

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 Pleanála 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 NO₂, SO₂, Benzene, Heavy Metals, Particulate Matter (PM₁₀ 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 C² 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