Appendix 7

Introduction

1 Introduction

1.1 Project Overview

1.1.1 Introduction

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.

This chapter outlines the background to the project and summarises the required planning procedure. This chapter also describes the methodology used to prepare this EIS and the consultation process that has been carried out to date. 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 EIS.

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 part of the site. Refer to **Figure 1.3** for the overall site layout. A summary of proposed development as detailed in public notices is provided below.

1.1.4 Summary of proposed development as detailed in public notices

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 10,000m^3 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 1100m^3 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

A full description of the proposed development is provided in **Chapter 4** ***Project Description*** of this EIS.

1.2 Background

1.2.1 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. 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 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. Its highly-designed systems are tuned to monitor 14 different individual aspects of the Meath facility continuously. Since 2011, more than 120,000 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.

1.2.2 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.

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. 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. In addition to this,.

1.2.3 Project History and Current Proposal

The project design has changed since the last application for permission was submitted in 2008, as Indaver has responded to the concerns raised by both An Bord Pleanála and the local community. In this application, Indaver addresses concerns about overdevelopment, localised flooding of the road, preservation of the Martello Tower as an amenity, and coastal erosion.

The facility's footprint has been reduced significantly. Whereas the original footprint of the process building, aero-condenser and turbine proposed in 2008 was more than 14,000m^2, the current design describes a process building, aero-condenser and turbine footprint of less than 9,300m^2. Consequently, the proposed development does not constitute overdevelopment of the site. Refer to **Figure 1.4** for a footprint comparison.

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[1] 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

[1] 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)"

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 *Project Description*** of this EIS.

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

1.3 Structure of Environmental Impact Statement

This Environmental Impact Statement (EIS) has been prepared to provide information on the likely significant effects of the project on the environment and, in particular:

1. a description of the project comprising information on the site, design, size and other relevant features of the project;
2. a description of the features of the project and/or measures envisaged in order to avoid or reduce and, if possible, offset likely significant adverse effects on the environment;
3. the data required to identify and assess the main effects which the project is likely to have on the environment;
4. an outline of the main alternatives studied by the developer, which are relevant to the project and its specific characteristics, and an indication of the main reasons for the options chosen, taking into account the effects of the project on the environment; and
5. a non-technical summary of the information referred to in the above four points.

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

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

Volume 1 - Non-Technical Summary

Volume 2 - Environmental Impact Statement (Main Text)

Volume 3 - Figures

Volume 4 – Appendices

In addition, a Natura Impact Statement has been submitted with the application for permission, 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.

1.4 Duration of Planning Permission

The construction of the Ringaskiddy Resource Recovery Centre including site development works will take circa 31 months. However, in view of the complexity of the development, licensing requirements and the need for the advance agreement of all conditions, Indaver is applying for a 10-year planning permission to commence and complete the construction phase.

In addition, permission is sought to operate the proposed development for an initial period of 30 years after commissioning with the option to extend the operating period for a further 30 year period, subject to obtaining a grant of permission for that extended period.

1.5 Planning Procedure for the Proposed Resource Recovery Centre

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 from An Bord Pleanála.

The 2000 Act 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 Board. In compliance with this, and in preparation for submitting the planning application and this Environmental Impact Statement, Indaver engaged in 6 pre-application consultation meetings, between the 12th November 2012 and the 23rd November 2015.

1.6 Environmental Impact Statement Methodology

1.6.1 Statutory Requirements for the Contents of an EIS

This EIS has been prepared in accordance with the relevant provisions set out in the Planning and Development Regulations 2001, as amended ('the Regulations'), and the provisions of the codified Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the

assessment of the effects of certain public and private projects on the environment. Annex IV to the EIA Directive and Schedule 6 to the Regulations specify the information to be contained in an EIS.

Thus, pursuant to the provisions of Article 5(1) of the EIA Directive, the information specified in Annex IV is to be provided, in as much as the information is relevant to a given stage of the consent procedure and to the specific characteristics of a particular project or type of project and of the environmental features likely to be affected, having regard to current knowledge and methods of assessment.

This EIS has been prepared in compliance with the requirements of Directive 2011/92/EU and the Regulations. Moreover, although the requirements of Directive 2014/52/EU have not yet been transposed into Irish law, this EIS has had regard to the provisions of Directive 2014/52/EU.

The format used in the EIS 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 16 *Potential Cumulative & Other Impacts and Interactions*** of this EIS.

1.6.2 EPA Guidelines

This EIS has been prepared with due regard to the guidelines on the preparation of environmental impact statements published by the EPA. These are contained in Advice Notes on Current Practice (in the preparation of Environmental Impact Statements) (2003), and Guidelines on the Information to be contained in Environmental Impact Statements (2002). Moreover, the EIS has been prepared having had due regard to:

- Revised Guidelines on the Information to be Contained in Environmental Impact Statements (Environmental Protection Agency, draft September 2015);
- Advice Notes for Preparing Environmental Impact Statements Draft September 2015
- 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 (2006) Clarification of the application of Article 2(3) of the EIA Directive
- European Commission (1999) Guidelines for the Assessment of Indirect and Cumulative Impacts as well as Impact Interactions

1.7 Consultation

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. For a representative list of these stakeholders, please see **Appendix 1.2 (*Consultation*).**

1.7.1 Community Stakeholder Engagement

In addition to the consultations referred to above, Indaver has 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 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 **Appendix 1.2**.