Appendix 7

Introduction

1 Introduction

1.1 Project Overview

1.1.1 Introduction

Indaver Ireland Limited (Indaver) proposes to develop a resource recovery centre (including waste-to-energy facility) in Ringaskiddy in County Cork.

The proposed development will consist principally of a waste-to-energy facility (waste incinerator) for the treatment of up to 240,000 tonnes per annum of residual, household, commercial and industrial non-hazardous and hazardous waste which is currently landfilled or exported. Of the 240,000 tonnes of waste, up to 24,000 tonnes per annum of suitable hazardous waste will be treated at the facility.

In line with European Union and national policy, this residual waste will be diverted away from landfill and exports, moving the management of waste up the waste hierarchy, allowing Ireland to become more self-sufficient in the treatment of waste and reducing the environmental impact of residual waste management. The proposed development will maximise the extraction and recovery of valuable material (in the form of ferrous and non-ferrous metals) and energy (in the form of 21 megawatts of electricity) resources from residual waste.

An application for permission under section 37E of the Planning and Development Act 2000, as amended, was submitted by Indaver to An Bord Pleanála in January 2016. An Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) accompanied the planning application to An Bord Pleanála in 2016. (For ease of reference, the EIS and NIS are referred to as “2016 EIS” and “2016 NIS” in this chapter and throughout this EIAR).

Permission was granted by An Bord Pleanála for the proposed development under section 37G of the Planning and Development Act 2000, as amended in May 2018. Further details on the planning process between 2016 and 2018 are provided in **Section 1.2** below.

Waste management in Ireland is controlled, from a licensing perspective, through Industrial Emissions (IE) Licensing legislation. Under the legislation, the Environmental Protection Agency (EPA) has the responsibility for the licensing of all significant waste recovery and disposal activities. In order to operate the proposed development, Indaver requires an IE licence from the EPA. The design of the proposed development which was submitted as part of the planning application to the Board in 2016 (and for which permission was granted by the Board in 2018) has not changed. The same design is now presented for the IE licence application. However, a new EIS (now referred to as Environmental Impact Assessment Report (EIAR)) and a new NIS have been prepared to support the IE licence application. Both the 2016 EIS and 2016 NIS required updating due to recent changes in EIA legislation, changes in environmental baseline since 2016 and also to incorporate all relevant information gathered in the intervening period between the submission of the planning application in 2016 the present date.

While the 2016 EIS and NIS have been updated, it should be noted that the overall conclusions of the 2016 EIS and the 2016 NIS remain unchanged, and the same conclusions are documented in this EIAR and new NIS.

This EIAR is a continuation of the EIA process initiated by the planning application and is for the purpose of supporting an Industrial Emissions Licence application to the EPA.

For ease of reference, the Ringaskiddy Resource Recovery Centre (including waste-to-energy facility) is referred to as “proposed development” or “Ringaskiddy Resource Recovery Centre” in this chapter and throughout the EIAR.

1.1.2 Project Location

The site for the Ringaskiddy Resource Recovery Centre is located approximately 15km to the south-east of Cork City, in the townland of Ringaskiddy on the Ringaskiddy Peninsula in the lower part of Cork Harbour. The site occupies an area of approximately 13.55 hectares and is located approximately 800m east of the village of Ringaskiddy.

The L2545, the main road from Ringaskiddy village to Haulbowline Island, forms the northern boundary of the site. The eastern boundary of the site extends to the foreshore of Cork Harbour along Gobby Beach. The site surrounds the Hammond Lane Metal Recycling Co Ltd facility. Refer to **Figures 1.1** and **1.2** which show the site location.

1.1.3 Main elements of the Project

The main element of the proposed Ringaskiddy Resource Recovery Centre project is a waste-to-energy facility (waste incinerator).

Other elements include an upgrade of a section of the L2545 road, coastal protection measures on Gobby beach, a connection to the national electrical grid, and raising the ground levels in parts of the site. Refer to **Figure 1.3** for the overall site layout. A full description of the proposed development is provided in **Chapter 4** ***Description of Proposed Development*** of this EIAR.

As noted previously, the design of the proposed development which was submitted as part of the planning application to the Board in 2016 (and for which permission was granted by the Board in 2018) has not changed. The same design is presented in this EIAR and accompanying drawings. The overall conclusions of the 2016 EIS and the 2016 NIS have not changed, and the same conclusions are documented in this EIAR and new NIS.

The proposed development as detailed in public notices (which were 2016 planning application) is provided below in **Section 1.1.3.1**. The proposed development as detailed in public notices for the IE licence application to the EPA is provided below in **Section 1.1.3.2**.

1.1.3.1 Summary of proposed development as detailed in 2016 public notices for the 2016 Planning Application

"In accordance with Section 37E of the Planning and Development Act, 2000 as amended, Indaver Ireland gives notice of its intention to make an application to An Bord Pleanála for permission in relation to the proposed Ringaskiddy Resource Recovery Centre development and all associated works in the townland of Ringaskiddy, County Cork.

10 year planning permission and a 30 year operational life from the completion of the construction of the proposed development, is sought for a Waste to Energy Facility (waste incinerator) for the treatment of non-hazardous and hazardous waste on a 13.55 Hectare site owned by Indaver Ireland at Ringaskiddy, Co. Cork. In addition, the proposed development will include an upgrade to a section of the L2545 road, coastal protection measures on Gobby Beach, a connection to the national electrical grid, the raising the ground levels in part of the site; and the provision of an amenity walkway along the eastern and part southern boundary of the site

The Development includes 13,369m² of buildings and will consist of the following elements:

> *A. Waste to Energy Facility consisting of: Process Building (including warehouse, workshop and admin area), 8 storeys, up to 11,255m² total floor area, up to 45.7m Maximum height above ground; Stack, up to 70m high above ground, Administration Building (including gate house), 2 storeys, up to 998m² total floor area, up to 8.2m high above ground; Aero-Condenser, single-storey, up to 482m² plan area, up to 16m high; Turbine Hall, single-storey, up to 375m² floor area, up to 16m high; Pump House, single-storey, up to 157m² floor area, up to 6m high, Firewater storage Tank, 2,200m³ volume, up to 11m high; 38 kV ESB Substation and Compound, single-storey, up to 102m², up to 5m high; 2no. weigh bridges, pipe racking, light fuel oil storage tank, packaged sewage treatment plant and ancillary site development works consisting of 57 no. car parking spaces, underground surface water attenuation tank and firewater retention tank, aqueous ammonia storage tank and unloading area, site services, 2 no. site entrances, all landscaping, boundary fences and changes to site levels to facilitate the above.*
>
> *B. Upgrade to L2545 road consisting of raising a 185m length of the road by a maximum height of up to 1 metre between Gobby Beach car park and the entrance to the National Maritime College of Ireland (NMCI); upgrade of surface water drainage network in the L2545 road from the western end of the Indaver site to the eastern end of Gobby Beach car park*
>
> *C. Grid Connection consisting of: 38kV underground connection to adjacent ESB Networks Loughbeg substation located to the east of The Hammond Lane Metal Company Ltd premises*
>
> *D. Increase in ground levels in western section of the site consisting of: raising a 10,000m3 area by a maximum height of up to 2.5m above ground level*

E. Coastal Protection Measures on Gobby Beach consisting of: the placement of 1100m3 of shingle above the foreshore along the eastern boundary of the Indaver site and to be repeated every two to five years.

F. Amenity walkway along the eastern and part southern boundary of the site".

1.1.3.2 Summary of proposed development as detailed in 2019 public notices for the IE licence application

Notice is hereby given in accordance with Regulations 4(1) (a) and 5 of the above Regulations that Indaver Ireland Limited of 4th Floor, Block 1, West Pier Business Campus, Old Dunleary Road, Dun Laoghaire, County Dublin intends to apply to the Environmental Protection Agency for an Industrial Emissions Licence in respect of a Waste to Energy Facility (waste incinerator with energy recovery) at a site in the townland of Ringaskiddy, County Cork (National Grid Ref. E179055, N064279) for the treatment of residual household, commercial and industrial waste which includes up to 24,000 tonnes of suitable hazardous waste with an annual capacity of 240,000 tonnes per annum.

The Classes of Activity at the site as specified in the First Schedule to the Environmental Protection Act of 1992 (as amended), are as follows:

Class 11.3(a) Disposal or recovery of waste in waste incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour.

Class 11.3(b) Disposal or recovery of waste in waste incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day.

An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) will be submitted to the Environmental Protection Agency with the application. The EIAR and NIS and any further information relating to the effects on the environment of the emissions from the activity which may be furnished to the Agency in the course of the application, will be available at the headquarters of the Agency.

An EIS and NIS was submitted to An Bord Pleánala as part of an application for planning permission for the Waste to Energy Facility. A copy of the EIAR and NIS for this application for an Industrial Emissions Licence for the Waste to Energy Facility will be submitted to Cork County Council as the planning authority in whose functional area the activity will be carried on.

A copy of the application for the licence may be inspected on the Agency's website www.epa.ie or inspected at or obtained from the headquarters of the Agency as soon as is practicable after the receipt by the Agency of the application for the licence.

1.1.3.3 Notice to the Planning Authority (Cork County Council) required for the IE licence application

As required under Regulation 8 of the Industrial Emissions (Licensing) Regulations, SI No. 137 of 2013, a notice has been sent to Cork County Council as the relevant planning authority in this case. The notice details the intention of Indaver to lodge an application with the Environmental Protection Agency for an Industrial Emissions Licence for the proposed development and that it is accompanied by an EIAR and NIS. This notice is included in **Appendix 1.3**.

1.2 Summary of planning process since 2016 and updates to the 2016 EIS (now referred to as EIAR)

1.2.1 Introduction

This section describes the main events (including the submission of additional information to the Board) that arose during the planning process after Indaver submitted an application for permission to An Bord Pleanála in January 2016.

This section also summarises the changes to the EIA legislation and the changes to the environmental baseline since January 2016 which the EIAR now needs to include.

As noted previously, the design of the proposed development which was submitted as part of the planning application to the Board in 2016 (and for which permission was granted by the Board in 2018) has not changed. The same design is presented in this EIAR and accompanying drawings. The overall conclusions of the 2016 EIS and NIS have not changed, and the same conclusions are documented in this EIAR and new NIS.

1.2.2 Overview of Planning Process between 2016 and 2018

1.2.2.1 Planning Application 2016

The provisions of section 37A of the Planning and Development Act 2000, as amended ("the 2000 Act"), require an application for permission in respect of the proposed Ringaskiddy Resource Recovery Centre to be made directly to An Bord Pleanála ('the Board') under section 37E, in circumstances where the Board has determined that the proposed development is of a class specified in the Seventh Schedule to the Act and that the condition set out in section 37A (2) of the Act was satisfied.

On 23rd December 2015, An Bord Pleanála notified Indaver and Cork County Council that the proposed Ringaskiddy Resource Recovery Centre was of a class specified in the Seventh Schedule to the Act and falls within one of the paragraphs of section 37A (2). Accordingly, the application for permission was made to the Board and not to the planning authority. Refer to **Appendix 1.1** ***(Letter from An Bord Pleanála)*** for a copy of the letter from An Bord Pleanála.

The 2000 Act, as amended, details that pre-application consultations with the Board shall form part of the process leading to the Board's determination that an application for permission should be made directly to the Board. In compliance with this, and in preparation for submitting the planning application and the EIS, Indaver engaged in 6 pre-application consultation meetings with An Bord Pleanála, between the 12th November 2012 and the 23rd November 2015. Indaver also consulted with the planning authority, statutory bodies, interested parties, and the local community regarding its plans for this development. For a representative list of these stakeholders, please see **Appendix 1.2 (*Planning Process Consultation*).**

An application for permission under section 37E of the Planning and Development Act 2000, as amended, was submitted by Indaver to An Bord Pleanála in January 2016. An Environmental Impact Statement (EIS) and Natura Impact Statement (NIS) accompanied the planning application to An Bord Pleanála.

Indaver created a stand-alone website: http://ringaskiddyrrc.ie which includes all of the 2016 planning application documentation, the 2016 EIS, the 2016 NIS and the 2016 planning drawings. A full copy of the 2016 planning application is available to view and download from that website. In addition to the application documents, other information leading up to and including the planning decision as referenced in in **Sections 1.2.2.2** to **1.2.2.4** below are also available to view and download on the same website.

1.2.2.2 Planning Oral Hearing 2016

An Bord Pleanála held an oral hearing between April and May of 2016. Evidence and information was submitted to the Board over the course of the oral hearing which then formed part of the material in respect of which the Board had to carry out its assessments.

1.2.2.3 Further Information Request 2017

An Bord Pleanála requested further information from Indaver on 20th March 2017.

Indaver provided the information as requested by the Board on 15th May 2017.

Submissions on the further information documentation were made by observers to An Bord Pleanála up until July 2017. Indaver also made a submission to An Bord Pleanála on 2nd October 2017 in response to these submissions and observations received by the Board.

1.2.2.4 Grant of Permission 2018

Permission was granted by An Bord Pleanála for the proposed development under section 37G of the Planning and Development Act 2000, as amended, in May 2018. The final Board Order (and associated planning conditions) is provided in **Appendix 1.4** of this EIAR.

A 10 year planning permission and a 30 year operational life from the completion of the construction of the proposed development was granted for the proposed development.

1.2.3 Changes to EIA legislation

The 2016 EIS accompanied the 2016 planning application to An Bord Pleanála. The 2016 EIS was prepared in compliance with the requirements of the EIA Directive 2011/92/EU and Planning and Development Regulations 2001, as amended at that time. Although the requirements of Directive 2014/52/EU had not yet been transposed in 2016, the EIS had regard to the provisions of Directive 2014/52/EU. The Board carried out the environmental impact assessment in accordance with the legal requirements of the EIA Directive 2011/92/EU and Planning and Development Regulations 2001, as amended at that time.

Directive 2011/92/EU has now been amended in 2014 by Directive 2014/52/EU. The European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018) transpose the requirements of the 2014 EIA Directive into existing planning consent procedures.

The definition of EIA provides for a clear distinction between the process of environmental impact assessment to be carried out by the competent authority and the preparation by the developer of an Environmental Impact Assessment Report (EIAR).

The environmental impact assessment must identify, describe and assess the direct and indirect significant effects of the project on specified environmental factors. These factors include changes from the 2011 Directive, the most notable being the replacement of 'Human Beings' by 'Population and Human Health', the addition of 'Land' and the replacement of 'Flora and Fauna' by 'Biodiversity with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC' (the Habitats and Birds Directives). The significant effects on these environmental factors must include the expected significant effects arising from the vulnerability of the project to the risks of major accidents and/or disasters which are relevant to the project.

Key amendments introduced by the 2014 Directive include the following:

- The refinement of environmental factors to be considered in the assessment process – resource efficiency, climate change, population and human health, biodiversity and disaster risk prevention and management.
- Strengthening of the procedures for screening, particularly through the introduction of new information requirements to be provided by the developer (Annex IIA) and revised selection criteria to be used by the competent authority in making a determination (Annex III of Directive).
- Expansion of the information to be included in the EIAR (formerly known in Ireland as EIS) (Annex III of Directive).
- Requirement that the EIAR must be prepared by competent experts and for the competent authority to have, or have access to, sufficient expertise to examine the EIAR.
- Expansion of the information to be included in a development consent decision including a requirement for a 'reasoned conclusion' to be incorporated into the decision in respect of the significant effects of the project on the environment.

- Requirements to inform the public and to make relevant environmental information publicly accessible through electronic means and in a timely fashion during the assessment process and at the time of the decision.
- Requirement for monitoring of significant adverse effects resulting from the construction and operation of a project.

The 2016 EIS which accompanied the 2016 planning application has now been updated to an EIAR to reflect the above changes in the EIA legislation. In preparing the EIAR, it was important to ensure that there was compliance with the amended EIA Directive, the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 and up to date EIA guidance. **Appendix 1.5** provides further detail as to how the relevant sections of the EIAR are compliant with the relevant EIA legislation and EIA guidance.

As noted previously, the overall conclusions of the 2016 EIS have not changed, and the same conclusions are documented in this EIAR.

This EIAR has also been prepared in accordance with Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013 (SI No. 137 of 2013). At the time of writing, the requirements of the 2014 EIA Directive have not yet been transposed into EPA licensing consent procedures.

1.2.4 Changes to Environmental Baseline

Due to the passage of time since the compilation of the 2016 EIS and the potential for changes in the baseline environment, Indaver commissioned several environmental baseline studies during the course of 2018 and 2019 for this EIAR. The rationale was based on the areas with the greatest potential for change since the previous baseline data was gathered in 2014 and 2015. The following surveys were updated for the 2019 EAR:

Traffic - 18-hour traffic counts (06:00-00:00) were undertaken on all relevant roads and junctions on Tuesday 29 January 2019 and form the basis of subsequent analysis, refer to **Section 7.2** of **Chapter *7 Roads and Traffic***.

Air Quality – The full air quality survey was updated for the 2019 EIAR. An extensive baseline survey was carried out in the region of the proposed facility over the period from October 2018 to January 2019. This included monitoring for the following pollutants NO_2, SO_2, Benzene, Heavy Metals, Particulate Matter (PM_{10} and $PM_{2.5}$), Hydrogen Fluoride and Hydrogen Chloride, and Dioxins/Furans. Refer to **Appendix 8.1** of **Chapter 8 *Air Quality***.

Noise Assessment – Noise measurements were taken at four locations between the 14 – 19 November 2018, refer to **Section 10.3.2** of **Chapter 10 *Noise and Vibration Assessment***.

Biodiversity – The following ecological surveys were updated for the 2019 EIAR:

- Habitat mapping and flora surveys were carried out over several visits in May 2019, refer to **Appendix 12.1**.
- A survey for otters and badgers was carried out over several visits in the period of May 2019, refer to **Appendix 12.3**.
- Bat surveys using standard detectors were carried out in May 2019, refer to **Appendix 12.3**.

- Breeding bird surveys were carried out in the period of May 2019, refer to **Appendix 12.2**.
- A survey for Japanese Knotweed and other invasive plant species was undertaken on site in October and November 2018 and May 2019. The survey findings are included in this chapter, refer to **Figure 12.3**.

Landscape & Visual – The baseline photographs, which are used to create the photomontages were taken in September 2018 from various vantage points from the surrounding landscape and harbour, refer to **Section 11.5.4.6** of **Chapter 11** ***Landscape and Visual***.

1.3 Background

1.3.1 The positive effects of Ireland's first large scale waste-to-energy facility

Indaver has successfully operated Ireland's first large scale waste-to-energy facility in Duleek, Co Meath since 2011 (EPA IE Licence Reg. No. W0167-03). The facility treats 235,000 tonnes per annum of household, commercial and industrial non-hazardous waste and, since 2015, hazardous waste. The facility in Meath has a similar capacity to that proposed for Ringaskiddy.

Each year since 2011, the Meath facility has diverted over 200,000 tonnes away annually from landfills and export, recovered over 6,000 tonnes of ferrous metals, and generated 138 gigawatt hours of electricity. The production of 138 gigawatt hours is enough to power the equivalent of 30,000 homes per annum, or a town the size of Drogheda and Navan combined. Like any large-scale industrial facility, the facility in Meath is subject to an extremely rigorous environmental and compliance regime. It's highly-designed systems are tuned to monitor 14 different individual aspects of the Meath facility continuously. Since 2011, more than 210,000 individual measurements of operations have been taken and evaluated.

Not only is the Meath facility compliant and well-run, but it is also successfully integrated in the local area. In order to provide an effective and transparent means of communication and as part of a planning condition, Indaver and the local community in Meath set up a Community Liaison Committee in 2008, whose members include representatives from the Carranstown Residents Association, local Council members, Meath County Council, and Indaver. The Community Liaison Committee has proved invaluable. It ensures that any issues that arise are quickly identified and speedily resolved.

1.3.2 A Plan-Led Development

Indaver's proposed thermal treatment facility for residual non-hazardous and hazardous waste streams supports and reflects the recommendations and policies of the National Hazardous Waste Management Plan 2014-2020 and the Southern Region Waste Management Plan 2015-2021. Consistent with the Cork County Development Plan 2014, the proposed Ringaskiddy Resource Recovery Centre will be located in an industrial area that is also designated as a Strategic Employment Area. It will address a local need for treatment facilities while contributing to a diversity in renewable energy generation and reaffirming Ringaskiddy's strategic industrial role.

Furthermore, as detailed in full in **Chapter 2** ***Planning Policy Need*** for the Scheme, and specifically in **Section 2.4** of the same on Planning Policy, the applicable planning policy framework has been significantly altered since the 2016 planning application.

The National Planning Framework (NPF) which supersedes the previous National Spatial Strategy was adopted in May 2018 and has been given legislative effect through the Planning and Development (Amendment) Act 2018. This Plan in conjunction with the National Development Plan (NDP) is designed to ensure future development will be evidence based and plan-led such that balanced and sustainable regional development can take place.

The NPF in conjunction with the NDP will also set the context for each of Ireland's three regional assemblies to develop their Regional Spatial and Economic Strategies (RSES's) taking account of and coordinating local authority County and City Development Plans in a manner that will ensure national, regional and local plans align. More detailed analysis of this aspect of the new NPF including the applicable Southern Regional Spatial and Economic Strategy is contained in **Chapter 2** ***Planning & Policy Framework and Need for the Scheme*** of this EIAR.

The National Planning Framework stipulates that Regional Spatial and Economic Strategies local area plans must be consistent with the objectives of the development plan, the national and regional development objectives in the National Planning Framework and the regional spatial and economic strategy.

In terms of planning for waste treatment requirements to 2040, the NPF's National Strategic Outcome 9 – *Sustainable Management of Water and other Environmental Resources*[1], expressly provides that this will require, waste to energy facilities which treat the residual waste that cannot be recycled in a sustainable way delivering benefits such as electricity and heat production.

Thus, from a planning policy perspective the proposed development may be regarded as being in alignment with the newly adopted NPF, as the Plan underlines the need for waste treatment facilities to meet future waste objectives and constitutes a plan led and evidence-based development which will contribute to the achievement of properly managed spatial planning in the Region.

Furthermore, from an environmental policy perspective the proposed development is also in alignment with the objectives of the newly adopted Circular Economy Package including the revised Directives on Waste and Landfill and a number of regulations pertaining to climate change and energy efficiency and from a national policy perspective as it adheres to the requirements laid out in the Southern Region Waste Management Plan and the National Hazardous Waste Plan.

Finally, in addition to adherence to planning policy requirements at national and regional level, the principle of proximity underpins Indaver's choice of the site in Ringaskiddy. Cork is a hub for Ireland's pharmaceutical industry, the producers of the hazardous and non-hazardous industrial waste streams the proposed waste-to-energy facility would treat.

[1] http://npf.ie/wp-content/uploads/Project-Ireland-2040-NPF.pdf at pages 150-151.

Within the southern region, the largest population centre is Cork City, which means this is the area where the largest concentration of household and commercial residual waste is produced.

1.3.3 Project History and Current Proposal

The project design has changed since an application for permission was submitted to An Bord Pleanála in 2008, as Indaver responded to the concerns raised by both An Bord Pleanála and the local community. In the 2016 planning application (and accompanying EIS) to ABP (and repeated in this EIAR), Indaver addressed concerns about overdevelopment, localised flooding of the road, preservation of the Martello Tower as an amenity, and coastal erosion.

The proposed development will include an upgrade of the local road (L2545) adjacent to the Indaver site to alleviate local flooding issues along the road. This upgrade will be a significant planning gain for the benefit of existing and future users of the immediate area. The proposed development will include landscaping along the southern boundary of the L2545, thus enhancing the aesthetics of the approach to Haulbowline and any future amenities there.

The ground levels of the Indaver site will be raised to alleviate localised flooding issues. It is worth noting that the Indaver site is classified as Flood Zone C[2] according to the OPW Planning Guidelines (2009) which means that the probability of flooding from rivers and the sea is low.

The facility has been angled on the site so as to keep a clear sightline (or inter-visibility) between the top of the nearby Martello Tower and Fort Mitchell on Spike Island.

An amenity walkway, incorporating a viewing platform is proposed as part of the development. This walkway will commence at the existing car park at Gobby Beach and will be located close to the eastern and southern boundaries of the proposed development site. The walkway will provide a connection from Gobby Beach towards the Ringaskiddy Martello tower. This walkway will be a significant planning gain for the benefit of existing and future users of the immediate area.

A full description of the proposed development is provided in **Chapter 4 *Description of the Proposed Development*** of this EIAR.

Finally, issues in relation to coastal erosion were raised by An Bord Pleanála during the course of the 2008 planning application process. The coastline along the eastern boundary of the Indaver site consists of a glacial till face adjoining Gobby Beach. In response to the issues raised by the Board at that time, a coastal study was carried out by Arup in order to better understand the coastal processes in the vicinity of the site, the rate of erosion of the glacial till face and the specific coastal protection measures required. Coastal protection measures in the form of shingle above the foreshore on Gobby Beach are proposed along the eastern boundary of the Indaver site.

[2] Flood Zones are geographical areas within which the likelihood of flooding is in a particular range. There are three types of flood zones defined in the OPW Planning Guidelines (2009): A, B & C. The Indaver site is located in *Flood Zone C* which is defined as “Probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding)”

Further details on these mitigation measures are provided in **Chapter 13 *Soils, Geology, Hydrogeology, Hydrology and Coastal Recession*** of this EIAR.

1.4 Structure of Environmental Impact Assessment Report

This Environmental Impact Assessment Report (EIAR) has been prepared to provide information on the likely significant effects of the project on the environment, as per Schedule 6 of the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, S.I. No. 296 of 2018:

1. A description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development;
2. A description of the likely significant effects on the environment of the proposed development;
3. A description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce and, if possible, offset likely significant adverse effects on the environment of the development;
4. A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment;
5. A Non-technical summary of the information referred to in the above four points.

The EIAR has been prepared on behalf of Indaver by environmental specialists under the supervision of Arup.

As noted previously, **Appendix 1.5** provides further detail as to how the relevant sections of the EIAR are compliant with the relevant EIA legislation and EIA guidance.

The format used in the EIAR is the grouped format, in which each topic is addressed in a separate section. This is designed to allow readers to access the issues of interest to them as easily as possible. However, there is overlap of some topics. For example, effects on human beings are addressed in a number of chapters including Landscape and Visual Assessment, Air Quality and Climate Assessment, and Noise and Vibration, as well as Human Beings. Issues not directly addressed in individual chapters and interactions between environmental issues are described in **Chapter 17 *Potential Cumulative Effects & Other Effects and Interactions*** of this EIAR.

The EIAR comprises four volumes of which this is the second. The four are as follows:

Volume 1 - Non-Technical Summary

Volume 2 - Environmental Impact Assessment Report (Main Text)

Volume 3 - Figures

Volume 4 – Appendices

In addition, a Natura Impact Statement (NIS) was submitted with the application for planning approval to ABP in 2016, so as to enable An Bord Pleanála to carry out the Stage One and Stage Two assessments required pursuant to Article 6(3) of the Habitats Directive and Part XAB of the Planning and Development Act 2000, as amended. As mentioned previously, a new NIS accompanies the licence application for approval to the EPA in order to enable the EPA to carry out Stage One and Stage Two assessments required pursuant to Article 6(3) of the Habitats Directive and the European Communities (Birds and Natural Habitats) Regulations 2011 as amended.

1.4.1 Guidelines

This EIAR has been prepared with due regard to the guidelines on the preparation of environmental impact assessment reports including:

- European Commission (2017) Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report;
- Government of Ireland (2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018);
- Department of Housing, Planning, Community and Local Government (2017) Key Issues Consultation Paper on the Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems;
- Department of Housing, Planning, Community and Local Government (2017) Circular PL 1/2017 - Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive): Advice on the Administrative Provisions in Advance of Transposition;
- Department of Housing, Planning and Local Government (2018) Circular PL 05/2018 -Transposition into Planning Law of Directive 2014/52/EU amending Directive 2011/92/EU on the effects of certain public and private projects on the environment (the EIA Directive) And Revised Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment;
- Environmental Protection Agency (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017);
- European Union (2013) Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment;

- European Commission (2012) Interpretation suggested by the Commission as regards the application of the EIA Directive to ancillary/associated works; and
- European Commission (1999) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions.

1.5 Details of Competent Experts

This EIAR has been prepared on behalf of Indaver by a multi-disciplinary consultancy team of competent experts led by Arup with input from specialist sub-consultants. Arup has been awarded an EIA Quality Mark by the Institute of Environmental Management and Assessment in recognition of its excellence in EIA activities.

Further, all technical leads are deemed to be qualified and competent experts in their fields in accordance with Article 5(3) of the EIA Directive, given their academic qualifications, professional affiliations and professional experience on other EIAs for major infrastructure projects. Refer to **Appendix 1.6** for further detail on the competent experts that have prepared this EIAR.

1.6 Consultation for the 2016 Planning Process

Indaver engaged in statutory pre-application consultations with An Bord Pleanála and also consulted with the planning authority, statutory bodies, interested parties, and the local community regarding its plans for this development. For a representative list of these stakeholders, please see **Appendix 1.2 (*Consultation*).**

1.6.1 Community Stakeholder Engagement

In addition to the consultations referred to above, Indaver consulted the public and interested parties regarding its plans for the proposed development.

Following initial discussions with representatives of the community and other individuals, Indaver proceeded to hold public engagement days in the area for all interested members of the local community.

The first information day was held between 10am and 2pm and between 4pm and 8pm on the 31st of July 2015 at the Carrigaline Court Hotel. The second information day was held in the Ringaskiddy Community Centre on the 8th of September between 4pm and 8pm. The third information day was held at Shanbally National School on the 15th of September between 6pm and 9pm.

Indaver advertised each information day in advance on the Indaver website and in a number of local papers such as *The Carrigdhoun*, *The Southern Star*, *The Evening Echo* and *The Examiner*. The Ringaskiddy Community Centre and Shanbally National School information days were also advertised on each venue's noticeboards. Indaver sent letters advertising the information days to members of the local community in July and in September. Over 300 letters were sent out on each occasion to individuals who had previously expressed interest in the project, and whose details Indaver had recorded in a communications register.

A letter was sent to the same group of people in November 2015 to inform them of the closing stages of the planning preparation and possible submission in January 2016.

Members of the project team, including the project manager, the managing director, and the manager of Indaver's Meath facility attended each day.

The project team used a series of posters and other visual aids to give an overview of the project, the planning history, and the legislative and policy context; to demonstrate how the project is complementary to other industry in the area; and to show how it is compatible with plans for the harbour more widely.

Anyone who attended the information days was invited to come to the Meath facility in order to see the day-to-day operation of a facility similar to the one proposed in Ringaskiddy. The project team also used a video of the waste treatment process in the Meath facility. The video of the waste treatment process in the Meath facility is on the Indaver website www.indaver.ie.

In addition to inviting people to the information days, Indaver has also been in contact with over 140 groups and individuals to discuss the project. These stakeholders consist mostly of business and community groups. Contact was through briefing letters and emails, over the phone, and through meetings.

Indaver has created a stand-alone website: www.ringaskiddyrrc.ie which includes all of the planning application documentation including the EIS, the Natura Impact Statement (NIS), planning drawings, and the subsequent RFI request from and responses to An Bord Pleanála by Indaver.

Copies of an advert, letters to the local community, and an information leaflet giving an overview of the project are provided in **Appendix 1.2**.

1.7 Consultation for the 2019 Industrial Emissions Licensing Process

Indaver has engaged with the Environmental Protection Agency (EPA) in pre-application consultations pertaining to the format of the application via the new EDEN portal submission system and the compilation of the EIAR.

Indaver has also notified relevant stakeholders of their intention to submit an application to the EPA for Industrial Emissions Licence. A sample copy of this letter has been included in **Appendix 1.7**.

All of the licence application documentation, EIAR and new NIS will be made available on the Ringaskiddy Resource Recovery Centre website http://www.ringaskiddyrrc.ie/ shortly after the application to the EPA has been validated. Project information is also provided in the newspaper notice and site notice.

Information relating to the project is also available on the Department of Housing, Planning and Local Government's EIA Portal (Portal ID number 2019104). The EIA Portal shows information on applications for development consent subject to EIA made to relevant competent authorities since 16 May 2017. The EIA Portal identifies, on a map, the location of each application for development consent accompanied by an EIAR. It also lists, the name of the applicant, the type of

development proposed and the competent authority to which the application is made.

A copy of the confirmation notice from the EIA Portal is provided in **Appendix 1.8** A link to the newspaper notice relating to the application is also provided. The portal can be accessed at https://www.housing.gov.ie/planning/environmental-assessment/environmental-impact-assessment-eia/eia-portal

1.8 Difficulties Encountered During the Assessment

No difficulties were encountered during the preparation of this EIAR that were considered to have a material impact on this EIAR.

1.9 References

European Commission (2017) Environmental Impact Assessment of Projects: Guidance on the preparation of the Environmental Impact Assessment Report;

Government of Ireland (2018) Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment (August 2018);

Department of Housing, Planning, Community and Local Government (2017) Key Issues Consultation Paper on the Transposition of 2014 EIA Directive (2014/52/EU) in the Land Use Planning and EPA Licencing Systems;

Department of Housing, Planning, Community and Local Government (2017) Circular PL 1/2017 - Implementation of Directive 2014/52/EU on the effects of certain public and private projects on the environment (EIA Directive): Advice on the Administrative Provisions in Advance of Transposition;

Department of Housing, Planning and Local Government (2018) Circular PL 05/2018 -Transposition into Planning Law of Directive 2014/52/EU amending Directive 2011/92/EU on the effects of certain public and private projects on the environment (the EIA Directive) And Revised Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment; and

Environmental Protection Agency (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017).

European Union (2013) Guidance on Integrating Climate Change and Biodiversity into Environmental Impact Assessment

European Commission (2012) Interpretation suggested by the Commission as regards the application of the EIA Directive to ancillary/associated works

European Commission (1999) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions



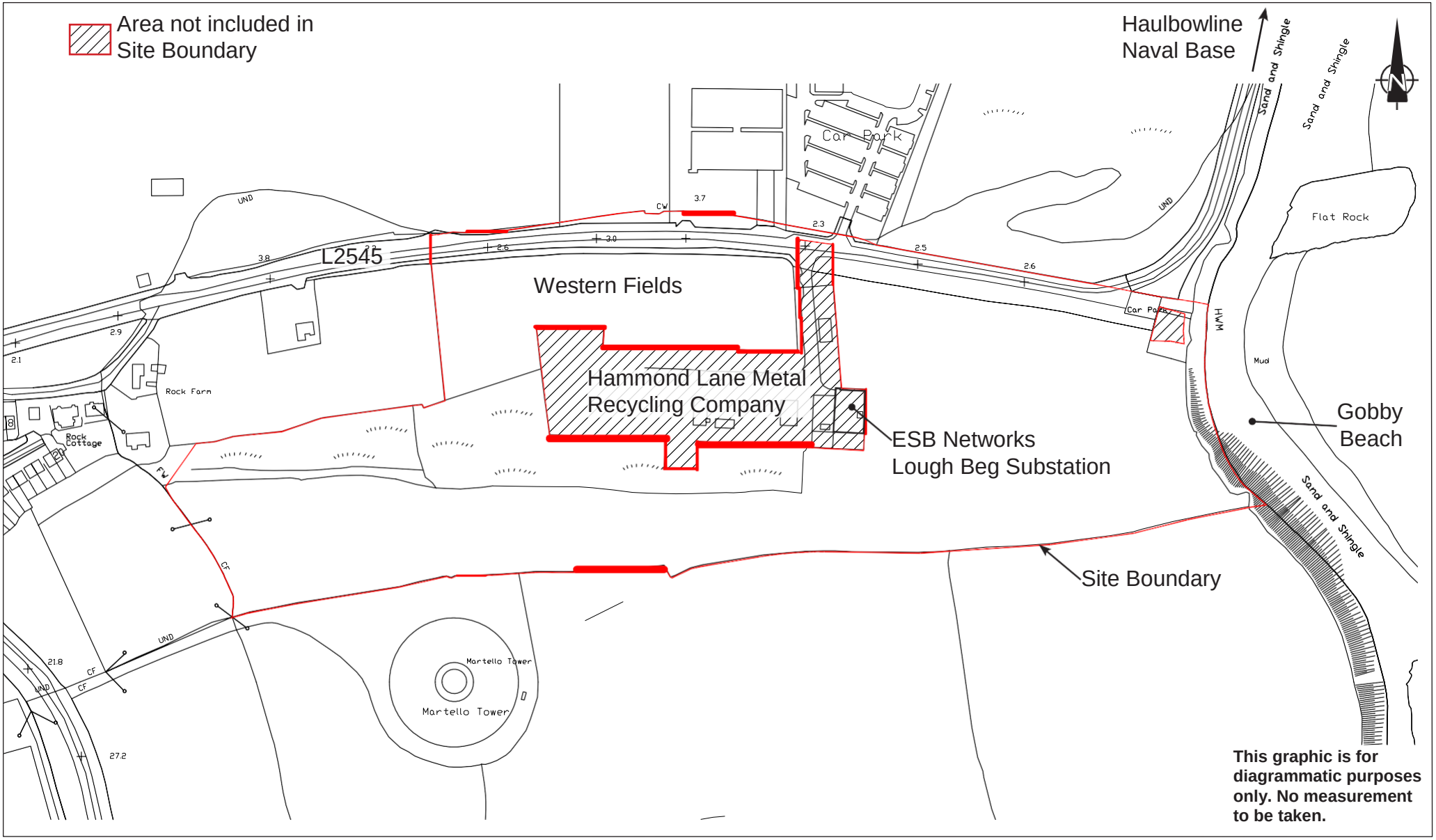
ARUP

INDAVER

Site Location

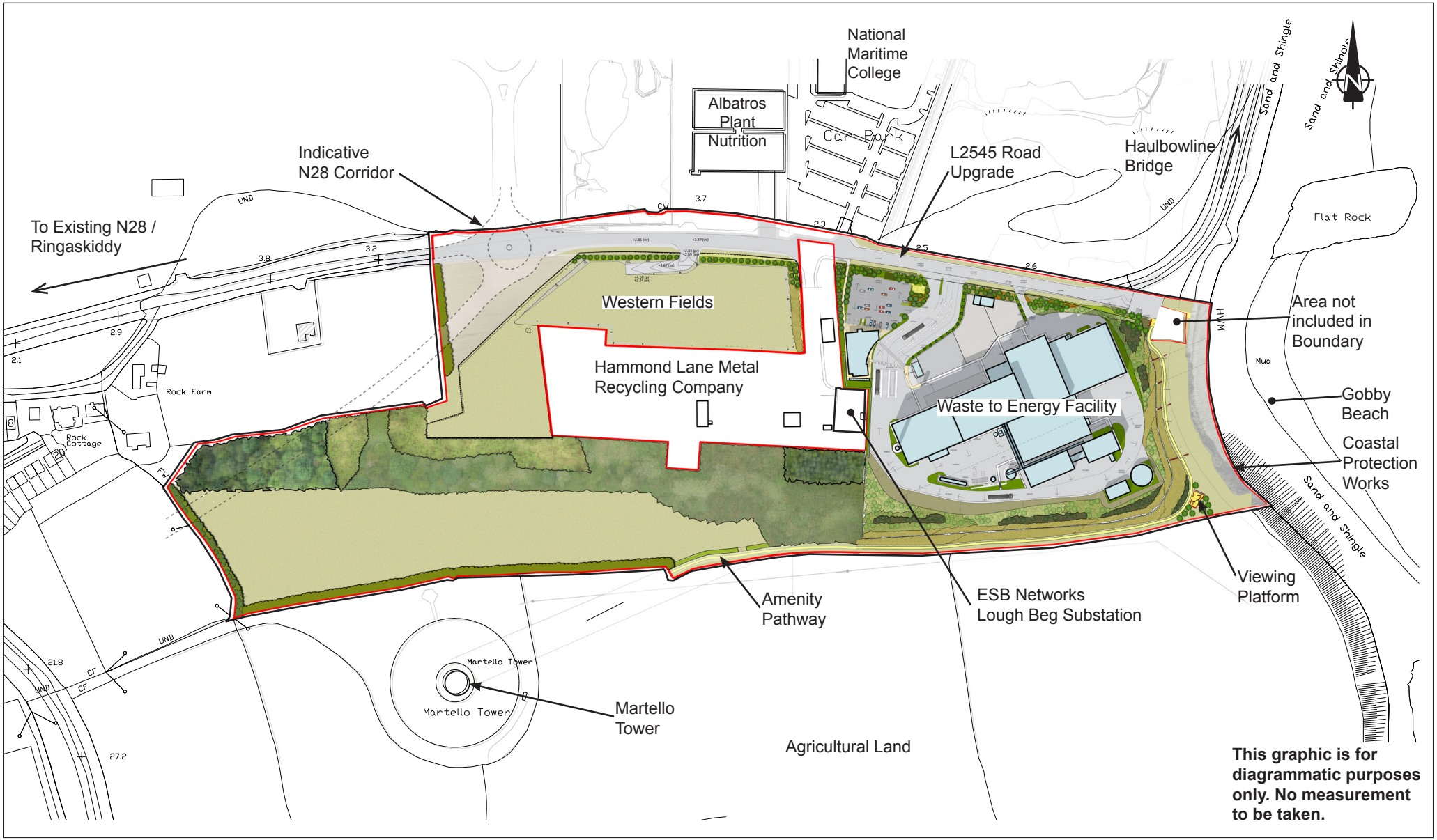
Ringaskiddy Resource Recovery Centre

238129-00 | Figure 1.1



INDAVER

Existing Site Layout



ARUP

INDAVER

Proposed Site Layout

Ringaskiddy Resource Recovery Centre

238129-00 | Figure 1.3

Appendix 1.1
Letter from An Bord Pleanála

Our Ref: 04.PC0151
P.A.Reg.Ref:

Your Ref:

An Bord Pleanala

Jane Hennessy
lndaver Ireland
4th Floor, Block 1
West Pier Business Campus
Old Dunleary Road
Dun Laoghaire, Co. Dublin

23rd December 2015

Re: A waste management facility comprising a waste-to-energy plant,
Ringaskiddy, Co. Cork.

Dear Madam,

Please be advised that following consultations under section 37B of the Planning and Development Act, 2000 as amended, the Board hereby serves notice under section 37B(4)(a) that it is of the opinion that the proposed development falls within the scope of paragraphs 37A(2)(aXb) and (c) of the Act. Accordingly, the Board has decided that the proposed development would be strategic infrastructure within the meaning of section 37A of the Planning and Development Act. 2000, as amended. Any application for permission for the proposed development must therefore be made directly to An Bord Pleanala under section 37E of the Act.

Please also be informed that the Board considers that the pre-applicationconsultation process in respect of this proposed development is now closed.

Attached is a list of prescribed bodies to be notified of the application for the proposed development

In accordance with section 146(5) of the Planning and Development Act, 2000 as amended, the Board will make available for inspection and purchase at its offices the documents relating to the decision within 3 working days following its decision. This information is normally made available on the list of decided cases on the website on the Wednesday following the week in which the decision is made.

Information in relation to challenges to the validity of a decision of An Bord Pleanala under the provisions of the Planning and DevelopmentAct, 2000, as amended, is overleaf.

If you have any queries in relation to the matter please contact the undersigned officer of the Board. Please quote the above mentioned An Bord Pleamila reference number in any correspondenceor telephone contact with the Board.

Yours faithfully,

Kieran Doherty
Executive Officer
Direct Line:01-8737248

PC09.LTR

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Judicial review of An Bord Pleanala decisions under the provisions of the Planning and Development Act, 2000, as amended

A person wishing to chaJJenge the validity of a Board decision may do so by way of judicial review only. Sections 50, 50A and SOB of the Planning and DevelopmentAct 2000 (as substituted by section 13 of the Planning and Development (Strategic Infrastructure) Act 2006, as amended/substituted by sections 32 and 33 of the Planning and Development (Amendment) Act 2010 and as amended by sections 20 and 21 of the Environment (MiscellaneousProvisions) Act 2011) contain provisions in relation to challenges to the validityof a decision of the Board.

The validity of a decision taken by the Board may only be questioned by making an application for judicial review under Order 84 of The Rules of the Superior Courts (S.I. No. 15 of 1986). Sub-section 50(6) of the Planning and DevelopmentAct 2000 requires that subject to any extension to the time period which may be allowed by the High Court in accordance with subsection 50(8), any application for judicial review must be made within 8 weeks of the decision of the Board. It should be noted that any challenge taken under section 50 may question only the validity of the decision and the Courts do not adjudicate on the merits of the development from the perspectives of the proper planning and sustainable development of the area and/or effects on the environment. Section 50A states that leave for judicial review shalt not be granted unless the Court is satisfied that there are substantial grounds for contending that the decision is invalid or ought to be quashed and that the applicant has a sufficient interest in the matter which is the subject of the application or in cases involving environmental impact assessment is a body complying with specified criteria.

Section SOB contains provisions in relation to the cost of judicial review proceedings in the High Court relating to specified types of development(including proceedings relating to decisions or actions pursuant to a law of the state that gives effect to the public participation and access to justice provisions of Council Directive 85/337/EEC i.e. the EIA Directive and to the provisions of Directive 2001/12/EC i.e. Directive on the assessment of the effects on the environment of certain plans and programmes). The general provision contained in section 508 is that in such cases each party shall bear its own costs. The Court however may award costs against any party in specified circumstances. There is also provision for the Court to award the costs of proceedings or a portion of such costs *to* an applicant against a respondent or notice party where relief is obtained to the extent that the action or omission of the respondent or notice party contributed to the relief being obtained.

General infonnation on judicial review procedures is contained on the following website, **www.cltizensinformation.ie.**

Disclaimer: The above is intended for information purposes. It does not purport to be a legally binding interpretation of the relevant provisions and it would be advisable for persons contemplating legal action to seek legal advice.

AnBordPleanala

A Waste Management Facility comprising a Waste-to-Energy Plant, Ringaskiddy, Co. Cork.

Prescribed Bodies:

The following is a schedule of prescribed bodies considered relevant for the purposes of section 37E(3)(c) of the Planning and Development Act 2000, as amended:

(a) Minister for the Environment, Community and Local Government
(b) Minister for Arts, Heritage and the Gaeltacht
(c} Minister for Defence
(d) Minister for Communications, Energy and Natural Resources
(e) Cork County Council
(f) Cork City Council
(g) Environmental Protection Agency
(h) Transport Infrastructure Ireland
(i) Irish Aviation Authority
0) An Chomhairle Ealaion
(k) An Taisce
(I) Irish Water
(m)Failte Ireland
(n) Heritage Council
(o) Health Service Executive
(p) Health and Safety Authority
(q) Minister for Tourism Transport and Sport
(r) South West Regional Authority, and
(s) Southern Region Waste Management Office

Appendix 1.2

Consultation for Planning Application 2016

1.1 Introduction

Indaver has engaged in statutory pre-application consultations with An Bord Pleanála and has also consulted with the planning authority, statutory bodies, interested parties, and the local community regarding its plans for this development. Details are provided below.

1.2 Pre-Application Consultation

The provisions of section 37A of the Planning and Development Act 2000, as amended ("the 2000 Act"), require an application for permission in respect of the proposed Ringaskiddy Resource Recovery Centre to be made directly to An Bord Pleanála ('the Board') under Section 37E, in circumstances where the Board has determined that the proposed development is of a class specified in the Seventh Schedule to the Act and that the condition set out in section 37A (2) of the Act was satisfied.

An Bord Pleanála has notified Indaver and Cork County Council that the proposed Ringaskiddy Resource Recovery Centre is of a class specified in the Seventh Schedule to the Act and falls within one of the paragraphs of section 37A (2). Accordingly, the application for permission is being made to the Board and not to the planning authority. **Refer to Appendix 1.1** for a copy of the letter to Indaver from An Bord Pleanála.

The 2000 Act defines that pre-application consultations with the Board shall form part of the process leading to the Board's determination that an application for permission should be made directly to Board. In compliance with this, and in preparation for submitting the planning application and this Environmental Impact Statement, Indaver engaged in six number pre-application consultation meetings, from the 12th November 2012 to 23rd November 2015.

1.3 List of Prescribed Bodies

An Bord Pleanála has provided a list to Indaver of the bodies, prescribed under Article 213 of the Planning and Development Regulations 2000 (as inserted by Article 41 of the Planning and Development Regulations 2005 (S.I. No. 685 of 2006)), which should be notified of the application by Indaver. The list is provided below. A copy of the planning application and the EIS and NIS has been sent to these prescribed bodies.

a) Minister for the Environment, Community and Local Government

b) Minister for Arts, Heritage and the Gaeltacht

c) Minister for Defence

d) Minister for Communications, Energy and Natural Resources

e) Cork County Council

f) Cork City Council

g) Environmental Protection Agency

h) Transport Infrastructure Ireland

i) Irish Aviation Authority

j) An Chomhairle Ealaíon

k) An Taisce

l) Irish Water

m) Fáilte Ireland

n) Heritage Council

o) Health Service Executive

p) Health and Safety Authority

q) Minister for Tourism, Transport and Sport

r) Southern & Eastern Regional Assembly (formerly South West Regional Authority), and

s) Southern Region Waste Management Office

1.4 Consultation with Planning Authority (Cork County Council)

Indaver has engaged with Cork County Council regarding its plans for the Ringaskiddy Resource Recovery Centre. Consultation has been carried out with the following departments:

- Planning Department – meetings, Meath site visit and ongoing consultations since April 2015.
- Roads Department – meetings and ongoing consultation since September 2014.
- Traffic Department – meetings and ongoing consultation since October 2014
- Architects Department – meetings and ongoing consultation since May 2015
- Coastal Management and Flood Projects Department - Ringaskiddy site visit with project design team in August 2015
- Flood Projects Department - Consultation since January 2015
- Biodiversity Department - meeting and ongoing consultation since May 2015
- Heritage and Archaeology Department – meeting and ongoing consultations since April 2015
- Environment Department - meeting in September 2015

1.5 Consultation with utilities providers in relation to proposed service diversions

A number of services will require diversion due to the proposed development. Indaver has engaged with all relevant utilities providers in relation to the proposed diversions. The utilities providers consulted are as follows:

- Gas Networks Ireland
- ESB Networks
- Eir (formerly Eircom)
- Cork County Council (acting on behalf of Irish Water)

1.6 Legal interest

The proposed development includes an upgrade to the L2545 which is a public road. The section of road which Indaver proposes to upgrade lies within its ownership (save for a small section adjacent to the entrance to the Hammond Lane facility which is in the ownership of the Hammond Lane Metal Company Ltd). Indaver has engaged with both Cork County Council and Hammond Lane Metal Company Ltd. in relation to the proposed upgrade. Both parties have provided consent to Indaver to make a planning application for the proposed L2545 upgrade.

1.7 Grid Connection

The proposed development also includes a grid connection to the boundary of the adjacent ESB Lough Beg substation. The lands over which the entire grid connection will be constructed lie within Indaver's ownership (save for a small section comprising associated works on the adjacent substation owned by ESB Networks). These works will be carried out by ESB Networks and do not form part of the planning application. Indaver has engaged with ESB Networks in relation to the grid connection.

1.8 Statutory bodies and other interested parties

Indaver has engaged with following bodies regarding its plans for the Ringaskiddy Resource Recovery Centre:

1. An Taisce
2. Arts Council of Ireland
3. Bat Conservation Ireland
4. Bird Watch Ireland
5. Gas Networks Ireland
6. Commission for Energy Regulation

7. Commissioner for Irish Lights
8. Cork Airport Authority
9. Cork County Council (see section 1.4 above)
10. Cork City Council
11. Department of Defence
12. Department of Agriculture, Food and the Marine
13. Department of Arts, Heritage and the Gaeltacht
14. Department of Communications, Energy and Natural Resources
15. Department of Environment, Community and Local Government
16. Department of Transport, Tourism and Sport
17. Departments of Communications, Energy and Natural Resources
18. Environmental Protection Agency
19. ESB Networks
20. Open Eir (formerly Eircom)
21. EirGrid
22. Fáilte Ireland
23. Geological Survey of Ireland
24. Health and Safety Authority
25. Health Service Executive
26. Inland Fisheries Ireland
27. Irish Aviation Authority
28. Irish Raptor Study Group
29. Irish Water
30. Irish Wildlife Trust
31. Marine Institute
32. National Monuments Service
33. National Parks and Wildlife
34. National Road Design Office
35. Office of Public Works
36. Port of Cork Company
37. The Heritage Council (An Chomhairle Oidhreachta)
38. Transport Infrastructure Ireland (formerly National Roads Authority)
39. Southern Region Waste Management Office

1.9 Community Stakeholder Engagement

In addition to the consultations referred to above, Indaver has consulted the public and the public concerned regarding its plans for the proposed development.

Following initial discussions with representatives of the local Residents Association and other individuals, Indaver proceeded to hold public engagement days in the area for all interested members of the local community.

The first information day was held between 10am and 2pm and between 4pm and 8pm on the 31st of July 2015 at the Carrigaline Court Hotel. The second information day was held in the Ringaskiddy Community Centre on the 8th of September between 4pm and 8pm. The third information day was held at Shanbally National School on the 15th of September between 6pm and 9pm.

Indaver advertised each information day in advance on the Indaver website and in a number of local papers such as The Carrigdhoun, The Southern Star, The Evening Echo and The Examiner. The Ringaskiddy Community Centre and Shanbally National School information days were also advertised on each venue's noticeboards. Indaver sent letters advertising the information days to members of the local community in July and in September. Over 300 letters were sent out on each occasion to individuals who had previously expressed interest in the project, and whose details Indaver had recorded in a communications register.

Members of the project team, including the project manager, the managing director, and the manager of Indaver's Meath facility attended each day.

The project team used a series of posters, and other visual aids to give an overview of the project, the planning history, the legislative and policy context, to demonstrate how the project is complementary to other industry in the area, and how it is compatible with plans for the harbour more widely.

Anyone who attended the information days was invited to come to the Meath facility in order to see what the day-to-day operation of a facility similar to the one proposed in Ringaskiddy. The project team also used a video of the waste treatment process in the Meath facility. The video of the waste treatment process in the Meath facility is on the Indaver website www.indaver.ie

In addition to inviting people to the information days, Indaver has also been in contact with over 140 groups and individuals to discuss the project. These stakeholders consist mostly of business and community groups. Contact was through briefing letters and emails, over the phone, and through meetings.

Indaver has been engaging with community stakeholders for over six months, since May 2015. Indaver has created a stand-alone website: www.ringaskiddyrrc.ie which includes all of the planning application documentation including this EIS, the Natura Impact Statement (NIS), and planning drawings etc.

Copies of an advert, letters to the local community, and an information leaflet giving an overview of the project are provided in **Section 1.11** below.



Figure A.1.1 Indaver Ireland's MD giving an overview of the project

1.10 Other Consultees

1. Cork TDs, Members of Seanad, MEPs
2. Political parties
3. Local and national business groups
4. Ringaskiddy corporate neighbours
5. National and local environmental groups
6. Local and national media
7. Local community groups in Ringaskiddy, Monkstown, Shanbally, Crosshaven, Curraghbinny, Carrigaline

1.11 Information Material

Copies of the advert from Irish Examiner (Figure A.1.2), sample letters to the local community (Figure A.1.3 & 4), posters (Figure A.1.5) and an information leaflet (Figure A.1.6) giving an overview of the project are provided below.

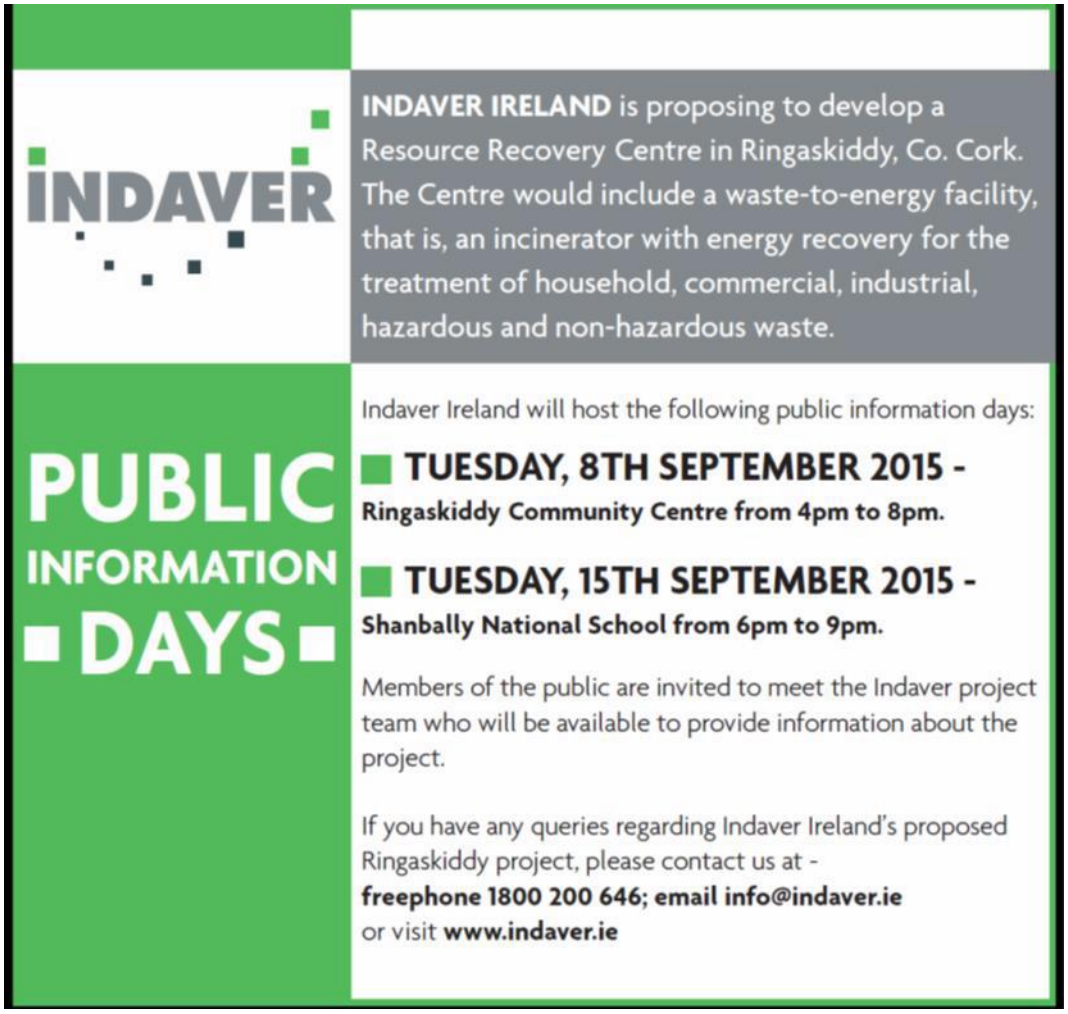


Figure A.1.2 Advert in Irish Examiner September 4th, 2015



www.indaver.ie

XXXXXXXXXX
Address Line 1
Address Line 2
Address Line 3

3rd September 2015

Dear XXXXX

We are preparing a planning application to develop a resource recovery centre in Ringaskiddy. This centre would include a waste-to-energy facility, that is, an incinerator with energy recovery for the treatment of household, commercial, industrial, hazardous and non-hazardous waste.

With this in mind, we are extending an invitation to attend one of our information days over the coming weeks. There will be one at the Ringaskiddy Community Centre on the 8th of September between 4pm and 8pm, and there will be one at Shanbally National School on the 15th of September between 6pm and 9pm.

We would also like to offer an open invitation to visit our waste-to-energy facility in Duleek, Co. Meath.

Please feel free to contact us if there are any queries regarding our proposed centre in Ringaskiddy, or if you would like this name and address to be removed from our register. We can be contacted by email info@indaver.ie, Freephone 1800 200 646, or Freepost Indaver Ireland, 4th Floor, Block 1, West Pier Business Campus, Freepost F5127, Dun Laoghaire, Co. Dublin.

Yours sincerely,

John Ahern
Managing Director, Indaver Ireland

Indaver Ireland Ltd. ▪ Registered in Ireland No. 356557
Registered Office: 4th Floor, Block 1, West Pier Business Campus, Clic Dunleary Road, Dun Laoghaire, CO. DUBLIN, IRELAND ▪ tel. + 353 1 280 4534 ▪ fax + 353 1 280 7865
▪ Tolka Quay Road, Dublin Port, DUBLIN 1, IRELAND ▪ tel. + 353 1 280 4534 ▪ fax + 353 1 280 7865
▪ Unit 11, South Ring Business Park, Kinsale Road, CORK, IRELAND ▪ tel. + 353 21 470 4260 ▪ fax + 353 21 470 4259
▪ Meath Waste-to-Energy Facility, Carranstown, Duleek, CO. MEATH, IRELAND ▪ tel. + 353 1 280 4534 ▪ fax + 353 1 280 7865
VAT Reg. No. IE9570712F ▪ IBAN IE53 AIBK 9334 0633 3250 49 ▪ AIBKIE2D
Directors: J. Ahern, C. Jones, J. Kearney
Belgian Directors: P. De Bruycker, M. Decorte, B. Goetmos

Figure A.1.3 Sample letter to the local community September 2015



www.indaver.ie

XXXXXXX
XXXXX
Ringaskiddy
Cork

28th July 2015

Dear XXXXX,

We are writing this letter to you as you had previously expressed interest in receiving updates on Indaver Ireland's proposed development in Ringaskiddy, Co. Cork. The purpose of this letter is to provide a project update, and to verify if there is still an interest in remaining on this contact list.

We are preparing a planning application to develop a Resource Recovery Centre. This Centre would include a waste-to-energy facility, that is, an incinerator with energy recovery for the treatment of household, commercial, industrial, hazardous and non-hazardous waste.

With this in mind, we are extending an invitation to attend one of our information sessions at the Carrigaline Hotel on Friday 31st July from 10am to 2pm or from 4pm to 8pm. Details of future information sessions will be advertised in local newspapers and on our website www.indaver.ie.

We would also like to offer you an open invitation to visit our waste-to-energy facility in Duleek, Co. Meath.

Please feel free to contact us if you have any queries regarding our proposed centre in Ringaskiddy, or if you would like this name and address to be removed from our register. We can be contacted by email info@indaver.ie, Freephone 1800 200 646, or Freepost Indaver Ireland, 4th Floor, Block 1, West Pier Business Campus, Freepost F5127, Dun Laoghaire, Co. Dublin.

Yours sincerely,

John Ahern
Managing Director, Indaver Ireland

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Registered Office: 4th Floor, Block 1, West Pier Business Campus, Old Dunleary Road, Dun Laoghaire, CO. DUBLIN, IRELAND • tel. + 353 1 280 4534 • fax + 353 1 280 7865
• Tolka Quay Road, Dublin Port, DUBLIN 1, IRELAND • tel. + 353 1 280 4534 • fax + 353 1 280 7865
• Unit 11, South Ring Business Park, Kinsale Road, CORK, IRELAND • tel. + 353 21 478 4260 • fax + 353 21 4734259
• Meath Waste-to-Energy Facility, Carranstown, Duleek, CO. MEATH, IRELAND • tel. + 353 1 280 4534 • fax + 353 1 280 7865
VAT Reg. No. IE9570712F • IBAN: IE58 AIBK 9334 0633 1250 49 • AIBKIE2D
Directors: J. Ahern, C. Jones, J. Kenny
Belgian Directors: P. De Bruycker, M. Decorte, B. Goemans

Figure A.1.4 Sample letter to the local community July 2015

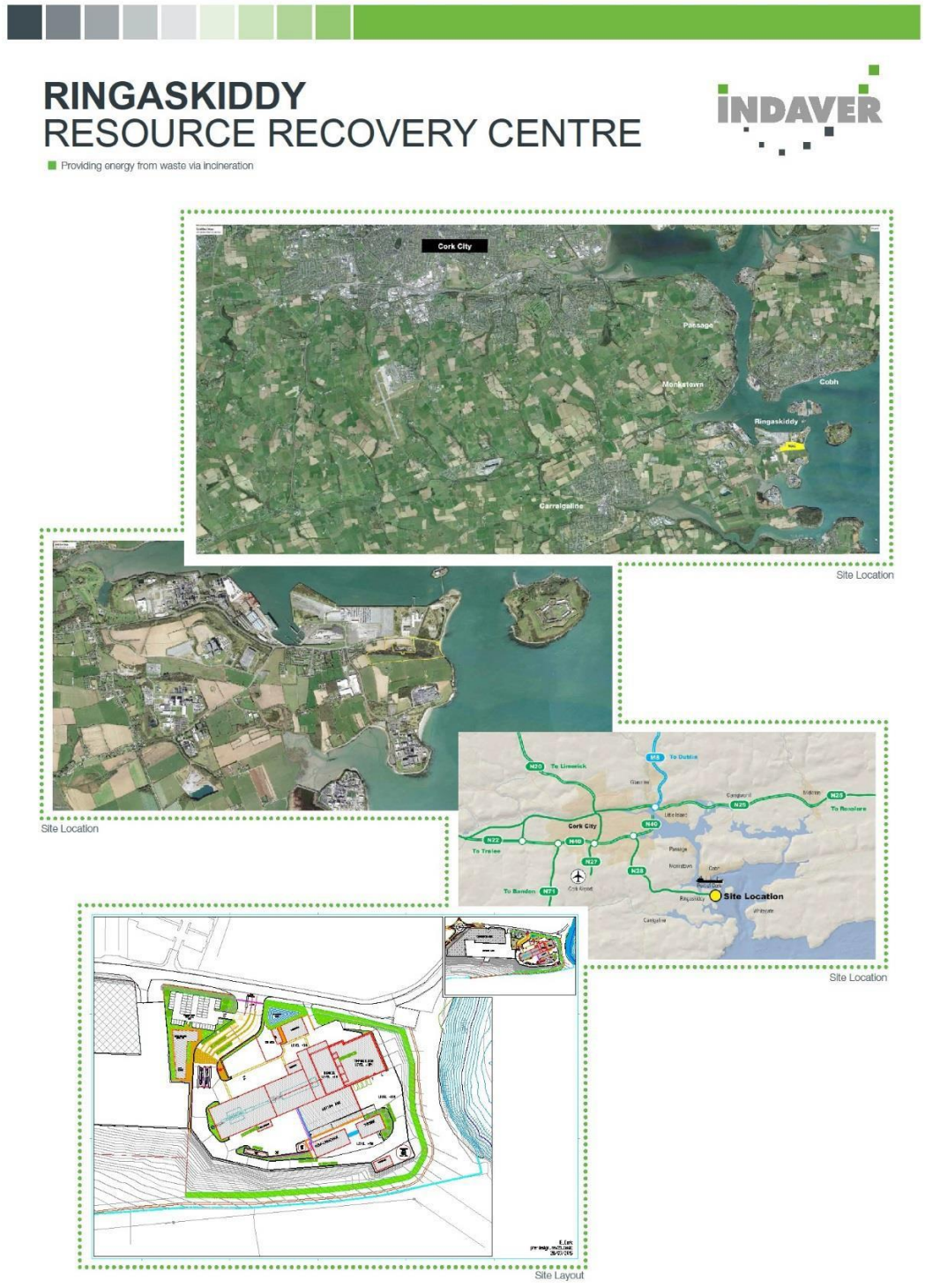


Figure A.1.5a Poster

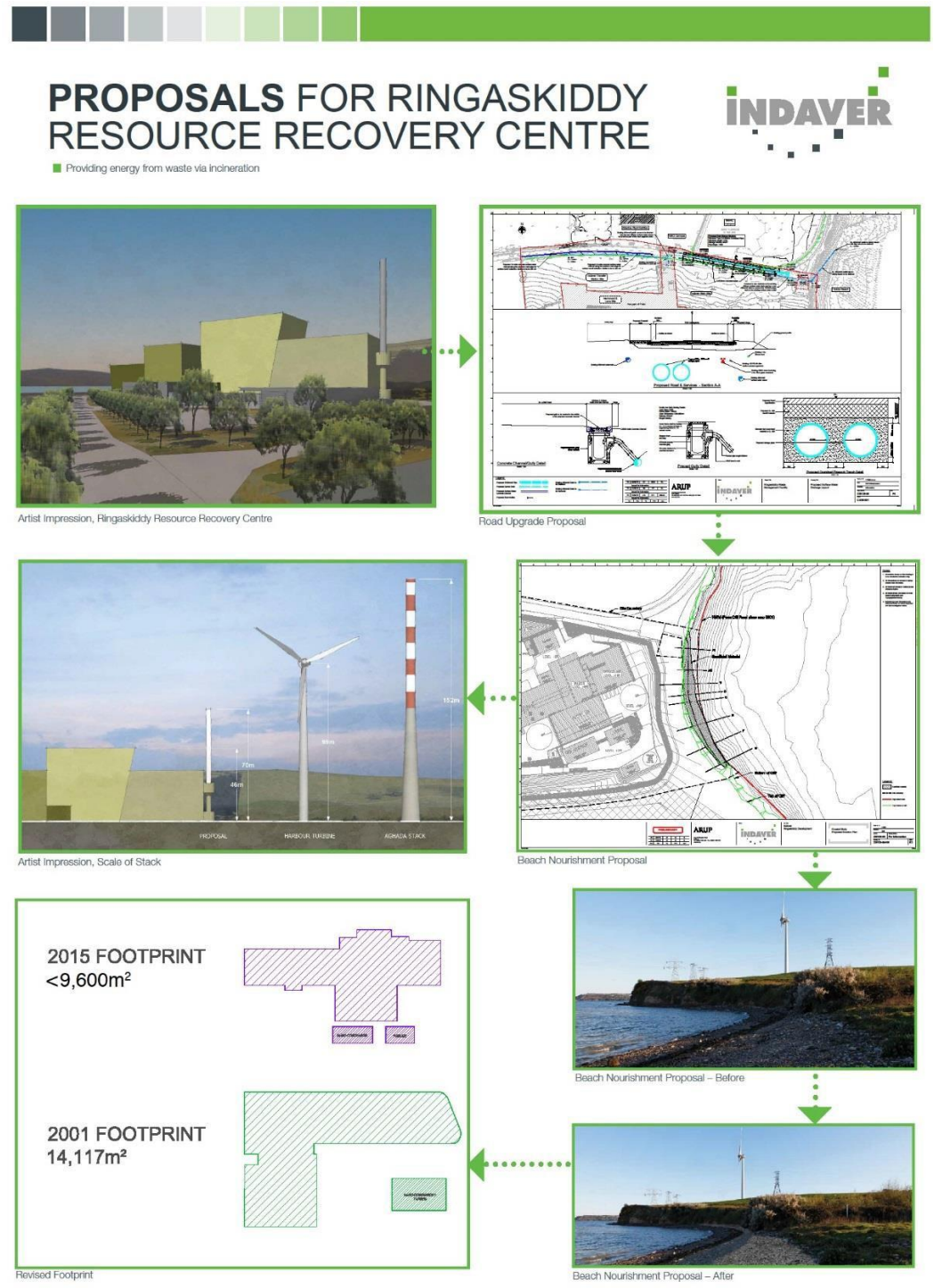


Figure A.1.5b Poster

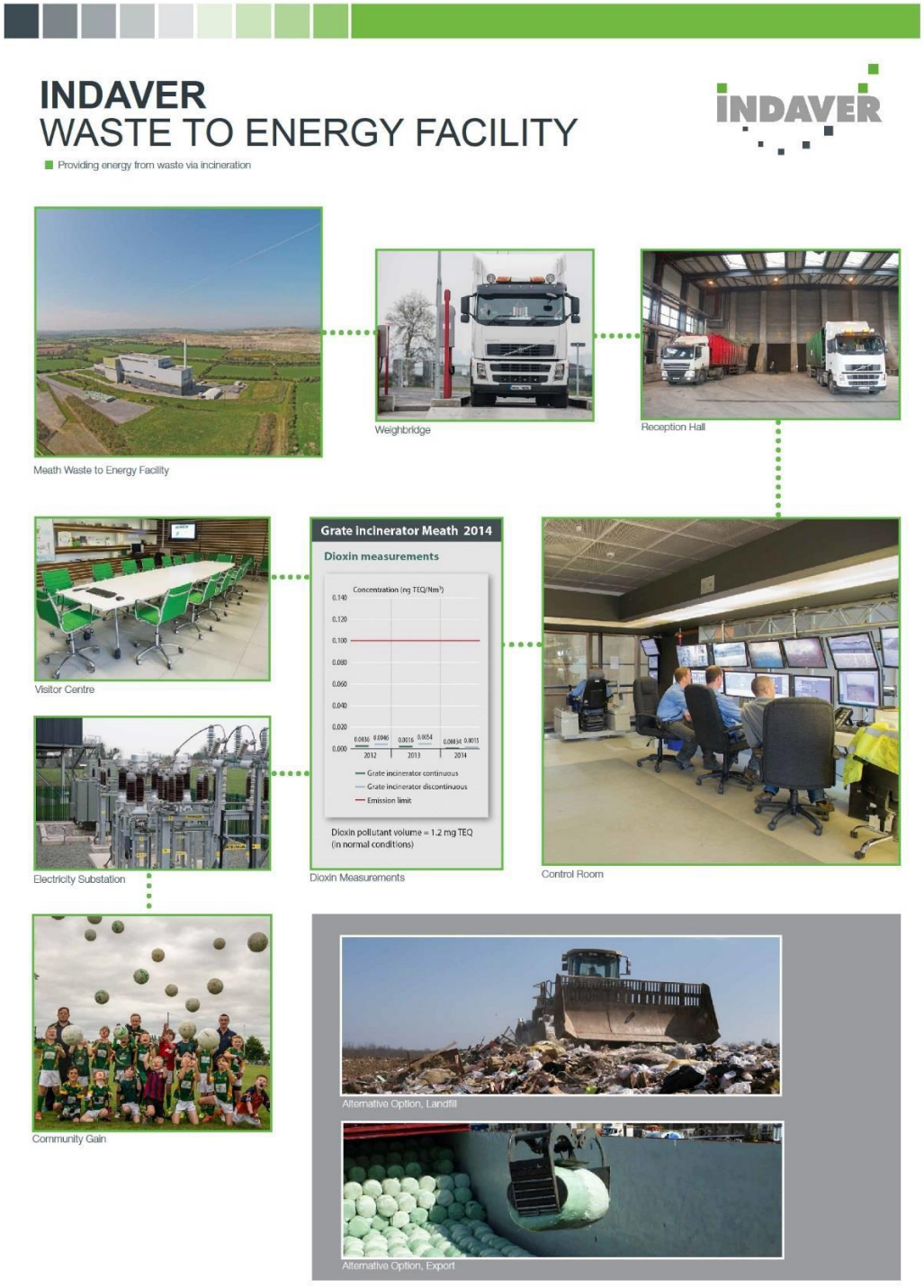


Figure A.1.5c Poster

Leading the Field in Sustainable Waste Management

What is resource recovery and why is it important?

Indaver proposes to build a resource recovery facility in Ringaskiddy.

Resource recovery plays a vital role in moving towards a circular economy in which waste is recognised as a valuable resource from which materials and energy can be recovered. Where a linear economy is wasteful and unsustainable, a circular economy is sustainable and efficient.

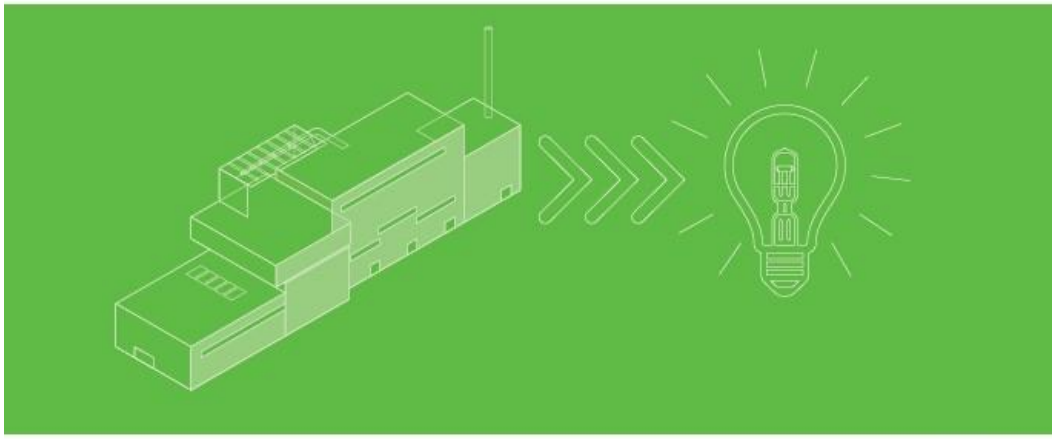
We need to move from a linear economy to a circular economy because we are currently living beyond our environmental means. Policy at European and national levels is creating this transition. The European Parliament and the Council of the European Union describe this vision for 2050 in the *7th Environmental Action Programme:*

In 2050, we live well, within the planet's ecological limits. Our prosperity and healthy environment stem from an innovative, circular economy where nothing is wasted and where natural resources are managed sustainably, and biodiversity is protected, valued and restored in ways that enhance our society's resilience. Our low-carbon growth has long been decoupled from resource use, setting the pace for a safe and sustainable global society.

On a national level, Ireland's Regional Waste Plans apply the principles of the circular economy. The strategic vision of the Southern Region Waste Management Plan, published in May 2015, is to rethink the southern region's approach to managing waste. The Plan re-defines waste streams as valuable material resources to be recovered and recirculated, rather than merely disposed of.

This paradigm shift will lead both to a healthier environment and to sustainable commercial opportunities for our economy. Resource recovery plays a vital part in creating a circular economy that is the foundation for prosperity and health.

The proposed Ringaskiddy Resource Recovery Centre would support European, national, and regional circular economy objectives by diverting valuable non-recyclable resources from landfill and from export for use by other European member states. The Centre would safely and efficiently recover valuable energy which could be used locally. Thermal recovery also supports high quality recycling by treating polluted and complex waste, thereby keeping harmful substances out of the circular economy. Finally, thermal recovery facilities can contribute to recycling through extraction of ferrous and non-ferrous metals and where possible, a range of aggregates, all from bottom ash.



Page 1

Figure A.1.6a Information Leaflet

Leading the Field in Sustainable Waste Management

Has Indaver built and managed anything like the Ringaskiddy Resource Recovery Centre in Ireland?

Indaver built, and now operates, Ireland's first waste-to-energy facility for the treatment of household, commercial and industrial, hazardous and non-hazardous waste in Co. Meath. The Meath Waste-to-Energy Facility completed its fourth successful year of operation in August 2015. It treats 235,000 tonnes per year of residual waste and generates more than 18MW electricity from this waste, enough to power the equivalent of more than 22,000 households.



Meath Waste-to-Energy Facility



Reception Hall



Control Room



Electricity Substation

Page 2

Figure A.1.6b Information Leaflet

Leading the Field in Sustainable Waste Management

What is the Ringaskiddy Resource Recovery Centre?

Indaver proposes to develop a resource recovery centre in Ringaskiddy in County Cork for the treatment of household, commercial and industrial, hazardous and non-hazardous waste. The proposed development, the Ringaskiddy Resource Recovery Centre, will include a waste-to-energy facility. The facility will use robust and proven technology to process up to 240,000 tonnes per annum of residual waste. Energy and other useful materials will be recovered from this residual waste, which is currently landfilled or exported. The waste-to-energy facility will produce approximately 21 megawatts of electricity.

The site for the Ringaskiddy Resource Recovery Centre is situated at the north-eastern corner of the Ringaskiddy peninsula and occupies an area of approximately 12 hectares.

Design

The facility has been designed to fit in with the area's corporate campus feel.



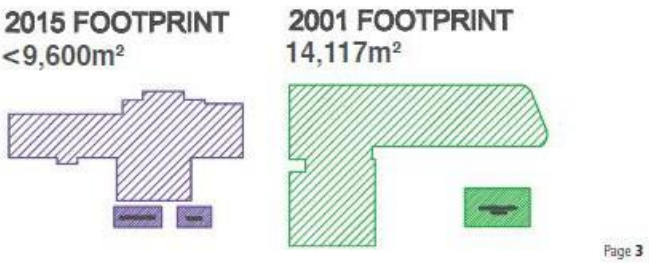
Scale

The stack height is relatively low in comparison to other developments in the locality.



Footprint

The footprint for this plan has been reduced in comparison with previous plans.



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Figure A.1.6c Information Leaflet



Figure A.1.6d Information Leaflet

Leading the Field in Sustainable Waste Management

What is different about this application?

In 2008, a municipal facility was not part of waste management planning for County Cork. Now, in 2015, waste management policy has changed. The Regional Waste Management Plans and the National Hazardous Waste Management Plan identify a need for 300,000 tonnes of additional municipal thermal capacity and an additional 50,000 tonnes of hazardous thermal capacity in Ireland.

Policy

The Southern Waste Region Management Plan notes that the spatial distribution of thermal recovery facilities nationally is potentially unbalanced, with all active and pending facilities located in the Eastern and Midlands Region. As a result, the Plan notes that there is a need to consider the spatial distribution of thermal recovery capacity in the State when authorising future facilities. In order to bring balance to the spatial distribution of facilities, Indaver will seek planning permission for a waste-to-energy facility to treat municipal, commercial and industrial, hazardous and non hazardous waste in Ringaskiddy, Co. Cork.

Three other reasons for objection to the 2008 plan pertained to the zoning of the site, local flooding of the road, and erosion of the local coastline. The 2015 planning application has been prepared with consideration of all of these objections.

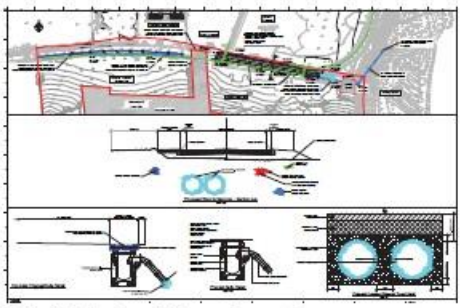
Zoning

Indaver's proposed site in Ringaskiddy is now a zoned 'Industrial Area'. As per the Cork County Development Plan, consideration will be given to large scale waste treatment facilities including waste-to-energy recovery facilities in 'Industrial Areas'. This area is also home to a large cluster of pharmaceutical companies, many of whom are existing customers of Indaver. Being located in close proximity to our customers reduces the distance that the waste needs to be transported, thus reducing the carbon footprint of waste management. This Centre would provide local solutions for local waste.

This area is also designated as a Strategic Employment Area as outlined in the County Development Plan. The Ringaskiddy Resource Recovery Centre would support the local economy and provide opportunities for both direct and indirect local employment.

Road Upgrade

Included in the proposed development is an upgrade of the local road (L2545) adjacent to the Indaver site in order to alleviate local flooding issues along the road. This upgrade would improve access to not only to the Indaver site, but also to the other institutions in the area, and to Haulbowline. The upgrade includes landscaping, and so would improve the appearance of the approach to Haulbowline.



Technical drawing of the road upgrade.

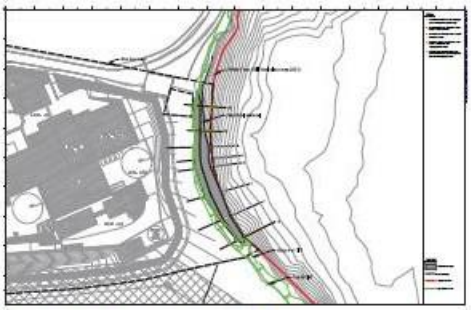
Page 5

Figure A.1.6e Information Leaflet

Leading the Field in Sustainable Waste Management

Beach Nourishment

In addition, the proposed development will include beach nourishment along the eastern boundary of the Indaver site. Indaver would deposit shingle on the emerged beach above the foreshore. This form of beach nourishment is preferred, as it mimics natural processes while being un-invasive; a similar strategy has been used on Greystones Beach in Dublin. The shingle dissipates wave energy, so it would protect the toe and lower area of the cliffs from direct wave action, thus reducing the rate of erosion. The shingle would protect the Indaver site and those adjoining it, so would benefit the entire coastline. It would also enhance the visual appearance of the beach.



Beach nourishment technical drawing

Education and research

As the owner of Ireland's first waste-to-energy facility, Indaver understands and values education. Since the opening of the Meath facility in 2011, we have welcomed more than 2,000 visitors onsite. Visitors, who come from a range of different countries, include third-level students, local authorities, industry groups, energy bodies, and waste-to-energy operators.



Tour of Facility

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Figure A.1.6f Information Leaflet

Leading the Field in Sustainable Waste Management

Leading the field in learning & research in Ringaskiddy.

In addition to recovering resources from waste, the Ringaskiddy Resource Recovery Centre would be a centre for learning and research. Like the Meath facility, the Ringaskiddy facility would have a dedicated Visitor Centre in order to accommodate visitors to the site. The Visitor Centre would provide a gateway to the site, showcasing best practice in resource recovery management and sustainability.

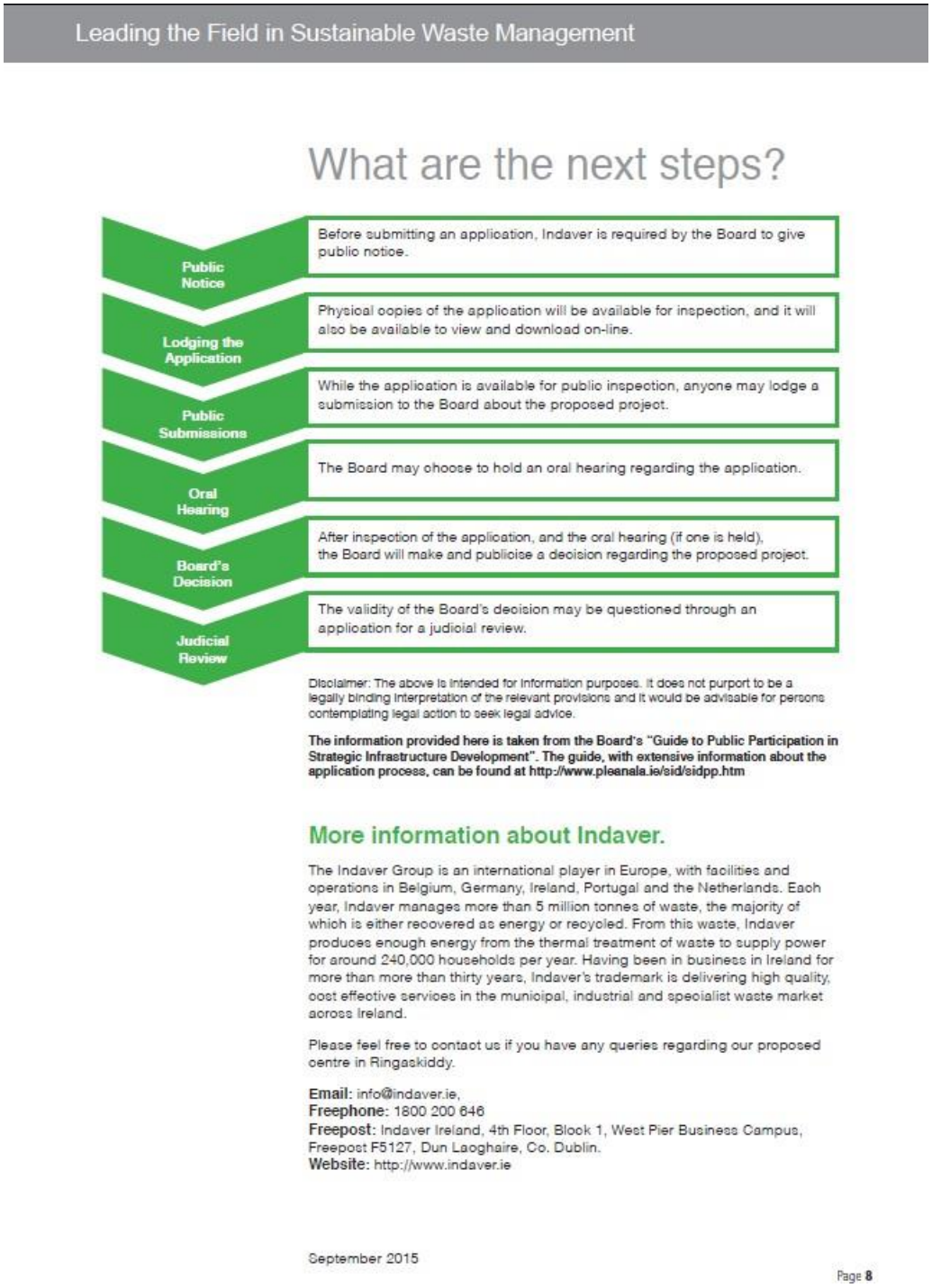
The Ringaskiddy Resource Recovery Centre would also include a high-tech, multi-media training facility. Using our training centre model, we would provide courses for industrial customers in areas such as Dangerous Goods, Transport Safety & Legislation, Waste Legislation and Packaging of Waste. With a high-tech laboratory on site, we could also provide training in the analysis of waste composition. There is a local emphasis on research in Ringaskiddy, which will provide an excellent opportunity for Indaver to develop existing research partnerships with University College Cork and to develop new partnerships with neighbouring institutions. The particular cluster of industries in Ringaskiddy provides the ideal environment to foster research in renewable energies.



Visitor Room

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Figure A.1.6g Information Leaflet



Leading the Field in Sustainable Waste Management

What are the next steps?

Public Notice
Before submitting an application, Indaver is required by the Board to give public notice.

Lodging the Application
Physical copies of the application will be available for inspection, and it will also be available to view and download on-line.

Public Submissions
While the application is available for public inspection, anyone may lodge a submission to the Board about the proposed project.

Oral Hearing
The Board may choose to hold an oral hearing regarding the application.

Board's Decision
After inspection of the application, and the oral hearing (if one is held), the Board will make and publicise a decision regarding the proposed project.

Judicial Review
The validity of the Board's decision may be questioned through an application for a judicial review.

Disclaimer: The above is intended for information purposes. It does not purport to be a legally binding interpretation of the relevant provisions and it would be advisable for persons contemplating legal action to seek legal advice.

The information provided here is taken from the Board's "Guide to Public Participation in Strategic Infrastructure Development". The guide, with extensive information about the application process, can be found at http://www.pleanala.ie/sid/sidpp.htm

More information about Indaver.

The Indaver Group is an international player in Europe, with facilities and operations in Belgium, Germany, Ireland, Portugal and the Netherlands. Each year, Indaver manages more than 5 million tonnes of waste, the majority of which is either recovered as energy or recycled. From this waste, Indaver produces enough energy from the thermal treatment of waste to supply power for around 240,000 households per year. Having been in business in Ireland for more than more than thirty years, Indaver's trademark is delivering high quality, cost effective services in the municipal, industrial and specialist waste market across Ireland.

Please feel free to contact us if you have any queries regarding our proposed centre in Ringaskiddy.

Email: info@indaver.ie,
Freephone: 1800 200 646
Freepost: Indaver Ireland, 4th Floor, Block 1, West Pier Business Campus, Freepost F5127, Dun Laoghaire, Co. Dublin.
Website: http://www.indaver.ie

September 2015

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Figure A.1.6h Information Leaflet

Appendix 1.3

IE Licence Notice to Cork County Council

www.indaver.ie

The Secretary
Planning Department
Cork County Council
Ground Floor
County Hall
Carrigrohane Road
Cork

16th July 2019

In the matter of:

Notice of intention to apply to the Environmental Protection Agency for an Industrial Emissions (IE) Licence pursuant to the the Environmental Protection Agency (Industrial Emissions) (Licensing) Regulations 2013, S.I. No. 137 of 2013

To whom it may concern,

Indaver Ireland Limited hereby wishes to notify Cork County Council, as the relevant planning authority for the purposes of the above Regulations, that an application for an Industrial Emissions Licence will be submitted to the Environmental Protection Agency (EPA).

This application is in respect of a Waste to Energy Facility (waste incinerator with energy recovery) at a site in the townland of Ringaskiddy, County Cork (National Grid Ref. E179055, N064279) for the treatment of residual household, commercial and industrial waste which includes up to 24,000 tonnes of suitable hazardous waste with an annual capacity of 240,000 tonnes per annum.

The Classes of Activity at the site as specified in the First Schedule to the Environmental Protection Act of 1992 as amended, are as follows:
Class 11.3(a) Disposal or recovery of waste in waste incineration plants for non-hazardous waste with a capacity exceeding 3 tonnes per hour.

Class 11.3(b) Disposal or recovery of waste in waste incineration plants for hazardous waste with a capacity exceeding 10 tonnes per day.

An Environmental Impact Assessment Report (EIAR) and a Natura Impact Statement (NIS) will be submitted to the Environmental Protection Agency with the application.

An EIS and NIS was submitted to An Bord Pleánala as part of an application for planning permission for the Waste to Energy Facility. A copy of the EIAR and NIS for this application for an Industrial Emissions Licence for the Waste to Energy Facility will be provided to Cork County Council, pursuant to Regulation 5 (d) (iii) of the 2013 Industrial Emissions Licensing Regulations.

In this regard, please see Appendix 1 to this letter in relation to the notice provided to the EIA Portal and the Confirmation of Notice received in response to the same.

A copy of the application for the licence (including the EIAR and NIS) may be inspected on the Agency's website www.epa.ie or on the public website www.ringaskiddyrrc.ie relating to this project once the application has been validated by the Agency.

Should any further information be required in relation to the above matters, please do not hesitate to contact me. I can be contacted by email at cjones@indaver.ie, or by post to: Indaver Ireland Limited, 4th Floor, Block 1, West Pier Business Campus, Dun Laoghaire, Co. Dublin.

Yours sincerely,

pp Karen Walsh

Conor Jones
Regional Engineering Director
Indaver Ireland Limited

Attached: Appendix 1 Confirmation of EIA Portal Submission

Appendix 1

Confirmation of Notice to EIA Portal received from EIAportal@housing.gov.ie

Paul Schutze

From: EIAportal <EIAportal@housing.gov.ie>
Sent: 15 July 2019 11:49
To: Paul Schutze
Subject: EIA Portal Confirmation Notice Portal ID 2019104 Indaver Ireland Limited

Follow Up Flag: Follow up
Flag Status: Flagged

A Chara,

An EIA Portal notification was received on 12/07/2019 in respect of this proposed application. The information provided has been uploaded to the EIA Portal on 15/07/2019 under EIA Portal ID number **2019104** and is available to view at http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1 .

Portal ID: 2019104

Competent Authority: Environmental Protection Agency

Applicant Name: Indaver Ireland Limited

Location: Ringaskiddy, County Cork (National Grid Ref. E179055, N064279)

Description: Waste to Energy Facility (waste incinerator with energy recovery) for the treatment of residual household, commercial and industrial waste which includes up to 24,000 tonnes of suitable hazardous waste with an annual capacity of 240,000 tonnes per annum

Linear Development: no

Date Uploaded to Portal: 15/07/2019

Regards
Morgan

Morgan O Reilly

EIA Portal team

An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

Teach an Chustaim, Baile Átha Cliath 1, D01 W6X0
Custom House, Dublin 1, D01 W6X0

T +353 (0) 1 888 2000

****
Is faoi rún agus chun úsáide an té nó an aonán atá luaite leis, a sheoltar an ríomhphost seo agus aon comhad atá nasctha leis. Má bhfuair tú an ríomhphost seo trí earráid, déan teagmháil le bhainisteoir an chórais.

Appendix 1.4

An Bord Pleanála Order (Planning Decision and Conditions) May 2018

Board Order
04.PA0045

Planning and Development Acts, 2000 to 2017

Planning Authority: Cork County Council

Application for permission under section 37E of the Planning and Development Act 2000, as amended, in accordance with plans and particulars, including an environmental impact statement and a Natura impact statement, lodged with An Bord Pleanála on the 13th day of January, 2016 by Indaver Ireland Limited of 4th Floor, Block 1, West Pier Business Campus, Old Dunleary Road, Dun Laoghaire, County Dublin.

Proposed Development: A 10-year planning permission and a 30-year operational life from the completion of the construction of the proposed development, is sought for a Waste to Energy Facility (waste incinerator with energy recovery) for the treatment of non-hazardous and hazardous waste on a 13.55-hectare site at Ringaskiddy, County Cork.

In addition, the proposed development will include an upgrade to a section of the L2545 road, coastal protection measures on Gobby Beach, a connection to the national electricity distribution grid, the raising of ground levels in part of the site; and the provision of an amenity walkway along the eastern and part southern boundary of the site.

The proposed development (which includes 13,369 square metres of buildings) will consist of the following elements:

(i) Waste to Energy Facility consisting of:

- eight storey process building (including warehouse, workshop and administration area) up to 11,255 square metres total floor area, up to 45.7 metres maximum height above ground;
- stack, up to 70 metres high above ground;

- two storey administration building (including gate house) up to 998 square metres total floor area, up to 8.2 metres high above ground;
- single storey aero-condenser up to 482 square metres plan area, up to 16 metres high;
- single storey turbine hall up to 375 square metres floor area, up to 16 metres high;
- single storey pump house up to 157 square metres floor area, up to 6 metres high;
- firewater storage tank, 2,200 cubic metres volume, up to 11 metres high;
- single storey 38-kilovolt ESB substation and compound up to 102 square metres, up to 5 metres high;
- two number weigh-bridges, pipe racking, light fuel oil storage tank, packaged sewage treatment plant, ancillary site development works consisting of 57 number car parking spaces, underground surface water attenuation tank and firewater retention tank;
- aqueous ammonia storage tank and unloading area;
- site services;
- two number site entrances, and
- all landscaping, boundary fences and changes to site levels to facilitate the above.

(ii) Upgrade to L2545 road consisting of:
- raising of a 185-metre length of the road by a maximum height of up to 1 metre between Gobby Beach car park and the entrance to the National Maritime College of Ireland (NMCI), and
- upgrade of surface water drainage network in the L2545 road from the western end of the Indaver site to the eastern end of Gobby Beach car park.

(iii) Grid connection consisting of a 38-kilovolt underground connection to the adjacent ESB Networks Loughbeg substation located to the east of The Hammond Lane Metal Company Limited premises.

(iv) Increase in ground levels in western section of the site consisting of raising a 10,000 cubic metre area by a maximum height of up to 2.5 metres above ground level.

(v) Coastal protection measures on Gobby Beach consisting of the placement of 1100 cubic metres of shingle above the foreshore along the eastern boundary of the Indaver site to be repeated every two to five years.

(vi) Amenity walkway along the eastern and part southern boundary of the site.

The proposed development relates to development which comprises an activity requiring an Industrial Emissions Licence.

Decision

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

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

Matters Considered

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

Reasons and Considerations

Having regard to:

- the European policy framework for waste management in particular:
    - the Waste Framework Directive 2008/98/EC,
    - the Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions: “The role of waste-to-energy in the circular economy”(2017),

- National and Regional waste policy in particular:
    - A Resource Opportunity – Waste Management Policy in Ireland published by the Department of the Environment, Community and Local Government in July 2012,
    - the National Hazardous Waste Management Plan 2014-2020, and
    - the Southern Region Waste Management Plan 2015-2021,
- National and Regional spatial planning policy in particular:
    - the National Planning Framework, Project Ireland 2040, and
    - the South West Regional Planning Guidelines 2010-2022,
- the provisions of the Cork County Development Plan 2014-2020 including Objective 3-7 that enables the location of large scale waste treatment facilities, including waste to energy facilities in industrial areas designated as 'Strategic Employment Areas', which is the land use objective applying to Ringaskiddy in policy EE 4-1 of the development plan,
- the pattern of existing and permitted development in the area, including the proximity to existing large-scale industrial, transport and utility infrastructure,
- the planning history of the site,
- the fact that an Industrial Emissions licence from the Environmental Protection Agency, which will be subject to ongoing review, will be required for the activity and the operator will be required to comply with any conditions imposed in such a licence,
- the advice given by the Health and Safety Authority,
- the mitigation measures proposed to prevent and to minimise environmental impacts likely to arise from the proposed development,
- the written submissions made in respect of the planning application and the submissions made at the oral hearing, and
- the reports and recommendation of the Inspector, including the consultant report.

Environmental Impact Assessment:

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

- the nature, scale and location of the proposed development (including existing and permitted development and future land-use planning objectives for the area),
- the environmental impact statement and associated documentation submitted with the planning application, including the proposed environmental mitigation measures,
- the written submissions from the planning authority, the observers and the prescribed bodies in the course of the planning application, including the submission from the Environmental Protection Agency,
- the submissions made by the parties to the oral hearing,
- the Inspector's initial report and recommendation (January 2017), including the consultant report,
- the response by the applicant to the further information request issued by An Bord Pleanála in March 2017, and the subsequent written submissions from the parties, and
- the Inspector's Addendum Report (March 2018).

It is considered that the environmental impact statement, supported by the further documentation submitted by the applicant, identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. While the Inspector's initial report identified concerns relating to certain baseline information (with respect to modelling of dioxin uptake in humans) and air navigation safety, his Addendum Report (March 2018), completed following receipt of further information, expresses satisfaction with the information available on these topics.

In completing the environmental impact assessment, the Board accepted and adopted the report and conclusions of the Inspector with respect to flora and fauna, soil, water, climate and cultural heritage (in full) and in relation to air and material assets in part (see below).

The Board's assessment of environmental impacts diverged from those of the Inspector in a number of areas, as outlined below:

Alternatives: The consideration of alternatives (Chapter 3 of the environmental impact statement) sets out a comprehensive record of the project's origin and evolution. It documents site selection processes followed in 1999/2000, but then goes on to update the site selection to take into account changes in circumstances in the intervening period including:

- changes to the development plan,
- the guidance in relation to site selection included in the Southern Region Waste Management Plan 2015-2021 (the subject site is tested against the relevant criteria), and
- changes in physical and planning circumstances in the area.

The Board did not agree with the Inspector that the environmental impact statement analysis lacked robustness or is deficient in relation to site selection. The changes in the vicinity of the site (such as the education/research campuses, the investment in heritage/ tourism assets, and increase in cruise tourism) are considered in the environmental impact statement. Other changes in the area (such as the erection of tall wind turbines, the expansion of Port of Cork facilities, and proposed improvements to the N28 road) are also considered.

The Board was satisfied that the consideration of alternatives as set out in the environmental impact statement complied with the legal requirements of the EIA Directive (2011/92/EU) and the Planning and Development Regulations 2001 (as amended), had regard to relevant guidance, took into account environmental factors, and was robust. Therefore, notwithstanding that a 'de-novo' site selection exercise

was not carried out for the purpose of this planning application, the Board was satisfied that it could complete its environmental impact assessment and make an informed decision in relation to the site suitability.

Human Beings: Having considered the information listed above, the Board did not consider that the proposed development would impair residential property values or impair opportunities for employment creation. The Board did not consider that the proposed development would be incompatible with continued development of the adjacent educational/research campuses, taking into account the facility design, the modern technology proposed and strong regulatory regime applying. Furthermore, a comprehensive report dealing with risk of accidents is included in the environmental impact statement, and is considered satisfactory. The Board did not share the Inspector's concern that the proposed development could significantly impact on the population and on future economic and community investment.

Health/Air Quality: The Inspector did not consider that any significant risk is posed to human health by the proposed development. The Board shared this view. In reaching this conclusion, the Board drew in particular on the following aspects:

- the use of modern technology in the design and operation of the facility, including in relation to cleaning of flue gases, and
- the Industrial Emissions regulatory regime under which waste-to-energy plants must operate, whereby the Environmental Protection Agency will require compliance with relevant EU and national emission standards.

The environmental impact statement contains a modelling exercise to predict the theoretical maximum level of dioxin intake for a resident of the area, which relies on detailed baseline information on the level of dioxins in air and soil, as well as on air dispersion modelling. The applicant accepted that the environmental impact statement appendices (submitted with the planning application in January 2016) contained incorrect information, and submitted corrected information in response to the An Bord Pleanála further information request of March 2017. A peer review of the revised information was submitted. The revised information was subject to further detailed submissions from the observers and the applicant. In his Addendum

Report (March 2018) the Inspector is satisfied that the further information submitted by the applicant addressed his original concerns regarding the baseline information submitted and the modelling exercise carried out. The Board, having considered all of the available information, reached the same conclusion, and was satisfied that the further information supports the conclusions set out in the environmental impact statement document.

The environmental impact statement contains an assessment of accident risk, including risk of accidental fire, the content of which is considered satisfactory.

The environmental impact statement also contains a specialist report on Human Health that concludes there will be no deleterious effects on human health in the immediate vicinity or in the wider context. Taking into account all of the information available on this topic, the Board considered that this conclusion was well based.

Material Assets (Aviation – Helicopter Safety):

The Inspector's concerns with regard to the safety of helicopters using the nearby Haulbowline Naval Base formed the basis of a request for further information by An Bord Pleanála. The response from the applicant contained site-specific information on the likely characteristics of the plume emerging from the stack and expert consideration of the potential risks for the safety of any helicopters using the nearby Haulbowline Naval Base. Further submissions were also received and considered in relation to this matter. The applicant has confirmed that they can comply with the technical requirements of the Department of Defence. In his Addendum Report (March 2018) the Inspector is satisfied that the proposed waste to energy facility will not present an unacceptable risk to aircraft navigation or impair the operation of the naval base. The Board, having considered all of the available information, concluded that the Department's earlier concerns expressed at the oral hearing have been addressed and agreed with the conclusion of the Inspector.

Landscape: The Board considered that an impact on the landscape and on the visual amenities of the area would arise owing to the scale of the facility. Mitigation measures by means of facility design and landscaping are proposed. Taking into account the pattern of development in the area, the Board considered that the residual impacts would be acceptable.

Interactions: The Board considered that chapter 16 of the environmental impact statement provided a reasonable summary of the main environmental interactions occurring. Whereas the Inspector expresses concern regarding cumulative impacts in relation to health, land and property values and risk of accident, the Board did not share his concerns on each of these matters and did not consider the interaction of these impacts to be significant.

EIA conclusion:

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, by itself and cumulatively with other development in the vicinity, and, subject to the implementation of the mitigation measures proposed, the proposed development would not have unacceptable impacts on the environment.

Appropriate Assessment:

Screening Stage:

The Board completed an Appropriate Assessment Screening exercise in relation to the potential effects of the proposed development on European Sites, taking into account the nature, scale and location of the proposed development, the Appropriate Assessment Screening submitted with the planning application and the Inspector's report and submissions on file. The Board agreed with the screening assessment and conclusion carried out in the Inspector's report that the Cork Harbour Special Protection Area (site code: 004030) is the only European Site for which the likelihood

of significant effects cannot be ruled out, and that this was the only site requiring a Stage 2 Appropriate Assessment.

Stage 2 Assessment:

The Board considered the Natura impact statement and all other relevant submissions and carried out an appropriate assessment of the implications of the proposed development for the Cork Harbour Special Protection Area (site code: 004030) in view of the site's conservation objectives. The Board considered that the information before it was adequate to allow the carrying out of an Appropriate Assessment.

In completing the assessment, the Board considered, in particular, the likely direct and indirect impacts arising from the proposed development both individually and in combination with other plans or projects, the mitigation measures which are included as part of the current proposal and the conservation objectives for the Cork Harbour SPA (site code: 004030). In completing the Appropriate Assessment, the Board accepted and adopted the Appropriate Assessment carried out in the Inspector's report of the potential effects of the proposed development on the aforementioned European Site, having regard to the site's conservation objectives. In overall conclusion, the Board was satisfied that the proposed development would not adversely affect the integrity of the Cork Harbour SPA (site code: 004030) in view of its conservation objectives.

In reaching this conclusion, the Board noted that the Inspector (in his Addendum Report of March 2018) is satisfied that the submissions received on foot of the Board's further information request (March 2017) do not alter his overall appraisal in respect of Appropriate Assessment. Having considered the further information submissions and reviewed the Natura impact statement and the Inspector's reports, the Board agreed with this position.

Conclusions on Proper Planning and Sustainable Development:

It is considered that, subject to compliance with the conditions set out below, the proposed development:

- would be consistent with European, National, and regional waste management policy, including in particular:
    - the Southern Regional Waste Management Plan 2015-2021 which supports the principles of proximity and self-sufficiency and the development of additional thermal capacity for the treatment of non-hazardous municipal waste, over the period of the plan, and
    - the National Hazardous Waste Management Plan 2014-2020, in so far as a certain amount of hazardous waste would also be accepted for energy recovery treatment,
- would be strategically located in the national context to serve Cork and the South West Region and would provide an infrastructural asset to the region as it grows in accordance with the policies of the *National Planning Framework Project Ireland 2040*,
- would be consistent with the policies and objectives of the Cork County Development Plan 2014-2020, and with the industrial land use zoning for the area in the Ballincollig Carrigaline Local Area Plan 2017,
- would be compatible with the pattern of existing development in this area of Cork Harbour, which includes large-scale industrial plants and utilities and other strategic facilities including the nearby Port of Cork container terminal facility,
- would be compatible with the continued development of the marine-related research and development/employment campuses in the vicinity of the site,
- would be compatible with the continued development of heritage and tourism assets in the harbour,
- would not have unacceptable impacts on existing traffic patterns on the nearby N28 route or on other roads in the area,

- would not be prejudicial to public health,
- would not be at risk from localised flooding or from coastal erosion patterns,
- would not have unacceptable impacts on visual amenities or on architectural and cultural heritage assets of the area, and
- would not otherwise seriously injure the amenities of the area or of property in the vicinity.

The Board concluded that the proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

In deciding not to accept the Inspector's recommendation to refuse permission, the Board's considerations were as follows:

Recommended refusal reason no. 1 (Compatibility with emerging campus developments and heritage developments)
The Board noted the existing education/research facilities that have been developed adjacent to the site and the further proposals to expand such employment uses. The recent revisions to the Ballincollig Carrigaline Local Area Plan (August 2017) – whereby part of the subject site was identified as suitable for extension of such land uses – was also noted. There has also been public investment in public amenities and heritage/tourism assets on Spike Island and Haulbowline, and further initiatives are proposed. Nevertheless, the Cork County Development Plan 2014-2020 enables the location of large scale waste treatment facilities, including waste to energy facilities in industrial areas designated as 'Strategic Employment Areas', which is the overarching land use objective applying to Ringaskiddy in the Development Plan. The site is also close to the expanding Port of Cork facilities and to various industrial (pharmaceutical/chemical) plants and large scale utilities. The Board was, therefore, cognisant of competing objectives in relation to the future development of the area.

Waste to energy plants operate successfully in a range of urban environments and such facilities, when well designed, operated and regulated, do not unduly constrain

neighbouring land uses. The Board considered that the development of a modern waste-to-energy facility would be compatible with continued development of the educational campus facilities in the area and with the ongoing improvement of tourism and amenities in the lower harbour. The Board concluded that the proposed facility would integrate successfully with the multi-faceted nature of existing and proposed development in the area, and would not be contrary to the development plan policies for the area or undermine the achievement of any of its objectives.

Recommended refusal reason no.2 (Evaluation of Alternatives)
Refer to Environmental Impact Assessment above under 'Alternatives'

Recommended refusal reason no.3 (Adequacy of EIS – dioxins/health)
Refer to Environmental Impact Assessment above under 'Health/Air Quality'

Recommended refusal reason no.4 (Overdevelopment of the Site)

The issue of overdevelopment was included as part of the previous refusal reason for an earlier unsuccessful application for a waste to energy facility on this site (An Bord Pleanála reference number 04.PA0010). The Board examined this issue, taking into account in particular:

- the constraints of the site and its topography,
- the scope, size and configuration of the proposed facility, including when compared with previous planning applications on the site,
- the site analysis of vehicular movements submitted to the oral hearing at the request of the Inspector,
- the detailed information provided in relation to site landscaping, and
- the visual impact assessment and photomontages provided.

The Board considered that the design had responded adequately to the site constraints, that there was adequate room on the site to accommodate buildings, circulation areas, and landscaping buffers, and that traffic management arrangements, combined with the design of the vehicular access, would avoid any external queuing of vehicles on the public road. There is no information to suggest that facility operations would be impaired by the site size. The proposed landscaping combined with high quality external finishes of the buildings will mitigate the visual impact on the immediate vicinity of the site adequately. It was not considered,

therefore, that there would be any serious injury to the amenities of the area, or that overdevelopment would occur.

Recommended refusal reason no.5 (Aviation – Helicopter Safety)
Refer to Environmental Impact Assessment above under 'Aviation – Helicopter Safety'

CONDITIONS

1. The proposed development shall be carried out and completed in accordance with the plans and particulars lodged with the planning application, including the submissions made at the oral hearing and the further information response received on the 15th day of May, 2017, except as may otherwise be required in order to comply with the following conditions. Where such conditions require details to be agreed with the planning authority, the developer shall agree such details in writing with the planning authority prior to commencement of development (and they shall be made available for public inspection at the offices of the planning authority), or, in default of agreement, shall be referred to An Bord Pleanála for determination, and the proposed development shall be carried out and completed in accordance with the agreed particulars.

   Reason: In the interest of clarity.

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

   Reason: In the interest of clarity.

3. Construction of the proposed development shall not commence until such time as an Industrial Emissions licence for the operation of the facility has been granted by the Environmental Protection Agency.

   Reason: In the interest of orderly development.

4. This permission shall be for an operational period of 30 years from the date of the first commissioning of the waste to energy facility.

Reason: In the interest of clarity, and to allow a review of the appropriateness of the continued operation of the facility in the light of the circumstances then prevailing.

5. (a) The quantity of waste to be accepted at the facility shall not exceed 240,000 tonnes per annum in any calendar year.

(b) As a subset of the above, the quantity of hazardous waste to be accepted at the facility shall not exceed 24,000 tonnes per annum in any calendar year.

Reason: To clarify the scope of this permission.

6. All environmental mitigation measures outlined in the environmental impact statement and the Natura impact statement, as amended by the additional information submitted at the oral hearing, shall be implemented in full.

Reason: In the interest of environmental protection.

7. The construction of the proposed development shall be managed in accordance with a Construction Management Plan, which shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. This plan shall provide details of intended construction practice for the development, including:

(a) Location of the site and materials compound(s).
(b) Location of areas for construction site offices and staff facilities.
(c) Details of site security fencing and hoardings.
(d) Details of on-site car parking facilities for site workers during the course of construction.

(e) Details of the timing and routing of construction traffic to and from the construction site and associated directional signage, to include proposals to facilitate the delivery of abnormal loads to the site.

(f) Measures to obviate queuing of construction traffic on the adjoining road network.

(g) Measures to prevent the spillage or deposit of clay, rubble or other debris on the public road network.

(h) Proposals for the suppression of on-site noise.

(i) Proposals for the suppression of dust on site.

(j) Proposals for the suppression of vibration.

(k) Proposals to minimise light pollution during construction.

(l) Containment of all construction-related fuel and oil within specially constructed bunds to ensure that fuel spillages are fully contained. Such bunds shall be roofed to exclude rainwater.

(m) Management of construction/demolition waste, including area(s) identified for the segregation and storage of construction refuse and details of how it is proposed to manage excavated soil.

The plan shall include a comprehensive monitoring plan to include inter alia noise, vibration, dust, surface water and groundwater, with regular reporting to the planning authority.

A record of daily checks that the works are being undertaken in accordance with the Construction Management Plan shall be kept for inspection by the planning authority.

Reason: In order to protect the environment and local amenities during construction.

8. Details of the operation of the proposed “HGV Mobility Management Plan” (and also the operational “Mobility Management Plan” for staff) shall be agreed in writing with the planning authority at least six months prior to the coming into

operation of the proposed development. The agreement shall include details in relation to:

(a) Management system to be employed.
(b) Monitoring arrangements to be employed.
(c) Reporting arrangements (including making information available to the public).
(d) Review arrangements, whereby the agreement can be revised periodically.

All costs associated with implementing the agreement shall be borne by the developer.

Reason: To minimise impacts of the proposed development on the road network, in particular at peak times.

9. Details of the materials, colours and textures of all the external finishes to the proposed facility – including associated administration office and ancillary structures (tanks, substations etc.) – shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development.

Reason: In the interest of visual amenity.

10. Aviation warning lights shall be provided on the proposed emission stack in accordance with details to be agreed with the planning authority following consultation with the Irish Aviation Authority. The developer shall inform the planning authority, the Irish Aviation Authority and the Department of Defence of the as-constructed heights and co-ordinates of the proposed facility including the stack.

Reason: In the interest of aviation safety.

11. Prior to commencement of development, construction stage details in relation to the proposed road improvement measures to the L2545 adjacent to the site

(to include the site entrance and any tie-in with future proposed road improvement schemes) shall be submitted to and agreed in writing with the planning authority. This work shall be completed prior to the main construction phase.

Reason: In the interest of orderly development and road safety.

12. Prior to commencement of development, construction stage details in relation to the implementation of the proposed coastal erosion protection measures at Gobby Strand shall be submitted to and agreed in writing with the planning authority. This shall include:

(a) Management of operations during placing of material.
(b) Monitoring arrangements, including triggers for any necessary replenishment.
(c) Reporting arrangements.
(d) Review arrangements, whereby the agreement can be revised periodically.

Reason: In the interest of orderly development and of coastal erosion protection.

13. Prior to commencement of development, construction stage details in relation to the proposed amenity pathway from Gobby Strand towards the Martello Tower – including materials, fencing, street furniture and signage – shall be submitted to and agreed in writing with the planning authority.

Reason: In the interest of orderly development and public amenity.

14. Landscaping shall be carried out generally in accordance with the proposals set out in the environmental impact statement and accompanying drawings by

Brady Shipman Martin consultants received by An Bord Pleanála on the 13th day of January 2016. In this regard, a comprehensive boundary treatment and landscaping scheme shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

Reason: In the interest of visual amenity.

15. A scheme containing details in relation to the signage of the facility, including in relation to wayfinding signage on the public road, shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

Reason: In the interest of visual amenity.

16. Water supply and drainage arrangements, including the attenuation and disposal of surface water, shall comply with the requirements of the planning authority for such works and services.

Reason: In the interest of public health.

17. The developer shall facilitate the preservation, recording and protection of archaeological materials or features that may exist within the site. In this regard, the developer shall –

(a) notify the planning authority in writing at least four weeks prior to the commencement of any site operations (including hydrological and geotechnical investigations) relating to the proposed development,

(b) employ a suitably-qualified archaeologist who shall monitor all site investigations and other excavation works, and

(c) provide arrangements, acceptable to the planning authority for the recording and for the removal of any archaeological material which the planning authority considers appropriate to remove.

In addition, the developer shall provide monitoring of vibrations at the nearby Martello Tower to ensure that there is no damage during the construction stage. Details in this regard shall be submitted to and agreed in writing with the planning authority prior to commencement of development.

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

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

18. A Community Liaison Committee shall be established to liaise between the developer, the planning authority and the local community. The committee shall comprise seven members having an independent chairperson, two local community representatives, two elected members of the planning authority, one official of the planning authority and one representative from the developer. The community liaison committee shall:

(a) act as a liaison committee with the local community in relation to ongoing monitoring of the construction and operation of the facility, and

(b) have responsibility for the distribution of the community gain fund account to be set up in accordance with condition number 19 of this order and for decisions on projects to be supported by the fund.

Reason: To provide for appropriate on-going review of construction and operation of the facility in conjunction with the local community and to provide

for the allocation of resources from the community gain fund in accordance with the requirements of the local community.

19. A community gain fund shall be established to support facilities and services which would be of benefit to the community in the general catchment area. This fund shall include an annual contribution of €1 per tonne of waste accepted at the Waste to Energy facility, which shall be lodged in a special community fund account. Details of the management and operation of the community gain fund shall be submitted to, and agreed in writing with, the planning authority prior to commencement of development. In default of agreement, the details shall be determined by An Bord Pleanála.

Reason: It is considered reasonable that the operators of the waste to energy facility should contribute towards the cost of environmental, recreational or community facilities which will be of benefit to the community in the area.

20. The developer shall commission an independent Feasibility Study in relation to the possibilities for the recovery of excess heat energy from the proposed facility. The terms of reference of the study shall be agreed with the planning authority, and the report shall be completed and submitted to the planning authority within 18 months of the date of this order, and made publicly available.

Reason: In the interest of sustainable energy management, and to inform future land-use and development planning in the area.

21. Prior to commencement of development, the developer shall submit to the planning authority for written agreement detailed plans and proposals for the restoration and reinstatement of the entire site following de-commissioning of the plant. The restoration works shall be completed within two years of the closure of the plant.

Reason: To ensure satisfactory restoration of the site in the interest of the amenities of the area and proper planning and control.

22. Prior to commencement of development, the developer shall lodge with the planning authority a bond of an insurance company, a cash deposit, or other security to guarantee the satisfactory completion of tree and shrub planting and all other landscaping proposals for the site as required by condition number 14. The sum lodged pursuant to this condition shall be refunded only when it is certified by the planning authority that the planting and landscaping has been completed to the planning authority's satisfaction. The security to be lodged shall be as follows:

an approved insurance company bond in the sum of €50,000 (fifty thousand euro), or

a cash sum of €50,000 (fifty thousand euro) to be applied by the planning authority at its absolute discretion if such landscaping proposals are not provided to its satisfaction, or

such other security as may be accepted in writing by the planning authority.

Reason: To ensure a satisfactory standard of landscaping is promptly completed.

23. Prior to commencement of development, the developer shall lodge with the planning authority a cash deposit, a bond of an insurance company, or other security to secure the restoration and reinstatement of the entire site following de-commissioning of the plant, coupled with an agreement empowering the planning authority to apply such security or part thereof to the satisfactory restoration and reinstatement of the entire site. The form and amount of the security shall be as agreed between the planning authority and the developer or, in default of agreement, shall be referred to An Bord Pleanála for determination.

Reason: To ensure the satisfactory restoration of the site.

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

in default of such agreement, the matter shall be referred to An Bord Pleanála to determine the proper application of the terms of the Scheme.

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

Schedule of Costs

In accordance with the provisions of section 37H(2)(c) of the Planning and Development Act 2000, as amended, the Board also determined the costs to be paid in relation to the case, in accordance with the summary form on the costs file, as follows:

Name	**Amount €**	**Reasons and Considerations**
An Bord Pleanála.	111,749	In accordance with schedule of costs.
Cork County Council	43,519	The costs claimed by the planning authority are considered reasonable and proportionate.
CHASE	15,000	See below
An Taisce	Nil	See below

Reasons and Considerations (Costs)

In relation to the claim for costs made by An Taisce, having regard to the submissions the observer made on the case, the detailed and reasoned reports of the Board's inspector, and the Board's decision in the case, it is considered that the

Strategic Infrastructure Development application process has enabled full participation by the observer in the case both in writing and at the oral hearing and there are no particular circumstances arising that would justify the developer having to make a contribution towards the costs of the observer in this case.

In relation to CHASE, the same considerations as set out for An Taisce above are considered to apply in relation to the claim by CHASE in general. However, this group did identify deficiencies in the applicant's submitted documentation and this led to the Board issuing a further information request to the applicant, which was necessary in order to address the concerns raised. This technical input by CHASE served to inform the Board's assessment of the case. In view of this, the Board considered that a payment by the applicant of €15,000 towards the costs of this observer would be reasonable in the circumstances.

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

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

Dated this day of 2018

Appendix 1.5

EIA Legislation Compliance Matrix

Article 5 of the EIA Directive sets out what must be included in the Environmental Impact Assessment Report (EIAR) and how to ensure that it is both of a sufficient high quality and complete. Article 5(1) sets out what Developers must include as a minimum in the EIAR. Annex IV, referenced in Article 5(1)(f) expands on these requirements. Article 5(3)(a) sets out the requirements for a developer to ensure that the EIAR is prepared by competent experts. Refer to table below for further details.

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
Article 5 (1) **Where an environmental impact assessment is required, the developer shall prepare and submit an environmental impact assessment report. The information to be provided by the developer shall include at least:**					
	1 (a) a description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development.	Part 5, Section 63 – new Covered under Article 94 (a) and Schedule 6, Paragraph 1(a)	Part A of the EC Guidance provides an overview of the legislative requirements for the preparation of the EIA Report, while Part B provides practical guidance on the preparation of the EIA Report. Part C of the guidance provides an EIA Report checklist. Part B, Section 1 provides guidance on the EIA Reports content requirements, including in Section 1.1 guidance on the project description.	Section 3.5 of the Draft Guidelines addresses how the proposed project should be described. In particular, Section 3.5.8 indicates the level of detail to be included in the project description	Chapters 4 (Project Description) and 5 (Construction Activities) of the EIAR provide a description of the proposed development comprising information on the site, design, size and other relevant features of the proposed development. Refer also to the figures referenced in these chapters and the drawings included in the 2016 planning application package which are included in this EIAR. Section 4.2 of the EIAR describes the site and surrounds, including other industries in the immediate and wider area. Sections 4.3 to 4.20 provide information on the proposed development in terms of design, land use requirements, size, site layout, operations, processes, individual structures, drainage, services, L2545 road upgrade works, coastal protection measures, diversion of services, regulatory control, BAT and other relevant features. The operations and processes associated with the proposed development are described in detail in Sections 4.6 to 4.14 including operating hours, waste-to-energy processes, waste handling, energy recovery, flue gas treatment, control systems and process inputs. Chapter 5 (Construction Activities) of the EIAR provides significant detail of the proposed development during the construction phase with regard to the approach to construction, indicative duration and phasing, land use requirements, enabling works including earthworks, indicative construction methods, traffic and site management (including materials requirements) and environmental management. A Construction Environmental Management Plan (CEMP) is provided in Appendix 5.1 of the EIAR, the purpose of which is to provide a mechanism by which environmental protection is to be achieved during the construction phase of the proposed development in order to ensure any

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
					disruption and nuisance is kept to a minimum. The CEMP identifies the minimum requirements with regard to the appropriate mitigation, monitoring, inspection and reporting mechanisms that need to be implemented during construction phase.
	1 (b) a description of the likely significant effects on the environment of the proposed development.	Covered under Part 5, Section 63 – new Article 94 (a) and new Schedule 6, Paragraph 1(b)	Part B, Section 1.4 of the EC Guidance provides guidance on assessing effects on the environment.	Section 3.7 of the Draft Guidelines sets out the guidelines with regard to the impact assessment, including in particular Section 3.7.3 which sets out best practice with regard to the description of effects, Section 3.7.4 on the assessment criteria and Section 3.7.5 on assessment methods. Section 3.9 provides guidance on residual impacts and conclusions.	A description of the likely significant effects on the environment of the proposed development is provided in each of the specialist assessment chapters (Chapters 6-16) of the EIAR. Each specialist assessment chapter identifies, describes and assesses the likely significant effects of the proposed development on the particular environmental factor. These likely significant effects are considered in relation to: • Construction phase • Operation phase • Cumulative effects Each specialist chapter (Ch 6 - 16) provides information on the 'do-nothing' scenario (i.e. outline of what is likely to happen in the environment should the proposed development not be implemented). A summary of the 'do-nothing' scenarios is given in Chapter 17 Cumulative, Other Effects and Interactions. Each chapter provides information on the likely residual effects of the proposed development (on the particular environmental factor), with the implementation of mitigation and monitoring measures. The overall cumulative and interactive effects of the proposed development are considered in Chapter 17 Cumulative, Other Effects and Interactions of the EIAR.
	1 (c) a description of the features, if any, of the proposed development and the measures, if any, envisaged to avoid, prevent or reduce, and if possible, offset likely significant adverse effects on the environment of the development.	Covered under Part 5, Section 63 – new Article 94 (a) and new Schedule 6, Paragraph 1(c)	Part B, Section 1.1 of the EC Guidance provides guidance on the description of the development, while Section 1.6 addresses mitigation and compensation measures.	Section 3.5 of the Draft Guidance provides recommendations on the description of the project. Section 3.8 of the Draft Guidelines highlights how mitigation and monitoring should be addressed in an EIAR.	Chapters 4 (Project Description) and 5 (Construction Activities) of the EIAR provide a description of the embedded design features/ proposed construction methodology which will avoid, prevent or reduce and if possible, offset likely significant adverse effects on the environment of the development. For example, Section 4.7.4 describes the process control of Nitrogen Oxides (NOx) which forms an integral part of the design whilst

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
					Section 4.11 describes the proposed emissions monitoring of flue gases and dioxin emissions. Further, chapters (Ch 6-16), as detailed above, include a description of the main features of the proposed development with regard to the specialist environmental aspect, as well as a description of the mitigation measures, if any, set out to avoid, prevent or reduce, and if possible, offset likely significant adverse effects on the environment of the development. Each of the specialist assessment measures details the mitigation and monitoring measures proposed to offset likely significant adverse effects. Residual effects are also detailed within these chapters. Chapter 18 Summary of Effects, Mitigation and Monitoring Measures, summaries these mitigation and monitoring measures for each environmental aspect and presents the residual effects.
	1 (d) a description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment.	Covered under Part 5, Section 63 – new Article 94 (a) and new Schedule 6, Paragraph 1(d)	Part B, Section 1.5 of the EC Guidance provides recommendations on the mandatory assessment of alternatives.	Section 3.4 of the Draft Guidelines sets out the recommended approach to the consideration of alternatives in the EIAR, including the 'do nothing' alternative, alternative locations, layouts, designs, processes, mitigation measures and the need for consultation on the alternatives consideration.	A description of the reasonable alternatives studied by the person or persons who prepared the EIAR, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the proposed development on the environment is provided in in Chapter 3 of the EIAR.
	1 (e) a non-technical summary of the information referred to in points (a) to (d); and	Covered under Part 5, Section 63 – new Article 94 (c)	Section 2 of the EC Guidance addresses the Quality of the EIA Report, including the format and presentation of the non-technical summary in Section 2.1.2. Box 41 under Section 2.1.2 includes the qualities of a good non-technical summary.	Section 4 of the Draft Guidelines sets out best practice in presenting information in an EIAR, with Section 4.6 dealing with the preparation of the non-technical summary.	A non-technical summary has been prepared which summarises the information referred to in points (a) to (d) of Article 5(1), in non-technical language. The non-technical summary is presented as Volume 1 of the EIAR.
	(f) any additional information specified in Annex IV relevant to the specific characteristics of a particular	Covered under Part 5, Section 63 – new Article 94 (b). Paragraph 2 of new	See below	See below	See below.

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
	project or type of project and to the environmental features likely to be affected.	Schedule 6 specifies the information required under Article 94(b).			
Annex IV (Information referred to in Article 5(1) – Information for the Environmental Impact Assessment Report					
	(1) Description of the project, including in particular: (a) A description of the location of the project	Covered under 2(a)(i) of Article 94, Schedule 6	Part B, Section 1.1 of the EC Guidance provides recommendations on the project description.	Section 3.5 of the Draft Guidelines provides best practice recommendations with regard to the description of the proposed project. In particular, Section 3.5.8 provides recommendations with regard to the level of detail to be provided in the project description.	Chapters 4 (Project Description) and 5 (Construction Activities) of the EIAR provide a description of the proposed development. The location of the construction phase of proposed development will take place in the same location as the proposed development during operational phase. Section 4.2 of Chapter 4 Description of the Proposed Development, describes the site location, immediate vicinity and the wider Ringaskiddy area. The description of the site includes a number of figures that give aerial imagery and drone photograph of the areas described where available (Figures 4.1-4.6 of Volume III of the EIAR). Refer also to the figures referenced in these chapters and the drawings included in the 2016 planning application package.
	(1) Description of the project, including in particular: (b) A description of the physical characteristics of the whole project, including where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases.	Covered under 2(a)(ii) of Article 94, Schedule 6	Part B, Section 1.1 of the EC Guidance provides recommendations on the project description. Section 1.2 provides guidance on the baseline scenario.	Section 3.5 of the Draft Guidelines provides best practice recommendations with regard to the description of the proposed project. In particular, Section 3.5.2 provides recommendations with regard to the characteristics of the project, with Section 3.5.3 providing recommendations with regard to the description of the construction works.	Chapters 4 (Project Description) and 5 (Construction Activities) of the EIAR provide a description of the physical characteristics of the whole project, including where relevant, requisite demolition works, and the land-use requirements during the construction and operational phases. Refer also to the figures referenced in these chapters and the drawings included in the 2016 planning application package which are included in this EIAR. Section 4.5 describes in detail each aspect of the as-built proposed development including the layout of the proposed facility (main process building, turbine hall, administration building), storage areas, site infrastructure (electricity substation, lighting, drainage), emergency access and overall land use of the site. The ancillary works are also described including the public amenity footpath, L2545 road upgrade, increase in ground levels, coastal protection measures and diversion of services. Refer also to Sections 4.3 to 4.20. Demolition works are not proposed as noted in Section 4.5.18. Decommissioning is described in Section 4.18.

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
					Chapter 5 Construction Activities, provides significant detail with regard to the approach to construction, indicative duration and phasing, land use requirements, enabling works, traffic and site management (including materials and services required) and environmental management. A Construction Environmental Management Plan (CEMP) is included in Appendix 5.1 of the EIAR, the purpose of which is to provide a mechanism by which environmental protection is to be achieved during the construction phase of the proposed development in order to ensure any disruption and nuisance is kept to a minimum. The CEMP identifies the minimum requirements with regard to the appropriate mitigation, monitoring, inspection and reporting mechanisms that need to be implemented during construction phase.
	(1) Description of the project, including in particular: (c) A description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of materials and natural resources (including water, land, soil and biodiversity used).	Covered under 2(a)(iii) of Article 94, Schedule 6	Part B, Section 1.1 of the EC Guidance provides recommendations on the project description.	Section 3.5 of the Draft Guidelines provides best practice recommendations with regard to the description of the proposed project. In particular, Section 3.5.2 provides recommendations with regard to the characteristics of the project, with Sections 3.5.4 and 3.5.5 providing recommendations with regard to the description of the commissioning and the operation of the project.	Chapters 4 Description of the Proposed Development, 12 (Biodiversity), 13 (Soils, Geology, Hydrogeology, Hydrology and Coastal Recession) and Chapter 15 (Material Assets of the EIAR provide a description of the main characteristics of the operational phase of the project (in particular any production process), for instance, energy demand and energy used, nature and quantity of materials and natural resources (including water, land, soil and biodiversity used) as follows: Section 4.6 describes the general operations of the proposed development including operating hours and annual maintenance schedule, site management is described in Section 4.16. The main waste-to-energy production processes of the proposed development are described in detail in Section 4.7 (waste acceptance, waste handling, furnace and controls). Chapter 4 also describes the operation of the proposed development in terms of energy demand and energy usage (Section 4.8), the nature and quantity of materials used in the process (Section 4.9 and 4.12), the natural resources required (Section 4.13 and Section 4.15) in terms water, power and energy efficiency (Section 4.13.7). Process outputs are also described (Section 4.13) in terms of waste, electricity and heat. Secondary processes such as the back-up systems (Section

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
					4.14.1) and drainage (including storm and fire water) are described in Section 4.14.3. Decommissioning is described in Section 4.18. Health & Safety (Section 4.17). The regulatory controls on the operations under the Industrial Emissions Licence (Section 4.19) and the best available technologies (BAT) that will be employed at the proposed development are outlined (Section 4.20). Chapter 11 (Landscape & Visual), Chapter 12 (Biodiversity), Chapter 13 (Soils, Geology, Hydrogeology, Hydrology and Coastal Recession) and Chapter 15 (Material Assets) provide further detail on the nature and quantity of materials and natural resources (water, land, soil and biodiversity) during the operational phase of the proposed development.
	(1) Description of the project, including in particular: (d) An estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operational phases.	Paragraph 2 of Schedule 6 Covered under 2(a)(iv) of Article 94, Schedule 6	Part B, Section 1.1 of the EC Guidance provides recommendations on the project description. Section 1.2 provides guidance on the baseline scenario. Section 1.3 provides recommendations on the environmental factors to be considered.	As detailed above, Section 3.5 of the Draft Guidelines provides best practice recommendations with regard to the description of the proposed project. Section 3.6 and 3.7 of the Draft Guidelines provide the relevant recommendations with regard to the description of the baseline and impact assessment. Section 3.9 provides guidance on residual impacts and conclusions.	There are a number of chapters in the EIAR which provide a description of an estimate, by type and quantity, of expected residues and emissions (such as water, air, soil and subsoil pollution, noise, vibration, light, heat, radiation) and quantities and types of waste produced during the construction and operational phases as follows: Chapter 4 describes in detail the operation of the proposed development as a waste-to-energy facility. In particular, waste generated as process outputs (solid waste residues, bottom ash, boiler ash and flue gas cleaning residues) are described in Section 4.13. Section 4.17.1 describes how the site will be protected from ionising radiation materials accidentally mixed with the incoming municipal waste stream. Section 4.15 describes the water emissions with regards to the management of storm and sanitary (foul) water management on site as well as fire water management. Section 4.8.1 describes how heat generated during the operation of the proposed development will be recovered and used for energy generation. Chapter 5 Construction Activities, describes the types of residues generated during the construction phase in terms of excavated materials (Section 5.5) and storm and foul water (Section 5.6.3). Chapter 11 Landscape and Visual, assesses the likely significant effects of lighting during the construction (Section 11.4.1) and operation (Section 11.5.2) of the proposed development.

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					Further detail on expected residues and emissions are provided in the individual specialist chapters of the EIAR, including Chapter 8 (Air Quality), Chapter 9 (Climate), Chapter 10 (Noise and Vibration), Chapter 13 (Soils, Geology, Hydrology, Hydrogeology and Coastal Recession) and Chapter 15 (Material Assets). A Construction and Environmental Management Plan (CEMP) is also included in Appendix 5.1 of the EIAR. The outline CEMP identifies the minimum requirements with regard to the appropriate mitigation, monitoring, inspection and reporting mechanisms that need to be implemented during construction.
	2. A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects.	Covered under 2(b) of Article 94, Schedule 6	Part B, Section 1.5 of the EC Guidance provides recommendations with regard to the mandatory assessment of alternatives.	Section 3.4 of the Draft Guidelines sets out the recommended approach to the consideration of alternatives in the EIAR, including the 'do nothing' alternative, alternative locations, layouts, designs, processes, mitigation measures and the need for consultation on the alternatives consideration.	A description of the reasonable alternatives (for example in terms of project design, technology, location, size and scale) studied by the developer, which are relevant to the proposed project and its specific characteristics, and an indication of the main reasons for selecting the chosen option, including a comparison of the environmental effects is provided in Chapter 3 in Chapter 3 of the EIAR. A detailed description of the reasonable alternatives considered for the proposed development is provided in Chapter 3 Alternatives.
	3. A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge.	Covered under 2(c) of Article 94, Schedule 6	Part B, Section 1.2 of the EC Guidance, provides recommendations with regard to the baseline scenario in an EIAR.	Section 3.6 of the Draft Guidelines sets out recommendations for describing the baseline, including methodology, grouping of information, range and level of detail.	A description of the relevant aspects of the current state of the environment (baseline scenario) and an outline thereof without implementation of the project as far as natural changes from the baseline scenario can be assessed with reasonable effort on the basis of the availability of environmental information and scientific knowledge is provided in a number of chapters of the EIAR. Each specialist assessment chapter (Ch 6 – 16) includes a detailed description of the baseline conditions with regard to the specific environmental aspect based on the best available environmental information and scientific knowledge. Each of these specialist assessments also includes an outline of the potential changes from the baseline scenario without the implementation of the project – in the assessment of the 'do-nothing' scenario and for example, in the description of future year traffic growth rates during construction (Section 7.7.1 of the

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					EIAR, Chapter 7 Traffic and Transport) and operation (Section 7.7.13). A summary of the "do-nothing scenario" for all of the specialist assessments is provided in Chapter 17 of the EIAR Section 2.5 of Chapter 2 Planning Policy and Need for the Scheme, describes the current state of the environment in terms of waste management planning policy at a local, regional and national level and the current treatment options for hazardous and non-hazardous waste in Ireland.
	4. A description of the factors specified in Article 3(1)[1] likely to be significantly affected by the project; population, human health, biodiversity (for example fauna and flora), land (for example land take), soil (for example organic matter, erosion, compaction, sealing), water (for example hydromorphological changes, quantity and quality), air, climate (for example greenhouse gas emissions, impacts relative to adaption), material assets, cultural heritage, including architectural and archaeological aspects, and landscape.	Covered under 2(d) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.3 of the EC Guidance provides recommendations with regard to the environmental factors to be considered in the EIAR.	Section 3.6 of the Draft Guidelines sets out recommendations for describing the baseline, including methodology, grouping of information, range and level of detail.	The EIAR contains the following specialist assessments which provide details on the factors specified in Article 3(1) likely to be significantly affected by the project in compliance with the legislation and best practice guidance: (a) Population & Human Health: addressed in Chapter 6 – Population and Human Health and cross referenced in other chapters relating to public health such as air, noise, water, soil (see below.) (b) Biodiversity: addressed in Chapter 12 - Biodiversity (c) Land, soil, water, air and climate: addressed as follows: • Land: Chapter 11 – Landscape and Visual and Chapter 15 – Material Assets • Soil and Water: addressed in Chapter 13 – Soils, Geology, Hydrology, Hydrogeology and Coastal Recession • Air: addressed in Chapter 8 – Air Quality • Climate: addressed in Chapter 9 – Climate. Also addressed in the design of the proposed development in terms of flood risk (Refer to Chapter 4 and 13) (d) Material assets, cultural heritage and the landscape: • Material Assets: addressed in Chapter 15 – Material Assets • Cultural heritage: addressed in Chapter 14 – Archaeology, Architectural and Cultural Heritage • The landscape: addressed in Chapter 11 – Landscape and Visual

[1] Article 3:(1)."The environmental impact assessment shall identify, describe and assess in an appropriate manner, in the light of each individual case, the direct and indirect significant effects of a project on the following factors: (a) population and human health; (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC; (c) land, soil, water, air and climate; (d) material assets, cultural heritage and the landscape; (e) the interaction between the factors referred to in points (a) to (d)".
Article 3 (2). "he effects referred to in paragraph 1 on the factors set out therein shall include the expected effects deriving from the vulnerability of the project to risks of major accidents and/or disasters that are relevant to the project concerned"

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					(e) Chapters 7 – Roads and Traffic, Chapter 10 – Noise and Vibration and Chapter 16 – Major Accidents and Disasters are also relevant in terms of providing information on the factors likely to be significantly affected by the project Further, a detailed description of the baseline environment for each of the environmental factors is provided in each of these assessments of each chapter.
	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (a) The construction and existence of the project, including where relevant, demolition works;	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.1 of the EC Guidance provides recommendation on the project description. Section 1.4 provides recommendations on assessing effects on the environment.	Section 3.5 of the Draft Guidelines provides recommendations with regard to the description of the project, including Section 3.5.3 which provides guidance on the description of Construction. Section 3.3 provides guidance on the scoping of the assessments. Section 3.7 includes recommendations on the impact assessment, including in particular, Section 3.7.3 which addresses the descriptions of effects. Section 3.9 provides guidance on residual impacts and conclusions.	Chapter 5 Construction Activities, includes a detailed description of the construction of the proposed development, including details on the approach to construction, indicative duration and phasing, land use requirements, enabling works, traffic and site management (including materials requirements), demolition works and environmental management. Demolition works are not proposed as noted in Section 4.5.18. Decommissioning is described in Section 4.18. Chapter 4 describes in detail the existence of the project in terms of the operation of the proposed development as a waste-to-energy facility. Sections 4.3 to 4.20 provide information on the proposed development in terms of design, land use requirements, size, site layout, operations, processes, individual structures, drainage, services, L2545 road upgrade works, coastal protection measures, diversion of services, regulatory control, BAT and other relevant features. The operations and processes associated with the proposed development are described in detail in Sections 4.6 to 4.14 including operating hours, waste-to-energy processes, waste handling, energy recovery, flue gas treatment, control systems and process inputs. Each specialist assessment chapter (Chapters 6 – 16) considers the likely significant effects of the project from the construction, including the ancillary works (the L2545 road upgrade works, coastal protection measures and diversion of services) that accommodate the proposed development. Each specialist assessment details the likely significant effects of the proposed development relevant to each environmental aspect, with the effects of the construction of the development included therein.

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	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (b) The use of natural resources, in particular, land, soil, water and biodiversity, considering as far as possible the sustainable availability of these resources;	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.1 of the EC Guidance provides recommendation on the project description. Section 1.3 provides guidance on the environmental factors to be considered. Section 1.4 provides recommendations on assessing effects on the environment.	Section 3.3 of the Draft Guidelines provides guidance on the scoping of the assessments. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	The likely significant effects of the proposed development on land, soils and water during the construction and operation of the proposed development are described in Chapter 13 (Soils, Geology, Hydrogeology, Hydrology and Coastal Recession) for soils (Sections 13.5.2), groundwater (Section 13.5.3), surface water including rivers (Section 13.5.4) and coastal areas (Section 13.5.5). The likely significant effects of the proposed development on biodiversity during the construction and operation of the proposed development are described in Chapter 12 Biodiversity, including terrestrial habitats (Section 12.6.1), non-native invasive species (Section 12.6.2), marine habitats (Section 12.6.3.8) and fauna (Section 12.6.3.9). The sustainable availability of these resources has been considered in the relevant chapters for the construction and operation phases, refer to: • Land in terms of land take and suitable zoning (Section 2.4.3 of Chapter 2 and Appendix 3.3 Planning Report of Chapter 3); • Land in terms of land use (Section 15.5.2.1 of Chapter 15); • Soils in terms of the use and re-use of soil during the construction of the proposed development (Section 13.4.2.1 of Chapter 13); • Water in terms of water use during construction (Section 5.6.2 of Chapter 5 and Section 15.5.2.6 of Chapter 15) and operation (Section 4.12.2 of Chapter 4 and Section 15.5.3.6); • Water in terms of water quality and discharges to water bodies (of which there are none) during construction (Section 13.5.4.1 of Chapter 13 and Section 15.5.2.4) and operation (Section 13.5.4.2 of Chapter 13 and Section 15.5.3.4 of Chapter 15); and • Biodiversity in terms of the ecological value of the site of the proposed development (Section 12.3.5, Chapter 12).

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	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (c) The emission of pollutants, noise, vibration, light, heat and radiation, the creation of nuisances, and the disposal and recovery of waste;	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.1 of the EC Guidance provides recommendation on the project description. Section 1.3 provides guidance on the environmental factors to be considered. Section 1.4 provides recommendations on assessing effects on the environment.	Section 3.3 of the Draft Guidelines provides guidance on the scoping of the assessments. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	Chapter 4 describes in detail the waste generated as process outputs (solid waste residues, bottom ash, boiler ash and flue gas cleaning residues) from the waste-to-energy operations including Section 4.13. Section 4.15 describes the water emissions with regards to the management of storm and sanitary (foul) water management on site as well as fire water management. Section 4.8 describes the process by which heat generated will be recovered for energy generation. Section 4.17.1 describes how the site will be protected from ionising radiation materials accidentally mixed with the incoming municipal waste stream. Chapter 5 Construction Activities, describes construction phase activities that will potentially generate the emission of pollutants in terms of water (Section 5.6), noise and vibration nuisances (Section 5.4) and waste (Section 5.5). The likely significant effects of these emissions, nuisances and wastes on the environment are described in detail in the respective assessment chapters: Chapter 6 Population and Human Health, assesses the likely significant effects of any nuisance effects and emission of pollutants during the construction and operation of the proposed development on human health. Chapter 7 Roads and Traffic, describes the likely significant effects of the proposed development will have on traffic flows and Chapter 6 considers these effects in terms of the access and use of residential amenities (Section 6.5.3.1). Chapter 8 (Air Quality) describes the likely significant effects of air emissions during the construction and operation phase of the proposed development on the air quality. Chapter 9 (Climate) describes the likely significant effects of emissions of pollutants on climate during the construction and operation phase of the proposed development. Chapter 10 (Noise and Vibration) describes the likely significant effects of noise emissions and vibration effects during the construction and operation phase of the proposed development. Chapter 11 Landscape and Visual, assesses the likely significant effects of lighting during the construction

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					(Section 11.4.1) and operation (Section 11.5.2) of the proposed development. Chapter 13 (Soils, Geology, Hydrogeology, Hydrology and Coastal Recession) describes the likely significant effects of the proposed development from emissions to soil (Section 13.5.2), groundwater (Section 13.5.3) and surface water (Section 13.5.4) during construction and operation. Chapter 15 (Material Assets) describes the likely significant effects from proposed development in terms of waste during construction (Section 15.5.2) and operation phase (Section 15.5.3) of the proposed development.
	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (d) The risks to human health, cultural heritage or the environment (for example due to accidents or disasters)	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.1 of the EC Guidance provides recommendation on the project description. Section 1.3 provides guidance on the environmental factors to be considered. Section 1.4 provides recommendations on assessing effects on the environment.	Section 3.3 of the Draft Guidelines provides guidance on the scoping of the assessments. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	Section 6.5.4.2 of Chapter 6 Population and Human Health, assesses the likely significant effects of the risks of the proposed development on human health in terms of the waste-to-energy operations. A Hazard Identification and Risk Assessment Report was prepared and is presented in Appendix 6.1. Chapter 14 Archaeological, Architectural and Cultural Heritage, describes the likely significant effects from the construction (Section 14.6.1) and operation (Section 14.6.2) of proposed development in terms of cultural heritage. Chapter 16 Major Accidents and Disasters, describes the likely significant effects from the construction (Section 14.6.1) and operation (Section 14.6.2) of proposed development in terms of risks of accidents or disasters.
	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (e) The cumulation of effects with other existing and/or approved projects, taking into account any existing environmental problems relating to areas of particular environmental importance likely to be affected or the use of natural resources;	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.4 of the EC Guidance provides recommendations on assessing effects on the environment, with Section 1.4.3 dealing with cumulative effects.	Section 3.3 of the Draft Guidelines provides guidance on the scoping of the assessments. Section 3.5 provides recommendations with regard to the description of the project, and in particular, Section 3.5.7 looks at the description of other related projects. Section 3.7 includes	Each of the assessment chapters has considered all existing and/or approved projects that have the potential have a cumulative effect in the environment for each aspect, as a result of the construction and operation of the proposed development. Chapter 17 Cumulative Effects, Other Effects and Interactions, describes all existing and/or approved projects that have a potential cumulative effect on the environment with the construction and operation of the proposed development and summarises for each existing and/or approved project where like significant cumulative

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				recommendations on the impact assessment, with Section 3.7.6 addressing interactions between impacts on different factors. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	effects have been identified in the respective assessment chapters. Section 15.7 of Chapter 15 Material Assets considers the cumulative effects of the proposed development in terms of natural resources during the construction and operation of the scheme.
	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (f) The impact of the project on climate (for example the nature and magnitude of greenhouse gas emissions) and the vulnerability of the project to climate change;	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.1 of the EC Guidance provides recommendations on the project description. Section 1.3 provides guidance on the environmental factors to be considered, including in particular Section 1.3.2 impacts related to climate change. Section 1.4 provides guidance on assessing effects on the environment.	Section 3.3 of the Draft Guidelines provides guidance on the scoping of the assessments. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	Chapter 9 Climate, assess the likely significant effects of the proposed development on the climate during the construction (Section 9.5.2) and operation phase (Section 9.5.3) and considers the greenhouse gas emissions on the climate. Section 4.13.5 provides information on the energy generated during the operation of the proposed development and Section 4.5.7 describes the energy efficiency of the process during operation. The design of the proposed development has had regard to the vulnerability to climate change. Examples include: • Raising of the site ground levels, described in Section 4.3.3 and considered in Appendix 13.4 Flood Risk Assessment of Chapter 13; and; • Raising of the road level of the L2545 along the northern boundary, described in Section 4.3.2 and considered in Appendix 13.4 Flood Risk Assessment of Chapter 13; • The proposed coastal protection measures described in Section 4.5.16 of Chapter 4, address the potential effects of sea level rise due to climate change as considered in Appendix 13.3 Coastal Study in terms of coastal management measures for the coastal boundary.

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	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: (g) The technologies and substances to be used.	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.1 of the EC Guidance provides recommendations on the project description. Section 1.3 provides guidance on the environmental factors to be considered, while Section 1.4 provides guidance on assessing effects on the environment. Section 1.5 addresses the mandatory assessment of alternatives.	Section 3.4 of the Draft Guidelines sets out the recommended approach to the consideration of alternatives in the EIAR, including the alternative designs, processes, mitigation measures and the need for consultation on the alternatives consideration. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	Chapter 4 Description of the Proposed Development describes in detail the technologies and substances that will be used in the operation of the proposed development. The technologies described include the main waste-to-energy process including the waste handling, furnace and control of nitrogen oxides (Section 4.7), energy recovery (Section 4.8), flue gas treatment (Section 4.9) and operation control systems (4.10). The technologies proposed for secondary processes (emergency generator, water management) are described in Section 4.14. The technologies for the general site services (surface water drainage, sanitary/foul, telecom, gas and electricity) are described in Section 4.15. The substances used during the construction of the project are described in Chapter 5 (Construction Activities) in terms of the materials imported (Section 5.5) and the services and utilities required for the build (Section 5.6). The substances required for the operation of the proposed development are described in Chapter 4 Description of the Proposed Development, in terms of the process inputs (waste, support fuel, water) and those required for flue gas cleaning (Section 4.12). Chapter 15 Material Assets describes the substances required for the construction (Section 15.5.2) and operation (Section 15.5.3) of the proposed development in terms of natural resources where the substances and the likely significant effects from the proposed development attributed to the use of these substances.
	5. A description of the likely significant effects of the project on the environment resulting from, inter alia: The description of the likely significant effects on the factors specified in Article 3(1) should cover the direct effects and any indirect, secondary, cumulative, transboundary, short-term, medium-term and long-term, permanent and temporary, positive and negative effects of the project. This description should take into account the environmental protection objectives established at Union or Member State level which are relevant to the project.	Covered under 2(e) of Article 94, Schedule 6 with slightly different wording and reference to Section 171A of the Planning and Development Act, 2000, as amended	Part B, Section 1.3 of the EC Guidance provides recommendations on the environmental factors to be considered, including in particular, Section 1.3.1 which provides guidance on the scope of environmental factors covered by the Directive. Section 1.4 provides recommendations on	Section 3.3 of the Draft Guidelines provides recommendations on the scoping of the EIAR. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment, including in particular, Section 3.7.3 which	The likely significant effects of the proposed development are considered under each of the specialist assessment chapters (Ch 6 to 16). Each specialist assessment chapter sets out the likely significant direct and indirect effects of the proposed development on the particular environmental aspect. These likely significant effects are considered in relation to: • Construction phase • Operation phase • Cumulative effects

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			assessing effects on the environment. Annex I of the Guidance provides links with other EU Instruments.	addresses the descriptions of effects. Section 3.9 provides guidance on residual impacts and conclusions.	Each specialist chapter (Ch 6 - 16) provides information on the do-nothing scenario (i.e. outline of what is likely to happen in the environment should the proposed development not be implemented). Each chapter provides information on the likely residual effects of the proposed development (on the particular environmental factor), with the implementation of mitigation and monitoring measures. The overall cumulative and interactive effects of the proposed development are considered in Chapter 17 Cumulative, Interactive and Other Effects of the EIAR.
	6. A description of the forecasting methods or evidence, used to identify and assess the significant effects on the environment, including details of difficulties (for example technical deficiencies or lack of knowledge) encountered compiling the required information and the main uncertainties involved.	Covered under 2(f) of Article 94, Schedule 6	Part B, Section 1.3 of the EC Guidance provides recommendations on the environmental factors to be considered, including in particular, Section 1.3.1 which provides guidance on the scope of environmental factors covered by the Directive. Section 1.4 provides recommendations on assessing effects on the environment.	Section 3.5 of the Draft Guidelines provides recommendations on the description of the project. Section 3.6 provides guidance on describing the baseline, while Section 3.7 provides recommendations with regard to the impact assessment, including in particular 3.7.2 on documenting the process and 3.7.5 on assessment methods.	Each of the specialist assessment chapters (Chapters 6- 16) includes a specific section on the assessment methodology used, including details of forecasting methods or evidence used to identify and assess the likely significant effects on the environment. Further detail, where relevant, is also provided in the appendices (Volume 4 of the EIAR), for example, Appendix 13.5 includes the flood risk assessment which was used to inform Chapter 13 Soils, Geology, Hydrogeology, Hydrology and Coastal Recession, for the effects of the proposed development on flooding risks.
	7. A description of the measures envisaged to avoid, prevent, reduce or, if possible, offset any identified significant adverse effects on the environment and, where appropriate, of any proposed monitoring arrangements (for example the preparation of a post-project analysis). That description should explain the extent, to which significant adverse effects on the environment are avoided, prevented, reduced or off-set, and should cover both the construction and operational phases.	Covered under 2(g) of Article 94, Schedule 6 with slightly different wording	Part B, Section 1.6 of the EC Guidance provides recommendations with regard to mitigation and compensation measures.	Section 3.4 of the Draft Guidelines includes recommendations on the consideration of alternatives, including in particular, Section 3.4.7 alternative mitigation measures. Section 3.5 provides recommendation with regard to the description of the project. Section 3.8 provides guidance on mitigation and monitoring, while Section 3.9 provides recommendations with	A detailed description of the reasonable alternatives considered for the proposed development is provided in Chapter 3 of the EIAR, including reasons for proceeding with the chosen alternative, which includes mitigation by avoidance. Each of the specialist assessment chapters (Ch 6 – 16), as detailed above, includes a description of the main features of the proposed development with regard to the specialist environmental aspect, as well as a description of the measures, if any, set out to avoid, prevent or reduce, and if possible, offset likely significant adverse effects on the environment of the development. Each of the specialist assessment measures details the mitigation and monitoring measures, where appropriate, proposed to offset likely

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
				regard to residual impacts and conclusions.	significant adverse effects. Any residual impacts are also detailed within these chapters. Chapter 17 includes details of the cumulative and interactive effects of the proposed development, with Chapter 18 providing a summary of the mitigation, monitoring and residual effects of the proposed development. A Construction Environmental Management Plan (CEMP) is included in Appendix 5.1 of the EIAR, the purpose of which is to provide a mechanism by which environmental protection is to be achieved during the construction phase of the proposed development in order to ensure any disruption and nuisance is kept to a minimum. The CEMP identifies the minimum requirements with regard to the appropriate mitigation, monitoring, inspection and reporting mechanisms that need to be implemented during construction phase.
	8. A description of the expected significant adverse effects of the project on the environment deriving from the vulnerability of the projects to risks of major accidents and/or disasters which are relevant to the project concerned. Relevant information available and obtained through risk assessments pursuant to Union legislation such as Directive 2012/18/EU of the European Parliament and of the Council (*) or Council Directive 2009/71/Euratom (**) or relevant assessments carried out pursuant to national legislation may be used for this purpose provided that the requirements of this Directive are met. Where appropriate, this description should include measures envisaged to prevent or mitigate the significant adverse effects of such events on the environment and details of the preparedness for and proposed response to such emergencies.	Covered under 2(h) of Article 94, Schedule 6 with slightly different wording	Part B, Section 1.3 of the EC Guidance provides recommendations on the environmental factors to be considered, including in particular, Section 1.3.3 on the impacts related to risks of major accidents and disasters. Section 1.4 provides guidance on assessing effects on the environment. Annex I of the Guidance provides links with other EU Instruments.	Section 3.3 of the Draft Guidelines provides guidance on the scoping of the assessments. Section 3.5 provides recommendations with regard to the description of the project. Section 3.7 includes recommendations on the impact assessment. Sections 3.8 and 3.9 provide guidance on mitigation and monitoring and residual impacts and conclusions.	Chapter 16 Major Accidents and Disasters, assess the likely significant effects from major accidents and disasters. This assessment considered: • The relevant major accidents and/or disasters (on-site and off-site), if any, that the proposed development could be vulnerable to; • The potential for these major accidents and/or disasters to result in likely significant adverse environmental effect(s); and • The measures that are in place, or need to be in place, to prevent or mitigate the likely significant adverse effects of such events on the environment. Site-specific risk assessment (RA) methodology was used when carrying out the RA and this methodology is described in detail in Appendix 6.1 Hazard Identification and Risk Assessment Report and it is consistent with the approach used by industrial facilities under the COMAH Regulations (SI No. 209 of 2015) which implements the Seveso III Directive (2012/18/EU), though this site is not a “Seveso” site.

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
					A Construction Environmental Management Plan (CEMP) is included in Appendix 5.1 of the EIAR, the purpose of which is to provide a mechanism by which environmental protection is to be achieved during the construction phase of the proposed development in order to ensure any disruption and nuisance is kept to a minimum. The CEMP identifies the minimum requirements with regard to the appropriate mitigation, monitoring, inspection and reporting mechanisms that need to be implemented during construction phase.
	9. A non-technical summary of the information provided under points 1 to 8.	Covered by Part 5, Section 63 – new Article 94 (c) using slightly different wording	Section 2 of the EC Guidance addresses the Quality of the EIA Report, including the format and presentation of the non-technical summary in Section 2.1.2. Box 41 under Section 2.1.2 includes the qualities of a good non-technical summary.	Section 4 of the Draft Guidelines sets out best practice in presenting information in an EIAR, with Section 4.6 dealing with the preparation of the non-technical summary.	A non-technical summary has been prepared which summarises the information referred to in points 1 to 8 of Article 5(1), in non-technical language. The non-technical summary is presented Volume 1 of the EIAR.
	10. A reference list detailing the sources used for the descriptions and assessments included in the report.	Covered by Part 5, Section 63 – new Article 94 (d) using slightly different wording	Part B, Section 2 of the EC Guidance provides recommendations on the quality of the EIA Report, including in particular, Section 2.1.1 which provides guidance on the qualities of a good EIA Report.	Section 4 of the Draft Guidelines sets out best practice in presenting information in an EIAR with Section 4.3 making recommendations with regard to language, terms and editorial notes.	The last section of each chapter includes a reference list, detailing the sources used for the descriptions and assessments included in the relevant chapter. Footnotes are also used throughout, as appropriate. A Glossary and Abbreviations list is provided at the start of Volume II of the EIAR.
Article 5 (3) In order to ensure the completeness and quality of the environmental impact assessment report:					
	(a) the developer shall ensure that the environmental impact assessment report is prepared by competent experts.	Part 5, Section 63 – new Article 94(e): A list of the experts who contributed to the preparation of the report, identifying for each expert – (i) the part or parts of the report which he or she is responsible for	Section 2.2 of the EC guidance provides information on the competence of expertise and quality control, including in particular, Section 2.2.1 legal requirements and Section 2.2.2 experts used by Developer.	Section 2.5 of the Draft Guidelines addresses this.	Appendix 1.6 of Volume 4 of the EIAR provides details of the EIA Team Competencies. This includes a list of the experts who contributed to the preparation of the report and the part or parts of the report for which he/she is responsible, as well as details under the following headings: • Company affiliations • Years of experience • Professional qualifications • Professional affiliations

	EIA Directive 14/52/EU	European Union (Planning and Development) (EIA) Regulations 2018	European Commission (2017) Guidance on Environmental Impact Assessment of Projects	EPA (2017) Draft Guidelines on the Information to be contained in Environmental Impact Assessment Reports (Draft August 2017)	Demonstration of how the EIAR complies with the legislative and best practice requirements
		or to which he or she contributed, (ii) his or her competence and experience, including relevant qualifications, if any, in relation to such parts, and (iii) such additional information in relation to his or her expertise that the person or persons preparing the EIAR consider demonstrates the expert's competence in the preparation of the report and ensures its completeness and quality.			

Appendix 1.6

EIA Team Competencies

EIA Team Competencies

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
EIA Manager, Ch 1 Introduction, Ch 3 Alternatives, Ch 6 Population and Human Health, Ch 15 Material Assets, Ch 17 Cumulative Effects, Other Effects and Interactions. Ch 18 Summary of Mitigation Measures and Residual Effects	Fiona Patterson	Arup	18	Bachelor of Science (BSc) (Hons) Earth Science, University College Cork, (1997); Master of Science (MSc) Environmental Engineering, Queens University Belfast (1998); Diploma Field Ecology, University College Cork (2016); Advanced Diploma in Planning and Environmental Law, King's Inns (2018). Fiona is a senior environmental consultant with experience in delivering environmental advisory services on projects in a variety of sectors, including highways, rail, energy, water, wastewater, education, manufacturing and commercial/residential. Relevant projects include N6 Galway City Ring Road EIAR (2018) and Indaver Resource Recovery Centre EIS (2016).	Affiliate member of Institute of Environmental Management and Assessment (IEMA)
EIA Coordinator	Alexandra Fleming	Arup	4	BSc Environmental Science, National University of Ireland, Galway (2010) MSc Environmental Consulting, Newcastle University (2014) Alexandra is an Environmental Consultant with experience working on EIARs in a number of areas including water, manufacturing and residential/commercial developments. Relevant projects include Indaver Resource Recovery Centre EIS (2016) and Eli Lilly IE43 Extension EIS (2016).	

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 2 Planning Policy & Need for the Scheme	Jackie Keaney	Indaver	19	BSc Environmental Science, University College Dublin, 1996; MSc Environmental Studies, Trinity College Dublin, 1998. Jackie is the Commercial Director of Indaver and has worked on most of Indaver's EIA projects starting with the EIA for Duleek in 2000. Jackie has been to the forefront in advocating for policy changes at EU and at national level in the field of waste management and sustainability for almost 20 years. Jackie has been an employee of Indaver since March 1998.	
Ch 2 Planning Policy & Need for the Scheme	Aiden O'Neill	Coakley O'Neill Town Planning	23 years	BSc(Hons) Environmental Planning, Queen's University Belfast, 1993 Postgraduate Diploma Town and County Planning, Queen's University Belfast, 1994 Aiden is a Director of Coakley O'Neill Town Planning Ltd, established in Cork in February 2010, and has over 23 years' experience in the public and private sectors in UK and Ireland. Aiden has advised on a number of complex commercial, infrastructural, industrial and urban development projects, including metal recycling developments in Cork and Dublin, as well as the Ringaskiddy Resource Recovery Centre.	Corporate Member of the Irish Planning Institute
Ch 2 Planning Policy & Need for the Scheme	Julie Bowe	Indaver	11 years	LLB Law & European Studies, UL, 1998 LLM Masters in Commercial Law, UCD, 2003 New York State Bar, 2006 Barrister-at-law Degree, Kings Inns 2008 Julie is Legal Counsel with Indaver and has assisted with the preparation of legal aspects of the present EIAR Report and more generally with Indaver's business development projects in Ireland and other jurisdictions. Julie has previously worked for Eunomia Research & Consulting and was responsible for conducting Compliance Assessments on behalf of DG Environment of the European Commission including legal analysis of the EU environmental acquis of the Former Republic of Macedonia regarding the country's proposed accession to the EU. Julie has been an employee of Indaver since March 2017.	

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 3 Alternatives	John Ahern	Indaver	24 Years	BE (Chem) UCD, 1980 Chartered Director, Institute of Directors, IoD Chartered Engineer, Institute of Engineers Ireland, IEI John has been a regional Director of Indaver Ireland UK for 24 years and has led all of Indaver's waste developments in Ireland and the UK for that time. Prior to joining Indaver John worked for Flogas for 15 years and developed a number of its LPG plants in Ireland and the UK.	
Ch 4 Description of Proposed Development **Ch 5 Construction Strategy**	Conor Jones	Indaver	18 years	BE (Chem), UCD, 1996 Conor is the Regional Engineering Director of Indaver and has worked on most of Indaver's EIA projects from both a planning and industrial licensing perspective starting with the initial EIA for the Ringaskiddy project in 2001. Conor has been an employee of Indaver since January 1999 and was Plant Manager at Indaver's Duleek Waste to Energy plant from 2014 to 2016	
Ch 6 Population and Human Health	Martin Hogan	CHI	32	MB BCh BAO UCC 1987, MRCGP 1992, FRCPI 2008, FFOM (RCPI) 2000, AFOM (RCPI Lond) Martin is a Consultant Occupational & Environmental Physician for 25 years. He is Managing Director of CHI (Cork) and has been involved in Environmental Impact Assessments for 23 years.	Faculty of Occupational Medicine Royal College of Physicians of Ireland

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 7 Roads and Traffic	Niall Harte	Arup		BE, University College Cork (2001) Designing for Safety – Safety, Health and Welfare at Work (Construction) Regulations 2013, CMSE, April 2014 Niall Harte is an Arup Associate with 18 years' experience in Roads and Transportation Engineering and Consultancy, including 4 years' experience of Road & Civil Construction. This includes project managing the design and delivery of Green Route, Public Transport Priority and Cycle Network schemes in Cork and Limerick cities, the design of Route Signage Schemes, VMS and PGS improvements, and Traffic Signalised installations in both Cork and Limerick. Niall has also fulfilled the role of Lead Witness on a number of significant projects including the Indaver's Ringaskiddy Resource Recovery Centre, the Apple Data Centre in Athenry and the North Meath Wind Farm.	Chartered Member of the Institution of Engineers of Ireland 2009
Ch 7 Roads and Traffic	Clifford Killeen	Arup	14	BEng, Civil (Hons), University College Cork, 2004 Chartered Engineer (accredited 2014) Clifford is a Senior Engineer within the Arup Transportation & Urban Design Team, with 14 years' experience in transportation including planning, design and analysis. Relevant project experience includes a number of analysis studies of the N28 and N40 road networks and junctions, and preparation of the Indaver EIAR Traffic Assessment for the Resource Recovery Centre 2016 application.	Chartered Engineer, Member of Engineers Ireland
Ch 8 Air Quality; Ch 9 Climate.	Dr Edward Porter	AWN Consulting	20	BSc (Hons) Chemistry, 1st Class, University of Sussex PhD Environmental Chemistry (Air Quality), University College Dublin, Edward is Director of Air Quality & Climate team with the AWN Consulting in Dublin. Edward has worked on a numerous air quality projects in the areas of industrial licensing and development. Edward is lead author of the EPA publication "Air Dispersion Modelling from Industrial Installations Guidance Note (AG4)" and has peered reviewed the NRA Air Quality Guidelines (NRA, 2006). He specialises in the fields of ambient air quality, odour assessment, climate impacts and air dispersion modelling.	Full Member of the Institute of Environmental Sciences (MIEnvSc), a Full Member of the Institute of Air Quality Managements (MIAQM) and is a Chartered Chemist (C Chem MRSC)

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 10 Noise and Vibration;	Jennifer Harmon	AWN Consulting	17	BSc (Hons) Environmental Science, Ulster University, 1999 Diploma Acoustics and Noise Control, Institute of Acoustics, 2002 Jennifer is a senior acoustic consultant with AWN Consulting. She has extensive experience in the preparation of noise and vibration impact assessments for a wide range of infrastructural, industrial, commercial and residential developments across Ireland and has provided expert witness at over 20 planning hearings relating to noise impact assessment.	MIOA
Ch 11 Landscape and Visual;	John Kelly	Brady Shipman Martin	25	Bachelor of Science (BArch) 1991, University College Dublin. John is a qualified architect and Managing Partner at Brady Shipman Martin, specialising in landscape, planning and environmental consultancy. John has over 25 years' experience in the fields of Landscape and Visual Assessment and of Accurate Visual Representation of developments and strategic infrastructure developments in both urban and rural environments across all sectors including: • waste management, including waste to energy. • industrial and pharmaceutical water and waste water projects. • power generation, including renewables, and transmission. • transport infrastructure, including airports, road, rail, light rail, bus and cycling. • urban development – individual development and master planning tourism and leisure.	MRIAI

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 12 Biodiversity	Carl Dixon	DixonBrosnan	20	BSc Applied Ecology, University College Cork MSc Ecology, University College Cork. Carl has completed biodiversity chapters for EIA/EIAR for a range of projects including large scale infrastructural projects. Examples include Indaver Waste-to-Energy Project, Shannon LNG Project, Skibbereen Flood Relief Scheme, Upgrade to Mallow WWTP, Greenlink Ireland Wales Electrical Connector. Smaller projects include ecological assessments for quarries, industrial facilities, pig units, housing developments etc. DixonBrosnan have particular expertise in freshwater ecology, mammal and bird surveys, habitat mapping and surveys for invasive species.	
Ch 13 Soils, Geology, Hydrology, Hydrogeology and Coastal Recession.	Joanna O'Brien	Arup	37	(BE) Civil Engineering, University College Cork (1980), Masters (MEngSc) Geotechnical Engineering, University College Cork (1990) Joanna was Associated Director with Arup and headed up the Geotechnical team in the Cork Office from 1990-2017. Joanna has completed a number of international secondments abroad, including London (1988-91, 2012), Hong Kong (1993-96), Bangkok (1998), Brisbane and Melbourne (2009) and Newfoundland, Canada (2012-13). Between 1980 and 1990, Joanna worked as a civil/structural engineer and since 1990 specialised in geotechnical engineering design. Joanna has been involved in the geotechnical engineering design of numerous projects in the Ringaskiddy area since 1989.	C Eng IStructE

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 13 Soils, Geology, Hydrology, Hydrogeology and Coastal Recession	Julie Ascoop	Arup	24	MSc, Civil Engineering, Delft University of Technology (1994) Julie Ascoop is an Associate Director, maritime business leader in Arup Ireland and maritime skills leader for Arup-Europe. Julie is a chartered Civil Engineer and has over 24 years working experience as a maritime engineer, working with both consultants and contractors in Ireland, the Netherlands and Germany. She has extensive experience in the project management, design and construction of maritime projects, such as port developments, dredging projects, marine infrastructure (locks, storm surge barriers, bridges), coastal protection and ocean energy developments.	CEng, Chartered Engineer (2006) Member of the Institute of Engineers Ireland (IEI) Member of the Royal Dutch Institute of Engineers (KIVI) Member of the World Association for Waterborne Transport Infrastructure (PIANC)
Ch 13 Soils, Geology, Hydrology, Hydrogeology and Coastal Recession	Ken Leahy	Arup	20	B.E. (Hon.) (Civil & Environmental Engineering), University College Cork – 1998 Dip CL (Distinction), (Construction Law & Contract Administration), Trinity College Dublin – 2004 Ken leads Arup's Flood Risk Assessment and Management (FRAM) business in Ireland. Ken is a Chartered Engineer, working with Arup since 1998. He has gained significant experience in multidisciplinary project management, design and contract administration. Ken's strong management and people skills have enabled him to lead large teams of specialists in the successful delivery of numerous civil infrastructure projects. Ken is currently Project Manager for the Lower Lee (Cork City) Flood Relief Scheme, which will be the largest single flood relief scheme ever to be implemented in Ireland. Ken is also Project Manager for a number of other major flood relief schemes including the Mallow Flood Relief Scheme which has recently reached Substantial Completion.	Chartered Member of Engineers Ireland 2004 Chartered Member of the Institute of Civil Engineers 2014

Role and EIAR Input	Name	Company	No. years of experience	Professional Qualifications and Relevant Expertise	Professional Affiliations
Ch 14 Archaeology, Architectural and Cultural Heritage	Avril Purcell	Lane Purcell Archaeology (LPA)	22	BA Archaeology and History, NUI Cork, 1992. MA Archaeology, NUI Cork, 1994. Licence eligible by National Monuments Service since 1997 Avril Purcell is the director of LPA and is a licensed archaeologist with over twenty years of experience in research, consultancy, surveying and excavation. Avril has been involved in a large number of diverse EIAR projects throughout the country. In some cases, her involvement has been from the initial constraint study stage through pre-development investigations, resolution and construction. Avril has compiled the archaeological, architectural and cultural heritage assessments for numerous EIAR projects including pipelines, roads, waste-water treatment plants, recreational and industrial facilities, wind and alternative energy projects.	Member of the Institute of Archaeologists of Ireland (MIAI)
Ch 16 Major Accidents and Disasters	Thomas Leonard	Byrne Ó'Cléirigh	23 years	BE (Chem) UCD 1992 MEngSc UCD 1995 Chartered Engineer Thomas (Tom) Leonard is a Partner at Byrne Ó'Cléirigh with 23 years' experience of assisting industries in the area of risk assessment and environmental protection. He has a long track record of providing consultancy support and conducting risk assessments for companies across a wide range of sectors including oil & gas, pharmaceutical, waste management, food & drink and logistics companies.	Chartered Engineer Member of Engineers Ireland (MIEI) Member of the Fire & Safety Committee at Engineers Ireland.

Appendix 1.7

IE Licence Sample
Consultation Letter

www.indaver.ie

14 June 2019

Dear ,

Re: Indaver to submit Industrial Emissions licence application & Environmental Impact Assessment Report to the Environmental Protection Agency

We are writing to inform you that we intend to submit an Industrial Emissions licence application and an Environmental Impact Assessment Report (EIAR) to the Environmental Protection Agency (EPA) in the coming weeks. The EPA is the competent authority for granting and enforcing Industrial Emissions licences in Ireland.

The application relates to our proposed Resource Recovery Centre in Ringaskiddy which received planning permission on May 31st, 2018. The project is currently the subject of a judicial review process and we expect a decision from the High Court this year.

An Industrial Emissions licence is required under EU law, specifically the Industrial Emissions Directive (IED). As part of our planning permission, we are obliged to obtain a licence in advance of construction and operation of the Resource Recovery Centre.

The IED takes an integrated approach to environmental protection which is aimed at protecting the environment as a whole. We fully support this approach to robust environmental monitoring and have been successfully operating a waste-to-energy facility in Duleek, Co. Meath since 2011.

We intend to erect a notice at our Ringaskiddy site and place an advertisement in local newspapers prior to submission of the application and EIAR. The EPA will make these documents available on its website once it has validated the application. We will also make these documents available at www.ringaskiddyrrc.ie and will advise you once the documents are available on both websites.

Yours sincerely,

Jackie Keaney

Jackie Keaney,
Commercial Director

Appendix 1.8

EIA Portal Confirmation Email

Paul Schutze

From: EIAportal <EIAportal@housing.gov.ie>
Sent: 15 July 2019 11:49
To: Paul Schutze
Subject: EIA Portal Confirmation Notice Portal ID 2019104 Indaver Ireland Limited

A Chara,

An EIA Portal notification was received on 12/07/2019 in respect of this proposed application. The information provided has been uploaded to the EIA Portal on 15/07/2019 under EIA Portal ID number 2019104 and is available to view at http://housinggovie.maps.arcgis.com/apps/webappviewer/index.html?id=d7d5a3d48f104ecbb206e7e5f84b71f1.

Portal ID: 2019104

Competent Authority: Environmental Protection Agency

Applicant Name: Indaver Ireland Limited

Location: Ringaskiddy, County Cork (National Grid Ref. E179055, N064279)

Description: Waste to Energy Facility (waste incinerator with energy recovery) for the treatment of residual household, commercial and industrial waste which includes up to 24,000 tonnes of suitable hazardous waste with an annual capacity of 240,000 tonnes per annum

Linear Development: No

Date Uploaded to Portal: 15/07/2019

Regards
Morgan

Morgan O Reilly

EIA Portal team

An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

Teach an Chustaim, Baile Átha Cliath 1, D01 W6X0
Custom House, Dublin 1, D01 W6X0

T +353 (0) 1 888 2000

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Is faoi rún agus chun úsáide an té nó an aonán atá luaite leis, a sheoltar an ríomhphost seo agus aon comhad atá nasctha leis. Má bhfuair tú an ríomhphost seo trí earráid, déan teagmháil le bhainisteoir an chórais.

Deimhnítear leis an bhfo-nóta seo freisin go bhfuil an teachtaireacht ríomhphoist seo scuabtha le bogearraí frithvíorais chun víorais ríomhaire a aimsiú.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the system manager.

This footnote also confirms that this email message has been swept by anti-virus software for the presence of computer viruses.
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