Bord na Móna
Naturally Driven

PROPOSED DEVELOPMENT AT
DREHID WASTE MANAGEMENT FACILITY

ENVIRONMENTAL IMPACT ASSESSMENT REPORT (EIAR)

VOLUME II
EIAR MAIN TEXT

DECEMBER 2017

TOBIN CONSULTING ENGINEERS

TOBIN
Patrick J. Tobin & Co. Ltd.

DOCUMENT AMENDMENT RECORD

Client:	**Bord na Móna**
Project:	**Proposed development at Drehid Waste Management Facility**
Title:	**EIAR Main Text (Volume II)**

PROJECT NUMBER: 8108				DOCUMENT REF: 8108-01			
D01	FINAL EIAR Vol II of IV	Various	11/08/17	AM/DG	14/12/17	DG	18/12/17
Revision	**Description & Rationale**	**Originated**	**Date**	**Checked**	**Date**	**Authorised**	**Date**
TOBIN Consulting Engineers							

TABLE OF CONTENTS

TABLE OF FIGURES

LIST OF TABLES

LIST OF PLATES

APPENDICES

Appendix 1.1 List of contributors to the EIAR
Appendix 1.2 Record of EIA Consultation
Appendix 2.1 An Bord Pleanála SID Direction
Appendix 2.2 List of Planning applications
Appendix 2.3 EPA's National Waste Report
Appendix 3.1 Engineering Services Report
Appendix 6.1 Geophysics
Appendix 6.2 Borehole data
Appendix 6.3 Lab data
Appendix 6.4 Falling head test data
Appendix 6.5 GSI matrix
Appendix 6.6 Aquifer Classification
Appendix 6.7 Pumping test data
Appendix 6.8 Hydrogeological Risk Assessment
Appendix 6.9 Report Extracts on Johnstown & Robertstown well fields
Appendix 6.10 Waste Acceptance Protocol
Appendix 7.1 Hydrometric data
Appendix 7.2 Biological Quality Classes
Appendix 7.3 AER surface water quality
Appendix 8.1 Photomontages
Appendix 10.1 **(See CD)** Haul Route Figure
Appendix 10.2 **(See CD)** Abacus, Kildare County Council and TII Traffic Count Surveys
Appendix 10.3 **(See CD)** A.M. and P.M. Peak Origin Destination Matrices
Appendix 10.4 **(See CD)** OSCADY results
Appendix 10.5 **(See CD)** JUNCTION 9-PICADY results
Appendix 10.6 **(See CD)** JUNCTION 9-ARCADY results
Appendix 10.7 **(See CD)** FWD Level 1 Pavement Surveys (PMS)
Appendix 10.8 **(See CD)** Traffic Scoping Document
Appendix 10.9 **(See CD)** Collision Data
Appendix 11.1 Description of the Aermod model
Appendix 11.2 Met Data - Aermet
Appendix 11.3 Air Quality Standards
Appendix 11.4 Traffic Model
Appendix 11.5 Dust minimisation plan
Appendix 11.6 Baseline Air Quality monitoring
Appendix 13.1 Archaeological Bog Survey Report
Appendix 14.1 Casement Aerodrome Wind Rose Diagram
Appendix 15.1 Fáilte Ireland Visitor numbers

1 INTRODUCTION

1.1 SITE LOCATION

1.1.1 Applicant Details and Site Location

Bord na Móna Plc. (hereafter referred to as Bord na Móna) operates the Drehid Waste Management Facility (WMF), situated near Carbury, County Kildare. The Drehid WMF is an integrated waste management facility which principally includes a municipal solid waste (MSW) landfill and a Composting Facility. The Drehid WMF operates subject to an Industrial Emissions Directive (IED) licence, issued by the EPA, (W0201-03) and subject to the planning approval for the facility.

Bord na Móna proposes to further develop the existing Drehid WMF to include:

- Changes to the volume and nature of wastes to be accepted at the landfill disposal facility;
- Development of additional non-hazardous and new hazardous landfill capacity to provide for the sustainable landfill of these waste streams for a period of twenty five years;
- Pre-treatment or processing of certain waste streams prior to landfill;
- Increasing the volume of waste to be accepted at the composting facility, and the removal of the restriction on the operating life of the composting facility contained in Condition 2(2) of ABP Ref No. PL09.212059;
- On-site treatment of leachate; and,
- Development of associated buildings, plant, infrastructure and landscaping.

The application area (the area within which the application for development is being made) is confined to an area of 272 hectares (ha), outlined in red on Figure 1.1: Regional Site Location Map. This development, hereafter referred to as the proposed development, is situated in the townlands of Timahoe West, Coolcarrigan, Killinagh Upper, Killinagh Lower, Drummond, Kilkeaskin, Loughnacush, and Parsonstown, as outlined in red on Figure 1.1.

The overall Bord na Móna landholding comprises 2,544 ha and is outlined in blue on Figure 1.1. The overall landholding is located within the townlands of Drehid, Ballynamullagh, Kilmurry, Mulgeeth, Mucklon, Timahoe East, Timahoe West, Coolcarrigan, Corduff, Coolearagh West, Allenwood North, Killinagh Upper, Killinagh Lower, Ballynakill Upper, Ballynakill Lower, Drummond, Kilkeaskin, Loughnacush and Parsonstown at Carbury, County Kildare.

As the proposed development will share elements of infrastructure with the existing Drehid WMF, the application area includes the townlands of Killinagh Upper, Killinagh Lower, Drummond, Kilkeaskin,

Loughnacush, and Parsonstown, wherein existing infrastructure to be shared is located. The application area includes the total area subject to the existing planning approval for the operational WMF, which is also that area licensed by the existing IED licence (W0201-03).

The redline application area of 272 ha, includes an area of approximately 120 ha where development will take place for the first time; i.e. approximately 152 ha of the application area includes infrastructure and buildings which currently form part of the existing WMF, and this area principally includes the existing MSW landfill and the existing borrow areas.

Access to the Drehid WMF is from the R403 regional road via an existing dedicated site entrance and a 4.8 km internal access road from the regional road. It is proposed that this entrance and road will also provide access from the R403 regional road to the proposed development. The R403 lies south, southwest and west of the site. The R403 joins the R402 at Carbury to the northwest of the site. The R402 connects to the M4 while the R403 connects to central and south County Kildare. The M4 (Dublin to Sligo / Galway) motorway is located approximately 9 km to the north of the proposed development, while the M7 (Dublin to Limerick / Cork) motorway is located approximately 17 km to the south of the proposed development.

The planning application is accompanied by this Environmental Impact Assessment Report (EIAR). An application for an Industrial Emissions Directive (IED) Licence for the proposed development is also being made to the Environmental Protection Agency (EPA). A Screening Report accompanies the planning application, the conclusion of which notes that the proposed development does not require a Natura Impact Statement (NIS) or Appropriate Assessment.

The application for planning approval for the proposed development is being made directly to An Bord Pleanála (ABP) through the Strategic Infrastructure Development (SID) process under the provisions of Section 37 of the Planning and Development (Strategic Infrastructure) Act, 2006, the Planning and Development Act, 2000 as amended and the associated Planning Regulations.

EXISTING DREHID FACILITY

PROPOSED DEVELOPMENT

CONSENTED MBT FACILITY

GENERAL LEGEND

BORD NA MÓNA OWNERSHIP BOUNDARY

APPLICATION BOUNDARY

N O T E S :

1. FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
2. ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
3. ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
4. THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES
5. ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

OSI 1:50,000 DISCOVERY SERIES SHEET NO'S: OS2620_D,OS2622_D,OS2624_D,OS2820_D, OS2822_D,OS2822_D

□D0m 0m □D0m □D□m □□□m

Rev	Date	Description	By	Chkd.
A	Dec. '17	EIS	MN	DG

Client: BORD NA MÓNA Naturally Driven

Project:

PROPOSED DEVELOPMENT AT DREHID WASTE MANAGEMENT FACILITY

Title:

REGIONAL SITE LOCATION MAP

Scale @ A3:	1:50,000	
Prepared by: M. Nolan	Checked: D. Grehan	Date: December 2017
Project Director:	D. Grehan	
Drawing Status:	Planning	

TOBIN Patrick J. Tobin & Co. Ltd.

TOBIN Consulting Engineers,
Block 10-4, Blanchardstown Corporate Park,
Dublin 15, Ireland.
tel: +353-(0)1-8030406
fax:+353-(0)1-8030409
e-mail: dublin@tobin.ie
www.tobin.ie

Drawing No.: Figure 1.1

Revision: A

1.1.2 Company Background

Bord na Móna is Ireland's leading environmentally responsible integrated utility service provider. Established in 1934 as the Turf Development Board to develop Ireland's peat resources, renamed Bord na Móna in 1946, it is now active across a range of industries.

For the financial year 2016, Bord na Móna's recorded a turnover of €433 million and it currently employs approximately 2,200 people. Today, Bord na Móna owns approximately 80,000 hectares of peatland, located mainly in the Midlands of Ireland. To date this land has been primarily used for peat harvesting for energy and for horticulture growing media.

With a transition away from the traditional industries, heavily dependent on peat and other fossil fuels, Bord na Móna has embraced, at its core, a new vision for the future and a move to a new, more sustainable business. The Group's "Sustainability 2030 Statement" creates a vision that ensures that Bord na Móna operations work in harmony with, and minimises the impact on, the environment.

Bord na Móna Activities

Bord na Móna is now active across a wide range of industries with business units in the areas of:

- Waste and Recovery - the business includes collection, recovery, recycling, treatment and disposal of waste and is focused on the responsible treatment and recovery of waste;
- Powergen – develops and operates a portfolio of thermal and renewable energy assets. The current portfolio consists of Edenderry co-fired Power Plant, Cushaling Peaking Plant, the Drehid landfill gas facility and wind farms in Bellacorrick, Mount Lucas, Bruckana and Sliabh Bawn, Powergen is currently developing the Oweninny Wind Farm through a joint venture with ESB, with enabling work commenced in 2017;
- Peat – the peat business harvests, manages and supplies milled peat to Edenderry co-fired power plant and the two ESB power plants. The business also supplies peat to the Horticulture and Fuels businesses for the manufacture of growing media and peat briquettes;
- Biomass – the biomass supply business is focusing on the transition away from peat based energy supply by lowering the carbon footprint of fuel for the generation of electricity in the Bord na Móna and ESB owned power stations. Biomass will also be an essential component of products within the Fuels and Horticulture businesses as it develops and commercialises more environmentally friendly products;
- Fuels – the fuels business supplies the residential market with solid fuel products. The portfolio includes peat briquettes, coal, smokeless coal, wood logs and kindling, stove fuels and convenience fuels e.g. Firepak, Firelog and Firelighters; and
- Horticulture – focused on the marketing and sales of growing media and other horticulture products to retail and professional markets primarily in Ireland, the UK and Europe.

Many of Bord na Móna's current activities are regulated by the Environmental Protection Agency. Bord na Móna conducts its peat extraction activities under the terms of IPPC (Integrated Pollution Prevention Control) licenses and operates its Resource Recovery facilities, a peat deposition site and an ash repository site under the terms of further Licenses, including IED and Waste Licences.

Waste Management

Bord na Móna's Resource Recovery is an integrated waste management business providing a collection service, recycling, composting and residual disposal of all non-hazardous waste streams arising from both commercial and domestic sources. The principal focus is on delivering exceptional customer service and maximising the re-use potential of managed waste materials, where possible, within the broader Bord na Móna Group.

Advanced Environmental Solutions (Ireland) Ltd (AES), was acquired by the Group in 2007, creating an opportunity to establish a strong presence in the Waste Management sector in Ireland. Today, waste collection services operate under the AES brand; provide domestic waste management to over 100,000 domestic customers throughout the Midlands, South East and Mid West regions, and more than 4,000 commercial customers nationwide.

In terms of waste management facilities, Bord na Móna also operates engineered landfills for the environmentally responsible disposal of peat ash from Ireland's three peat-fired power stations. The facilities are operated under the terms of the EPA licensing regime and cumulatively manage approximately 120,000 tonnes of waste 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 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.

The Drehid Waste Management Facility is the Group's most extensive waste management facility. In 2005, Bord na Móna was granted planning permission[1] for the development of activities comprising an engineered residual landfill accepting 120,000 TPA; and a composting facility accepting 25,000 TPA of biowaste from household, commercial and industrial sources; and associated site infrastructure and development works. A waste licence was subsequently issued by the Environmental Protection Agency (EPA)[2]. The facility commenced operations in February 2008.

[1] Kildare County Council Reg. Ref. 04/371; An Bord Pleanála Ref. PL.09.212059
[2] EPA Ref. W0201-03

Planning permission was granted by An Bord Pleanála[3] in 2008 to intensify waste acceptance at the landfill to 360,000 TPA for a five-year period (until December 2013) and to extend the landfill footprint of the facility. The appropriate EPA waste licence[4] was granted in 2009. That licence was reviewed in June 2009 as a result of the introduction of limits on the acceptance of biodegradable municipal waste at landfill. A revised waste licence was issued by the EPA in March 2010 and this has since been licensed with an Industrial Emissions Directive licence in 2016[5]. More recent permissions include the development of a landfill gas utilisation plant (October 2011) and an increase in the floor area of the previously permitted composting facility (November 2011) and the extension of the intensification of 360,000 for an additional period till 1st December 2017.

Following the incorporation into the statute book of additional regulations in 2013 relating to the Industrial Emissions Directive, on 20th December 2013[6], the EPA issued an Industrial Emissions Directive Amendment to the Drehid WMF licence, and further detail is provided in Section 1.3 below.

As detailed further in Chapter 2, in Section 2.3.3, subsequent applications were made to An Bord Pleanála under Section 146B of the Planning and Development Acts 2000 in relation to the volume of waste acceptance at the Drehid WMF. A Section 146B application was made for waste acceptance at 360,000 TPA for an additional two years to December 2015, and that request was granted approval on 23rd December 2013. In 2016, a further Section 146B application was made by Bord na Móna for waste acceptance at 360,000 TPA for a further 2 years till 1st December 2017, reverting to 120,000 TPA thereafter; that application was granted approval by An Bord Pleanála on 12th September 2016.

The company has made significant investment in the waste management sector and has developed a landfill gas electricity generation facility, which is the process of gathering, processing and treating landfill gas to produce electricity. Currently, the landfill gas utilisation facility at Drehid WMF generates enough sustainable and renewable electricity to power 8,500 homes.

Elsewhere, the Group had secured planning permission for the development of a 99,000 TPA materials recycling and transfer facility at Drumman, County Offaly. The company also provides consultancy services to the waste management industry.

1.2 PROPOSED DEVELOPMENT

The proposed development is described in detail in Chapter 3 of this EIAR. In summary, the proposed development will include the following at the Drehid WMF:

[3] An Bord Pleanála Ref. PL09.PA004
[4] EPA Ref. W0201-02
[5] EPA Ref. W0201-03
[6] EPA Ref. W0201-03 IED Amendment

- Changes to the volume and nature of wastes to be accepted at the landfill disposal facility;
- Development of additional non-hazardous (250,000 TPA) and new hazardous landfill (85,000 TPA) capacity to provide for sustainable landfill of these waste streams for twenty five years;
- Pre-treatment or processing of certain waste streams prior to landfill (including recovery from waste stream of non-hazardous waste of approx 15,000 TPA metals);
- Increasing the volume of waste to be accepted at the composting facility and the removal of the restriction on the operating life of the composting facility contained in Condition 2(2) of ABP Ref No. PL.09.212059 including the following;
    - increase in the composting processing within the existing built composting infrastructure (increase by 20,000 TPA to 45,000 TPA within current infrastructure); and
    - extension to the existing composting facility to build further infrastructural capacity for an additional 45,000 TPA composting (a combined total of 90,000 TPA where all capacity would be licensed);
- On-site treatment of leachate; and
- Development of associated buildings, plant, infrastructure and landscaping.

1.3 ENVIRONMENTAL IMPACT ASSESSMENT (EIA)

Environmental Impact Assessment (EIA) is the process by which the anticipated effects on the environment (positive and negative) of a proposed development or project are measured. If the anticipated effects are unacceptable, design measures or other relevant mitigation measures can be identified to reduce or avoid those effects. The purpose of the assessment is to ensure that decision makers consider the environmental effects when deciding whether or not to proceed with a project.

The initial Environmental Impact Assessment (EIA) Directive has been in place since 1985 (85/337/EEC). This Directive along with four amendments was amalgamated into Directive 2014/52/EU in May 2014. Directive 2014/52/EU aims to simplify the rules for assessing the potential environmental effects of projects on the environment while improving the level of environmental protection in line with current challenges. One of the key changes made by Directive 2014/52/EU is that it replaces the term Environmental Impact Statement (EIS) with Environmental Impact Assessment Report (EIAR). An EIAR is the principle document that the environmental impact assessment process is based on and focuses on describing the existing environment, identifying the potential effects as a result of the proposed development and describing any mitigation measures required to reduce or eliminate potential effects.
The EIA Directive requires that certain developments be assessed for the likely significant environmental effects before planning approval can be granted. When submitting a planning application for such a development, the applicant must also submit an EIAR.

1.3.1 Legislative context of an EIAR

Planning and Development Regulations

In accordance with the Planning and Development Act 2000 (as amended), the proposed development is of the type described in Para 3 – Environmental Infrastructure, Section 5, Part 2, of the 2006 Act (as inserted as the 7th Schedule into the Planning and Development Act,2000), namely both:

"- A waste disposal installation for –
(c) the landfill of hazardous waste to which Council Directive 91/689/EEC applies (other than an industrial waste disposal installation integrated into a larger industrial facility)"
and
"*- An installation for the disposal, treatment or recovery of waste with a capacity for an annual intake greater than 100,000 tonnes".*

The proposed development also exceeds the thresholds for completion of an EIAR (previously referred to in Irish legislation as an Environmental Impact Statement (EIS)), as detailed in the Planning and Development Regulations (S.I. No.600 of 2001), as amended, in Part 1 of Schedule 5, Class 9 , 10 and 11(b), as highlighted below:

Schedule 5, Part 1:

"*Class 9* *Waste disposal installations for the incineration, chemical treatment as defined in Annex IIA to Directive 75/442/EEC3 under heading D9, or landfill of hazardous waste (i.e. waste to which Directive 91/689/EEC4 applies).*

Class 10*: Waste disposal installations for the incineration or chemical treatment as defined in Annex iiA to Directive 75/442/EEC under the heading D9, of non-hazardous waste with a capacity exceeding 100 tonnes per day.*

Schedule 5, Part 2:

Class 11(b) *Installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included in Part 1 of this Schedule*".

This EIAR therefore accompanies the planning application to An Bord Pleanála.

1.4 INDUSTRIAL EMISSIONS DIRECTIVE LICENCE

1.4.1 Drehid WMF IED Licence

The Drehid WMF IED licence W0201-03 was issued by the Environmental Protection Agency (EPA) on 20th December 2013 by Amendment to the existing licence.

The European Union (Industrial Emissions) Regulations SI 138 of 2013 and the EPA (Industrial Emissions) (Licensing) Regulations SI 137 of 2013 update the existing regulations in Ireland and update the licensing regime managed by the EPA. The remit of the EPA now includes the licensing of Industrial Emissions Directive activities.

The regulatory framework for the issuing of IED licences is provided for by the updated EPA Acts (1992 to 2013), in conjunction with the general provisions of IED Regulations SI 137 & SI 138 of 2013, and the most recent amendment to First Schedule of the 1992 Act, included in IED Regulations SI 138 of 2013.

The update to the First Schedule of the 1992 Act in conjunction with SI 138 of 2013 specifies the classes of activities that are considered Industrial Emissions Directive activities and to be licensed as such by the EPA.

At the time of issuing IED Licence W0201-03 the EPA amended the licensed activities, such that the activities listed here are IED activities within the licence Schedule of Activities (where the 1996 Act is the Waste Management Acts and Part IV is Part IV of the 1992 EPA Acts (1992 to 2013) as amended); The relevant classes of activity are as follows:

11.5 *Landfills, within the meaning of section 5 (amended by Regulation 11(l) of the Waste Management (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 (S.I. No. 524 of 2008)) of the Act of 1996, receiving more than 10 tonnes of waste per day or with a total capacity exceeding 25,000 tonnes, other than landfills of inert waste.*

11.1 *The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.*

11.4 (b)(i) *Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.1. No. 254 of 2001) apply): biological treatment; when the only waste treatment activity carried out is anaerobic digestion, the capacity threshold for this activity shall be 100 tonnes per day.*

An application for an Industrial Emissions Directive (IED) Licence for the proposed development is being made to the EPA.

1.4.2 EIAR and the IED Regulations

Section 9 (2) (d) of the (Industrial Emissions) (Licensing) Regulations 2013, SI 137 of 2013, also identifies the need for an EIAR to be issued to the EPA following the requirements of the EPA Act of 1992.

> *(d) in accordance with Section 87(1B) (a) of the Act of 1992 and in the case where an application for permission for development comprising or for the purposes of the industrial emissions directive activity to which the application for permission for the licence relates is currently under consideration by the planning authority concerned or An Bord Pleanála, a written confirmation from the planning authority or An Bord Pleanála, as appropriate, of the fact together with either:*

i. A copy of the environmental impact statement (now referred to as Environmental Impact Assessment Report); 2 hard copies and 2 electronic copies or in such form as may be requested by the Agency, that was required to be submitted with the application for planning permission, or
ii. A written confirmation from the planning authority or An Bord Pleanála that an environmental impact statement (now referred to as Environmental Impact Assessment Report), is not required by or under the Act of 2000.

1.5 INFORMATION TO BE CONTAINED WITHIN THE EIAR

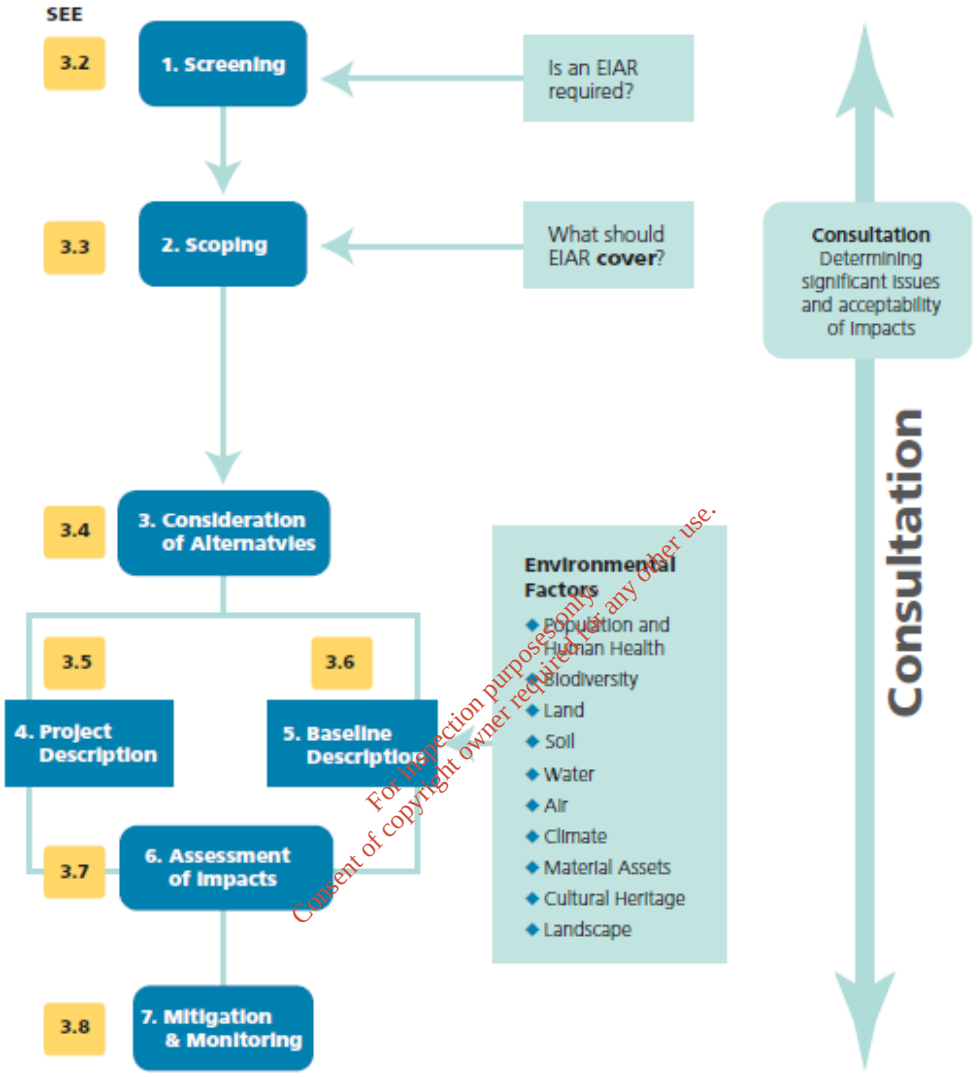
Information to be contained within an EIAR is detailed in Article 5 and Annex IV of the EIA Directive (as amended).

Currently in Irish planning legislation the minimum information that must be contained in an EIAR (the term EIS will continue to be used in some legislation until such time it is updated) is specified in Article 94 of Part 10 ("Content of EIS") of the Planning and Development Regulations, 2001 (as amended), and Article 177 ("*Prescribed information regarding environmental impact statements") of Part X of the Planning and Development Act, 2000, as amended.*

Additional advice is contained in the "*Guidelines on the Information to be contained in Environmental Impact Statements*" published by the Environmental Protection Agency (EPA) in March 2002 and the "*Advice Notes on Current Practice"* (in the preparation of Environmental Impact Statements) published by the EPA in September 2003.

Draft "*Guidelines on the Information to be contained in Environmental Impact Assessment Reports"* published by the Environmental Protection Agency (EPA) in August 2017 detail the key changes made by the amended 2014 EIA Directive.

The structure and content of this EIAR fully complies with all current legislative requirements, and the 2014 EIA Directive and guidelines as identified within the above documents and provisions.



Source: EPA Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)

The diagram above outlines seven steps included in the EIAR process. The environment is described under a number of specific headings that are shown on the right. Adherence to this general sequence and structure helps ensure an objective and systematic approach.

This EIAR includes:

- A description of the site and the existing environment;
- A description of reasonable alternatives considered;
- A description of the proposed development;

- The environmental effects, if any, resulting from the proposed development;
- The measures to mitigate or reduce the potential effects;
- Monitoring measures (where required); and
- A non-technical summary.

This EIAR takes into account information compiled through the desk based assessment, field surveys and consultation with the relevant statutory bodies and the general public.

1.5.1 Overview of the structure of the EIAR

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

Volume I: Non Technical Summary;
Volume II: Environmental Impact Assessment Report;
Volume III: Drawings; and
Volume IV: Appendices.

Volume I: Non-Technical Summary

This document provides an overview and summary of the main EIAR using non-technical language. It is a standalone document presents a clear and concise summary of the existing environment, characteristics of the proposed development and mitigation measures adopted into the design of the development to minimise impacts on the surrounding environment.

Volume II: Main Environmental Impact Assessment Report;

The EIAR is presented in a “grouped format” structure to allow for ease of presentation and consistency across the document when considering the various elements of the environment.

The EIAR follows standard methodology and is presented in accordance the above mentioned legislation and guidelines. Individual categories are introduced later in this section. The development is assessed and described within each category in terms of:

- **Introduction** - includes a background to the assessment and describes the study methodology employed in carrying out the assessment.

- **Existing Environment** - Describes and assesses the existing environment in the context of the relevant environmental categories. This section also takes account of any other proposed and existing developments in the vicinity.

- **Do nothing scenario** – For the relevant environmental categories this section describes the likely future receiving environment in the event that the proposed development does not proceed i.e. the do nothing scenario.

- **Potential Effects** - Provides the description of the potential specific, direct and indirect effects, associated with the development. This through reference to the magnitude, duration, consequences and significance of the impact associated with the construction and operation of the development. This section also considers cumulative effects with other proposed or permitted developments.

- **Mitigation Measures** - A description of any remedial, or mitigation measures that have been incorporated into the design to offset or minimise identified potential adverse effects. This section also includes proposed monitoring to be undertaken where required to ensure mitigation measures are working effectively.

- **Residual Effects** - Provides the description and assessment of the predicted residual effect associated with the development on the surrounding environment.

- **Conclusion** - Provides a summary of the salient points of the assessment chapter.

Chapter 1 Provides an introduction to the EIAR. Chapters 2 to Chapter 16 inclusive within Volume II present the environmental impact assessment associated with the proposed development under the following categories;

- Chapter 2 Planning and Policy- Detailed assessment of the Planning Policy and Context in support of the rationale and the need for the proposed development;
- Chapter 3 Description of the Existing Environment and the Proposed development – Provides a detailed description of the proposed development and construction methodology, including site layout and infrastructural details, construction procedures and the materials required, the operational and maintenance phases in addition to the decommissioning and restoration phases;
- Chapter 4 Description of Reasonable Alternatives;
- Chapter 5 Biodiversity;
- Chapter 6 Soils, and Geology and Hydrogeology;
- Chapter 7 Water;
- Chapter 8 Landscape and Visual;
- Chapter 9 Land;
- Chapter 10 Material Assets (Roads and Traffic);
- Chapter 11 Air Quality;

- Chapter 12 Noise and Vibration;
- Chapter 13 Cultural Heritage;
- Chapter 14 Climate;
- Chapter 15 Population and Human Health; and
- Chapter 16 Interactions of the Foregoing

Supporting maps and drawings as referred to in the Main EIAR (Volume II) are included in this volume.

Volume III: Drawings

Planning Drawings accompanying the EIAR are presented in Volume III of the EIAR.

Volume IV: Appendices

All supporting documentation and references, referred to in the Main EIAR (Volume II) are included in this volume. A detailed schedule of appendices is included at the front of Volume IV for ease of reference.

1.5.2 Contributors to the EIAR

TOBIN Consulting Engineers have been engaged by Bord na Móna as Lead Consultant to project manage the preparation of the Planning Application, IED Licence Application and accompanying EIAR for the proposed development. The relevant inputs of the various members of the Study Team are listed in Table 1-1: Contributors to the EIAR and in Appendix 1.1.

Table 1-1: Contributors to the EIAR

Team Member	Inputs
TOBIN Consulting Engineers	Project Direction, Project Management, EIAR Production, Evaluation and Reporting, Description of the Existing Environment & Proposed development, Socio Economic, Biodiversity, Climate, Water, Soils, Geology & Hydrogeology, Land, Material Assets (Roads and Traffic) and Interactions of the foregoing Engineering Design: Preliminary Engineering Design for Planning Application Health & Safety: PSDP and PSCS for EIAR contract works
AOS Planning Consultants	Planning and Policy Context
AWN	Air Quality Noise & Vibration

Team Member	Inputs
AECOM	Landscape & Visual Assessment Production of Photomontages and Wireframes
Arch Consultancy	Cultural Heritage
Corporate Health Ireland Ltd	Human Health

1.6 CONSULTATION

1.6.1 Scoping 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 "*Advice Notes on Current Practice*" (in the preparation of Environmental Impact Statements) published by the EPA in September 2003, *Guidelines on the Information to be contained in Environmental Impact Assessment Report*s published by the EPA (Draft) in August 2017, and the Planning and Development (Strategic Infrastructure) Act 2006, the consultation process consisted of consultation with competent bodies, prescribed bodies and interested parties. The primary objective of involving competent bodies, prescribed bodies and interested parties at an early stage in the EIA process is to aid scoping of the EIAR and to ensure that the EIAR addresses the issues associated with the proposed development that are likely to be of significance.

The consultation and scoping process consisted of communicating with both statutory and non-statutory organisations and other competent parties. The primary objective of involving these organisations and parties at an early stage in the EIA process is to aid in the scoping of and the project design and the content of the EIAR.

Initial correspondence was issued to all Consultees on 10th June 2016.

TOBIN Consulting Engineers met with the Kildare County Council to discuss the scope of the EIAR on 29th June 2016.

All comments and recommendations from each of the Statutory Authorities, An Bord Pleanála and Consultees have been taken into consideration in this EIAR.

Comments, observations or concerns raised by consultees regarding the project design and impact assessment are addressed in this EIAR, with specific responses directed onto the relevant specialist for consideration. Table 1-2: List of Consultees Responses Received During EIA summarises the consultations issued and responses received to date. Copies of written correspondence received from Consultees are included in Appendix 1.2.

Table 1-2: List of Consultees Responses Received During EIA

Consultee	Summary of Consultee Response
Kildare County Council Director of Planning, Community and Enterprise	Response received 26/10/2016. Local Authority noted the following; the expected publication in Spring 2017 of the 2017-2023 Development Plan, following consideration and acceptance of the Draft Plan; material alternations to the Draft Plan include policies in relation to waste management, Drehid and HGV traffic associated with landfill and quarries; proposed development needs to be set within the hierarchy of national, regional and county planning and waste policy documents; Consideration of relevant existing and proposed development surrounding the site; proposed development should be described in terms of the nature and extent of the proposal - duration of operations, interconnections between activities on-site and off-site, tonnages, cumulative impacts etc; County Development Plan contains plans for small towns and settlements which should be examined and considered; an issue was queried around the proposed development being a possible contravention to the County Development Plan in relation to rural development as set out within Section 10.5.1 of the County Development Plan 2011-2017
Kildare County Council Roads, Transportation & Public Safety	29/08/2016 email reply and 26/10/2016 written scoping reply. Email reply 29/08/2016 requesting "that a Road Safety Impact Assessment / Road Safety Audit should be carried out for the proposed development as from our analysis there will be safety implications for road users with the projected increase in traffic on public roads from this development and in particular HGV traffic on local roads". Written scoping response of 26/10/2016 requesting clarification of the changes in proposed volumes of traffic, requesting a pavement impact assessment and identifying concerns in relation to a number of items including the following; potential large volumes of HGV's, the absence of sufficient levies from the applicant to date to deliver funding to Kildare County Council to cover the cost of maintaining haul routes, the potential for road safety issues to road users arising from the transportation of hazardous waste on haul routes which have cuttings and open drainage channels adjacent to the road and which have significant drops to the surrounding lands; concern over the potential loss of control of HGVs on the road and spillage of hazardous waste on the haul routes; concern that other roads, that have so far been adequately performing, will rapidly deteriorate as a result of the proposed development
Kildare County Council Water & Environment Services	Response of 26/10/2016. The Environment Officer noted a number of items of which the applicant is advised to take cognisance and which the applicant is to demonstrate including the following; the proximity principle (with reference to Directive 91/156/EEC) and in relation to the policy on the proximity principle in the Eastern Midlands Regional Waste Management Plan (EMRWMP); the policies within the EMRWMP on self sufficiency and development of indigenous recovery infrastructure to replace landfill; compliance with the waste hierarchy principle; demonstration of adherence to policies in the EMRWMP on the scale of and location of the proposed infrastructure, adherence to the waste hierarchy and best available technology; management of all aspects of potential environmental emissions; the principles of self sufficiency and proximity in relation to transport related emissions in the waste sector
Kildare County Council Water & Environment Services	Presentation on 19th October 2016 by Bord na Móna to the Strategic Policy Committee for Environment and Water Services of Kildare County Council, including local councillors.

Consultee	Summary of Consultee Response
Kildare County Council Conservation Services	Acknowledgement on 14/06/2016. Response of 26/10/2016. The Conservation officer noted the following; addressing partial impacts on the cultural and built heritage; potential impacts on historic field patterns, potential impacts on views and prospects, physical impacts to roads, bridges, demesne boundary walls and historic designated landscapes, protected structures, gate lodges, out buildings, potential impacts to the structure and fabric of built heritage; use of the National Landscape Strategy; reference to the Department Architectural Heritage Protection guidelines to assess potential impacts to protected structures their curtilage, attendant grounds and settings'; reference to the County Development Plan and potential impacts on long and short range views, historic artefacts and areas and sensitive historic landscapes.
Transport Infrastructure Ireland	The scoping response from the TII included the following: • Consultations should take place with local authority/National roads design office for existing or future road schemes. • TII concerned with impact development will have on national road network. • Developer should assess visual impacts from existing national roads. • Developer should consider any EIS and all conditions and/or modifications imposed by An Bord Pleanála regarding road schemes. • Developer in conducting EIS should have regard to TII publications DMRB and the Manual of Contract Documents for Road Works. • Developer in conducting EIS should have regard to TII's Environmental Assessment and Construction Guidelines. • EIS should consider Environmental Noise Regulations 2006. • Traffic and Transport Assessment carried out in accordance with relevant guidelines. • Designers asked to consult TII's DMRB Road Safety Audit to determine if a Road Safety Audit is needed. • EIS should identify methods/techniques proposed for any works near or crossing the national road network. • Proposed haul routes should be identified.
Environmental Protection Agency	2 No. meetings have been held with the EPA, in Johnstown, County Wexford on the 10th of June 2016 and on the 26th of October 2016 respectively. The main points raised by the EPA relative to the content of the EIS include the following: • LandSim modelling will be required for the geological / groundwater assessment • EPA will consider whether the current proposal is a review of the existing licence or will require a new licence application • Components of basal liner proposed, particularly for the proposed hazardous waste element of the landfill will be critical • The submission for a licence review / application can only be made following acknowledgement by An Bord Pleanála of the submission of the planning application. • Revised CRAMP and ELRA will be required
Department of Arts, Heritage and Gaeltacht; Correspondence to NPWS	No response from NPWS
Department of Arts, Heritage and Gaeltacht; National	The scoping response from the DAU included the following: • All previous surveys of the bog should be examined. • A new survey of the bog should be carried out. This survey should include cleaning the drains and walking the bog. It might be necessary to have

Consultee	Summary of Consultee Response
Monuments Service (NMS) Separate correspondence to NPWS; DAU coordinate	drains re- cut to facilitate examination. • Survey work should be carried out by an archaeologist working under the terms of an excavation licence granted by this Department. This will facilitate sampling for species identification and dating. • The proposed site layout should be considered in the light of the surveys. • Having identified areas of archaeological importance, buffer areas where no ground disturbance will take place should be established, in order to facilitate preservation in situ of archaeological features. • Archaeological mitigation should be suggested, to take place in advance of and/or during groundworks. • It is likely, that where material is to be preserved in situ, empirical measurement into the future of hydrology of the site will be required, e.g. by means of the use of wells (piezometers).
Irish Water	The scoping response from Irish Water included the following: • Impacts of the development on the capacity of water services (do existing water services have the capacity to cater for the new development if required). • Any up-grading of water services infrastructure that would be required to accommodate the development. • In relation to a development that would discharge trade effluent - any upstream treatment or attenuation of discharges required prior to discharging to an IW collection network • In relation to the management of surface water; the potential impact of surface water discharges to combined sewer networks & potential measures to minimise/stop surface waters from combined sewers • Any physical impact on IW assets - reservoir, treatment works, pipes, pumping stations, discharges outfalls etc. including any relocation of assets • Any potential impacts on the assimilative capacity of receiving waters in relation to IW discharge outfalls including changes in dispersion /circulation characteristics • Any potential impact on the contributing catchment of water sources either in terms of water abstraction for the development (and resultant potential impact on the capacity of the source) or the potential of the development to influence/ present a risk to the quality of the water abstracted by IW for public supply. • Where a development proposes to connect to an IW network and that network either abstracts water from or discharges waste water to a "protected"/sensitive area, consideration as to whether the integrity of the site/conservation objectives of the site would be compromised. • Mitigation measures in relation to any of the above
Commission for Energy Regulation	Acknowledgment of receipt of correspondence
Department of Agriculture Marine and Food	Acknowledging receipt of correspondence. Correspondence has been forwarded to the relevant Dept. Officials.
IFI	No response
An Taisce	No response

Consultee	Summary of Consultee Response
Health Service Executive	The following aspects that should be assessed during the EIA process ; • Assessment of Principle & description of the Project. • Assessment of Later Consents required. • Assessment of Public Consultation & Non Technical Summary. • Assessment of Consideration of Alternatives. • Assessment of Description of Physical Environment. The EIA process the following topics should be assessed and documented in the EIAR with regards to construction and operation of the proposed development; • Geology/Soils; • Water/Hydrology/hydrogeology; • Human Beings; • Waste; • Climatic factors • Air Quality/Traffic; • Noise/traffic; • Material Assets In addition the following should be assessed; • The Interaction of Impacts • The Cumulative Effects of Impacts • Environmental and Health submissions • Decommissioning
An Chomhairle Ealaoin	No response
The Heritage Council	No response
Coillte	The scoping response from Coillte includes the following: • The proposed area adjoining Coillte properties to be fenced off to protect the forest properties. • Any streams/rivers or watercourses leaving the purposed area flowing, into Coillte properties, to be protected against any pollutants entering the water. • • A monitoring programme to protect against fly tipping.
Irish Peatland Conservation Council	The scoping response from IPCC includes the following: • IPCC object to any development that has potential to damage a wetland habitat. • Within the land holding of this development a number of sites have been highlighted through the Bog Allen Habitat and Heritage Survey, Kildare Wetland Survey and by the Bord na Móna Ecology Team. • These sites need to be screened in the EIA and protected. • IPCC urge you to contact the Bord na Móna ecology team who have done extensive survey work. • The IPCC would also appreciate a copy of the EIS on completion.
Bord Gáis	Gas Networks Ireland has no infrastructure in the vicinity and as a result has no further comments regarding proposal.
Electricity Supply Board	Acknowledgement phone call received in TOBIN (June 2016) from ESB, Group Safety Manager for ESB. No specific scoping items raised.
HSA	Emails from T Horigan on 25th & 26th April 2017 with information on guidance provided to Local Authority on Consultation Distance in relation to Seveso sites.
GSI	No response
Irish Farmers Association	No response
BirdWatch Ireland	No response
Teagasc	No response
Irish Wildlife Trust	No response
Irish Native Woodland Trust	No response

1.6.2 Public Information

A public information event was held by Bord na Móna at Carbury GAA Clubhouse, Parsonstown, County Kildare in respect of the proposed developments at the Drehid Waste Management Facility. This event was advertised in local newspapers and conducted over the afternoon and evening of February 8th 2017. There was a good level of positive engagement with members of the public regarding the proposed developments.

1.7 ASSUMPTIONS AND LIMITATIONS OF THE EIAR

Assumptions specific to certain environmental aspects are discussed in the relevant chapters of the EIAR. General Assumptions that have been made during preparation of the EIAR are set out below:

- The cumulative impact assessment has been undertaken based on the permitted MBT being operational concurrent to the proposed development;
- The principal land uses in the vicinity of the proposed development remain as they were at the time of this EIAR preparation. In undertaking cumulative impact assessments, cases where planning permissions have been granted by the Local Authorities or An Bord Pleanála, (e.g. adjacent Solar Farm, proposed Cloncreen Wind Farm) have been assumed to be in place in line with the duration specified in the grant of permission/application documentation for each development;
- Information provided by third parties, including publicly available information and databases, is correct at the time of publication; and
- The EIAR has been prepared using the Draft "Guidelines on the Information to be contained in Environmental Impact Assessment Reports" published by the Environmental Protection Agency (EPA) in August 2017.

Limitations specific to certain environmental aspects are discussed in the relevant chapters of the EIAR. General limitations associated with this EIA are outlined below:

- Baseline conditions and assessments are accurate at the time of the physical surveys but may be subject to change, due to the dynamic nature of the surrounding environment and surrounding activities.
- None of the individual specialists have highlighted any limitations that are considered significant.
- The assessment of cumulative effects from built or consented developments is partially reliant on the availability of information provided by relevant third parties. An Bord Pleanála and Local Authority public planning registers were reviewed as part of the impact assessment.

1.8 LIST OF PLANNING DRAWINGS

Drawing No.	Drawing Title
8108-2000	REGIONAL SITE LOCATION MAP
8108-2001	SITE LOCATION MAP - Sheet 1 of 2
8108-2002	SITE LOCATION MAP - Sheet 2 of 2
8108-2003	SITE LAYOUT PLAN
8108-2004	EXISTING SITE TOPOGRAPHY
8108-2005	SITE DRAINAGE LAYOUT
8108-2006	SITE FENCING LAYOUT
8108-2010	FACILITY MASTER PLAN
8108-2011	NON HAZARDOUS LANDFILL PHASING PLAN
8108-2012	HAZARDOUS LANDFILL PHASING PLAN
8108-2013	LEACHATE COLLECTION SYSTEMS
8108-2014	LANDFILL GAS & LEACHATE RECIRCULATION LAYOUT
8108-2015	SURFACE WATER AND FOUL DRAINAGE MASTER PLAN
8108-2016	UTILITIES MASTER PLAN
8108-2017	DRAINAGE AND UTILITIES LAYOUT PLAN 1 of 12
8108-2018	DRAINAGE AND UTILITIES LAYOUT PLAN 2 of 12
8108-2019	DRAINAGE AND UTILITIES LAYOUT PLAN 3 of 12
8108-2020	DRAINAGE AND UTILITIES LAYOUT PLAN 4 of 12
8108-2021	DRAINAGE AND UTILITIES LAYOUT PLAN 5 of 12
8108-2022	DRAINAGE AND UTILITIES LAYOUT PLAN 6 of 12
8108-2023	DRAINAGE AND UTILITIES LAYOUT PLAN 7 of 12
8108-2024	DRAINAGE AND UTILITIES LAYOUT PLAN 8 of 12

Drawing No.	Drawing Title
8108-2025	DRAINAGE AND UTILITIES LAYOUT PLAN 9 of 12
8108-2026	DRAINAGE AND UTILITIES LAYOUT PLAN 10 of 12
8108-2027	DRAINAGE AND UTILITIES LAYOUT PLAN 11 of 12
8108-2028	DRAINAGE AND UTILITIES LAYOUT PLAN 12 of 12
8108-2029	SURFACE WATER DRAINAGE - LONGITUDINAL SECTIONS 1 of 3
8108-2030	SURFACE WATER DRAINAGE - LONGITUDINAL SECTIONS 2 of 3
8108-2031	SURFACE WATER DRAINAGE - LONGITUDINAL SECTIONS 3 of 3
8108-2032	FOUL WATER DRAINAGE - LONGITUDINAL SECTIONS 1 of 2
8108-2033	FOUL WATER DRAINAGE - LONGITUDINAL SECTIONS 2 of 2
8108-2034	TYPICAL CELL LAYOUT
8108-2035	HAZARDOUS AND NON HAZARDOUS LANDFILL - LONGITUDINAL SECTIONS
8108-2036	HAZARDOUS AND NON HAZARDOUS LANDFILL - CROSS SECTIONS
8108-2040	PROPOSED ROADS KEY PLAN
8108-2041	PROPOSED ROADS ALIGNMENTS AND LONGSECTIONS - 1 OF 6
8108-2042	PROPOSED ROADS ALIGNMENTS AND LONGSECTIONS - 2 OF 6
8108-2043	PROPOSED ROADS ALIGNMENTS AND LONGSECTIONS - 3 OF 6
8108-2044	PROPOSED ROADS ALIGNMENTS AND LONGSECTIONS - 4 OF 6
8108-2045	PROPOSED ROADS ALIGNMENTS AND LONGSECTIONS - 5 OF 6
8108-2046	PROPOSED ROADS ALIGNMENTS AND LONGSECTIONS - 6 OF 6
8108-2047	SIGNAGE AND ROAD MARKINGS
8108-2050	ATTENUATION LAGOONS TYPICAL PLAN AND SECTION
8108-2051	TYPICAL CARPARK AND ROAD CONSTRUCTION DETAILS

Drawing No.	Drawing Title
8108-2052	TYPICAL MANHOLE DETAILS
8108-2053	TYPICAL WATERMAIN DETAILS
8108-2054	TYPICAL TRENCH BEDDING AND SWALE DETAILS
8108-2055	WHEELWASH STANDARD DETAILS
8108-2056	WEIGHBRIDGE GENERAL ARRANGEMENT - PLAN AND SECTIONS
8108-2057	TYPICAL FENCING DETAILS
8108-2058	SURFACE & PROCESS WATER PUMP STATION - PLAN AND SECTIONS
8108-2059	TYPICAL FIRE MAIN PUMP SET AND OIL INTERCEPTOR DETAILS
8108-2060	TYPICAL EMBANKMENT AND LINER DETAILS
8108-2061	GROUNDWATER PUMP STATION - TYPICAL DETAILS
8108-2062	LEACHATE HEADWALL - TYPICAL DETAILS
8108-2063	LANDFILL GAS MANAGEMENT & CAPPING DETAILS
8108-2064	INTEGRATED CONSTRUCTED WETLANDS - TYPICAL DETAILS
8108-2070	LANDFILL CAP FINAL RESTORATION LEVELS
8108-2071	LANDFILL RESTORATION PLAN
8108-2080	STRUCTURES GENERAL ARRANGEMENT
8108-2082	COMPOST FACILITY EXTENSION PLAN
8108-2083	COMPOST FACILITY EXTENSION ELEVATIONS
8108-2084	COMPOST FACILITY EXTENSION SECTION A-A
8108-2086	LEACHATE TREATMENT FACILITY PLAN AND ELEVATION
8108-2087	LEACHATE TREATMENT FACILITY SECTIONS

Drawing No.	Drawing Title
8108-2091	METALS RECOVERY FACILITY PLAN, ELEVATIONS AND SECTION
8108-2092	IBA RECEPTION AND MATURATION FACILITY PLAN
8108-2093	IBA RECEPTION AND MATURATION FACILITY ROOF PLAN
8108-2094	IBA RECEPTION AND MATURATION FACILITY ELEVATIONS & SECTION
8108-2096	MAINTENANCE BUILDING AND FUEL STORAGE BUND PLAN
8108-2097	MAINTENANCE BUILDING AND FUEL STORAGE BUND SECTION AND ELEVATIONS
8108-2098	CONVERTED WELFARE BUILDING PLAN AND ELEVATIONS
8108-2099	CONVERTED WELFARE BUILDING PLAN, ELEVATIONS AND SECTION
8108-2101	WASTE CONTROL BUILDING PLAN AND ELEVATIONS
8108-2111	ASH SOLIDIFICATION FACILITY PLAN AND ELEVATION
8108-2112	ASH SOLIDIFICATION FACILITY ELEVATIONS AND SECTION
8108-2113	HAZARDOUS WASTE STORAGE & QUARANTINE AREA PLAN AND ELEVATIONS
8108-2114	HAZARDOUS WASTE HANDLING BUILDING PLANS, ELEVATIONS AND SECTION
8108-2115	WEIGHBRIDGE KIOSK PLAN & ELEVATIONS

2 PLANNING AND POLICY

2.1 BACKGROUND

2.1.1 Background context and General Location of the Proposed development

This section of the EIAR provides an evaluation of Planning and Policy in relation to the proposed development. This chapter should be read in conjunction with Chapter 1, Introduction, and Chapter 3, Description of the Proposed development.

The existing Drehid Waste Management Facility is situated approximately 4 km north of Allenwood, 9 km north-west of Prosperous, 9 km south of Enfield (County Meath), and 12 km east of Edenderry (County Offaly). The landform of the general area is flat-lying to gently undulating topography of cut away peatland. Villages with zoned land in the context of the Kildare County Development Plan, and in relative close proximity include Derrinturn (c.7 km to the north-west), Coill Dubh ('Blackwood' – c.7.5 km to the south-east) and Allenwood (c.4 km to the south). The general location within the above context is indicated in Figure 2.1: Site Location Map – Spatial Context in relation to zoned Settlements.

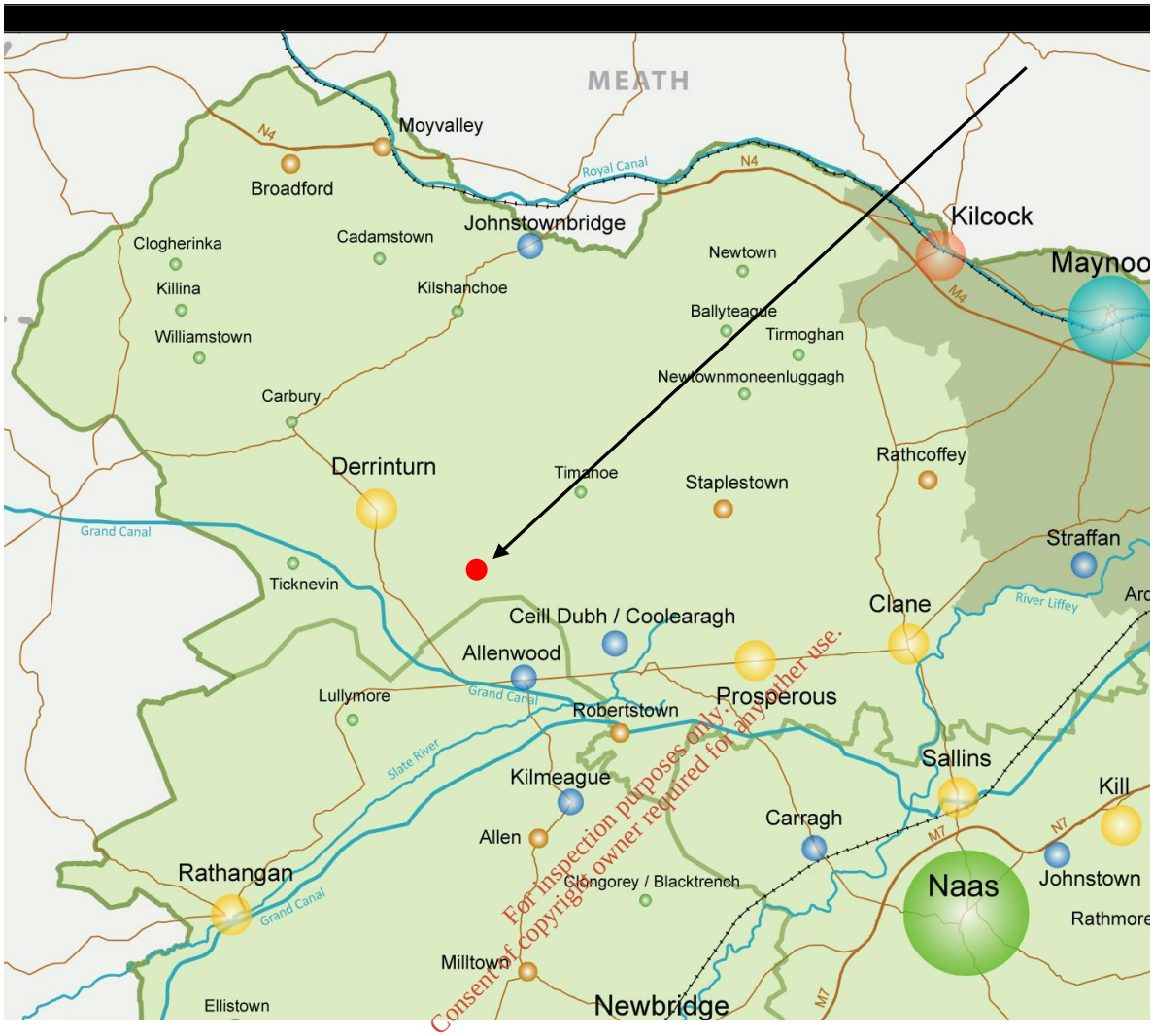


Figure 2.1: Site Location Map – Spatial Context in relation to zoned Settlements
Source: Kildare County Development Plan 2017-2023

The location of the proposed development is confined to a landbank of approximately 272 ha within the larger Bord na Móna landholding. The location has been optimised with regard to environmental considerations. As such, existing permitted development, including haul routes, and environmental matters relating to ecology, hydrogeology, archaeology, distance from sensitive receptors and other relevant factors have informed the site suitability process, as detailed in Chapter 1 of the EIAR.

The existing Drehid Waste Management facility is also within relative close proximity of the R402 and R403 regional roads. Primary access to the site is from the R403. Access to the proposed development will be by means of the existing permitted and newly proposed haul routes, the existing site entrance at the R403 regional road, and the existing 4.8 km long dedicated access road. The proposed site is therefore already accessible via the existing network of regional routes which in turn link with the National Motorway network.

The R403 lies south, southwest and west of the site, and joins the R402 at Carbury to the northwest. The R402 connects to the M4 south of Enfield while the R403 connects to central and south County Kildare. The M4 (Dublin to Sligo/Galway) motorway is located approximately 8 km to the north of the proposal location, while the M7 (Dublin to Limerick/Cork) motorway is located approximately 18 km to the south of the existing Drehid Facility. It is noted that, in the context of the proposed Leinster[7] Outer Orbital (or Dublin Outer Orbital) Road, the proposed development is strategically located within relative close proximity to the proposed route for this road as shown in Figure 2.2: Site Location within the Context of the Proposed Leinster Outer Orbital Road.

Figure 2.2: Site Location within the Context of the Proposed Leinster Outer Orbital Road
Source: irishmotorwayinfo.com

[7] Whilst the Transport Strategy for the Greater Dublin Area 2016 – 2035 confirms that up to the horizon year of the plan, no work will take place on this road, the finalisation of the route corridor and its protection from development intrusion for possible later implementation, is recommended.

In the context of the above, it should be noted that this EIAR also considers the traffic implications of the proposal to the existing Drehid Waste Management Facility (Landfill and Compost Facility) using existing approved haul routes, approved in respect of the MBT planning application granted under ABP Ref. 09.PA0027), and newly proposed haul routes.

This application by Bord na Móna is being made directly to An Bord Pleanála as 'Strategic Infrastructure Development' under the provisions of Section 37 of the Planning and Development (Strategic Infrastructure) Act, 2006, the Planning and Development Act, 2000 as amended, and the associated Planning Regulations.

Strategic Infrastructure Development (SID) comprises defined categories of development which are considered to be of national or regional strategic importance. SID provisions were inserted into the Planning and Development Act, 2000, as amended, by the Planning and Development (Strategic Infrastructure) Act 2006. The 2006 Act provides generally for applications for permission/approval for specified private and public strategic infrastructure developments to be made directly to An Bord Pleanála.

The Seventh Schedule to the Act lists the classes of infrastructure development which, if considered by An Bord Pleanála to be strategic infrastructure development, require direct application for permission to An Bord Pleanála, instead of the local planning authority. Specific SID project categories relating to private developers fall into three classes set out in the Seventh Schedule namely: energy infrastructure, transport infrastructure and environmental infrastructure.

The proposed development is of the type described in Para 3 – Environmental Infrastructure, Section 5, Part 2, of the 2006 Act (as inserted as the 7th Schedule into the Planning and Development Act,2000), namely both:

"- A waste disposal installation for –
(c) the landfill of hazardous waste to which Council Directive 91/689/EEC applies (other than an industrial waste disposal installation integrated into a larger industrial facility)"
and
"- *An installation for the disposal, treatment or recovery of waste with a capacity for an annual intake greater than 100,000 tonnes".*

As provided for under Section 37B of the Planning and Development Act 2000, as amended, Bord na Móna (the applicant) therefore entered into discussions and consultations with An Bord Pleanála in relation to the proposed development (Case Ref.PL09.PC0204). Five meetings were held with An Bord

Pleanála. These were on the 1st of September 2015, the 25th of May 2016, the 16th of November 2016, the 30th March 2017, and 13th September 2017. A Board Direction issued on 13th November 2017, where it was decided that the proposed development constituted strategic infrastructure, it being a class of development that comes within the scope of the 7th Schedule and would, if carried out, fall within the following paragraphs of Section 37A(2)(a) of the Act:

a. the development would be of strategic economic or social importance to the State or the region in which it would be situate;
b. the development would contribute substantially to the fulfilment of any of the objectives in the National Spatial Strategy or in any regional spatial and economic strategy[8] in force in respect of the area or areas in which it would be situate;
c. the development would have a significant effect on the area of more than one planning authority.

Please note that a copy of this notice from the Board dated 13th November 2017, in this regard, has been enclosed within Appendix 2.1.

Following the issuing of this notice by the Board under Section 37B(4)(a) of the 2000 Act, as amended, and in accordance with the provisions of Section 37E of the Planning & Development Act 2000, as amended, Bord na Móna is now making this application for the proposed development directly to An Bord Pleanála.

2.2 PROPOSED DEVELOPMENT

Section 2.2 of this chapter should be read in conjunction with Chapter 3, Description of the Proposed development. Chapter 3 provides the detail of the proposed Non-Hazardous and Hazardous landfill capacity to be developed and the proposed additional composting capacity. Chapter 3 also includes cross reference to the relevant planning drawings which give the details of the proposed infrastructure. The section below provides an overview of the proposed development.

At present, the Drehid Waste Management Facility comprises an engineered landfill and a composting plant. The engineered landfill is currently permitted to accept 360,000 tonnes per annum (TPA) of municipal solid waste. This permission is valid until 1st December 2017. Thereafter, municipal waste for landfill disposal at the facility is limited to a maximum of 120,000 TPA until the end of the life of the currently permitted facility in 2028. The composting facility is currently permitted to accept a maximum of 25,000 TPA.

[8] Whilst the Act has been amended since the 2011 MBT application, there are as yet NO RSES in place – the existing RPG's are therefore still applicable. This is likely to be the case until at least Q4 2017

The proposed development is broadly outlined as follows and is described in more detail in Chapter 3 of this EIAR:

- Changes to the volume and nature of wastes to be accepted at the landfill disposal facility;
- Development of additional non-hazardous and new hazardous landfill capacity to provide for the sustainable landfill of these waste streams for a period of twenty five years;
- Pre-treatment or processing of certain waste streams prior to landfill;
- Increasing the volume of waste to be accepted at the composting facility, and the removal of the restriction on the operating life of the composting facility contained in Condition 2(2) of ABP Ref No. PL.09.212059;
- On-site treatment of leachate; and,
- Development of associated buildings, plant, infrastructure and landscaping.

2.2.1 Need for the Development and Description of the Proposed Changes to the volume and nature of wastes to be accepted at the landfill

Additional Non-Hazardous Landfill Capacity and Processing

As well as the existing permission for the disposal of non-hazardous municipal solid waste (MSW), until the end of the life of the currently permitted facility in 2028, it is proposed to provide capacity for the sustainable landfill of **250,000 TPA** of non-hazardous wastes (non Municipal Solid Waste (MSW)) including incinerator bottom ash (IBA), stabilised waste arising from the biological treatment of the biodegradable fraction of municipal waste, and construction and demolition (C&D) waste including the fine fraction, soil and stone. It is proposed that up to **15,000 TPA** of metals will be recovered from IBA onsite prior to landfill.

Incinerator Bottom Ash

The commencement of full commercial operations at the 600,000 TPA Poolbeg incinerator in 2017 will see the production of approximately 133,000 TPA of non-hazardous bottom ash. The Poolbeg development will not have the capacity for the recovery of some 10% by weight of metals from this waste stream. In addition to the future availability of bottom ash from Poolbeg, approximately 50,000 TPA of the same material is currently produced at the Carranstown incinerator in Duleek, County Meath, where metals are subsequently removed. Since commencement of operations at Carranstown, the remaining c.40,000[9] TPA of bottom ash has been disposed of, or used as engineering material, at a number of landfills in the region[10], some of which are now closed.

[9] From Annual Environmental Reports for Carranstown, EPA website.
[10] Whiteriver Landfill, County Louth; Knockharley Landfill, County Meath; Scotch Corner Landfill, County Monaghan; Ballynagran Landfill, County Wicklow; Drehid Landfill County Kildare.

In addition to the above, the Regional Waste Management Plans jointly support the development of an additional 300,000 TPA waste-to-energy capacity within the State[11]. The net total of non-hazardous waste-to-energy bottom ash requiring management from these facilities alone is therefore of the order of 220,000 TPA (after removal of metals).

As there is a relatively plentiful supply of aggregates in the Irish market, there is little demand for recycled bottom ash to be used in the construction sector, especially within the context of a lack of framework for the re-use of bottom ash. In the medium term then, this material is likely to be landfilled until such time as interventions are put in place to incentivise and/or mandate the utilisation of minimum proportions of recycled materials. Such interventions might include the introduction of an aggregates tax in order to incentivise the utilisation of recycled materials. In addition, it is considered that the utilisation of incinerator bottom ash as a replacement for natural aggregate in construction would require the approval of the EPA. It is therefore proposed to develop an incinerator bottom ash treatment facility which will provide for the recovery of up to 15,000 TPA of metals from IBA, prior to the onsite landfilling of the remaining fraction. This component of the proposed development comprises a reception / storage area, a processing area for metal recovery, a storage and loading area for metals and a loading area for the residual IBA material to be delivered internally to the non-hazardous landfill for disposal (refer also to Chapter 3, Description of the Proposed development). The extraction of metals involves screening, a process which is itself a first step towards the future grading and recycling of the ash into suitable aggregate. Furthermore, the fraction to be landfilled can be segregated from other waste streams so as to provide options should it become viable for further recovery in the future, subject to the necessary regulatory approvals.

C&D Waste including Fine Fraction, Soil and Stone

Soil and fines material, predominantly originating from construction and demolition (C&D) activity, is traditionally recovered for use in MSW landfill engineering. According to a report by SLR Consulting, approximately 250,000 TPA of C&D fines were being produced in the Greater Dublin Area (GDA) and used as landfill engineering material in 2013. This is substantiated by the EPA's National Waste Report for 2012[12] which confirms that approximately 500,000 tonnes of C&D waste (including C&D fines) was recovered in landfills accepting municipal waste in the Eastern-Midlands Region that year. The SLR report also notes that this figure is likely to increase significantly as the construction industry recovers from the recent recession. The GDA is the traditional source of approximately two thirds of the waste accepted at the Drehid Waste Management Facility.

With increased volumes of municipal solid waste being recycled/ recovered, and particularly with the commencement of operations at the 600,000 TPA Dublin Waste to Energy facility, and a consequent

[11] See Section 2.4.1.8
[12] Appendix 2.3

reduction in levels of MSW landfill activity[13], there is a corresponding reduction in the requirement for the deployment for recovery of C&D waste material in MSW landfill engineering applications. This has led to concerns[14] regarding current and future outlets for this material by non-licensed, poorly regulated, waste collectors. With increasing activity rates in the construction industry, there is a risk that these practices could continue and, indeed, increase. Disposal of the material at landfill would previously have attracted a €75 levy per tonne. The risk was that, with reducing levels of landfill activity, the levy would drive the material out of regulated waste management towards illegal dumping, undermining the competitive position of compliant operators. Much of the fines material (particularly that with a particle size of less than 10mm) looks similar to soil and is generally inert but, due to the gypsum content in C&D waste, the fines contain high levels of sulphate ions. C&D fines should therefore be contained at a location where leachate is collected and treated because rainwater passing through the fines can bring the sulphate into solution and cause the water to become slightly acidic. The acidic water dissolves metal ions in soil, giving rise to contamination in groundwater.

An exemption from payment of the levy was therefore introduced by DECLG (now Department of Housing, Planning, Community and Local Government – DHPCLG)[15] since 1st June 2015 to remove the incentive for illegal dumping and encourage the safe disposal of this material in lined, engineered landfills such as Drehid.

A recent report[16] commissioned by the three regional waste management planning offices, to analyse the national waste capacity for the safe treatment of soil wastes, has concluded (inter alia) that such capacity is an issue in each region. In particular, the report notes that:

"Based on the extensive review of waste and capacity data available it can be concluded that there is a lack of licensed capacity nationally and particularly in the Greater Dublin Area to meet current and forecasted growth. There is a clear need to bring additional capacity on stream to alleviate the current shortfall as well as providing security over the medium to long-term. The failure to do so will likely lead to increased costs along the waste supply chain and may also lead to an increase in unauthorised activities such as illegal dumping."

Table 4-3 of the report outlines the anticipated shortfall in capacity for soil and stones in GDA, showing a capacity shortfall in 2019 of 2,62 million tonnes rising to some 3,98 million tonnes in 2023. Figure 4-3 of the report presents the soil waste and capacity projections together showing a large capacity shortfall from 2019 onwards. The report further notes that

[13] Including the reduction in permitted capacity of the MSW landfill at Drehid from 360,000 tpa to 120,000 tpa from December 2017
[14] Expressed in DECLG's Waste Policy Circular WP 06.15, 15th May 2015.
[15] Note: 'Waste Management and Resource Efficiency' has been moved to the remit of the Department of Communications, Climate Action and Environment (DCCAE).
[16] *Construction & Demolition Waste – Soil and Stone Recovery / Disposal Capacity*, RPS December 2016

"The predicted capacity shortfall clearly has the potential to be a significant constraint for market operators and construction activities in the regions in future years."

It is clear from the report that there is a need for significant additional capacity for the landfill of construction and demolition waste in the GDA and the proposed development at Drehid will address part of this capacity deficit.

To accommodate the additional volume of waste (250,000 TPA of non-hazardous waste including IBA, stabilised organic fine fraction of municipal solid waste, and C&D Fine Fraction, Soil and Stone) for a period of 25 years, it is therefore proposed to develop additional landfill capacity within the Drehid facility, by constructing a new non-hazardous landfill covering approximately 20.9 ha. Additional details pertaining to the calculations and basis of this are provided within Chapter 3 of this EIAR. This capacity will not, of itself, address all of the need for the management of these waste streams.

Hazardous Landfill Capacity and Pre-Processing

Ireland currently has no dedicated hazardous waste landfill disposal facility. The National Hazardous Waste Management Plan (NHWMP) for 2014–2020, published by the Environmental Protection Agency (EPA), recommends that Ireland should strive for greater self-sufficiency in hazardous waste management where it is strategically advisable and where it is technically and economically feasible. In particular, the plan identifies three overarching strategic needs for action if additional hazardous waste is to be treated in Ireland and export is to be reduced. In the context of the proposed development, these needs include *"securing of long-term disposal arrangements for hazardous waste streams not suitable for thermal treatment or recovery"*[17]. The plan also notes that *"Consideration should be given to co-location of hazardous waste treatment at existing waste facilities or brownfield sites for the purposes of sustainability and land-use planning".*

It is therefore proposed that capacity be provided, for a period of 25 years, for the pre-treatment (where required[18]) and sustainable landfill of approximately **85,000 TPA** of hazardous wastes, including incinerator fly ash and other residues as well as other hazardous waste streams which are currently exported abroad.

Incinerator Fly Ash and other Residues

As well as non-hazardous bottom ash, incineration produces a number of hazardous residues, such as fly ash and solid wastes from flue gas treatment system. The hazardous nature of this waste stream

[17] Page 79 of the National Hazardous Waste Management Plan, 2014 – 2020, published by the EPA.

[18] Other than asbestos, a relatively small amount of hazardous waste (other than contaminated soil) requires access to off-site commercial landfill. It is likely that licence conditions for the landfill disposal of this material, and fly ash and solid wastes from flue gas treatment, would require an element of pre-treatment (such as stabilisation or solidification) which would increase the volume of landfilled material managed.

limits its potential re-use. The Carranstown incinerator produces approximately 10,000[19] TPA of this material, while the Poolbeg incinerator will produce another 27,000 TPA. If the supported additional 300,000 TPA of waste-to-energy capacity is developed in the State, it will add approximately 13,500 TPA to these figures, resulting in a total potential of some 51,000 TPA from these facilities.

In respect of residues from the Poolbeg incinerator, the Board's Inspector (in the case of Ref. PL29S.EF2022) noted that: "*The issue of the disposal of residues in the form of bottom ash and flue gas cleaning residues was discussed at length at the oral hearing. The bulk of the residue would be in the form of bottom ash. I accept the arguments put forward by Dublin City Council to the effect that the export of this ash as proposed, would be in the form of a waste recovery operation, rather than waste disposal. I accept that there would be procedural requirements in relation to any such trans-boundary shipment of waste. I do not consider however that these are insurmountable problems. I have reservations however as to whether in the long term, it would be financially sustainable to export the bottom ash in this manner. I would anticipate that if other waste to energy facilities are developed, a plant would be developed in Ireland for the treatment of this material and that the material would subsequently be reused in Ireland. The current proposal before the Board however is to export the bottom ash for reuse, although there is no definitive information in relation to the final end user.*"

The Inspector further noted: "*In the event of an alternative bottom ash* ***recovery/disposal*** *system being proposed in the future the implications of that would have to be assessed through the appropriate procedures. I consider that alternative options which would be acceptable from environmental and planning perspectives are likely to be available in the future*"

and

"*Closeness of the port would obviously facilitate the export of residues, such as bottom ash, although the long-term sustainability of this element of the proposal must be open to question.*"

As it stands therefore, it had been envisaged that non-hazardous and hazardous residues generated by the Poolbeg incinerator could not be managed within the State, and would therefore have to be exported. This can be directly attributed to the fact that no facility existed at that time to specifically facilitate such residues.

In contrast, it is highlighted that the development proposal now being applied for, which provides for management of such ash within Ireland, rather than exporting it, is fully in accordance with the proximity

[19] As confirmed by recent Annual Environmental Reports for this facility on the EPA website.

and self-sufficiency provisions of the Waste Framework Directive and the provisions of the National Hazardous Waste Management Plan.

The proposed development would therefore specifically provide a facility which would have capacity to treat and dispose of such waste, thus reducing the need for export. This is in accordance with the various national and regional policies as derived from the Waste Framework Directive (WFD), and the principles of self-sufficiency and proximity as outlined within Section 2.4 of the Directive.

Other Hazardous Wastes

Table 24 of the NHWMP 2014-2020 outlines the use of landfill for Irish hazardous waste abroad for the years 2010 and 2011. Based on both these figures, the plan indicates a current capacity need for approximately 10,000 to 15,000 TPA. According to a summary of baseline scenario projections for waste generation (including for hazardous waste generation), referred to in Table 21 of the plan, this need is expected to at least double over the period to 2030. This is in addition to the hazardous residues from waste-to-energy mentioned above. While asbestos is the single largest hazardous waste stream that requires landfill disposal, other streams include some C&D wastes, contaminated soils, industrial wastes, sludges and filter cakes, as well as metals and heavy-metal-containing wastes.

To accommodate this additional volume of hazardous waste (estimated at 85,000 TPA) for a period of 25 years, it will be necessary to develop separate additional landfill capacity. The proposed development makes provision for such required additional hazardous waste landfill capacity, and it is proposed that this be co-located at, but operated separately from, the existing permitted and operating Drehid Waste Management Facility.

The Board will be aware that a proposal for the development of an Integrated Waste Management Facility, for the acceptance of incinerator ash, hazardous and non-hazardous soils and inert soils at Hollywood, Naul, County Dublin, was granted planning permission by the Board in June 2011.

Notwithstanding the above, the EPA issued a proposed decision to refuse a waste licence for the site in June 2014. Thereafter, on 6th January 2016, the EPA issued a Final Determination for a refusal of a licence for the proposed 'Hollywood' development. This has obvious implications as regards the lack of available appropriate waste management infrastructure, capacity and facilities within the country. The subject development proposal at Drehid would assist in addressing this lack of capacity.

Composting Facility

The final component of the subject proposed development relates to an increase in the volume of waste to be accepted at the existing composting facility, by **20,000 TPA** from the currently permitted 25,000 TPA (without the need for any physical development). The proposal also includes the removal of the

restriction on the operating life of this composting facility, which is currently aligned with the landfill life. In addition, it is proposed to extend the existing facility to provide for the acceptance of an additional **45,000 TPA**. It is anticipated that the latter will require slightly more than double the footprint of the existing composting facility. The justification for the proposed changes to the volume of waste to be accepted at the composting facility is the ongoing requirement to divert bio-waste from landfill, as provided for in E.U. and National policy, and supported by the recently adopted Eastern Midlands Regional Waste Management Plan[20].

2.3 SITE LOCATION, CONTEXT AND PLANNING HISTORY

2.3.1 Location of the Proposed development Site

The proposed development site is located immediately adjacent to the existing Drehid Waste Management Facility.

The largest concentration of houses in the vicinity of the proposed development site is in the village of Derrinturn, some 3 km north west of the proposed site. The villages of Allenwood and Coill Dubh are in excess of 3 km to the southeast and east, respectively, of the proposed development site. There are no significant residential/commercial developments planned within close proximity of the site.

The R403 regional road lies south, southwest and west of the site. The R403 joins the R402 regional road at Carbury, to the northwest of the proposed site. The R402 connects to the M4 while the R403 connects to central and south County Kildare. The M4 (Dublin to Sligo/Galway) Motorway is located approximately 8 km to the north of the site, while the M7 (Dublin to Limerick/Cork) Motorway is located approximately 18 km to the south of the site.

Access to the proposed development site for the waste facility will be via the existing, permitted site entrance at the R403 regional road and the existing facility access road. It will thus be accessible via the network of existing regional routes which in turn link with the National Motorway network. These routes have been previously approved for the existing and operational Drehid Waste Management Facility, and for the permitted Mechanical Biological Treatment (MBT) facility (ABP Ref. PL09.PA0027); and in addition three haul routes, additional to those currently permitted, are proposed (refer to Chapter 10 Material Assets (Roads &Traffic), Section 10.3.2 of this EIAR).

2.3.2 Planning History for the Site

This application relates to an approximately 272 ha site located within the larger Bord na Móna owned landholding. The application boundary also abuts the boundary of the permitted development of an adjacent MBT facility.

[20] Policy E.17 Plan supports the development of at least 75,000 TPA of additional biological treatment capacity.

2.3.3 Relevant Planning History for the Bord na Móna Landholding

The planning files associated with the development of the existing Drehid Waste Management Facility are set out in Table 2-1: Planning Applications within the Bord na Móna Landholding (associated with the Drehid Waste Management Facility Site).

As already outlined above, within the broader landholding, the Drehid Waste Management Facility has been developed and is operational, and a Mechanical Biological Treatment (MBT) facility (located immediately south of and adjacent to the proposed development site) has been permitted, and will also be taken into consideration within this table.

The following subsections within this chapter provide outline descriptions of the key relevant planning and associated applications submitted in respect of the Drehid Waste Management Facility site. It also provides details of waste licenses issued by the Environmental Protection Agency in relation to the operation of the existing facility.

Table 2-1: Planning Applications within the Bord na Móna Landholding (associated with the Drehid Waste Management Facility Site)

BRIEF DESCRIPTION OF PREVIOUS APPLICATIONS	REG. NO.	GRANT DATE
Construction of Drehid Waste Management Facility consisting of an engineered landfill site and composting facility for an operational lifespan of 20 years	04/371 / PL09.212059	13/04/05/ 21/11/05
Proposed extension and intensification of the Drehid Waste Management Facility	PL09.PA0004	31/10/08
Bord Na Móna sought a declaration whether or not the deposition of stable, non-reactive hazardous waste, including bound asbestos at this facility is development or exempted development. The Planning Authority (KCC) referred the case to ABP and on 30th August 2010 ABP issued its declaration that it is development and is not exempted development.	09.RL.2742	30/08/10
Extension of the appropriate period of the planning permission granted in 2005 under KCC reg. ref. 04/371 and ABP ref. PL09. 212059 – this related chiefly to the permitted composting facility which was not yet constructed	10/1172	25/02/11
Development of a landfill gas utilisation plant which will be phased and will generate up to 4.99 MW of electricity for input into the national grid.	11/537	19/10/11
An extension (with a gross floor space of approximately 383 square metres) to the previously permitted composting facility.	11/902	02/11/11
Development of a mechanical biological treatment (MBT) facility with a capacity of 250,000 tonnes per annum of waste (principally municipal solid waste).	PL09.PA0027	15/03/13
Section 146B request to ABP to permit intensification for 7 yrs as originally requested in PA0004 (i.e. for an additional 2 yrs to Dec. 2015).	PL09.PM0003	23/12/13
Section 146B request to ABP Alter condition of PA0004 to permit intensification of waste for a further 2 yrs to Dec. 2017, reverting to 120,000 tonnes thereafter. - No physical change to footprint proposed - No change to the final overall volume of waste proposed	PL09.PM0008	12/09/16

Grant of Planning Permission November 2005 and EPA Waste Licence in August 2005 (Ref. 04/371/ PL.09.212059)

The Drehid Waste Management 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. W0201-01).

Under the aforementioned planning permission, and in accordance with the aforementioned Waste Licence, 120,000 TPA (tonnes per annum) of waste can be disposed of to the engineered landfill site with an additional 25,000 TPA permitted for treatment at a composting facility. The operational life of this facility is 20 years.

This planning permission also provided for all associated site development works, including the development of an access road from the R403 regional road to the location of the landfill and composting facility. Construction of the facility commenced in August 2006 and it commenced accepting waste in February 2008.

Grant of Planning Permission, October 2008 and EPA Waste Licence, April 2009 (Ref.PL09.PA0004)

In April 2008 a Planning Application was lodged directly with An Bord Pleanála (under the provisions of the Planning and Development (Strategic Infrastructure) Act 2006) to intensify waste acceptance and to extend the landfill footprint of the facility.

The Planning Application proposed the disposal of an additional 240,000 TPA of waste (over and above that previously permitted) for 7 years, with the development reverting back to receiving the previously permitted 120,000 TPA thereafter.

In October 2008, following an Oral Hearing, An Bord Pleanála granted planning permission (ABP Ref No. PL09 .PA0004) to intensify waste acceptance (for disposal to landfill) to 360,000 TPA until December 2013, with tonnage for disposal at the landfill element of the facility, thereafter, to be restricted to the 120,000 TPA maximum previously permitted.

The permission also included for a landfill facility extension, which involves the construction of additional landfill capacity in the form of lined and contained cells, to ensure that the previously permitted overall life span, and/or the annual capacity of the landfill element of the facility, is not reduced as a consequence of the temporary intensification (*ABP Ref No. PL.09.212059*). The

Environmental Protection Agency issued a revised Waste Licence for the facility in April 2009 (*EPA Ref No. W0201-02*).

Grant of Revised Waste Licence, March 2010

In June 2009, the EPA initiated a Waste Licence review for the Drehid Waste Management Facility. The grounds for the review related to the introduction of limits on the acceptance of biodegradable municipal waste at landfill following the publishing of a technical guidance document on Municipal Solid Waste Pre-treatment and Residuals Management. The Environmental Protection Agency issued a revised Waste Licence for the facility in March 2010 (EPA Ref No. W0201-03).

***Declaration from An Bord Pleanála on Exempted Development Query, August 2010 (Ref.* 09.RL.2742)**

Bord na Móna requested a declaration on whether the deposition of stable non-reactive hazardous waste, including bound asbestos at the Drehid Waste Management Facility, is or is not development, or is or is not exempted development. This case was referred to An Bord Pleanála by Kildare County Council on the 23rd of April, 2010. An Bord Pleanála issued its declaration on the 30th of August 2010 that the deposition of stable, non-reactive hazardous waste, including bound asbestos, is development and is not exempted development.

Extension of Duration of Planning Permission, February 2011 (Ref. 10/1172)

In November 2010, Bord na Móna applied, under Section 42 of the Planning and Development Act, 2000 (as amended), for the extension, by an additional two years, of the appropriate period of the Planning Permission granted in 2005 (*KCC Reg. Ref No. 04/371*, *An Bord Pleanála Ref No. PL09.212059*).

In February 2011, Kildare County Council (*KCC Reg. Ref No. 10/1172*) granted an extension of the duration of the aforementioned Planning Permission for construction of the Drehid Waste Management Facility for a period of two years from the 14th of January 2011. This was chiefly to cover construction of the composting facility which had not yet been constructed.

Grant of Planning Permission for Landfill Gas Utilisation Plant, October 2011 (Ref. 11/537)

In May 2011, Bord na Móna lodged a Planning Application with Kildare County Council (*KCC Reg. Ref No. 11/537*) for the development of a landfill gas utilisation plant. The proposed development of the landfill gas utilisation plant will be phased and will generate up to 4.99 MW of electricity for input into the national grid. Planning permission was granted for this application in October 2011.

Planning Permission Granted for a Composting Facility Extension, November 2011 (Ref. 11/902)

Also in 2011, a planning application was lodged for an extension (with a gross floor space of approximately 383 square metres) to the previously permitted composting facility. No increase to the previously permitted waste acceptance of 25,000 tonnes per annum at the composting facility was proposed, rather, the application sought only an extension to provide additional floor space. Planning permission was granted for this development by Kildare County Council in November 2011.

***Grant of Permission for the development of a MBT Facility, March 2013 (Ref.* 09.PA0027)**

Bord na Móna applied for planning permission for the development of a Mechanical Biological Treatment (MBT) facility which would primarily accept and process municipal solid waste (MSW) and provided for an overall capacity of 250,000 tonnes per annum (TPA). The application for the proposed development was made directly to An Bord Pleanála as 'Strategic Infrastructure Development' under the provisions of Section 37 of the Planning and Development (Strategic Infrastructure) Act, 2006, the Planning and Development Act, 2000 as amended. Planning permission was granted for this development in March 2013, following an Oral Hearing.

The Environmental Protection Agency issued a Licence for the facility in February 2014 (*EPA Ref No. W0283-01*).

***Grant of Planning Permission for the intensification of the Drehid Waste Facility, December 2013 (Ref.* 09. PM0003)**

In June 2013, Bord na Móna, under section 146B of the Planning and Development Act 2000, submitted a request to An Bord Pleanála (ABP) to alter Condition 1 attached to the approved grant under reference 09.PA0004 in relation to the extension and intensification of the Drehid Waste Management Facility.

The request was for the alteration to the terms of the permission in order to allow municipal solid waste to be disposed of at the Drehid facility at a higher rate of 360,000 tonnes per annum (TPA) until the 1st of December 2015. After this period the disposal of waste would be limited to 120,000 TPA.

This was the first request for an alteration to the terms of the permission.

In September 2013, An Bord Pleanála informed Bord an Móna that it had decided that the proposed alteration was a material change. This in turn invoked the provisions of section 146B (8) of the Act, which required Bord na Móna to provide a public notice of the amendment and invite submissions from the public and certain prescribed bodies. Submissions, to which Bord na Móna subsequently responded, were received by An Bord Pleanála on the case.

The Section 146B request was granted by the Board in December 2013.

Activation of immediately available landfill capacity by Local Authorities, March 2016

On the 10th March 2016, all Local Authorities simultaneously and collectively invoked their powers under Section 56 of the Waste Management Act, to make Orders specifically in relation to making arrangements for a prescribed period up to 10th June 2016 for the activation of all immediately available landfill capacity and the taking of such other necessary measures to limit or prevent environmental pollution. The three Waste Management Planning Lead Authorities (the Southern Waste Region, the Connacht - Ulster Waste Region and the Eastern - Midlands Waste Region) highlighted, during the development of the New Waste Management Plans in 2015, that there is a potential shortfall in capacity nationally to deal with residual waste. The issuing of collective Section 56 Orders by all other Local Authorities was necessary to ensure that Kildare County Council in turn acted to make certain that available capacity at the Drehid Waste Management Facility was provided for disposal of waste for a defined time period until 10th June 2016. The additional capacity required to be provided at Drehid is 138,000 tonnes (6,000 tonnes per week for 23 weeks up to the 10th June 2016).

***Grant of Section 146B request to An Bord Pleanála, September 2016 (Ref.* PL09.PM0008)**

In April 2016, Bord na Móna, under section 146B of the Planning and Development Act 2000, submitted a request to An Bord Pleanála (ABP) to alter Condition 1 attached to the approved grant under reference 09.PA0004 in relation to the extension and intensification of the Drehid Waste Management Facility.

The request was for the alteration to the terms of the permission in order to allow municipal solid waste to be disposed of at the Drehid facility at a higher rate of 360,000 tonnes per annum (TPA) until the 1st of December 2017. After this period the disposal of waste would be limited to 120,000 TPA.

This was the second request for an alteration to the terms of the permission. An Bord Pleanála previously made a decision to alter Condition 1 of the permission to allow for a higher rate of waste to be accepted at the facility until the 1st of December 2015 under case reference 09.PM0003.

In June 2016 An Bord Pleanála informed Bord an Móna that it had decided that the proposed alteration was a material change. This in turn invoked the provisions of section 146B (8) of the Act, which required Bord na Móna to provide a public notice of the amendment and invite submissions from the public and certain prescribed bodies. Submissions, to which Bord na Móna subsequently responded, were received by An Bord Pleanála on the case.

The Section 146B request was granted by the Board in September 2016.

2.3.4 Planning History for Area Surrounding the Bord na Móna Landholding

As the proposed development is situated in a rural part of County Kildare, a thorough search of Kildare County Council's website was carried out. This indicated that the majority of planning applications made in recent years in the vicinity of the proposed development have been for small developments such as single dwellings.

For a detailed list of planning applications made in the area surrounding the subject site and the Drehid Waste Management Facility please refer to Appendix 2.2 of this EIAR.

2.3.5 Overall Characteristics of the Proposed development Site

The proposed development is characteristic of an industrial facility which manages and treats waste. The specific site of the proposed changes and associated extension and infrastructure is currently a cutover bog. In terms of specific site location, the proposed development will be located immediately adjacent to and the south-east of the existing Drehid Waste Management Facility. There is no conflict between this proposed land use and current land uses within the Bord na Móna landholding or in the surrounding area. Moreover, there is no precedent in the planning history of the site, or of the existing Drehid Waste Management Facility, that precludes the granting of planning permission for the proposed development.

2.4 PLANNING POLICY STRATEGY AND CONTEXT

The Waste Framework Directive (2008/98/EC) ("the WFD") sets the legal framework for waste management in the European Union. The WFD established a hierarchy of waste management, and was transposed into Irish Law (Section 21A of the Waste Management Act 1996 – as inserted by article 7 of the European Communities (Waste Directive) Regulations 2011 (S.I. No.126 of 2011)). It sets out the basic concepts and definitions relating to waste management, and was introduced in 2008. The WFD places a strong emphasis on optimising resource efficiency, prevention, reuse and the recovery of mixed residual wastes, whilst also introducing the "polluter pays principle" and the "extended producer responsibility". In addition to the above, it incorporates provisions on hazardous waste and waste oils.

The WFD imposes on Member States a number of obligations regarding waste management, including:

- The application of the waste hierarchy as a priority in waste prevention and waste management legislation and policy;
- To ensure that waste is recovered (including separate collection to facilitate recovery where technically, environmentally and economically practicable) or, where it is not recovered, to ensure that waste is disposed of without causing risks to human health and the environment; and

- To establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal wastes – aiming for EU self-sufficiency and for member states individually to move towards self-sufficiency.

The principles of self-sufficiency and proximity are also highlighted within the WFD (Article 16), and require that:

1. *"Member States shall take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households including where such collection also covers such waste from other producers, taking into account best available techniques.*
2. *The network shall be designed to enable the Community as a whole to become self-sufficient in waste disposal as well as in the recovery of waste referred to in paragraph 1, and to enable Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste.*
3. *The network shall enable waste to be disposed of, or waste referred to in paragraph 1 to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health".*

The Landfill Directive (Council Directive 1999/31/EC), "the LD", regulates waste management of EU landfills. The overall aim of the LD is to prevent or reduce as far as possible negative effects on the environment. The Directive is applicable to all waste disposal sites and divides them into three classes:

- Landfills for hazardous waste;
- Landfills for non-hazardous waste; and
- Landfills for inert waste.

In respect of the above, waste disposal to landfills is restricted, and those that are permitted, are subject to a standard waste acceptance procedure, the criteria of which are specified within Council Decision 2003/33/EC. Implementation of the LD through the setting of medium and long-term targets for reducing landfilling, has enabled a better definition of waste strategies and the continuous monitoring of their progress[21].

It is within the above context that the development of Irish waste policy and landfill facilities has been set. The sections below outline how the principles and objectives have been incorporated into the

[21] EEA Report No. 7/2009

various levels of policy (as relevant to the proposed development), and provide a brief indication of how the proposal meets or seeks to implement these provisions.

2.4.1 Relevant Planning and Development Policies

This section demonstrates that the proposed development fully complies with the detailed requirements of all relevant statutory planning and development plans and policies, including the following:

- Planning policies set out in the National Spatial Strategy and Planning Policy Statement;
- Planning policies set out in the Regional Planning Guidelines for the Greater Dublin Area, 2010 – 2022; and
- Local and County planning and development policies as set out in the Kildare County Development Plan, 2011 – 2017 (and any subsequent updates i.e. the draft Kildare County Development Plan 2017-2023).

(Note: Compliance with polices set out in the Eastern-Midlands Region Waste Management Plan 2015-2021 will be discussed in section 2.4.1.9).

2.4.1.1 National Spatial Strategy

The National Spatial Strategy (NSS) was launched in 2002 and proposed a 20-year spatial framework to achieve more balanced regional development in Ireland. The vision underlying the NSS was a better balance of social, economic, and physical development and population growth between regions. Whilst the government is currently progressing a review and replacement of the NSS (The National Planning Framework is to replace the existing National Spatial Strategy in the coming year), it is nonetheless appropriate to consider the references to waste management contained within the NSS as they currently stand.

The vision for each of the eight regional planning areas set out in the NSS directly underpins the Regional Planning Guidelines (RPGs) for these areas, including those for the Greater Dublin Area. Figure 2.3: Dublin and Mid East Regions illustrates the spatial vision for the Greater Dublin Area comprising the Dublin and Mid East Regional Authorities.

A key principle of the spatial vision for this region is to physically consolidate the growth of the metropolitan area (i.e. Dublin City and suburbs) while concentrating development in the hinterland of the metropolitan area (including County Kildare) in strategically placed urban centres.

Section 3.7 of the NSS specifically addresses the issue of the '*Key Infrastructure*' required to realise the strategy. In relation to waste management infrastructure, the NSS states that:

Waste management is a particular current priority. Efficient, effective and cost competitive waste management facilities are essential if industrial and enterprise activity is to thrive and develop in a balanced way across Ireland[22].

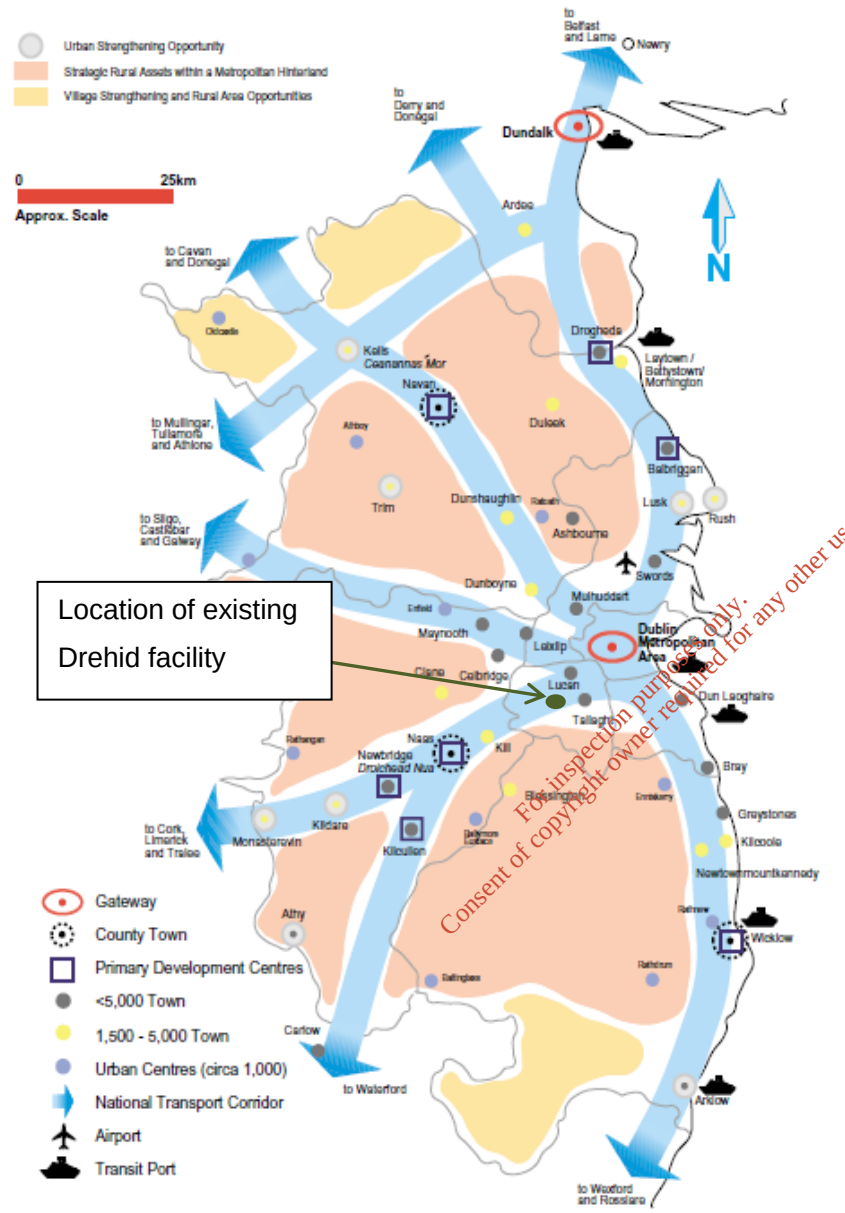


Figure 2.3: Dublin and Mid East Regions

Source: National Spatial Strategy, Map 5, page 78, National Spatial Strategy 2002-2020

In addition to the above, the NSS notes that, with respect to strengthening areas and places,[23] '*There are a number of specific elements within these factors, whose assembly at strategic locations in a*

[22] Section 3.7, Page 56, National Spatial Strategy, DoEHLG, 2001
[23] Section 2.6 of the NSS

targeted way, is vital to foster a wide range of enterprise activity and employment creation. These include… effective waste management structures and facilities'.

Whilst the successor to the National Spatial Strategy (the National Planning Framework) has yet to be published, the Government's Position Paper '*Issues and Choices Ireland* 2040', highlights at Section 6.1.9 that "*the NPF will be relevant to strategic national infrastructure that can influence the spatial pattern of development and contribute to national objectives in areas such as…waste."*

The proposed development offers a variety of waste solutions to the State and the region, particularly in terms of sustainable alternatives to exporting hazardous and non-hazardous waste, on a strategically located and accessible site. The proposed development will thus provide effective waste management structures and facilities as required in the NSS.

2.4.1.2 Ireland 2040 – Our Plan (Draft NPF)

Whilst it has not yet been adopted, this planning policy review has also considered any relevant provisions of the Draft National Planning Framework (NPF). Within this context the NPF reiterates the fact that "*waste planning in Ireland is primarily informed by national waste management policies and regional waste management plans",* and further highlights the fact that planning for waste treatment requirements to 2040 will require (*interalia*):

> *- RSESs and the core strategies of MASPs and city and county plans will support national and regional waste policy and efficient use of resources;*
> *- Development of necessary and appropriate hazardous waste management facilities to avoid the need for treatment elsewhere.*

The proposed development represents and efficient use of an existing resource, and will assist in providing the necessary and required appropriate hazardous waste management facilities.

2.4.1.3 Planning Policy Statement

The Government published its first Planning Policy Statement in January 2015, which is intended to act as a general guiding document to the operation of the planning system and to outline the key values, principles and priorities that should underpin it. Through the non-statutory Planning Policy Statement 2015, the Government wishes

> "*to reaffirm its strong belief in the value of a forward-looking, visionary and dynamic planning process, because it will ensure that the right development takes place in the right locations and at the right time and in providing the social, economic and physical infrastructure necessary to*

meet the needs of our people in a way that protects the many qualities of our natural and built environment".

The policy statement sets out a number of key principles, the following of which are relevant to the proposed development:

1. "Planning must be plan-led and evidence based so that at the appropriate level, from the National Spatial Strategy, Regional Spatial and Economic Strategies, City and County Development Plans and Local Area Plans, the Government, local authorities and local communities, work together to set out a cohesive vision for the future of our country.

2. Planning must proactively drive and support sustainable development, integrating consideration of its economic, social and environmental aspects at the earliest stage to deliver the homes, business and employment space, infrastructure and thriving urban and rural locations in an economically viable manner that will sustain recovery and our future prosperity.

6. Planning will encourage the most efficient and effective use of previously developed (brownfield) land over the use of greenfield land to ensure the most efficient use of existing infrastructure, enhancing and strengthening the continued vitality of existing communities through regeneration.

9. Planning will support the protection and enhancement of environmental quality in a manner consistent with the requirements of relevant national and European standards by guiding development towards optimal locations from the perspective of ensuring high standards of water and air quality, biodiversity and the minimisation of pollution risk[24]".

The proposed development embodies the above principles in that:

i) it is an evidence-based proposal;

ii) it is sustainably located on an appropriate existing brownfield site with an existing operational waste management facility and previously permitted MBT;

iii) It will support sustainable development and support the transition to a low carbon economy through the treatment of waste by an accepted means, proximate to source, and in so doing; and

iv) it will support the protection and enhancement of environmental quality, without impacting on designated sites.

2.4.1.4 Regional Planning Guidelines for the Greater Dublin Area

The Regional Planning Guidelines (RPGs) for the Greater Dublin Area 2010-2022 aim to direct the future growth of the Greater Dublin Area over the medium to long term and work to implement the strategic planning framework set out in the National Spatial Strategy (NSS) published in 2002.

[24] Page 2, Planning Policy Statement, DoECLG, 2015

Whilst the RPGs are still in place, it is noted that these will be superseded by the Regional Spatial and Economic Strategies (RSES) which will be formulated and published after publication of the new National Planning Framework (Ireland 2040). The RSES's will be prepared by the three new Regional Assemblies which have replaced the Regional Authorities. The spatial areas of the new Regional Assemblies also reflect the Regional Waste Management Plan areas. Notwithstanding the fact that the RPGs will be reviewed in the near future, it is considered that any subsequent policies or provisions in respect of waste will complement and/ or reflect existing sectoral and government policies as have been outlined further within this report.

The Greater Dublin Area (GDA) incorporates the geographical area of Dublin City, Fingal, Dún Laoghaire-Rathdown, South Dublin, Kildare, Meath and Wicklow. The Regional Planning Guidelines (RPGs) for this area set out a strategy for development in two main areas, namely the Metropolitan Area, and the Hinterland. According to the RPGs, development in the Hinterland area is to be:

> *"focused on the high quality integrated growth and consolidation of development in key identified towns, separated from each other by extensive areas of strategic green belt land devoted to agriculture and similar uses* [25].

Of particular relevance to the consideration of the proposed development is Chapter 6 of the RPGs. This sets out the key physical infrastructure needs for the GDA, listing key areas of priority investment under the different types of infrastructure such as transport, water supply, waste water and surface water treatment, energy and communications, and waste management.

Section 6.7 highlights the fact that "*waste management infrastructure provision is an important part of the physical infrastructure investment needed in the GDA for population and economic growth*". Key strategic policies and recommendations for waste management are set out in Section 6.7.1, and include the following Strategic Policy which emphasises the need to provide a range of options for the treatment and final disposal of waste:

> ***PIP5****: To ensure, from environmental, business and public health needs, that waste management remains a priority for local authorities and waste management regions in continuing to invest in promoting and facilitating reuse and recycling by residential and commercial sources and that high standard options for treatment and final disposal of waste are available within the GDA.*

[25] Section 2.2, page 33, Regional Planning Guidelines for the Greater Dublin Area, 2010-2022

The following strategic recommendations from the same section of the RPGs are also particularly relevant in the consideration of the proposed development:

> ***PIR36*** *The new waste management strategy across the regions of the GDA should seek to facilitate a balanced use of resources and greater adaptability and robustness of services. Integrated waste management should be considered from the perspective of the GDA as one singular functioning economic and spatial unit and to increase economies of scale.*
>
> ***PIR37*** *Encourage the expansion of increased levels of diversion of biodegradable waste from landfill through provision of or support for biological treatment facilities and home composting.*
>
> ***PIR40*** *Waste management facilities should be appropriately managed and monitored according to best practice to maximise efficiencies and to protect human health and the natural environment.*
>
> ***PIR41*** *Plans and projects associated with waste management that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the habitats directive and in accordance with best practice and guidance.*

It is clear from the policies included above that the proposed development will assist in achieving the objectives set out in the RPGs by providing additional options for the treatment of waste in the region including increased capability and capacity for biowaste, and non-hazardous and hazardous waste. The proposal will therefore also assist in addressing an identified need within the GDA in terms of the delivery of an efficient and effective waste management service with appropriate economies of scale, thereby facilitating strategic and balanced regional development.

In addition, as this EIAR demonstrates, the proposed development has been designed and sited, and will be built, in accordance with best practice for the protection of human health and the natural environment.

2.4.1.5 Local and County Planning and Development Policies

Kildare County Development Plan, 2017-2023

A key planning policy document against which the proposed development is to be assessed is the Kildare County Development Plan, 2017-2023. This plan sets out an overall strategy for the proper planning and sustainable development of County Kildare over the period 2017-2023. It also outlines an overall vision, along with affiliated strategies, policies and objectives for the county.

One of the main mandatory objectives of the Planning Acts relevant to the adoption and review of Development Plans, is "*the provision of infrastructure including transport, energy and communication facilities, water supplies,* ***waste recovery and disposal facilities****, waste water facilities, and ancillary facilities".* This primary objective sets a basis for policies in respect of waste management within the plan, which support the consideration and development of appropriate waste management facilities within Kildare, and which would support the proposed development at the existing waste management facility at Drehid.

The KCDP highlights the fact (Section 7.6.1) that the "*Eastern-Midlands Region Waste Management Plan 2015-2021* [EMRWMP] *provides the framework for waste management within the region and sets out a range of policies and actions to meet specified mandatory and performance-based targets*". The EMRWMP recognises that managing waste in a sustainable and self-sufficient manner will be one of the key challenges for the region.

The overall development strategy ('Core Strategy') for the County is outlined in Chapter 2 of the Kildare County Development Plan (KCDP). This establishes a strategic approach to the management of development in the county. The overall core strategy builds on the principles established in the previous Kildare County Development Plan 2011-2017, and the framework provided by the National Spatial Strategy (NSS) 2002-2020 (see section 2.4.1.1 of this EIAR Chapter) and the Regional Planning Guidelines for the Greater Dublin Area (RPGs) 2010-2022 (see section 2.4.1.4).

Section 2.6 of the Development Plan entitled '*SEA and the Settlement Strategy*' contains a map (see Figure 2.4: Development Plan Macro Environmental Sensitivity Map) which illustrates environmental conditions at a very broad, macro strategic level for the county as a whole, having regard to a range of separate environmental factors.

With regards to the location of the proposed development the Development Plan indicates that environmental sensitivities in the County increase towards the north-west due to the presence of bogs and wetlands, and that "*as the map illustrates a broad scale generalisation of sensitivities, all applications for development must be considered having regard to the individual environmental conditions of the subject site*".

In addition to the above, Section 2.7 of the Plan *'Preferred Development Strategy*' states that a key focus of the core strategy is on "*protecting the environment by implementing an environmental protection policy which recognises the various environmentally sensitive zones within the county but not to mutually exclude appropriate and otherwise acceptable uses and development*".

The proposed development fully complies with the Development Plan Core Strategy due to its use and its location on a site within the same landholding as the existing Bord na Móna waste management facility and previously permitted but not yet constructed Mechanical Biological Treatment (MBT) facility (Ref. PL09.PA0027). Furthermore, as this EIAR demonstrates, the proposed development has been carefully sited and designed to take account of the individual environmental conditions of the subject site.

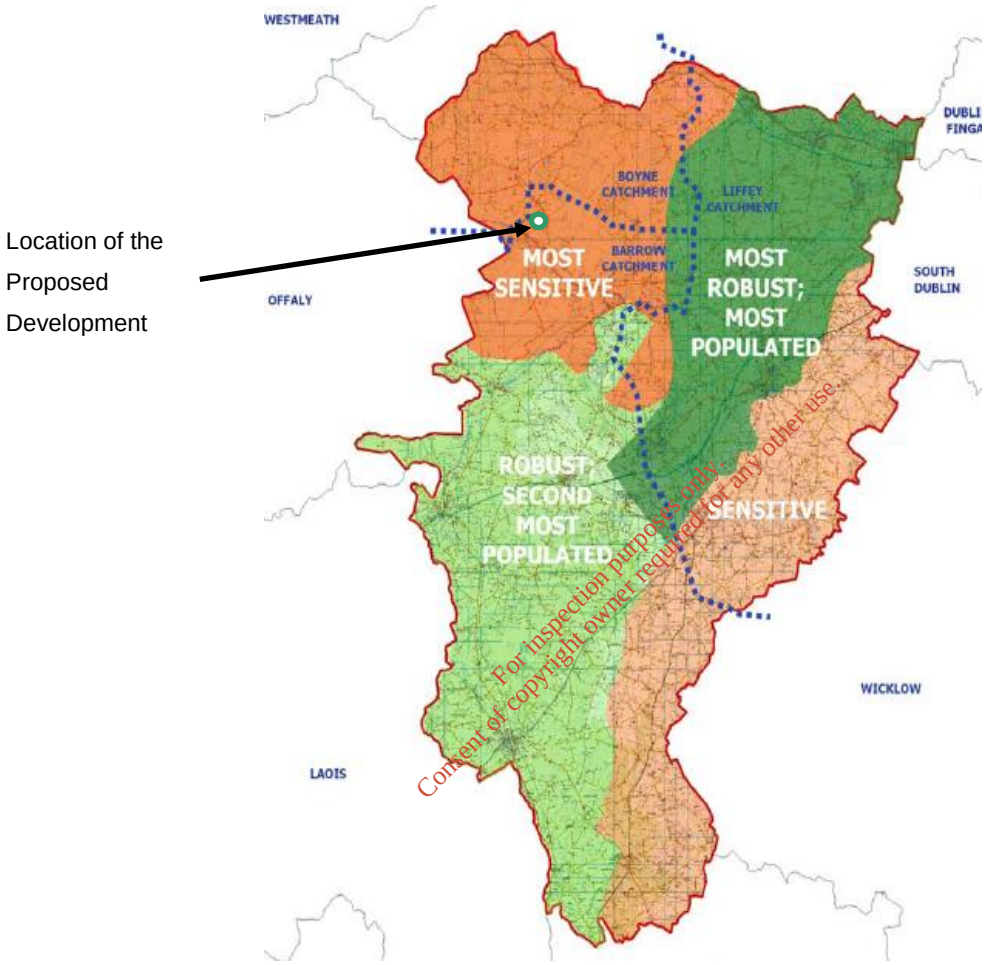


Figure 2.4: Development Plan Macro Environmental Sensitivity Map

Source: Section 2.6 Map 2.4, Kildare County Development Plan 2017-2023

Chapter 5 of the Development Plan (*'Economic Development, Enterprise and Tourism')*, highlights a key aim of the Development Plan as being to "*support and facilitate the economic development of the county across a range of sectors*". Section 5.3.2 identifies a number of factors which will influence the future economic development of the County including the availability of infrastructure. According to the Development Plan:

> *"Adequate infrastructure is essential to facilitate future economic development in the county and Kildare County Council will continue to work with infrastructure providers to secure adequate water services, effective public transport, energy, telecommunications,* ***waste management*** *and education facilities to support employment development.*

The above statement is also related to an Economic Development Strategy Objective – specifically:

> ***EO 2:*** *Work with Irish Water, to support the provision of water, wastewater treatment and* ***waste management facilities*** *to accommodate the future economic growth of the county and to seek to reserve capacity in water services infrastructure for employment generating uses.*

The above provisions outline the Council's commitment to working with the providers of waste management infrastructure, as well as the need to develop and upgrade waste management facilities in order to advance economic growth and the positive outcomes associated with this.
As regards movement and transport, Chapter 6 highlights the fact that the social, economic and environmental wellbeing of County Kildare is "*dependent on the efficient and sustainable movement of people and goods within and through the County".* In this regard policy MT 15 is of specific relevance to the subject proposal.

> ***MT 15****: (i) Seek to channel HGV traffic associated with landfill and extractive sites onto the regional and national road network insofar as possible.*
> *(ii) Seek appropriate and proportionate contributions towards the cost of road improvements which benefit the development, in accordance with Sections 48 or 49 of the Planning and Development Act 2000 (as amended)*

The proposed development will utilise previously permitted haul routes, predominantly comprising regional and national roads, and additional proposed haul routes on regional roads (Chapter 10, Figure 10.1 Haul Routes), all of which have been thoroughly assessed. Refer to Chapter 10 of this EIAR for further details of the Traffic Impact Assessment. The second part of the above policy (MT 15(ii)) reflects the provisions of Section 48 and 49 of the Planning and Development Act 2000, as amended, and as such, the proposed development will be subject to any appropriate conditions imposed in this regard.

Chapter 7 (Infrastructure) of the KCDP identifies the fact that Kildare County Council has a statutory role in regulating waste management and in pollution control. Within this Chapter, section 7.6 (Environmental Services) sets out the Council's aim in respect of conforming "*to European, National and Regional policies in relation to the provision of* ***waste management*** *and to protect and enhance water, air and noise quality".* In this respect, the Plan highlights that the waste management policies and objectives contained within the KCDP "*are reflective of the overarching EU, National and Regional*

policy and legislation". The KCDP also states that the Council "*seeks to ensure the provision of the highest standards of waste management facilities…",* and notes that as the Development Plan is required to include objectives for waste recovery and disposal facilities, *"the objectives of the relevant waste management plan are deemed to be included in the Development Plan*[26]*."*

The following policies contained within Chapter 7 of the KCDP, support the need for the proposed development at the Drehid Waste Management Facility:

> ***WM 1:*** *Implement European Union, National and Regional waste related environmental policy, legislation, guidance and codes of practice to improve management of material resources and wastes.*
>
> ***WM 3*** *Support the implementation of the Eastern Midlands Region Waste Management Plan 2015-2021 by adhering to overarching performance targets, policies and policy action.*
>
> ***WM 5*** *Provide, promote and facilitate high quality sustainable waste recovery and disposal infrastructure and technology in keeping with the EU waste hierarchy and to adequately cater for a growing residential population and business sector.*
>
> ***WM 7*** *Secure appropriate provision for the sustainable management of waste within developments, including the provision of facilities for the storage, separation and collection of such waste.*
>
> ***WM 10*** *Encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste. Where waste management is not being carried out properly, the Waste Management Act 1996 as amended will be used as a means of ensuring specific national policies and regulations are adhered to.*
>
> ***WM 12 E****nsure the provision of waste management facilities in County Kildare (either directly by the Council or in co-operation or partnership with other local authorities and the private sector) is subject to the specific requirements of the Eastern-Midlands Region Waste Management Plan 2015-2021.*
>
> ***WM 15*** *Support and facilitate the separation of waste at source into organic and non-organic streams or other waste management systems that divert waste from landfill and maximise the potential for each waste type to be reused and recycled or composted and divert organic waste*

[26] Section 7.6.1 of the KCDP

from landfill, in accordance with the 'National Strategy on Biodegradable Waste 2006 and the Eastern – Midlands Region Waste Management Plan 2015-2021.

***WM 17** Facilitate the development of waste management infrastructure that is of an appropriate scale and is related to the needs of the county and the Eastern and Midlands Waste Region, subject to the protection of the environment, landscape character, road network and the amenities of the area.*

***WM 18** Facilitate the ongoing operation of the Drehid waste facility in so far as operations at the facility relate to the waste management needs of the County and the Eastern and Midlands Waste Region and subject to the protection of the environment, landscape character, road network and the amenities of the area.*

The Environmental Services Objective associated with the above policies is stated at:

***EN 2:** Facilitate the implementation of the Eastern – Midlands Region Waste Management Plan 2015-2021.*

It should be noted that policies WM 17 and WM 18 are not entirely consistent with policy WM1, nor government guidance in respect of the movement of waste (Circular WIR: 04/05 Policy guidance pursuant to section 60 of the Waste Management Act, 1996 (as amended)).

The guidance notes that the national waste management policy document: "*Taking Stock and Moving Forward*", recognised a trend whereby certain planning permissions in respect of waste infrastructure restrict facilities to dealing only with waste arising within the area to which the waste management plan applies. The policy document reflected acceptance that facilities provided in a region must deal primarily with waste from that region. However, it also recognised that an unnecessarily restrictive approach may not be in keeping with the philosophy underpinning the regional approach to waste management planning and, by implication, the rational use of waste management infrastructure.

In addition, the Environmental Protection Agency has stated that "*the inter-regional movement and treatment of waste should be provided for ..in appropriate circumstances*." The Minister for the Environment, Heritage and Local Government issued guidance in 2005 to the effect that relevant authorities, in preparing waste management plans, determining the necessary statutory authorisations and in regard to other associated 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 was therefore intended to provide greater clarity in regard to the appropriate application of the proximity principle so as to facilitate the provision of environmentally sustainable and economically viable waste infrastructure in accordance with national policy.

Notwithstanding the above in respect of WM 17, the proposed development fully accords with the KCDP policies and objective in that it would represent a significant step in ensuring that the County (and in fact the wider region) has adequate waste management infrastructure to facilitate future economic growth. The proposed development is in accordance with EU, National, Regional and Local policies.

In accordance with guidance in respect of implementation of Directive 2014/52/EU, this EIAR has also considered aspects relating to climate change. Chapter 8 of the Kildare County Development Plan highlights specific policies relating to 'Energy from Waste' and 'Energy Efficiency in Buildings'. Those policies considered appropriate to the subject development proposal are:

> ***EW2:*** *It is the policy of Council to promote the development of waste heat technologies and the utilisation and sharing of waste heat in new or extended industrial and commercial developments, where the processes associated with the primary operation onsite generates waste heat.*
>
> ***EB1:*** *Ensure that new development is designed to take account of the impacts of climate change, and that energy efficiency and renewable energy measures are incorporated in accordance with national building regulations, policy and guidance.*

In the above regard, Chapter 14 (Climate) of this EIAR outlines those factors applicable to the subject proposal. In addition, landfill gas is utilised to generate green electricity at the facility's landfill gas utilisation plant (Section 3.2) and waste heat is utilised in the leachate treatment facility (Section 3.7).

Due to the location of the subject site, regard has also been had to ***Chapter 10 'Rural Development'*** of the County Development Plan, and in particular to those provisions and policies which relate to rural-based economic activity and boglands in these areas. In respect of these, the development plan strategy seeks to:

> *Promote the achievement of the goals and objectives of European and National plans and strategies. The Council will continue to support the work of local agencies and groups responsible for rural development within the county. A number of elements of the county's rural economy will be promoted including agriculture, equine, horticulture, forestry, boglands and renewable energy together with the continued modernisation of the farming/ food sector. In*

parallel, the quality of the rural environment will be enhanced and protected from inappropriate development and/ or practices.

It is acknowledged within the Plan that there is a role for rural employment in contributing to the general economic development of the county, and that in relation to this, there is a *"need to balance social and economic activity with the protection of the environment and character of the rural landscape"* specifically, as set out in Section 10.4:

***BL 1**: 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 of the county.*

***BL 6**: Support the development of the peatlands within the county for appropriate alternative uses, subject to environmental considerations and nature designations.*

The proposed development fully complies with these policies in that it represents an appropriate land use, and forms part of a balanced approach to an area characterised by peatlands - involving the further development of the existing facility within the Bord na Móna landholding at Carbury, County Kildare. The proposal incorporates a proposed use which has full regard to all relevant environmental considerations and nature designations.

In consideration of the above, the provisions and policies outlined within Section 10.4.10 (Rural Enterprises) also largely positively support the proposed development insofar as the existing and proposed use and activity is one that by its nature is appropriate, and in fact required to be located, within rural areas:

Commercial/ industrial developments in rural areas may be acceptable subject to proper planning considerations, where the Council is satisfied that the proposed development requires to be located in the rural area due to its dependence on an existing local resource or source material that is required for the carrying out of the industrial process/ commercial activity/ service. The local resource or source of material shall be in close proximity to the location of the proposed development.

***RE 4**: Support the provision of a high quality rural environment, encourage diversification and improved competitiveness of the rural economy, sustain the livelihood of rural communities and promote the development of the wider rural economy, all within the context of the sustainable management of land and resources".*

In the same way, and as is demonstrated within this EIAR, the proposed development also fully complies with the key rural development objective, RDO 4 which is set out in Section 10.5:

> ***REO 4**: To ensure that all new developments and practices do not undermine rural ecosystems, landscapes and conservation areas and are conducted in a manner consistent with the protection of the local environment and in line with national legislation and relevant guidelines.*

As with the previous KCDP, Chapter 14 (Landscape, Recreation and Amenity) references the Landscape Character Assessment (LCA) undertaken for the county in 2004. Within the context of this LCA, the Drehid site is located within the 'Western Boglands' Landscape Character Area, as illustrated on Figure 2.5.

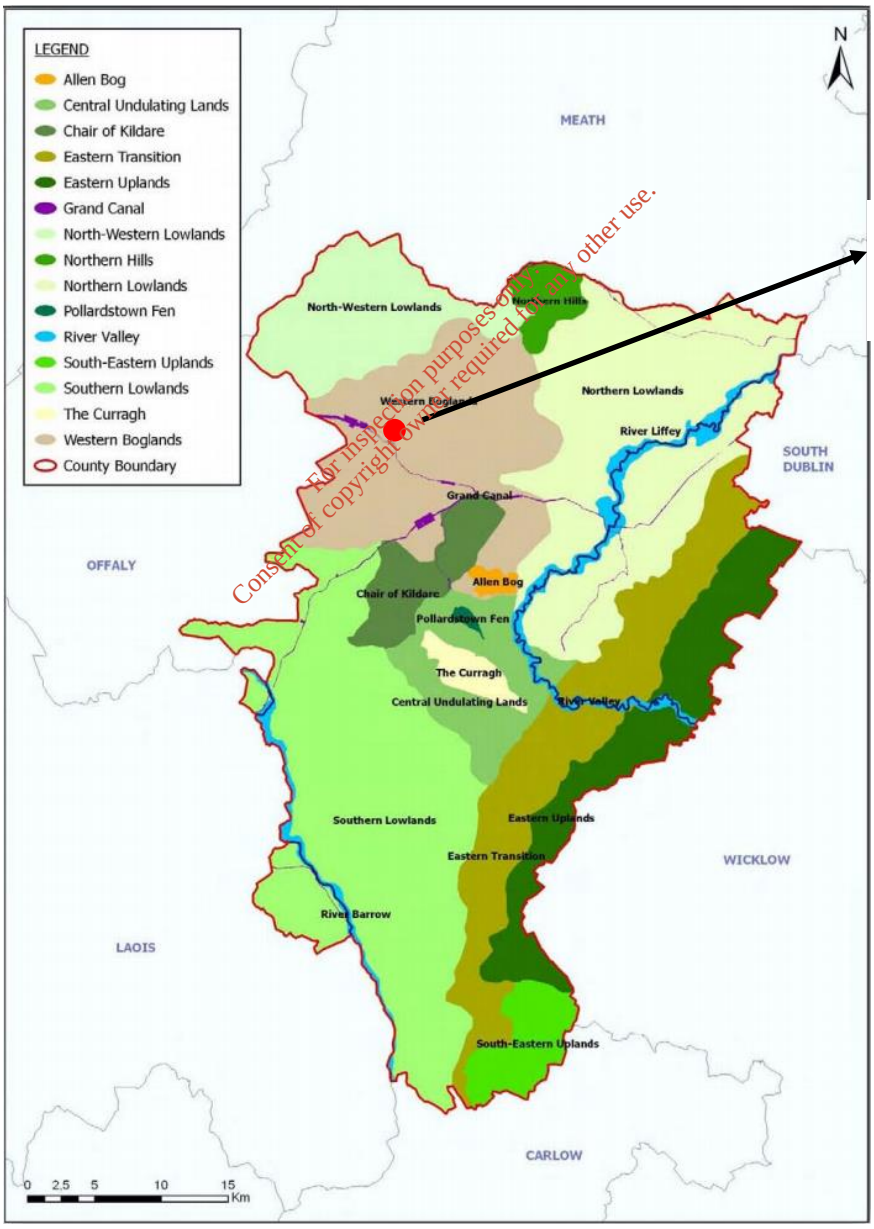
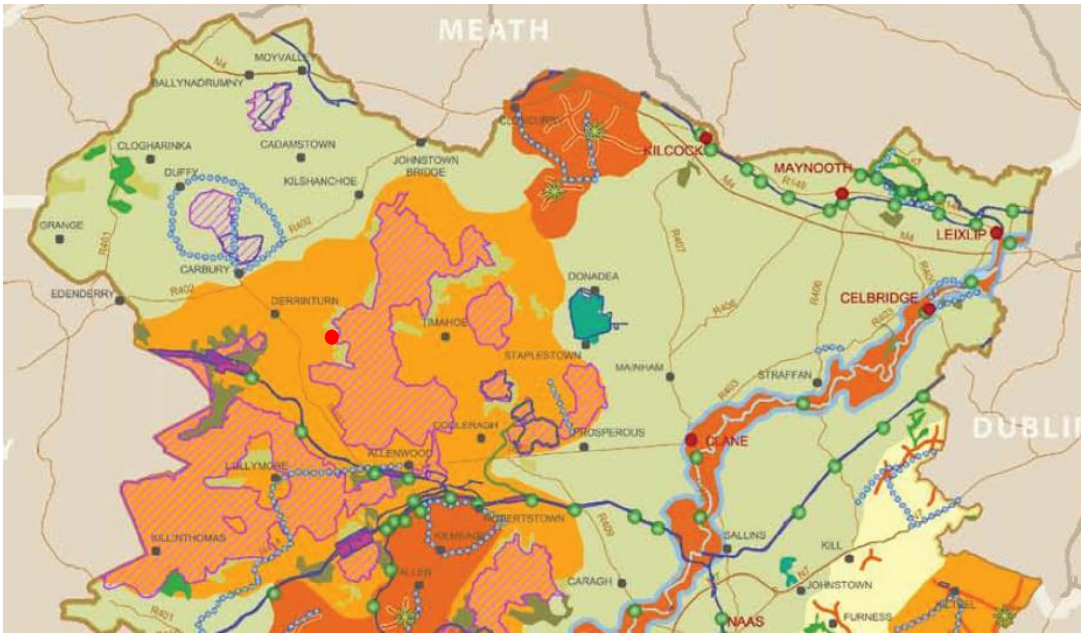


Figure 2.5: Kildare Landscape Character Areas
Source: Kildare County Development Plan 2017-2023



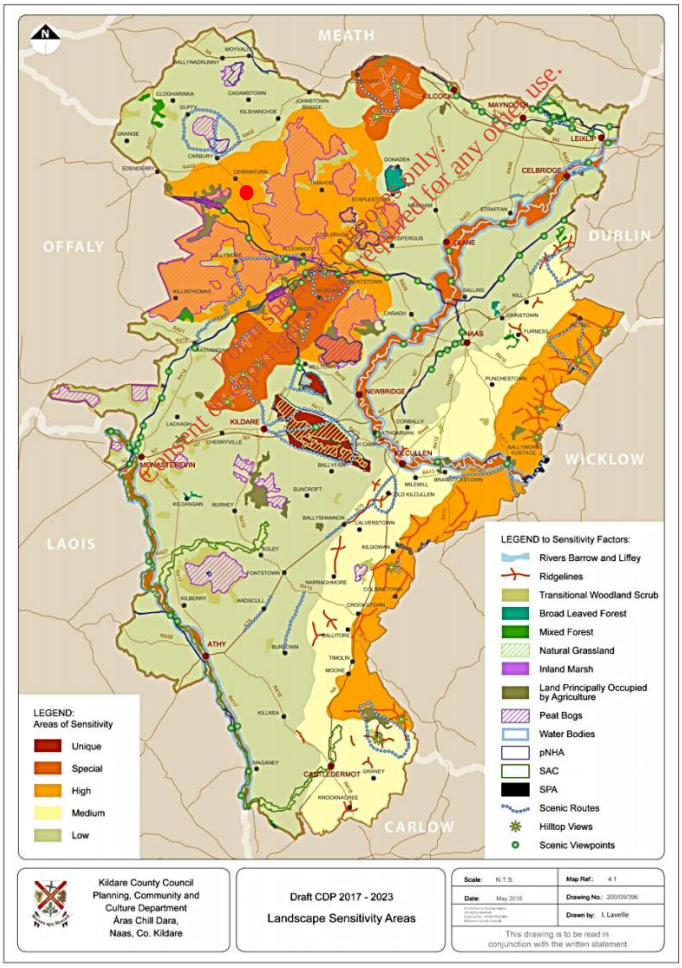


Figure 2.6: Kildare Landscape Sensitivity Areas
Source: Kildare County Development Plan 2017-2023

Table 14.1 of the development plan indicates the dominant sensitivity of each Landscape Character Area with the accompanying note (Sect. 14.4) which states "*It is important to note that within each of*

these areas there can be a wide variety of local conditions that can significantly increase or decrease sensitivity". Within this context, the Western Boglands has been classified as having a 'High Sensitivity' rating (Class 3).

Landscape areas of High sensitivity are described as '*areas with reduced capacity to accommodate uses without significant adverse effects on the appearance or character of the landscape having regard to prevalent sensitivity factors*'. Landscape Sensitivity Areas based on the findings of the LCA are indicated in Figure 2.6: Kildare Landscape Sensitivity Areas above. This illustrates that the Drehid facility is situated within an area described as comprising a 'Peat Bog Sensitivity Factor' within a 'High Sensitivity Area'.

Within Chapter 14, Section 14.4.2 examines the impacts of development types on different landscape areas. A table is provided for "*guidance on the likely compatibility between a range of land-use classes and the principal landscape areas of the county classified by sensitivity"*. '*Industrial Projects*' are indicated has having a '*Medium*' compatibility rating within the Western Boglands area.

The *likely compatibility between a range of land-uses and proximity of less than 300 m to the principle Landscape Sensitivity Factors* is also provided. In this respect, Industrial Projects are considered to be '*Very unlikely to be compatible*' within Peat Bogs. Notwithstanding this statement and as already noted above, the Plan acknowledges the uniqueness of individual developments and that these need to be assessed at micro / local level landscapes where their ability to absorb development varies, and that each site should be assessed on its individual merits.

Additional Landscape policies within the Chapter considered to be of relevance to the proposed development are:

> ***LA 1**: Ensure that consideration of landscape sensitivity is an important factor in determining development uses. In areas of high landscape sensitivity, the design, type and the choice of location of proposed development in the landscape will also be critical considerations.*
>
> ***LA 2**: Protect and enhance the county's landscape, by ensuring that development retains, protects and, where necessary, enhances the appearance and character of the existing local landscape.*
>
> ***LA 3**: Require a Landscape/Visual Impact Assessment to accompany significant proposals that are likely to significantly affect:*
>
> - *Landscape Sensitivity Factors*
> - *A Class 4 or 5 Sensitivity Landscape (i.e. within 500 m of the boundary)*

- A route or view identified in maps 14.2 and 14.3 (i.e. within 500 m of the boundary)

***LA 4**: Seek to ensure that local landscape features, including historic features and buildings, hedgerows, shelter belts and stone walls are retained, protected and enhanced where appropriate, so as to preserve the local landscape and character of an area, whilst providing for future development.*

***LA 7**: Be informed by consideration of the County Landscape Character Appraisal*

A Landscape and Visual Impact Assessment has been undertaken as part of this EIAR. This assessment has taken account of the landscape character area in which the proposal is situated – including consideration of any views and scenic routes within the vicinity of the site (Chapter 8 of this EIAR). Although located in a landscape character area of high sensitivity, the development is proposed at the existing Drehid Waste Management Facility, an established waste management facility and use in the area.

A number of specific policies are also outlined in respect of the specific Landscape Character Areas. Those applicable to the subject proposed development, and relating to Lowland Plains and Boglands Character Areas (Section 14.8.2), are identified as:

***LL 1:** Recognise that the lowlands are made up of a variety of working landscapes, which are critical resources for sustaining the economic and social well-being of the county.*

***LL 2:** Continue to permit development that can utilise existing structures, settlement areas and infrastructure, whilst taking account of the visual absorption opportunities provided by existing topography and vegetation.*

***LL 3:** Recognise that this lowland landscape character area includes areas of significant landscape and ecological value, which are worthy of protection.*

***LL 4**: To recognise that intact boglands are critical natural resources for ecological and environmental reasons.*

***LL 5**: To recognise that cutaway and cut-over boglands represent degraded landscapes and/or brownfield sites and thus are potentially robust to absorb a variety of appropriate developments.*

The Biodiversity chapter of this EIAR (Chapter 5) examines the ecology of the site and identifies the potential impacts that the proposed development may have on the ecological features of the site and

surrounding environs. The subject site is an established waste management facility located within a large area of cut-away bogland, which is deemed suitable to absorb such developments due to the robust nature of these lands and its existing use.

In addition to the above, it is noted that there is a perceived inconsistency between the landscape sensitivity classification of 'High[27]' for Western Boglands (within which area the proposed development is located), and Policy LL5, which recognises that cutaway and cutover peatlands (which form a significant part of the Western Boglands) are robust enough to absorb a variety of appropriate developments.

In the above regard, it is worth noting that both the existing Waste Management Facility and permitted MBT Facility at Drehid have previously been evaluated by Kildare County Council and An Bord Pleanála on appeal (and through direct application as Strategic Infrastructure Development proposals in respect of the intensification of the Drehid Waste Management Facility and the MBT applications). Within this context, both authorities have previously noted that the development and operation of a waste management facility, in this location, is compliant with the policies relating to landscape character areas.

Development Standards are outlined within Chapter 17 of the development plan. These are the standards which the Planning Authority use to assess development proposals. Within this context, the development plan states that *"in assessing development proposals for, or including, waste recovery / disposal facilities, the Planning Authority will have regard to the provisions of the Eastern-Midlands Region Waste Management Plan 2015-2021, planning legislation, the County Development Plan policies as set out in Chapter 7 and other relevant planning documents".* The proposal has considered and complied with all relevant planning legislation and also with the appropriate documentation in respect of the site suitability and location.

Further to the above, Section 17.7.6 (Car Parking) stipulates that "*Non-residential developments shall provide facilities for the charging of battery-operated cars at a rate of up to 10% of the total car parking spaces in order to meet the targets of the Governments Electric Transport Programme and in response to 'Climate Change the Government's National Policy Position on Climate Action and Low Carbon Development".*

The above requirement has been taken into account and such provision has been incorporated into the proposed development proposal, incorporating the provision of electric car charging facilities at 5 No. designated car parking spaces.

[27] This differs from the 2011-2017 Kildare County Development Plan which classified the Western Boglands as an Area of Medium Landscape Sensitivity

It is also stated (Section 17.10) that the Planning Authority will contribute to the SID process of relevant and larger proposals for waste recovery/ disposal facilities where these are considered by An Bord Pleanála through the SID process.

The criteria which have been established and set out within the development standards section relate to:

- Site sensitivity (impacts upon SAC's, SPA's, NHA's, areas at risk of flooding etc.);
- Nature of Operation and Materials (consideration of nature of waste material and methods of processing, including operation hours and duration of permission sought);
- Traffic and Transport (requirement of a Traffic and Transport Assessment to be submitted in most cases; the need to indicate details of traffic and transport arrangements for the proposal);
- Surface Water Drainage (proposals to incorporate sustainable drainage systems and to have regard to the EU Water Framework Directive and associated River Basin Management Plans);
- Emissions (the requirement of details on potential noise, fumes, odours, dust, grit, vibration and lighting, along with controls and monitoring);
- Landscaping and Restoration Proposals (the requirement of details for boundary treatments, screening proposals and remediation measures, including timeframe for implementation);
- Impacts on Residential Amenity (the proximity and impacts to residences will be considered);
- Environmental Impact Assessment (EIA) (Proposals to be screened for the requirement to undertake an EIA. An EIAR shall be submitted if required); and
- Appropriate Assessment (AA) (Proposals to be screened for the requirement to undertake an AA. In the absence of an AA screening or a Stage 2 AA, development will not be permitted).

The criteria outlined above for the assessment of waste facility planning applications have been adhered to in the design of the proposed development at the existing Drehid Waste Management Facility, and through the associated EIAR and AA screening processes.

The KCDP proposes that construction and demolition waste management plans should be submitted as part of development proposals for projects in excess of a number of thresholds, including:

- *New developments other than above, including institutional, educational, health and other public facilities, with an aggregate floor area in excess of 1,250 sq metres;*

- *Demolition / renovation / refurbishment projects generating in excess of 100 cubic metres in volume of C&D waste; and*
- *Civil engineering projects in excess of 500 cubic metres of waste materials used for development works on the site.*

The Plan also mentions that as a minimum, a Construction and Demolition Waste Management Plan should include provision for the management of all construction and demolition waste arising on site, and devise provision for the reuse of materials and/or recovery or disposal of this waste. Excavated material for the development site should also be reused on the same site if appropriate. The subject application incorporates as part of the proposal, the safe disposal of Construction and Demolition waste (C & D waste), via the proposed non-hazardous landfill.

As demonstrated through the relevant extracts above, the proposed development is fully compliant with the provisions, objectives and policies of the Kildare County Development Plan (2017-2023). The framework policy, as highlighted above within the KCDP, and within which this subject proposal is made, is thus supportive of the proposed development. The principle of the proposed development is therefore acceptable.

In addition, this EIAR demonstrates all possible measures will be taken to ensure that the proposed development will not have an undue impact on the environment. Furthermore, it is clear that the provision of a development, such as the subject proposal, will facilitate the provision of greater waste disposal and recovery options in the county and wider regions.

2.4.1.6 Sectoral Guidance and Reports from Other Relevant Bodies

In addition to the planning policy documents dealt with in the preceding pages of this Chapter, the proposed development has also been considered in light of the general waste policy environment within Ireland, and key and general sectoral guidance, policies and reports, including:

- Government policies (including recent draft policies) on the management and treatment of waste, as issued by the Department of the Environment, Community and Local Government (now the Department of Housing, Planning, Community and Local Government – DoHPCLG)[28];
- Sectoral policies set out by other relevant agencies such as the Environmental Protection Agency (EPA) and Forfás; and
- Policies set out in the Regional Waste Management Plans for the Waste Planning Regions which will be served by the proposal.

[28] Note: 'Waste Management and Resource Efficiency' has been moved to the remit of the Department of Communications, Climate Action and Environment (DCCAE).

These are briefly outlined below, with a summary being provided at the end of each sectoral review. Each sectoral review is concluded with a statement regarding compliance of the proposed development with the reviewed sectoral policy guidance.

2.4.1.7 Government Waste Management Policies and Guidance

There has been a significant evolution in National Waste Management Policies as issued by the Department of Environment, Community and Local Government (DoECLG) (previously the Department of Environment, Heritage and Local Government – DoEHLG) since the mid to late 1990s.

Government policy documents have moved from an initial focus on the development of modern, engineered landfill capacity and the promotion of recycling to fiscal measures to influence environmental performance as well as policies promoting and directing the emerging technologies in this sector, such as the development of commercial composting and both hazardous and non-hazardous waste facilities.

In addition, Government waste management guidance has been based on a regional approach to waste management and planning, as embodied by the various regional waste management plans. Key waste management policy statements published by the now DoHPCLG since the late 1990s include:

1. Waste Management: Changing Our Ways – DoEHLG (1998);
2. Preventing and Recycling Waste: Delivering Change (March 2002);
3. Waste Management: Taking Stock and Moving Forward (April 2004);
4. National Overview of Waste Management Plans (2004);
5. Policy Guidance Notes under Section 60 of the Waste Management Act, 1996 (May 2005);
6. National Strategy on Biodegradable Waste (April 2006);
7. International Review of Waste Management Policy (September 2009);
8. Towards a New National Waste Policy - Discussion Document (August 2011); and
9. A Resource Opportunity – Waste Management Policy in Ireland (July 2012).

The following sections of this report will provide a brief overview of each of these policy documents to demonstrate that the proposal accords with the Government's overall approach to waste management in Ireland.

1) "Waste Management: Changing Our Ways" - DoEHLG (1998)

The policy statement '*Waste Management: Changing Our Ways*' was published by the Minister for the Environment and Local Government in October 1998. The policy approach adopted in '*Changing Our Ways*' was one of integrated waste management based on the hierarchy of options, officially adopted by the European Union.

The illustration in Figure 2.7: European Union Waste Hierarchy indicates that this approach places greatest emphasis on waste prevention, followed by minimisation, re-use, recycling, energy recovery and, finally, the environmentally sustainable disposal of residual waste.

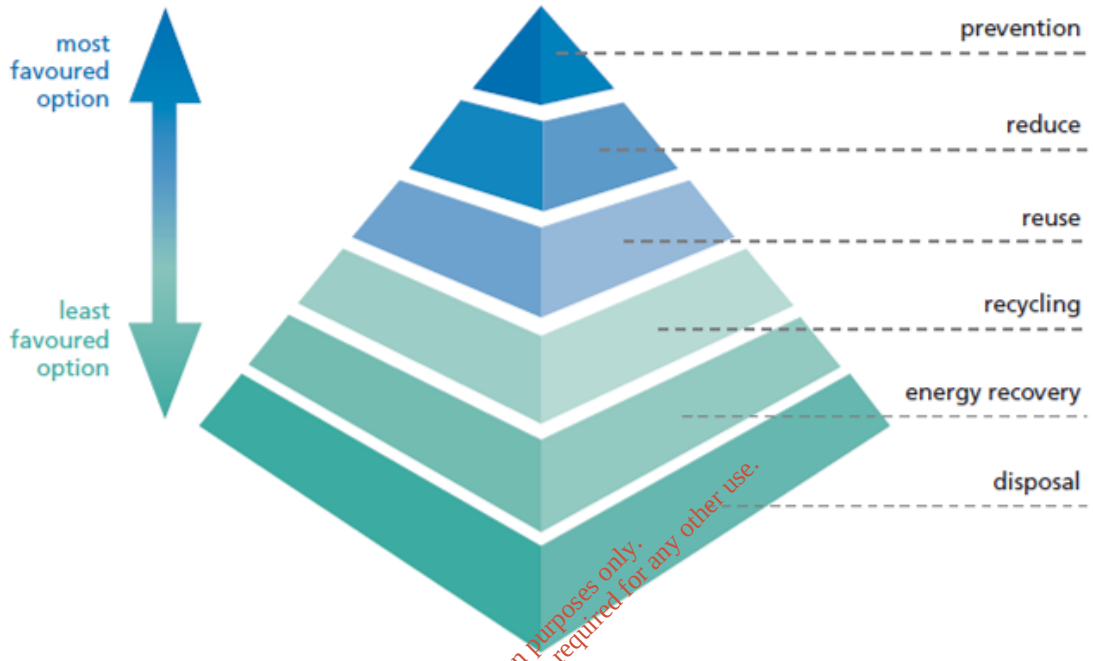


Figure 2.7: European Union Waste Hierarchy

Source: Page 5, Municipal Solid Waste: Pre Treatment and Residuals Management, EPA, 2009

The Government's '*Changing our Ways*' policy document highlighted the need for a new approach to the delivery of waste infrastructure and services, challenging the older model of stand-alone provision of waste services by individual local authorities. It also emphasised the need for co-operation with neighbouring local authorities and the utilisation of the potential of the private sector to contribute to the delivery of services.

Local authorities were encouraged to adopt a regional approach to waste management planning in order to secure a level of scale and activity which would provide a sound basis for the development of integrated and innovative waste management solutions.

Significantly *'Changing Our Ways*' also sought to secure and progress rationalisation of the municipal landfill network, the ultimate target being an integrated network of ca. 20 state-of-the-art facilities incorporating energy recovery and high standards of environmental protection [29].

[29] As stated in Para. 4.1, Changing our Ways, DoEHLG, 1998

2) Preventing and Recycling Waste: Delivering Change - DoEHLG (2002)

'*Preventing and Recycling Waste: Delivering Change*' evolved from and was grounded in the '*Changing Our Ways*' document which established a national policy framework for the adoption and implementation of strategic waste management planning.

'*Delivering Change*' addressed the factors and practical considerations that are relevant to the achievement of Government policy objectives and for the prevention and recovery of waste. This policy statement 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.

3) Waste Management: Taking Stock and Moving Forward - DoEHLG (2004)

The overall policy approach set out in '*Taking Stock and Moving Forward*' remained grounded in the concept of integrated waste management, based on the EU waste hierarchy and designed to achieve the ambitious targets set out in '*Changing Our Ways*' by 2013.

While '*Taking Stock and Moving Forward'* acknowledged the considerable progress made in improving waste management, it made it clear that further work remained to be done to put the full range and scale of waste infrastructure in place.

4) DoEHLG (2004) National Overview of Waste Management Plans

The *'National Overview of Waste Management Plans'* which was published in tandem with '*Taking Stock and Moving Forward*' set out on a region by region basis the progress made (up to end-2003) in providing the principal pieces of waste infrastructure envisaged in local authority waste management plans.

In terms of the Kildare Region, the *'National Overview'* concluded that the estimated landfill capacity in the County in 2001 was 2 years (based on the EPA National Waste Database Report, 2001); but that this had increased to 6 years in 2004 based largely on the EPA decision to issue a waste licence for a private municipal facility at Usk (which ultimately was never developed).

5) Policy Guidance Notes Under Section 60 of the Waste Management Act, 1996 - DoEHLG (2005)

Policy Guidance Notes pursuant to Section 60 of the Waste Management Act, 1996 (as amended), (circular WIR 04-05) were issued by the Minister in May 2005 to address the issue of actions against illegal waste activity as well as the movement of waste between waste management plan areas.

With specific regard to the movement of waste, the *'Policy Guidance Notes'* addressed what it termed the "*unnecessarily restrictive*" approach to limiting waste management facilities to dealing only with wastes arising in the area to which the relevant Waste Management Plan applied.

According to these *'Policy Guidance Notes',* such an unnecessarily restrictive approach, *"may not be in keeping with the philosophy underpinning the regional approach to waste management planning and, by implication, the rational use of waste management infrastructure*[30]*".*

6) National Strategy on Biodegradable Waste - DoEHLG (2006)

The *'National Strategy on Biodegradable Waste'* set out Government policy for the diversion of biodegradable municipal waste (BMW) from landfill, building upon the key objectives established in preceding policy documents. The primary focus of the policy therefore was tackling the challenge of meeting the limits set for the quantity of biodegradable municipal waste which is permitted to be sent to landfill under the EU Landfill Directive (1999/31/EC).

In order to meet the targets set out in the various Waste Management Plans, the *'National Strategy on Biodegradable Waste'* highlighted that a "*several-fold increase in recycling capacity and biological treatment capacity is required"* and that "*there is therefore an urgent need to procure the necessary alternative waste treatment capacity which will facilitate diversion of biodegradable municipal waste away from landfill*[31]*".*

7) International Review of Waste Management Policy (2009)

An International Review of Waste Management Policy was commissioned by the DoEHLG in 2008 and published in 2009. Prepared by Eunomia Research and Consulting (and Partners) the objective of the study was to identify possible challenges to policy at a national level in order to assist Ireland to move towards a sustainable resource and waste policy; and examine the prevailing legal, institutional and organisational arrangements and analyse potential changes which could assist in achieving policy goals, as well as national and international obligations.

The report makes a number of significant recommendations and emphasises the importance of waste minimisation and prevention with only the smallest volumes of waste then requiring treatment and/or disposal. Ultimately it concludes that the impact of waste policies should increase recycling and composting / digestion at the expense of other forms of residual waste treatment, including incineration.

8) Towards a New National Waste Policy - DoECLG (2011)

[30] Page 4, Circular WIR: 04/05, DoEHLG, May 2005
[31] Section 2.2.7, Page 25, National Strategy on Biodegradable Waste', DoEHLG, 2006

In August 2011, the current government published its own consultation document on waste management in Ireland entitled *'Toward a New National Waste Policy'*. This document is not intended to be prescriptive, but rather puts forward an outline of possible policy initiatives for consultation and takes on board submissions made to the previous Government's *'Draft Statement of Waste Policy'*.

'Towards a New National Waste Policy' was prepared in light of the transposition of the Waste Framework Directive (2008/98/EC) into Irish law in March 2011. The substantive changes in the Directive are aimed at encouraging the greater reuse and recycling of waste, whilst it also sets out to simplify the fragmented legal framework that has regulated the waste sector to date. The Directive also requires Member States to apply the waste hierarchy as a priority order in waste prevention and management legislation and policy.

According to *'Towards a New National Waste Policy'* , the development of a new waste policy is to be guided by a set of principles which, taken together with our obligations as an EU Member State, will inform how Ireland deals with its waste in the coming decade and beyond. One such principle is that *"the policy will be sufficiently flexible to respond to emerging developments in relation to technology, operational practice and wider thinking in the waste management policy realm"*. The document goes on to state that:

> *Waste, just like many other sectors, has developed a range of technologies and practices in recent decades and will develop newer, more efficient and effective technologies and practices in the years ahead. The policy will allow for flexibility to take advantage of new thinking and advances once such approaches are proven*[32].

In relation to the overall operation of the waste management planning system, *'Towards a New National Waste Policy'* continues to emphasise the need for flexibility in relation to inter-regional movements of waste. According to the policy document this is to ensure "*that regional boundaries do not operate in a rigid manner, preventing the most efficient use of infrastructure in pursuit of overall national targets/obligations*[33]"

9) A Resource Opportunity – Waste Management Policy in Ireland (2012)

The above-mentioned document was published by the Government (DECLG) in July 2012. In the context of the EU WFD this national policy document sets out the measures through which Ireland will make the further progress necessary to become a recycling society.

[32] Section 3, Page 7, Towards a New National Waste Policy, DoECLG, 2011
[33] Section 8.1, Page 25, Towards a New National Waste Policy, DoECLG, 2011

There are a number of guiding principles in this document (Section 1, Introduction), including that "*when waste is generated we must extract the maximum value from it by ensuring that it is reused, recycled or recovered, including by the appropriate treatment of mixed municipal waste or residual waste collected in our black bins".*

The document notes that the waste projections set out in the EPA's National Waste Report 2010, which are based on the ESRI's sustainable development model for Ireland, "*anticipate that municipal waste arisings will increase by 825,000 tonnes (to 3.7m tonnes) within the next 15 years*". The point is also made that:

> "*While there may be sufficient management capacity in the immediate future, the predicted growth of municipal waste within the coming decade will necessitate investment in waste management infrastructure."*

This national policy document required the preparation of a regional waste management plan for each of the three waste regions. This was in recognition of the nature of the Irish waste market and the movement of waste across existing boundaries to avail of waste management infrastructure. This also reflects one of the key objectives of the waste management plans in respect of principles relating to proximity and self-sufficiency, and the need to ensure a sufficiency of waste management infrastructure within the State to manage municipal waste.

Summary of Government Waste Management Policy

The brief review of Government waste management policy presented in the preceding section indicates a growing emphasis on the need to meet ambitious landfill diversion targets set out in various EU Directives by improving Ireland's waste management system as a whole.

This approach includes adopting a more flexible approach to the regional treatment of waste flows which must be seen in the national context of Ireland's commitments to meeting its waste management policy objectives. It also entails a growing emphasis on the need for greater sustainability as regards waste management, through the provision of better facilities in order to counteract unsustainable waste management practices.

The proposed development fully accords with the above-outlined government waste management policy approach, and would make a significant and required contribution towards helping Ireland meet its national waste policy management objectives, In this respect it would assist in Ireland becoming more aligned with the EU principles of self-sufficiency in waste management, and optimisation of proximity of waste management close to the source of generation. It would also comprise a needed contribution towards the requirement for increased biological treatment capacity (as expressed within

the National Strategy on Biodegradable Waste), through the proposed increased tonnage and physical extension to the composting facility.

2.4.1.8 Sectoral Agency Advice (EPA; Forfás)

The Environmental Protection Agency is responsible for the licensing and environmental enforcement of major waste facilities in Ireland. In addition, it is also responsible for producing national statistics on waste generation and management in Ireland, including information on waste exports and imports.

Forfás is Ireland's policy advisory board for enterprise, trade, science, technology and innovation, operating under the auspices of the Department of Enterprise, Trade and Employment. Since 2006, the organisation has prepared annual Waste Benchmarking Studies in order to assess Ireland's waste management performance.

Relevant documents from these organisations are outlined below:

1. National Hazardous Waste Management Plan 2014 – 2020: EPA (2014)

The Environmental Protection Agency (EPA) has prepared the National Hazardous Waste Management Plan (NHWMP). This is the third edition of the plan which was first published in 2001. It sets out priority actions that should be undertaken within the lifetime of the Plan (a six-year period), taking into account the progress made and the waste policy and legislative changes that have occurred since the publication of the previous plan. One area where insufficient progress was made on the previous plan was in achieving self-sufficiency (as described in previous plan), with levels of exported waste staying steady while the proportion of hazardous waste being treated in Ireland is slowly declining.

The above is highlighted as a priority action in relation to the following issues quoted in the plan: *the prevention of hazardous waste; improved collection rates for certain categories of hazardous waste;* ***steps that are required to improve Ireland's self-sufficiency in hazardous waste management*** *and the continued identification and regulation of legacy issues (e.g. identification, risk assessment and regularisation of historic unregulated waste disposal sites)*.

The plan incorporates objectives which aim to prevent and/or minimise hazardous waste while also encouraging greater sustainability in how this type of waste is dealt with. These objectives include:

1. *To prevent and reduce the generation of hazardous waste by industry and society generally;*

2. *To maximise the collection of hazardous waste with a view to reducing the environmental and health impacts of any unregulated waste;*

3. ***To strive for increased self-sufficiency in the management of hazardous waste and to minimise hazardous waste export;***

4. *To minimise the environmental, health, social and economic impacts of hazardous waste generation and management.*

The current situation in terms of exporting hazardous waste is highlighted throughout the plan. Approximately half of all Irish hazardous waste is exported. In 2011, 47% of Irish hazardous waste was transported abroad for treatment (this did not include contaminated soils). 31% of hazardous waste generated was treated at authorised hazardous waste facilities in Ireland, while the remaining 22% was treated on-site. Considering this data, the plan recommends "*that Ireland should strive for greater self-sufficiency in hazardous waste management where it is strategically advisable and where it is technically and economically feasible".* This further emphasises the need for the proposed development at Drehid to upgrade the existing facilities and the development of a hazardous landfill site.

The objectives of moving towards increased self-sufficiency in the management of hazardous waste therefore continue to be recommended where it is strategically or environmentally advisable, and technically and economically feasible.

This recommendation is in line with several objectives of the NHWMP. It recognises the proximity principle established in the WFD and it seeks to maximise the re-use and recovery potential, through the provision of a range of local treatment options where practical. The NHWMP (2014-2020) finds that, if Ireland is to become self-sufficient, suitable hazardous waste treatment options would be required. This is further elaborated upon within Section 6.2 of the plan:

> *There are ancillary environmental benefits deriving from self-sufficiency. Firstly international transport of hazardous waste is minimised eliminating associated risks, and avoiding transport related greenhouse gas emissions. Secondly, it increases availability of recovery and disposal outlets for hazardous waste if problems arise in the export agreements for hazardous treatment in other Member States.*

The plan also makes the point that the cost of exporting certain hazardous waste i.e. asbestos, is prohibitive. This in turn leads to the possibility of hazardous wastes being unreported or disposed of illegally and therefore creating negative environmental impacts. With regard to this, the plan proposes that additional capacity should be provided at specialised cells in a certain number of existing non-hazardous landfills, which would prevent illegal disposal of hazardous wastes such as asbestos.

If additional, hazardous waste is to be treated in Ireland and the export of such waste is to be reduced. Three overarching strategic needs are identified within the plan:

- *expansion of recovery and treatment capacity in Ireland for waste that does not need thermal treatment or landfill – generally referred to as physico-chemical treatment – see Section 6.6;*

- *addressing the deficit in thermal treatment capacity in Ireland (i.e. use as fuel, co-incineration or incineration) for Irish hazardous waste currently being exported (e.g. solvents) – see Section 6.4; and*

- ***securing of long-term disposal arrangements for hazardous waste streams not suitable for thermal treatment or recovery.***

In relation to the final point outlined above, "*securing of long-term disposal arrangements*", the proposed development aligns with the policies and requirements as set out by the EPA. The proposal would fulfil this need as it provides a solution for a long-term disposal capacity for hazardous waste.

The plan clearly indicates that there is currently no dedicated hazardous waste landfill disposal facility in Ireland, and that "***Consideration should be given to co-location of hazardous waste treatment at existing waste facilities or brownfield sites for the purposes of sustainability and land-use planning***". The subject application is in direct accord with this statement, as the proposal is directly associated with the existing Drehid Waste Management Facility and furthermore is sited on a cutover bog.

The proposed development would significantly reduce the need to export hazardous waste, and would thus contribute to the principles of proximity and self-sufficiency. The proposal would be a major contribution towards greater self-sufficiency in the management of hazardous waste in a manner that is strategically appropriate, and economically and technically feasible, with policy, and environmental benefits for both the region and the wider Irish State.

2. National Waste Report 2012 - EPA (2014)

The *National Waste Report* from the EPA has an objective to present the most up to date data available on waste generation and management (as reported to the EPA). The year 2012 is the most recent report available and addresses municipal solid wastes[34], waste streams subject to producer responsibility initiatives as well as construction & demolition and hazardous wastes.

[34] Note : The most recent National Waste Report was published in August 2014, reporting waste information for 2012. There have been four bulletins published to date, the most recent for 2013 data.

Ireland met all of its EU obligations across a broad range of waste legislation in 2012. It was stated in the report that '*there was 2,692,537 tonnes of municipal waste generated in 2012 which is a 4.6% decrease than municipal waste generation in 2011. There was 2,478,337 tonnes of municipal waste managed in 2012 which is 2.7% lower than municipal waste managed in 2011. The treatment of hazardous waste in 2012 was similar to 2011 with 22% treated on-site at industry where it was generated, 30% sent off-site to a commercial hazardous waste facility for treatment and 48% exported for treatment*'. The report went on to state that export was an important element in the treatment of hazardous waste generated in Ireland. This point further emphasises the requirement for the development of hazardous waste facilities within Ireland.

The report also outlines that '*Ireland has a number of licensed and permitted facilities authorised to treat hazardous waste, but currently has no dedicated hazardous waste landfill disposal facility. Authorised hazardous waste treatment in Ireland therefore either happens on-site at the industrial facility where the waste was generated (under conditions of EPA licence), or off-site at commercial hazardous waste treatment facilities*'. It is emphasised that although there are hazardous waste treatment facilities, there is still no such dedicated facility with landfill disposal capacity in Ireland. The proposed development would address this current deficit in capacity.

3. Waste Management Benchmarking Updates - Forfás (2009 and 2010)

In its role as Ireland's policy advisory board for enterprise and science, Forfás publishes regular reports on the state of the country's waste management infrastructure which is seen as having a key role to play in the overall competitiveness of the national economy. Key findings set out in the previous two such reports state that:

- *Ireland continues to have a relatively high reliance on landfill for waste treatment and Irish companies continue to have a limited choice of waste treatment solutions compared to their competitors*[35]
- *Waste management infrastructure rollout in Ireland remains slow. A range of infrastructures necessary to meet Ireland's waste management requirements need to be accelerated including: thermal treatment capacity to recover energy from municipal and industrial waste; thermal treatment or landfill capacity for hazardous waste; biological treatment (composting, anaerobic digestion) and reprocessing capacity for recovered materials (e.g. paper, glass, plastic, metal recycled materials)*[36].
- *Although still remaining high, Irish municipal waste generation per capita decreased in 2008 (most recent data available) in line with the slowdown in economic activity and*

[35] Press Release, Waste Management Benchmarking Update, Forfás, 2009
[36] Page 2, Press Release for the Waste Management Benchmarking Update, Forfás, 2009

increased waste prevention measures. Future volumes of municipal waste are expected to increase within the coming decade, necessitating investment in waste management infrastructure[37]*.*

The most recent 2010 Forfás Waste Management Benchmarking Report sets out a number of specific policy objectives which should be put in place to avoid impacting on the competitiveness of Irish enterprise. One such objective, '*Delivering necessary waste infrastructure*' states that:

- *There is an urgent need to accelerate the delivery of waste infrastructure projects along the waste hierarchy to deal with future projected increases in waste. Specific infrastructures that need to be prioritised include:*
  - *Thermal treatment capacity to recover energy from municipal and industrial waste.*
  - *Thermal treatment or landfill capacity for hazardous waste.*
  - *Biological treatment capacity (composting, anaerobic digestion).*
  - *Reprocessing capacity for recovered materials*[38]*.*

Summary of Relevant Agency Sectoral Policy Guidance

In summary, the sectoral policy guidance documents reviewed in the previous section emphasise the challenges facing Ireland in meeting its obligations under the latest EU Waste Management Directives and in particular the EU Landfill Directive.

They also point out that, despite improvements in the country's waste management system, not enough is being done to make use of new waste management technologies. These changes in policy at the national, regional and local level provide a significantly positive context for the proposed development, such that the proposed development is entirely compatible with waste policy in Ireland.

It is clear therefore that the proposed changes and associated development works at Drehid would represent a significant contribution towards self-sufficiency and minimising hazardous waste export. The proposed development includes the co-location, but separate treatment and disposal, of hazardous waste with the treatment and disposal of residual municipal waste. The proposed development would thus make a considerable contribution to ongoing efforts to meet national, regional and local targets.

2.4.1.9 Regional Waste Management Plans

Since the mid-1990s waste in Ireland has been managed, and planned for, on a regional basis. The Waste Management Act, 1996 introduced the requirement for Local Authorities to make and implement

[37] Page 4, Waste Management Benchmarking Update, Forfás, 2010
[38] Page 7, Waste Management Benchmarking Update, Forfás, 2010

detailed Waste Management Plans (WMPs). Nationally, there were previously ten Waste Management Regions.

The EU Waste Framework Directive (WFD), published in 2008, has resulted in revisions to the waste hierarchy, the principles of proximity and self-reliance and waste treatment definitions. The Directive places a greater emphasis on optimising resource efficiency, prevention, reuse and the recovery of mixed residual wastes. In 2012, the Government's blueprint for a circular waste economy, as set out in *A Resource Opportunity – Waste Management Policy in Ireland* (see also above at Section 2.4.1.7(9)) established a new framework for the provision of effective and efficient waste management services through the establishment of three new waste management planning regions (as illustrated in Figure 2.8: New Waste Management Regions). The new waste management regions comprise the Eastern – Midland Region, the Connacht – Ulster Region and the Southern Region.

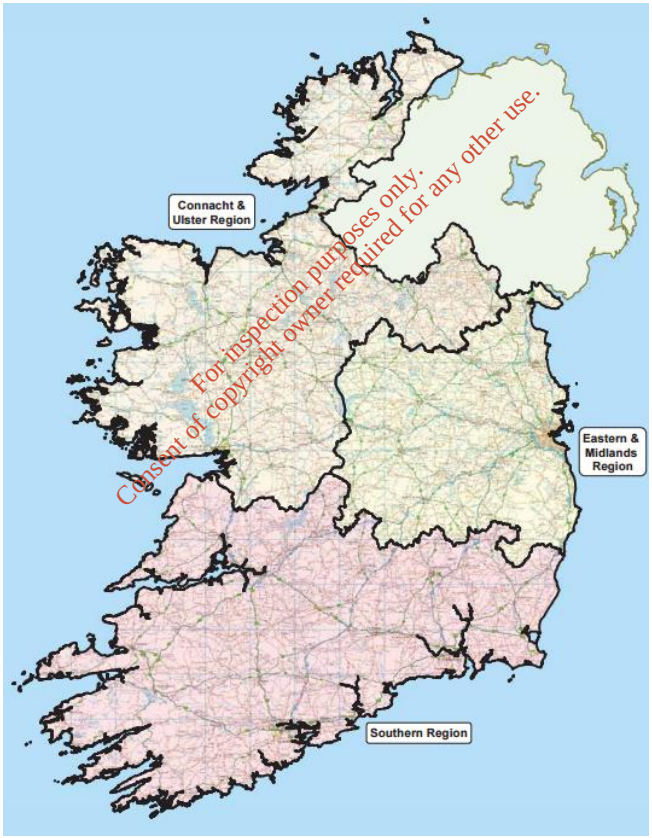


Figure 2.8: New Waste Management Regions

Source: Page 8, Eastern - Midlands Region Waste Management Plan 2015 – 2021, EMWR (2015)

This document specifically notes *that a key objective of waste management plans will be to ensure a sufficiency of waste management infrastructure to manage municipal waste.*

The following section of this Chapter will firstly provide a brief overview of the key relevant policy document in respect of regional waste management plans - namely the Eastern and Midlands Region Waste Plan. It will also address the relevant aspects of the Southern Region Waste Plan and the Connaught-Ulster Region Waste Management Plan.

Eastern – Midland Region Waste Management Plan 2015 - 2021

The relevant regional waste plan associated with the proposed development is the Eastern - Midlands Region Waste Management Plan (EMRWM Plan). It provides a framework for the safe and sustainable management and prevention of waste. The Plan is a statutory document and was prepared by the local authorities of the region which included Louth, Offaly, Meath, Wicklow, Westmeath, South Dublin, Dublin City, Fingal, Dún Laoghaire, Kildare, Laois and Longford.

The preparation of the EMRWM Plan allowed for the local authorities to evaluate the existing waste management practices in the region. This process in turn allowed for the identification of measures which were succeeding and those which were not performing as well as anticipated. The outcome of the evaluation led to the formulation of new policies and measures for the improvement of waste prevention and management in the region.

The EMRWM Plan sets out policies for infrastructural development in the region which take the findings of market analysis into consideration. The policies are largely relevant and targeted at the lead authorities, local authorities and operators in the waste market. In summary, policies of significance to the proposed development at the Drehid Waste Management Facility are as follows:

- *The waste plan supports the development of up to 300,000 tonnes of additional thermal recovery capacity for the treatment of non-hazardous waste nationally;*
- *The waste plan supports **75,000 tonnes of additional capacity to treat biowaste** (food and green waste) for the region;*
- ***With regard to disposal, the waste plan supports the development of disposal capacity for the treatment of hazardous and non-recoverable wastes at existing landfill facilities in the region.** In addition the local authorities anticipate disposal capacity for non-hazardous processed residual wastes will be required over the plan period but there is no need for additional facilities to be brought on stream during the plan period. The local authorities will consider the future land use of closed existing landfill sites;*

Many of the policies set out within the EMRWM Plan have a direct association with the proposed development at the Drehid Waste Management Facility. This can be clearly seen in policies which address waste disposal capacity with regard to hazardous and non-hazardous waste, and the treatment of biowaste, all of which are elements of the proposed development.

The EMRWM Plan also identifies which waste projects will be considered for strategic application status. These were distinguished as the following:

- *A waste disposal installation for (a) the incineration, or (b) the chemical treatment, or (c)* ***the landfill, of hazardous waste;***
- *A waste disposal installation for (a) the incineration, or (b) the chemical treatment, or (c)* ***the landfill, of non-hazardous waste with a capacity for an annual intake greater than 100,000 tonnes; and***
- ***An installation for the disposal, treatment or recovery of waste with a capacity for an annual intake greater than 100,000 tonnes.***

The EMRWM Plan (Section 7.5.5) identifies *the quantities of industrial waste (hazardous and non-hazardous) collected in the region. In 2012 there was an increase in the amount collected with a total estimate of 105,980 tonnes; this may be related to increased activity. There was a similar increasing trend in hazardous industrial waste, with 30,499 tonnes collected, an increase of 68% over the amount collected in 2010.* It is also indicated within Section 7.5.6 of the plan that *in 2012 44,348 tonnes of ash/incinerator residue was reported in the region, generated primarily at the Carranstown Waste to Energy Facility in County Meath.* The increase in the volume of both hazardous and non-hazardous wastes along with increased residues from incineration, further illustrates the requirement to increase the volume of existing waste facilities and develop a hazardous landfill which would lead to greater sustainability for waste management within Ireland.

Within section 16.4.3, the Plan notes that "*local authorities anticipate there will be an ongoing need for landfill capacity during the plan period for processed residual wastes".* According to the plan, there is also a requirement to address hazardous wastes which cannot be recovered or recycled – "*The EPA has identified the need for up to 277,000 tonnes of disposal capacity for hazardous waste materials over the period 2014 - 2019. This is a national capacity need and the* ***EPA recognises the value of developing existing landfill sites, including those which are currently closed, or uncommenced for the disposal of certain hazardous wastes*** *i.e. asbestos"* (Section 16.4.3).

The EMRWM Plan presents a number of supporting policies which support sustainability and indicates the need for further development of waste management facilities, as follows:

> ***E8 – The waste plan supports the development of disposal capacity for the treatment of hazardous and non-hazardous wastes at existing landfill facilities in the region*** *subject to the appropriate statutory approvals being granted in line with the appropriate siting criteria.*

E10 *- The waste plan recognises the* ***need for ongoing disposal capacity to be available*** *in response to events which pose a risk to the environment and/ or health of humans. The lead authorities of each region will monitor available contingency capacity annually.*

E16 *– The waste plan supports the development of up to 50,000 tonnes of additional thermal recovery capacity for the treatment of hazardous wastes nationally to ensure there is adequate active and competitive treatment in the market to facilitate self-sufficiency needs where it is technically, economically and environmentally feasible. The capacity is a national treatment need and is not specific to the region. All proposed sites for thermal recovery must comply with the environmental protection criteria set out in the plan.*

E17 *– The waste plan supports the development of at least 75,000 tonnes of additional biological treatment capacity in the region for the treatment of bio-wastes (food waste and green waste) primarily from the region to ensure there is adequate active and competitive treatment in the market. The development of such treatment facilities needs to comply with the relevant environmental protection criteria in the plan.*

E19 *– The waste plan supports the development of indigenous reprocessing and recycling capacity for the treatment of non-hazardous and hazardous wastes where technically, economically and environmentally practicable. The relevant environmental protection criteria for the planning and development of such activities need to be applied.*

The EMRWM Plan clearly states and outlines a number of policies and objectives which present an overall consensus that there is a valid requirement to expand and develop waste facilities with a particular emphasis on hazardous waste disposal and capacity.

Southern Region Waste Management Plan 2015 - 2021

The Southern Region Waste Management Plan (SRWM Plan) is also applicable to the proposal at Drehid as this region is adjacent to the south of Kildare. It provides a framework for the safe and sustainable management and prevention of waste. The Plan is a statutory document and was prepared by the local authorities of the region which included Limerick City and County Council, Tipperary County Council, Wexford County Council, Carlow County Council, Kilkenny County Council, Waterford City & County Council; Cork City and County Council, Kerry County Council and Clare County Council.

Similarly to the Eastern–Midlands Plan, the approach of the SRWMP was to put in place coherent policy objectives and actions which align with European and national policy, and support Ireland's move to an economy defined by higher resource efficiency and productivity. The Plan's policies and actions address, where possible, local, regional and national waste issues outside of the legislative structure.

The strategic vision of the SRWMP is to view waste streams as valuable material resources, leading to a healthier environment and sustainable commercial opportunities. The preferred treatment of non-recyclable residual waste is recovery.

Similarly to the EMRWMP, the SRWMP notes that significant progress was made by the Southern Region within the lifetime of the previous plan, but that challenges remain. These include, in relation to infrastructure, a gap in the end-of-chain residual waste treatment capacity, which has resulted in an increase in the export of waste. It is specifically noted that the amount of residual municipal waste exported increased each year since 2011, partly in response to landfill closures and a high landfill levy (€75/ tonne since 2013), and partly in response to spare capacity becoming available for residual MSW in European countries which drove down gate fees in those countries.

From the analysis of the existing situation in waste management and market analysis, the plan highlights that the local authorities anticipate *that there will be an ongoing need for landfill capacity during the plan period for processed residual wastes. There is also a need to maintain a contingency supply in response to potential situations which pose a risk to the health and well-being of citizens, livestock and the environment.*

According to the SRWMP, exports provide short term gains in meeting landfill diversion targets and providing competitive gate fees. However, a continued reliance on exports could:

- Pose a potential significant risk in terms of securing long-term and cost-effective outlets, exposing market operators to potential market shocks and increasing treatment prices.
- Impact on the national policy ambition to become to become self-sufficient in treating residual waste, reducing the incentive to develop local waste treatment infrastructure.
- Result in the direct loss in revenue to the Irish economy through a loss of potential gate fee revenue and energy resources.
- Result in higher greenhouse gas (GHG) transport emissions per tonne of waste (potentially 3.3 times higher than the self-sufficiency option, according to the Environmental Report on the Southern Waste Management Plan).

The SRWMP additionally identifies the importance of energy recovery in terms of waste management, and confirms that the development of waste infrastructure will be driven by the private sector as current disposal capacity is seen to be quite low, with an increase in capacity required. It also states that there is a need for the disposal facilities for a range of different wastes, including hazardous and non-hazardous wastes.

Connacht – Ulster Region Waste Management Plan 2015 – 2020

The Connacht Ulster Waste Management Plan is an amalgamation of three previous waste and management regions – Connacht, Donegal and the North-East Region. Whilst Kildare does not physically border this region, particular aspects of the proposal have potentially larger catchment areas that would expand beyond that of the waste management region in which the proposal is situated.

The above is especially pertinent in consideration of the 'hazardous' element of the proposed development, as there is currently no dedicated hazardous waste landfill disposal facility within Ireland. Similarly to the other waste management plans, the CURWMP establishes the framework for prevention and management of waste by safe and sustainable means within the region, and is also a statutory document. The CURWMP encompasses the administrative areas of the local authorities within the region, including; Mayo, Cavan, Donegal, Leitrim, Sligo, Monaghan, Roscommon, and Galway County Councils, and Galway City Council.

Similar to the SRWMP, the strategic vision of the CURWMP is to assess the approach to waste management towards viewing and establishing waste streams as valuable material resources. The plan highlights that resource efficiency and the reduction in the leakage of materials (i.e. waste) from the economy, will deliver economic and environmental benefits.

The plan highlights the fact that the safe and sustainable management of wastes will be a challenge into the future, and specifically notes that some of challenges posed include a decrease in waste infrastructure facilities within the region and a lack of treatment capacity for certain waste streams. To illustrate this point, the plan identifies that there were previously eight operating licensed landfills in the Connacht-Ulster region in 2008 which accepted municipal waste, but that by 2012 this had been reduced to four. It is also highlighted that further reductions in the total waste accepted at landfills occurred within the region in 2013 and 2014 due to the closure of landfills, and that there are currently only two active landfills in the region. These include the landfills at Rathroeen, Ballina, County Mayo (operated by Mayo County Council), and at Castleblayney, Monaghan (operated by Monaghan County Council).

The Plan states that local authorities in the region support the diversion of waste away from landfill sites and are proposing conditions to abolish the direct disposal of unprocessed residual waste to landfills. Notwithstanding this, it is highlighted that the local authorities anticipate that there will be an "*ongoing demand for landfill capacity for the disposal of processed residual wastes. There is also a need to maintain a contingency supply, in response to potential situations which pose a risk to the health and well-being of citizens, livestock and the environment*". This statement is based on the analysis of the existing situation within the region which shows that "*there has been a steady increase in both the non-*

hazardous and the hazardous waste reported. This is probably a result of the recovery in the economy over the period driven by the export of industrial products" (Sect. 7.2.13).

In addition to the above, the CURWMP expresses the fact that there is a need for "*capacity to address the treatment of hazardous wastes that cannot be recovered or recycled*" and highlights the fact that the "*EPA has identified*[39] *the need for up to 277,000 tonnes of disposal capacity for hazardous waste materials over the period 2014-2019. This is a national capacity need and the EPA recognizes the value of developing existing landfill sites, including those which are currently closed or uncommenced, for the disposal of certain hazardous wastes".* The Plan acknowledges that *significant quantities of hazardous waste are exported for reprocessing outside the State*. The above text is reflected within policy E10.

> ***Policy E10.*** *The waste plan recognizes the need for on-going disposal capacity to be available in response to events which pose a risk to the environment and/ or health of humans and livestock. The local authorities of each region will monitor available contingency capacity annually.*

Of additional significance, the CURWMP also highlights the fact that in accordance with an intergovernmental agreement in 2008, the repatriation of waste which originated in Ireland, but which was illegally disposed of in Northern Ireland in the early 2000's, is now underway. In April 2012, Dublin City Council's NTFSO established a Framework Agreement for licensed waste disposal facilities in the Republic of Ireland in order to provide a service for the disposal of waste excavated from sites in Northern Ireland. Eight landfills are on the framework, however only four remain open (the existing facility at Drehid comprising one of these) – three in the eastern-midlands and the fourth in Connacht-Ulster region. Seven sites remain in Northern Ireland with an estimated 120,000 tonnes of mixed municipal waste to be repatriated.

Associated with the above, it can be seen that the CURWMP recognises that the delineation of regional spatial boundaries does not necessarily reflect waste management need and demands 'on the ground'. This recognition is reflected within policy D3.

> ***Policy D3:*** *Foster links and activities with relevant stakeholders including businesses and Industry Groups, NGOs and other relevant networks (including cross-border networks) to extend the reach of the plan.*

[39] National Hazardous Waste Management Plan, 2014-2020, EPA (2014)

Summary of Regional Waste Management Plans

The outline of key policies presented above is significant as it highlights a growing requirement for the expansion and diversification of waste disposal facilities as an important part of the waste management system in Ireland. Crucially, it is highlighted that there is a lack of capacity nationally for current and future waste disposal of hazardous, and non-hazardous waste streams, and the treatment of biowaste.

Furthermore, the review highlighted the flexible approach to the inter-regional movement of waste adopted in the relevant Regional Waste Management Plans. This approach is significant as it enables the development of appropriately sized waste management facilities at suitable locations which can take advantage of the inter-regional economies of scale required to ensure the most efficient treatment of waste.

It is clear therefore that the proposed development not only fully complies with the recommended approaches to waste management set out in the various Regional WMPs, but will address a national and regional infrastructural capacity and treatment need for such waste management.

2.5 CONCLUSION

In conclusion, it can be seen that the proposed development at the existing Drehid Waste Management Facility, is in accordance with strategic planning and policy considerations, and the waste management principles set out in the relevant strategy and guidance documents in that it will:

- Address the current deficit in hazardous waste facilities, and will provide the first hazardous waste landfill in the state as required in the NHWMP 2014-2020. The proposed development is therefore of strategic economic and social importance to the State and the region in which it is situate;
- Have full regard to and be in full compliance with all relevant Kildare County Development Plan polices relating to the sustainable and appropriate extension to an existing waste management facility in the medium sensitivity Western Boglands landscape character area;
- Support the waste treatment scenario adopted in the Eastern – Midlands Region Waste Management Plan which seeks to increase the capacity capabilities of waste management facilities in order for the sustainable disposal of various wastes;
- Help to achieve the objectives set out in the RPGs by providing additional options for the treatment of waste in the region;
- Play an important role in addressing infrastructural requirements highlighted in the NSS and NDP by ensuring the provision of more efficient, effective and cost effective waste management infrastructure in the Greater Dublin Area;
- Support EU, national and regional waste policy objectives through the pre-treatment of certain waste streams prior to landfill, and contribute to recycling through the recovery of up to

15,000TPA of metals from IBA prior to landfill, the option to recover the residual IBA as an aggregate in the future and an increased composting capacity;

- Contribute to the national effort to meet targets set out in Government Waste Management Policy aimed at increasing sustainability within the waste disposal sector in Ireland;
- Provide a key physical infrastructure to support continued population and economic growth whilst managing waste arising in the state in a sustainable and self-sufficient way, as favoured by sectoral policy. (The exporting of waste is not considered to be self-sufficient); and,
- Provide an appropriately sized waste management facility at a suitable location which is positioned to take advantage of the inter-regional economies of scale required to ensure the most efficient treatment and disposal of waste.

Finally, it can be seen that the proposed development has been designed and sited and will be built in accordance with best practice for the protection of human health and the natural environment (as indicated within this EIAR).