustainable growth of the Region and that the most appropriate way to address this is the provision of facilities which meet the need of constituent waste regions as well as the wider Region.
- Planning precedent and decisions have established that there is indeed a deficit in waste management facilities in the Greater Dublin Area and that this is a key area of concern at a regional level. Indeed it is noted that even with the diversion of waste from landfill to the incinerator at Poolbeg there would remain a significant requirement for residual landfill disposal.

Decisions indicate that waste management infrastructure should be planned at

both a strategic and site specific level having regard to local and regional plans as well as prevailing National, County and Waste Region policies with consideration of the provisions of the County Development Plan and Waste Management Plan only being “*totally inappropriate*”³.

In considering applications for short-term intensification of use or extensions to permitted facilities, An Bord Pleanála has balanced the need to facilitate interim solutions to the Region’s infrastructural deficit and the need to protect long-term infrastructural assets. Where these are shown to conflict, An Bord Pleanála has not permitted short-term needs to undermine long-term plans. It is therefore concluded that short-term waste management capacity should be provided to address existing constraints while in parallel ensuring that longer-term waste management objectives are protected and maintained.

With specific respect to the facility at Drehid, it appears that the subject application to intensify and extend the permitted facility may indeed have been anticipated by An Bord Pleanála as it was noted that the Drehid Waste Management Facility could not cater for the needs of the Kildare and Dublin Waste Regions under the current permission.

- The Annual Progress Report 2007 which provides a commentary on the progress made in the first two years of the Waste Management Plan for the Dublin Region, also recognises that a critical shortage of municipal landfill capacity is imminent with the closure of Arthurstown and Balleally Landfills by 2009-2010.

The report further notes that the long-term landfill target of 16% by 2013 remains a considerable challenge, as does the reduction in the levels of Biodegradable Municipal Waste being landfilled in the region. It also states that a decision is still pending in relation to the development of a residual waste landfill in Fingal (as proposed at Tooman/Nevitt) and that *unless alternative landfill capacity is made available, a critical shortage of municipal landfill capacity is imminent*. In particular, the report notes that *the (Waste Management) Plan policy is to provide for the use of other available landfill within the greater Dublin Region, with changes to Planning or Licensing status of these facilities of a short term and limited nature*.

- The assessment of capacity commissioned by Bord na Móna indicates that the capacity of the waste management infrastructure of the Greater Dublin Area will be significantly undermined, should the Nevitt/Tooman landfill and/or the

³ as noted in Para. 1.3.1.4 above in relation to the facility at Calf Field, Counties Kildare and Meath (An Bord Pleanála Reference PL17.203801 and PL17.209320) by Padraic Thornton Waste Disposal Limited

Poolbeg Waste to Energy facility (for example) not be constructed or their construction be delayed. This report identifies a short- and long-term need for appropriately managed facilities, which are key to the economic and physical development of the Region and shows that this cannot be met with the existing available infrastructure.

Having regard to these points, the proposed development for the intensification and extension of an existing and approved engineered Waste Management facility which will cater for short- and long-term waste management needs of a large geographical area, represents rational strategic development of critical infrastructure which is key to national, regional, county and local waste management objectives. This represents a key step in the planning and development of integrated waste management facilities in the Planning Region and will deliver on the key objectives of protecting the economic, social and environmental potential of the Region as stated in the Regional Planning Guidelines. Moreover - and having particular regard to An Bord Pleanála's classification of this as Strategic Infrastructure, it is emphasised that this is indeed a development which would be of strategic economic importance to the State, the planning and the waste regions; and that it would contribute substantially to the fulfilment of any of the objectives of the National Spatial Strategy and the Regional Planning Guidelines for the Greater Dublin Area.

The proposed facility (which, as in the case of the current permission, would be subject to requirements of the Landfill Directive with respect to the treatment of waste) is wholly necessary to ensure that both the immediate and future needs of the Greater Dublin Area and its constituent Counties - including County Kildare, a waste management region in itself, are protected and enhanced.

1.3.2 Land Use Context & Prevailing Planning Policies

1.3.2.1 Existing Land Uses On-Site and in the Vicinity

The subject site accommodates a waste management facility, which is currently being developed in accordance with the relevant planning permission and waste licence. This facility has a permitted twenty year operational life. The proposed site for the new landfill footprint extension will directly abut the permitted landfill area.

The area surrounding the permitted facility is reasonably sparsely populated, with no residential dwellings in close proximity. The largest concentration of houses close to the facility is to the west of the site in the village of Derrinturn, some 3.2 km from the previously permitted landfill footprint and its proposed extension, while both Allenwood and Coill Dubh are in excess of 5km. There are no significant residential/commercial developments planned within close proximity of the facility.

1.3.2.2 Prevailing Land Use Policies for the Site

Within the prevailing Kildare County Development Plan, 2005, the subject lands are not zoned. However, having regard to the existing grant of permission for waste management operations on the site, the subject site must be considered to have a 'de-facto' zoning as a waste management facility.

In addition to this authorised land-use, the subject site is characterised by its landscape qualities. In that respect, the County Kildare Landscape Character Assessment describes that the site is located within 'The Western Boglands'. These are described as areas that principally consist of peat extraction areas together with areas of pasture and large areas of woodland – both planted and naturalized. The Critical Landscape Factors within this Area are described as smooth terrain, low vegetation and shelter vegetation, the former being features with a low capacity to visually absorb new developments while the latter, where present, can absorb visual impact.

In addition to its classification within a broad landscape, the site is located within one of the Sensitivity Factors – as outlined on Map 18.4 of the County Development Plan due to the presence of peat bogs, which are visually open and exposed with sparse or low growing vegetation. Furthermore, the subject site – in addition to a large portion of the County and indeed adjoining counties, is located within the Robertstown xcCountryside, in the bounds of the Northern Lowlands.

With respect to the overall compliance of this application, with regard these landuse and landscape policies, it is noted:

- The proposed development of a waste management facility directly abutting a permitted facility represents the clustering of compatible land uses in-line with land use policies set out in the County Development Plan;
- The permitted development has been evaluated by Kildare County Council and An Bord Pleanála on appeal and both of these authorities have previously noted that the development and operation of a waste management facility in this location is compliant with the policies relating to these character areas. It has therefore been ruled that there is no conflict between this type of land use development and the County Development Plan and associated Landscape Character Assessment.

1.3.2.3 Other Prevailing Local or County Level Policies

Sectoral policies set out in the Kildare County Development Plan, 2005 which must be considered in the evaluation of this application are summarised as follows:

Topic	Reference	Summary
Waste Management	Para. 3.4	Sets out legislative framework for the implementation of the County Kildare Waste Management Plan
	WM7	To ensure the provision of a residual landfill facility in County Kildare either directly by the Council or in co-operation or partnership with the private sector, subject to the specific requirements of the objectives of the County Kildare Waste Management Plan.
Boglands	Para. 11.2	Establishes a goal to ensure that a balanced approach is taken to the development of the county's peat resources and the restoration of cutaway bogs, in order to minimise the negative impact on biodiversity and the archaeological and cultural heritage.
		Establishes objectives to: <ul style="list-style-type: none"> • promote and facilitate the development of the County's peat resources in a sustainable manner; • to seek the conservation of designated bogs and to protect the bogland landscape character areas within the County; • to encourage a balanced approach to the re-development of cutaway bogs.
	BL2	To take a balanced approach to the re-development of cutaway bogs. Large portions of cutaway should be developed as areas for wildlife, biodiversity, conservation and their amenity value. While other portions can be utilised for economic uses such as grassland, forestry and wind energy.
	BL3	To liaise with Bord na Móna, Irish Peatland Conservation Council, Coillte, National Parks and Wildlife Service of the Department of the Environment, Heritage and Local Government to ensure the sustainable use of cut away bogland, with due consideration given to their ecological and amenity value.
	BL4	To recognise that cutaway boglands represent degraded landscapes and/or brownfield sites and thus are potentially robust to absorb a wide variety of sympathetic developments.

With respect to the overall compliance of this application with regard to these sectoral objectives it is noted that the permitted facility was assessed having regard to these policies, in the first instance, and was found to be wholly compliant with these.

1.3.2.4 Concluding Remarks - Land Use Context & Prevailing Planning Policies

- As noted above it is concluded that the proposed development is wholly compliant and in-line with the policies and objectives of Kildare County Council as set out in the County Development Plan, 2005.

1.4 Alternatives

1.4.1 Alternative Processes

The current dependence on landfill as a waste management option in Ireland is not sustainable in the long term. This is due to a combination of regulatory, environmental and public pressures to find other avenues for managing the growing quantities of municipal waste

Waste management in Ireland and across the EU is based on a waste management hierarchy, with the emphasis on waste prevention, minimisation, re-use/recycling and recovery respectively. In order to meet these objectives and reduce the reliance on landfill Bord na Móna has been granted permission by An Bord Pleanála (PL 09.212059) for a composting facility for the treatment of separately collected biowaste at the Drehid Waste Management Facility. Development of this composting facility is yet to commence as separately collected biowaste required for the facility is not as yet available in adequate quantities. It should also be noted that Bord na Móna currently operates a 96,000 tonne annual capacity green waste composting facility at Kilberry, near Athy in County Kildare and operates five significant materials recycling facilities (including a biowaste facility) in various counties, via a recent acquisition.

Nonetheless, waste disposal by landfill is seen as an integral part of the EU Waste Management Hierarchy and will always be required for the significant residual portion of the waste stream, which cannot be handled by the more favourable options.

The Drehid Waste Management Facility is currently constrained in terms of the annual tonnage of waste that it is permitted to accept. This constraint has been identified in various Inspectors' Reports for other waste management facilities. This includes the An Bord Pleanála Inspector's Report for Arthurstown which states that while the currently permitted annual tonnage at the Drehid Waste Management Facility *may be sufficient for the needs of Co. Kildare, it would not be sufficient for the Dublin and Kildare regions – estimated requirement of 445,000 tonnes per annum (both public and private)* (ABP Reg. Ref. PL 09.224032).

Current practice abroad also shows that landfills will continue to be an integral part of any waste management system even with the introduction of extensive recycling schemes and the construction of waste to energy facilities.

It is clear therefore that for the foreseeable future both biological treatment and landfill will remain essential components of the waste management infrastructure in the GDA of which County Kildare is a part.

1.4.2 Alternative Sites

Fehily Timoney & Co. on behalf of Kildare County Council identified the site at Drehid, as the preferred site in County Kildare for the development of a landfill, satisfying the general criteria as set down in Annex I of the EU Directive on Landfilling of Waste.

This was achieved by means of identifying a number of exclusionary areas and then ranking the remaining sites using a number of headings. This process led to the short-listing of three sites namely, Usk, Newtowndonore and Drehid as shown on Figure 1.4.1. Preliminary site investigations were carried out at each of the three sites. These activities included trial hole excavation, drilling, a geophysical survey, an archaeological survey and an ecological survey. The information gathered was then used to rank the three sites.

Drehid emerged as the most suitable site for a residual landfill due to

- the large available land bank;
- the remoteness from dwellings;
- availability of clay and gravel locally; and
- the natural protection offered by the surficial deposits to the underlying bedrock aquifer. Their nature and thickness (>10m) gives a low vulnerability rating, and the most favourable groundwater protection scheme response, i.e. R1.

The site selection report showed the Drehid site as the most suitable of the three sites shortlisted and the Preferred Site for the location of a residual landfill.

In addition, the baseline assessment for this project was completed prior to the design of the facility, which allowed for the optimisation of the siting of the facility, including the access road, within the overall Bord na Móna landholding of Timahoe Bog. In particular sensitive areas such as natural watercourses, areas of bog-woodland, potential archaeological sites and inferred geological faults etc. were avoided. The facility is also sited at a significant distance from the local road network and residential properties, with the nearest residence being approximately 1 kilometre from the proposed landfill footprint.

Perhaps uniquely in the wider regional context, the existing Drehid Waste Management Facility has the potential to immediately address the accepted imminent critical shortage of municipal landfill capacity in the Greater Dublin Region, while the overall site has the capacity for the proposed extension which would ensure that the long-term and strategic nature of the previous permission is not compromised.

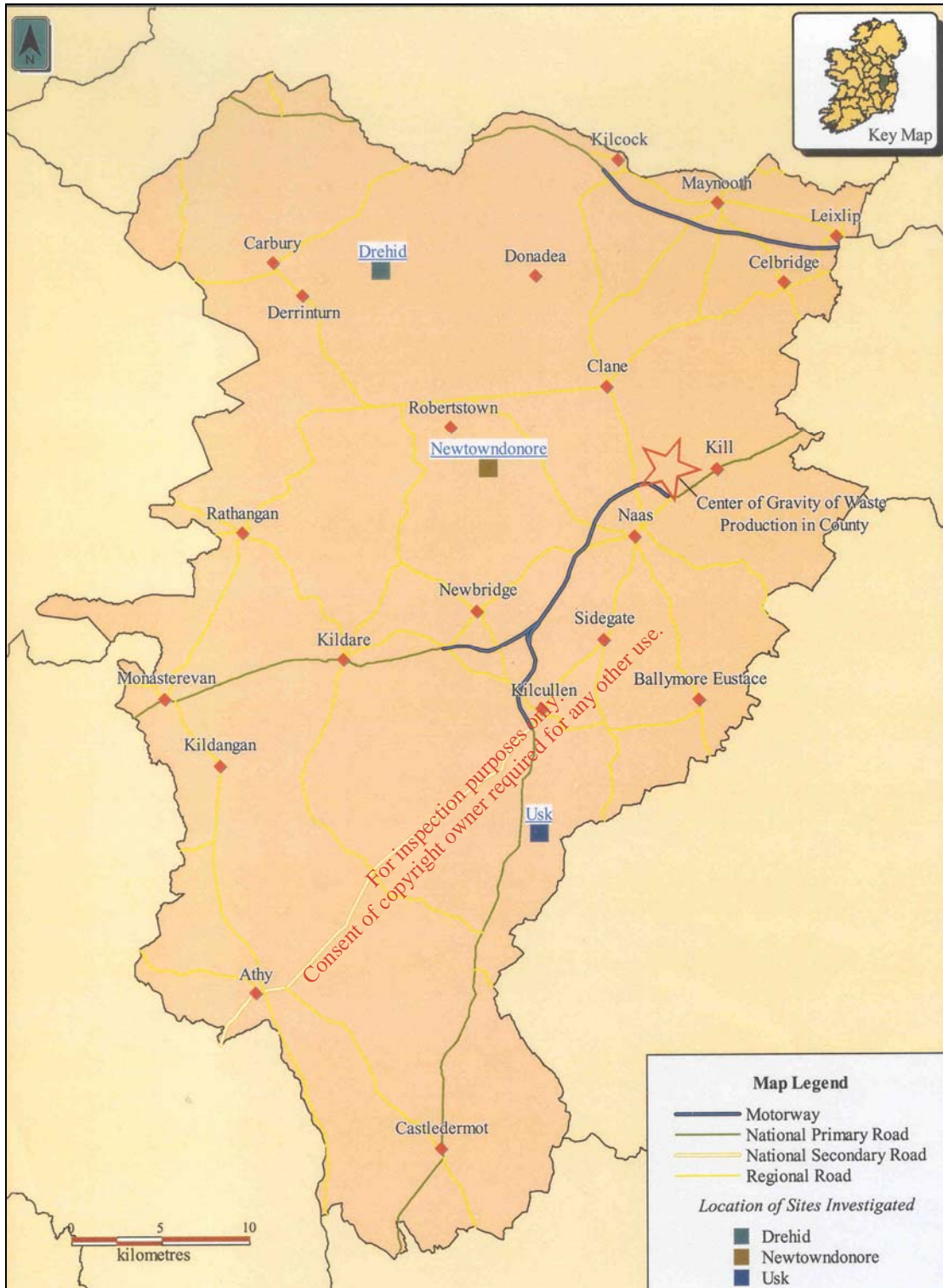


Figure 1.4.1: Site Location Map Three Priority Sites (*Kildare Landfill Site Selection*)

1.4.3 Do-Nothing Alternative

As stated in Section 1.3 of this EIS, short-term waste management capacity should be provided to address existing constraints while in parallel ensuring that longer-term waste management objectives are protected and maintained.

The proposed development, i.e. the intensification and extension of the Drehid Waste Management Facility, is wholly necessary to ensure that both the immediate and future needs of the Greater Dublin Area – and its constituent County Kildare – a waste management region in itself, are protected and enhanced.

The Initial Feasibility Report commissioned by Bord na Móna to assist it in formulating its position with respect to this proposal has shown that the capacity of the waste management infrastructure of the Greater Dublin Area will be significantly undermined, should the Nevitt/Tooman landfill or Poolbeg Waste to Energy facility (for example) not be constructed or their construction be delayed, thereby affecting the Region's capacity to both continue and grow in an economically and environmentally sustainable manner.

Arising from the reviews of policies, planning precedent and capacity studies (Section 1.3 of this EIS), the emerging solution for the development of waste management facilities to meet the shortfall in capacity within the Greater Dublin Area and specifically within the Dublin Waste Region is clear.

Simply, it emerges that:

- the Greater Dublin Area Planning Region and the constituent waste regions must address the development of waste management infrastructure in a rational and integrated manner;
- waste management facilities located in other waste regions but serving the Dublin Waste Management Region will be subject to conditions with respect to their operational life and permitted tonnages that ensure the receipt of waste from Dublin does not undermine their long-term capacity and functionality;
- the Dublin Waste Management Region will pursue an objective of accommodating and managing its own waste in the long-term and that facilities that undermine this – or the functionality of any waste region, will not be permitted.

Arising from this the need to provide a short-term facility that meets these criteria is clear.

We submit that the intensification and extension of the permitted facility at Drehid, will meet these objectives – providing a short-term environmentally appropriate solution to the existing constraints in the Dublin Waste Management Region (and thereby in the GDA) and also ensuring that the long-term capacity of the facility is protected.

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1.5 Background Work for the Environmental Impact Statement

All contributors to this report undertook comprehensive investigations of the site and surrounding area, during the course of the baseline studies.

The meteorological data used to determine the climatic conditions pertaining to the site are based on a rainfall station located at Lullymore. However, the evapotranspiration data was obtained from the synoptic station at Casement Aerodrome, County Dublin. The information supplied in the EIS is the best information available from the Meteorological Service.

1.6 Consultation

The purpose of this section is to provide an overview of the consultation process followed to date in respect of the proposed facility. In accordance with Section 4 of the *Guidelines on the Information to be Contained in Environmental Impact Statements (EPA, 2002)*, the consultation process consisted of consultation with competent bodies, statutory bodies and interested parties. The primary objective of involving competent bodies, statutory bodies, and interested parties at an early stage in the Environmental Impact Assessment process is to aid scoping of the EIA.

The following lists the various parties consulted to-date.

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Kildare County Council (Environmental Services)
Kildare County Council (Economic Development)
Kildare County Council (Roads)
Kildare County Council (Water Services)
Kildare County Council (Planning)
Kildare County Council (Conservation Officer)
Dublin City Council
Meath County Council
Fingal County Council
Dún Laoghaire-Rathdown County Council
South Dublin County Council
Wicklow County Council
Environmental Protection Agency
The Heritage and Planning Division of the Department of the Environment, Heritage and Local Government
Department of Agriculture and Food
Southern Fisheries Board
An Taisce
Irish Peatland Conservation Council (IPCC)
Heritage Council
Irish Native Woodland Trust
Geological Survey of Ireland
BirdWatch Ireland
Irish Wildlife Trust
Irish Forestry Board
Irish Farmers Association
Failte Ireland
National Roads Authority
National Parks and Wildlife Service
Teagasc
Electricity Supply Board
Bord Gáis
Health and Safety Authority

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Responses were received from Southern Fisheries Board, Bord Gáis, Failte Ireland, An Taisce, IPCC, ESB and the Department of Agriculture and Food. These are included in Appendix 1.6.1

Pre application consultation meetings were also held with Kildare County Council and the Environmental Protection Agency in January 2008

1.7 Waste Licence, Planning and Environmental Impact Statement

The Waste Management Act (1996) designates the Environmental Protection Agency as the sole licensing authority for landfills, above a certain threshold level of activity.

The Waste Management (Licensing) Regulations 2004 provide for the continued operation of the system of licensing by the Environmental Protection Agency of waste recovery and disposal activities under Part V of the Waste Management Act, 1996. The Regulations set out procedures for the making of waste licence applications, reviews of licences and consideration by the Agency of objections, including the holding of oral hearings.

The Waste Management (Licensing) Regulations 2000 (save for articles 3 and 4 and the First Schedule), Waste Management (Licensing)(Amendment) Regulations 2001, Waste Management (Licensing)(Amendment) Regulations 2002 and European Communities (Amendment of Waste Management (Licensing) Regulations 2000) Regulations 2002 are revoked by the 2004 Regulations.

These Regulations specify the classes of activity that are liable to licensing by the EPA and prescribes the information to be addressed in the licence applications.

The Waste Management Act (1996) as amended by the European Communities (Amendment of the Waste Management Act, 1996) Regulations, 1998, defines the *principal activity* undertaken at the site as ‘Specially engineered landfill, including placement into lined discrete cells, which are capped and isolated from one another and the environment’ (Class 5 of the Third Schedule of the Act). In compliance with the Regulations a Waste Licence Review Application must be sought by Bord na Móna, in respect of the proposed extension and intensification of the Drehid Waste Management Facility.

An Environmental Impact Statement (EIS) is required to accompany a Waste Licence Application, where the volumes for disposal are above a certain threshold volume (greater than 25,000 tonnes per annum), as outlined at class 11(c) in Part II of the First Schedule of Article 24 in the European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No 349 of 1989), as amended by S.I. No. 351 of 1998. These regulations have subsequently been amended by the European Communities (Environmental Impact Assessment) (Amendment) Regulations, 1999 (S.I. No. 93 of 1999). The capacity of the proposed intensification and extension of the facility is above the threshold value and therefore an EIS will accompany the Waste Licence Review Application to the Environmental Protection Agency.

Under Part X, Section 176 of the Planning and Development Act, 2000, which repeals and re-enacts with amendments the Local Government (Planning and Development)

Acts, 1963 to 1999, the circumstances under which an Environmental Impact Assessment may be required for certain developments are defined in Article 24 of the E.I.A. Regulations. The proposed facility is a development, which is of a class specified in Part II of the First Schedule of Article 24 of S.I. 349 of 1989. An EIS therefore accompanies the planning application to An Bord Pleanála in line with the requirements of the Planning and Development (Strategic Infrastructure) Act 2006 as discussed in more detail in Section 1.1 of this EIS.

1.8 Procedures and Structure of the EIS

The consequences of any major engineering project are generally presented in the form of an Environmental Impact Statement (EIS). The EIS contains information on the scale and nature of the proposed development, a description of the existing environment, impact assessment of the proposed development and mitigation measures to mitigate and/or reduce the impact on the receiving environment.

The structure and content of the Environmental Impact Statement has been based on the following documents, as published by the Environmental Protection Agency.

- Advice Notes on Current Practice in the preparation of Environmental Impact Statements (2003).
- Guidelines on the information to be contained in Environmental Impact Statements. (2002).

This Environmental Impact Statement provides for:

- A description of the site and the existing environment;
- A description of the proposed development;
- The impacts, if any, resulting from the proposed development;
- The measures to mitigate any adverse impacts; and,
- A non-technical summary.

The minimum information that must be contained in an EIS is specified in Part X of the Planning and Development Act, 2000 and Schedule 6 of the Planning and Development Regulations, 2001. The structure and content of this EIS has been based on the legislative requirements as set out in Part X of the Planning and Development Act, 2000 and Part 10 of the Planning and Development Regulations, 2001 and the guidance documents by the Environmental Protection Agency as outlined above.

The overall EIS is arranged in four volumes, as follows:

- Volume I: Non Technical Summary;
- Volume II: Environmental Impact Statement;
- Volume III: Drawings; and
- Volume IV: Appendices

Volume II of the EIS contains the main text body and is divided into four sections, which are detailed below:

- Section 1: Introduction;
 Section 2: Description of Site and Existing Environment;
 Section 3: Description of the Proposed Development; and
 Section 4: Potential Impacts and Proposed Mitigation Measures.

1.9 Study Team and Contributors to the EIS

This EIS has been prepared by a team of consultants co-ordinated by TOBIN Consulting Engineers. The relevant inputs of the various members of the Study Team are as follows:

TOBIN Consulting Engineers	Project Direction, Project Management, Production, Evaluation and Reporting. Noise, Climate, Socio Economic, Air Monitoring, Ecology, Surface Water, Geology and Hydrogeology, Traffic and Roads Landfill Requirements and Engineering Design.
Scott Wilson International, Dublin	Landscape & Visual Aspects
Arch Consultancy, Consultant Archaeologists Athenry, Co. Galway.	Archaeology
Odour Monitoring Ireland, Trim, County Meath	Odour Modelling
AOS Planning Ltd., Dublin	Planning

In addition to the main Study Team outlined above the following firms also made contributions to the EIS, namely:

- Glover Site Investigation Ltd Borehole Drilling/ Soil Analyses
- Briody Aquadrill Ltd Borehole Drilling
- Bord na Móna Environmental: Ground water/Surface water/Dust/Noise analysis
- Murray Surveyors Topographical Survey

1.10 List of Drawings

The following table contains a list of drawings included in Volume III, which accompanies this EIS.

Table 1.11.1: List of Drawings

DRAWING NO.	DRAWING TITLE	DRAWING NO.	DRAWING TITLE
3369-2401	SITE OWNERSHIP PLAN	3369-2420	COMPOST FACILITY LAYOUT, COMPOST TUNNEL - PLAN AND ELEVATIONS
3369-2402	SITE LAYOUT PLAN	3369-2421	COMPOST FACILITY - ELEVATIONS
3369-2403	SITE LOCATION MAP	3369-2422	COMPOST FACILITY DETAILS & BIOFILTER - PLAN & ELEVATION
3369-2404	AERIAL PHOTOGRAPH	3369-2423	COMPOST FACILITY - SERVICES LAYOUT
3369-2405	PROXIMITY TO BUILDINGS TO PROPOSED DEVELOPMENT	3369-2424	ADMINISTRATION BUILDING - PLANS
3369-2406	EXISTING TOPOGRAPHIC CONTOURS	3369-2425	ADMINISTRATION BUILDING - ELEVATIONS <1 OF 2>
3369-2407	SITE INVESTIGATION AND ENVIRONMENTAL MONITORING POINTS	3369-2426	ADMINISTRATION BUILDING - ELEVATIONS <2 OF 2>
3369-2408	FACILITY INFRASTRUCTURE	3369-2427	MAINTENANCE BUILDING - PLAN AND ELEVATIONS
3369-2409	SITE FENCING LAYOUT	3369-2428	WEIGHBRIDGE OFFICE / KIOSK - PLAN AND ELEVATIONS
3369-2410	TYPICAL FENCING LAYOUT	3369-2429	WASTE INSPECTION / FUEL STORAGE LOCATIONS - GENERAL ARRANGEMENT
3369-2411	ROAD CONSTRUCTION DETAILS	3369-2430	LINER AND EMBANKMENT DETAILS
3369-2412	LANDFILL PHASING LAYOUT AND CONSTRUCTION LEVELS	3369-2431	SAND AND GRAVEL BORROW AREA - PLAN AND SECTIONS
3369-2413	LEACHATE COLLECTION SYSTEMS	3369-2432	CLAY BORROW AREA - PLAN AND SECTIONS
3369-2414	LEACHATE MANAGEMENT AREA-PLAN AND SECTIONS	3369-2433	SITE DRAINAGE LAYOUT
3369-2415	LANDFILL GAS EXTRACTION LAYOUT AND LEACHATE RECIRCULATION LAYOUT	3369-2434	SURFACE WATER SETTLEMENT LAGOONS - FORMATION LEVELS
3369-2416	TYPICAL CELL LAYOUT	3369-2435	SURFACE WATER SETTLEMENT LAGOONS - LONGITUDINAL SECTION
3369-2417	LANDFILL GAS MANAGEMENT AND CAPPING DETAILS	3369-2436	FINAL RESTORATION LEVELS
3369-2418	LONGITUDINAL SECTIONS THROUGH LANDFILL	3369-2437	RESTORATION PLAN