Inspector's Report
ABP-309812-21

Development	Increase capacity of Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum.
Location	Poolbeg Peninsula, Dublin 4
Planning Authority	Dublin City Council
Applicant(s)	Dublin City Council
Type of Application	Approval under Section 226 of the Planning & Development Act, 2000 (as amended).
Submissions:	DAF&M, GSI, HSE, IW, EPA E-M Waste Region & Others
Date of CPO Oral Hearing	None
Date of Site Inspection:	15 September 2021
Inspector:	**Karla Mc Bride**

Table of Contents

1.0 INTRODUCTION

1.1 Introduction

Dublin City Council (acting on behalf of the four Dublin Local Authorities) proposes to increase the capacity of the existing operational Dublin Waste to Energy Facility at Poolbeg Peninsula from 600,000 tonnes per annum to 690,000 tonnes per annum. The application is made under Section 226 of the Planning and Development Act 2000 (as amended) in respect of Local Authority development on the foreshore.

1.2 Project Background

The Board granted approval to Dublin City Council for the Dublin Waste to Energy Facility in November 2007 under Section 226 of the Planning and Development Act 2000 (as amended). The facility is currently permitted to handle 600,000 tonnes of mainly municipal waste (domestic waste & municipal solid waste) for the four Dublin Local Authorities (Ref. 29S.EF2022). The facility generates power which is supplied to the national grid. It has the capability to supply heat to district heating networks serving developments in the surrounding area although this is not yet operational.

The applicant is currently seeking to increase the capacity of the facility from 600,000 tonnes per annum to 690,000 tonnes per annum, which equates to an increase of 15%. The applicant states that this would contribute towards achieving the additional 300,000 tonnes of thermal recovery capacity required nationally without the need to develop a new waste to energy facility or resort to landfill.

The emissions are governed by an EPA Industrial Emissions Licence (Ref. W0232-01) and a technical amendment to the existing Licence has been applied for separate to this application (Ref. W0232-02).

Pre-applications consultations with the Board are not required under section 226 of the Planning and Development Act 2000 (as amended), and none were undertaken.

1.3 Site Location and Description

The site is located on the Poolbeg peninsula to the E of Dublin City. The c.5.5ha site is located within a predominantly industrial area on the southside of the River Liffey. It is bound to the N and W by Pigeon House Road and Shellybanks Road and to the E by the Ringsend Wastewater Treatment Plant. It is located to the S of Dublin Port, W of the ESB Poolbeg Power Station and E of the ESB Dublin Bay Power Station across Shellybanks Road. The Poolbeg West SDZ is located to the S and W of the site. Vehicular access is off Pigeon House Road to the NE.

The River Liffey flows E to Dublin Bay which is covered by several Natural Heritage and European site designations including the South Dublin Bay & River Tolka Estuary SPA, North and South Dublin Bay SACs and North Bull Island SAC and SPA. A small section of the South Dublin Bay and River Tolka Estuary SPA is located within the river channel to the N of the site, as is the Dolphins, Dublin Docks pNHA, and some of this European site encompass the linear area to the S of the site. The site and environs may also be important for mobile species from other further afield European sites. There are several features of historic and cultural heritage interest in the surrounding area related to maritime and port activates including the Great South Wall and Poolbeg Lighthouse.

Maps and photographs in Appendix 1 describe the site in more detail.

1.4 Existing facility

The existing facility comprises 3 x buildings comprising the main process building (incl. waste reception area, waste bunker, furnaces, boilers Flue Gas Treatment lines, turbine hall, residual storage, control room, admin & staff facilities), a 2-stroey cooling water pump house (incl. filter system, cooling water pumps & biocide dosing system) and security building. The facility has an existing 11kV connection to the grid which is ramped up to 110kV for export, and it is connected to the 110kV switchyard located c.500m to the W.

The existing facility (incl. furnace, flue gas treatment & turbines) operates 24 hours per day over a 7-day week. Waste is accepted at the facility between 8am and 10pm six days per week (Mon-Sat) as per the current Industrial Emissions (IE) Licence. Most waste generated by the facility is removed between 8am and 6pm (Mon to Fri) and 2pm on Saturday. Incinerator Bottom Ash (IBA) and Air Pollution Control Residues (APCR) can be removed anytime to Dublin Port for shipment, also as per the current IE Licence.

1.5 Planning history

***PL29S.EF2022*:** ABP granted approval for the Dublin Waste to Energy Facility in November 2007 under S.226 of the Planning & Development Act, 2000 (as amended). Permission was sought to thermally treat household, commercial and non-hazardous industrial waste for the four Dublin Local Authorities. The public notices stated that facility would generate power to be supplied to the national grid and that it would have the capability to supply heat to any future district heating networks serving developments in the surrounding area.

Permission was granted subject to 13 x Conditions.

- *Condition no.1* stated that the waste thermally treated at the facility shall be in the form of municipal non-hazardous residual waste generated primarily in the Dublin Waste Management Region as proposed in the application.
- *Condition no.4* stated that deliveries should be in accordance with an agreed strategy and mainly via the M50 and Dublin Port Tunnel.
- *Condition no.8* dealt with the protection of fisheries at the cooling water intake and outfall at the River Liffey.
- *Condition no.10* stated that the design should make provision for a future district heating system.
- *Condition no.12* prohibited the storage of flue gas residues outside the site boundaries.
- *Condition no.13* required the implementation of the EIS mitigation measures, and additional measures in relation to underwater archaeology, architecture and environmental monitoring.

EPA IE Licence W0232-01: the emissions are governed by an EPA Industrial Emissions Licence (Class 11.3 (a) Waste).

Other planning cases: The extensive planning history related to sites in the wider industrial and SDZ area are summarised in Appendix B of the Supporting Statement.

2.0 PROPOSED DEVELOPMENT

2.1 Documentation

The application documentation includes the following:

- Supporting Statement & Planning Drawings
- Environmental Impact Assessment Report (EIAR)
- Screening for Appropriate Assessment report

The EIAR was supported by several Technical Appendices which included:

- Appendix A: Air Quality Impact Assessment
- Appendix B: Traffic & Transport Assessment

2.2 Development Description

The proposed development would comprise an increase of the capacity of the existing operational Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum. No physical interventions, alterations or changes to the operational processes are proposed.

The key changes to accommodate the throughput of an additional 90,000 tonnes of waste per annum would comprise:

- Additional waste delivery vehicles (10 x 1-way/20 x 2-way per day).
- Increased throughput and operation of the Waste to Energy plant,
- Management of additional residual solid waste produced (incl. incinerator bottom ash which will increase proportionally).

2.3 Environmental Impact Assessment Report (EIAR)

The EIAR was prepared using the standard “grouped format structure”. It described the site, surrounding area and the existing operational facility. It explained the background to the project, the benefits arising and the need for the development based on an analysis of existing and anticipated waste disposal requirements in line with European, National and Regional waste policies. It stated that the proposal would comply with national, regional and local environmental, planning, climate change and energy policies. An amendment has been sought to the EPA Industrial Emissions Licence and the facility is not a Seveso site. It provided a detailed description of the existing facility and the proposed capacity increase, identified constraints and described the alternatives considered, including the Do-Nothing and Do-Something scenarios (incl. alternative locations & alternative processes).

The main body of the EIAR outlined the study methodologies and assessed the potential impacts on the receiving environment under the required range of headings, and it proposed mitigation measures. It identified residual and cumulative impacts and assessed interactions. It also included a summary of the qualifications and experience of the main contributors to the report, stated that no difficulties were encountered. It had regard to the risk of major accidents or natural disasters, and to Climate Change. The EIAR was informed by several technical appendices and a Non-Technical Summary was provided.

The EIAR stated that the proposed tonnage increase would involve additional volume of waste throughput to an existing operational facility. It stated that the likely significant effects would be limited to air, climate, waste management, material assets, and more specifically roads and traffic, and population and human health. The additional waste would result in additional emissions to air from the waste delivery vehicles and plant stacks which could potentially have a significant effect on air quality, and the increased vehicular movements could also potentially effect roads and traffic.

The EIAR concluded that any adverse environmental impacts will be minimal and managed by mitigation measures and compliance with the EPA Industrial Emissions

Licence requirements. It concluded that the proposed development would comply with all relevant environmental, energy, planning and waste policy; it would not adversely affect amenities; interfere with biodiversity or give rise to a traffic hazard. It further concluded that there would be positive environmental impacts associated with the thermal disposal of municipal waste and avoidance of landfill. The EIAR finally concluded that the project would be in accordance with the proper planning and sustainable development of the area.

2.4 Appropriate Assessment Screening Report (AA)

A Stage 1 AA screening exercise was carried out and the preparation of a Stage 2 Natural Impact Statement was not considered necessary. The Screening exercise described the site, the existing operational facility and processes undertaken, and the characteristics of the proposed development. It summarised the legislative requirements and described the AA screening methodology. It noted that the Board previously determined in 2007 that the original facility (& subsequent amendments) would not adversely affect the integrity of any European. The report identified several Dublin Bay European sites within of the Zone of Influence of the proposed development and it identified likely significant and in-combination effects. It formally concluded that an AA is not required as the proposed project would not have likely significant effects on European sites, on the basis of objective scientific information, and in view of the Conservation Objectives of the sites, either individually or in-combination with other plans and projects.

3.0 POLICY CONTEXT

3.1 European Policy

Waste Directive (2018/851/EC)

This directive sets out the legal framework for waste management in the EU for the collection, transport, recovery and disposal of waste. It increases targets for the re-use and recycling of waste, and it requires Member States to establish an integrated

and adequate network of installations for waste disposal and the recovery of mixed municipal waste collected from private households in proximate locations.

Renewable Energy Directive (2009/28/EC)

This Directive requires a commitment to produce energy from renewable sources. Members States must submit National Renewable Energy Action Plans and Progress Plans to the EC and reduce reliance on landfill as a waste disposal option.

7th Environmental Action Programme 2013

This programme provides a basis for EU wide action to enhance environmental protection up to 2020. It outlines a longer vision for Europe to 2050 that requires the installation of a network of waste disposal facilities and for the recovery of mixed municipal waste from private households, with the aim of geographic self-sufficiency.

Circular Economy Action Plan for a Cleaner & More Competitive Europe

This Plan sets out measures to tackle all phases on the lifecycle of a product and it includes a number of actions to boost the circularity in specific sectors.

European Green Deal 2019

This document provides a roadmap and overall policy agenda for the delivery of key environmental commitments including clean energy supply and climate targets.

European Climate & Energy Policy

This policy seeks reduce GHG emissions, increase renewable energy and improve energy efficiency by 20% for each target (20-20-20).

3.2 National Policy

National Planning Framework, 2018-2040

This Plan sets out a high-level strategic plan for shaping future growth and development to 2040. It seeks to develop a region-focused strategy to manage growth and environmentally-focused planning at a local level. It contains several National Strategic Outcomes (NSOs) and National Policy Objectives (NPOs) related to transitioning to a low-carbon and climate resilient society (NSO8), seeking

sustainable waste management (NSO9 & NSO56), promoting renewable energy use (NPO55), and improving air quality (NPO64). It also seeks to achieve balanced regional growth, sustainable mobility, enhanced amenity and heritage, and a transition to a low-carbon and climate resilient society.

NSO 9: states in relation to the sustainable management of water, waste and other environmental resources, that:

- Planning for waste treatment requirements to 2040 will require Waste to Energy Facilities which treat the residual waste that cannot be recycled in a sustainable way delivering benefits such a electrical and heat production.

- Adequate capacity and systems to manage waste, including municipal and construction & demolition waste in an environmentally safe and sustainable manner.

NPO 56: seeks to sustainably manage waste generation, invest in different types of waste treatment and support circular economy principles, prioritising prevention, reuse, recycling, and recovery, to support a healthy economy and society.

National Development Plan, 2021-2030

This Plan underpins the National Planning Framework. It contains several priorities related to transitioning to a low-carbon and climate resilient society (NSO8) including investment in waste management and waste to energy infrastructure.

White Paper: Ireland's Transition to a Low Carbon Energy Future, 2015-2030

This document sets out a framework to guide policy and the actions intended to take in the energy sector up to 2030. It takes into account European and International climate change objectives and agreements, as well as Irish priorities.

Climate Action and Low Carbon Development Act, 2015 (as amended)

This document established a framework to develop the national transition towards a low carbon economy. It required the preparation of a national mitigation plan and a national adaptation framework along with compliance with existing obligations.

Climate Action Plan, 2021

This plan seeks to tackle climate breakdown and achieve net zero greenhouse gas emissions by 2050, and it identifies several risks as a result of climate change. It recognises that the transition to a more circular bioeconomy could provide an essential contribution to developing a sustainable, low carbon, resource efficient and competitive economy, and it aims to limit diversion of biodegradable municipal waste to landfill on an ongoing annual basis.

Waste Action Plan for a Circular Economy - National Waste Policy, 2020-2025

This Plan contains a roadmap for waste planning and management which seeks to embed climate action measures and shift focus away from waste disposal and look to how resources can be preserved by creating a circular economy. It fulfils the Programme for Government commitment to publish and start implementing a new National Waste Action Plan. It sets out a range of aims and targets for the State and the measures by which these will be achieved, including increased regulation and measures across various waste areas such as the Circular Economy, Municipal Waste, Plastics & Packaging, Construction & Demolition, and Waste Enforcement. It sets recycling targets in relation to (Household & Municipal) Waste (55% by 2025 to 65% by 2035) and seeks to ensure that no more than 10% of MSW goes to landfill by 2035. It notes that actions are required to reduce reliance of the exportation of waste and to support indigenous treatment capacity.

3.3 Regional Policy

Regional Spatial & Economic Strategy for the Eastern & Midlands 2019

The RSES supports the delivery of the programme for change set out in the National Planning Framework and the National Development Plan and it sets out a strategic vision and policy objectives for the Dublin Metropolitan Area (DMA). It seeks to promote quality infrastructure provision and capacity improvement in tandem with new development aligned with national projects and improvements in water and wastewater, sustainable energy an, waste management and resource efficiency.

It seeks to reduce emissions by 40% by 2030, support the transition to a low carbon region by 2050. The Strategy contains several Regional Policy Objectives (RPOs) related to energy and waste management including the: - identification of Strategic Energy Zones (RPO 7.35); the preparation of a Bioeconomy/Bioenergy Plan (RPO 7.37); the use of heat mapping and a feasibility assessment of district heating (RPO 7.38); and the identification of waste reduction methodologies in Development Plans.

Eastern – Midlands Region Waste Management Plan 2015 - 2021

This Plan provides a framework for the prevention and management of waste in a sustainable manner in its 12 x local authority areas (urban & rural). It has 3 x main targets which seek: - a 1% reduction in household waste per annum; a recycling rate of 50% of managed municipal waste by 2020; and a reduction to 0% of the direct disposal of unprocessed waste to landfill in favour of higher value pre-treatment processes and indigenous recovery practices, in lines with EU and national waste and related environmental policy, infrastructure development, and EU and national environmental and planning protection legislation.

Policy E15a: states that the Plan supports the development of 300,000 tonnes of additional thermal recovery capacity for the treatment of non-hazardous wastes nationally to ensure that the State's self-sufficiency requirements for the recovery of municipal waste are met by 2030. This is a national as opposed to a regional treatment need. Authorisations above this threshold must be justified. All proposed sites for thermal recovery must comply with environmental protection criteria.

3.4 Local Policy

Dublin City Development Plan 2016 - 2022

Zoning objective:

Zone Z7: seeks to provide for the protection and creation of industrial uses and facilitate opportunities for employment creation (site & environs).

Specific objectives:

SEVESO 11 Establishment: the site is identified as a SEVESO 11 (but it is not included as an Upper or Lower Tier Establishment by the HSA in the current lists).

Zone of Archaeological Interest: located to the NE along the Great South Wall.

Sites of Archaeological Interest: located to the NE along the Great South Wall.

Conservation Areas*:* located to the N & NE and along the Great South Wall.

Protected Structures: several in vicinity and along the Great South Wall.

Strategic Development Zone: located to the S & W of the site.

Energy policies:

CCO9: seeks to encourage the production of energy from renewable sources including combined heat and power (CHP), heat energy distribution such as district heating/ cooling systems, and any other renewable energy sources, subject to normal planning considerations, including in particular, the potential impact on areas of environmental sensitivity including Natura 2000 sites.

CC2: seeks to mitigate the impacts of climate change.

CCO14: support government targets for renewable energy.

Waste policies:

SI19: support the principles of good waste management & become self-reliant.

SI20: prevent & minimise waste, and support sorting & recycling.

SI21: minimise the amount of waste which cannot be prevented.

SIO19: implement the regional waste management plan.

Other policies

SI24: monitor & improve air quality.

SI25: preserve & maintain air & noise quality in line with good practice & legislation.

SI28: have regard to the provisions of the Major Accidents Directive.

MTO40: review the implementation of the HGV management strategy.

G122/3/4: deals with European sites & NHAs, and Protected flora, fauna & habitats.

Dublin City Council's Climate Change Action Plan 2019 - 2024

This Plan contains measures to improve energy efficiency whist reducing greenhouse gas emissions and it references the Dublin District Heating System which aims to supply low-carbon heat to houses and businesses in the area.

3.5 Natural heritage designations

European sites:

- South Dublin Bay & River Tolka Estuary SPA
- North Dublin Bay SAC
- South Dublin Bay SAC
- Rockabill to Dalkey Island SAC
- Howth Head SAC
- North Bull Island SPA
- Baldoyle Bay SAC & SPA
- Dalkey Islands SPA

Natural Heritage Areas:

- North Dublin Bay pNHA
- South Dublin Bay pHNA
- North Bull Island pNHA
- Dolphins, Dublin Docks pNHA

Other designations:

- Dublin Bay Biosphere Reserve
- North Bull Island Ramsar Site
- North Bull Island Nature Reserve
- North Bull Island Wildlife Sanctuary

4.0 PROJECT SUBMISSIONS

4.1 Prescribed Bodies

Dublin City Council (DCC) circulated details of the application to 18 x Prescribed Bodies and the Board invited observations from the following 3 x bodies:

- Dept. Transport, Tourism & Sport
- Dept. Agriculture, Food & Marine
- Environmental Protection Agency

A total of 5 x submissions have been received from the following agencies. The EPA did not make a submission however a copy of a letter to DCC from the EPA is attached on the case file.

- Dept of Agriculture, Food & Marine (DAFM)
- Health Service Executive (HSE)
- Geological Survey Ireland (GSI)
- Irish Water (IW)
- Eastern-Midlands Waste Region & Others (RWMPOS)

The main concerns are summarised below:

***DAFM**:* supports the increase in capacity. It raised concerns about the future disposal of high-risk animal by-products (ABP) including meat & bone meal (MBM) which can no longer be exported to the UK for combustion after 2023. It references a pilot project that trialled the combustion of 500 tonnes of MBM at the facility with no significant adverse impacts on odours or emissions. It submits that increased capacity would allow for the take-in of c.12,000 (tonnes). It stated that a long-term on-island solution is needed, there is no Irish facility that can dispose of the 60,000 TPA and it is looking at a range of possibilities (incl. cement factories, other incinerators & combustion plants).

HSE: is satisfied with the EIAR conclusions in relation to land & soils, water, air quality, and noise & vibration.

GSI: advises that regard should be had to Geohazards (incl. coastal vulnerability) and recommends the use of various GSI databases.

IW: requests that conditions be attached to ensure no negative impacts on IW infrastructure or assets.

RWMPOS: supports the increase in capacity, proposal complies with regional waste policy and requests that conditions be attached to:

- Ensure the provision of contingency capacity (c.30,000 TPA).
- Ensure additional capacity to accept untreated healthcare waste, in addition to pre-treated healthcare waste, in emergency circumstances (in light of the Covid Pandemic).

The ***EPA*** response to DCC provided details of the current IE Licence.

All observations so far received have been circulated to the applicant (DCC).

4.2 Public submissions:

No observations have been received from members of the public.

4.3 Applicants response to submissions

The applicant noted the positive contents of the submissions in relation to the proposed increase in treatment capacity at the existing operational facility. In relation to the specific concerns raised by the DAFM and RWMPOS in relation to acceptance of additional waste streams and contingency capacity, the applicant noted that these issues did not fall within the remit of the current planning application or the requested amendment to the EPA Industrial Emissions licence. The concerns raised by GSI and IW were noted, but as no physical works are proposed, the applicant did not consider that any further action or conditions were required or warranted.

5.0 ORAL HEARING

5.1 Introduction

The Board decided not to hold an Oral Hearing and the submissions were circulate to the applicant for comment.

6.0 PLANNING ASSESSMENT

This section should be read in conjunction with Section 7.0 (EIA) of this report.

The main issues arising in this case are:

1. Principle of development
2. Air quality
3. Traffic movement
4. Other issues:
    - Biodiversity
    - Climate Change
    - Coastal stability
    - Cultural heritage
    - Drainage & flood risk
    - Residential amenity
    - SEVESO Establishment

Section 7.0 deals with Environmental Impact Assessment.

6.1 Principle of development

6.1.1 European policy compliance:

The proposed 90,000 tonne per annum expansion of the existing waste to energy facility would be compatible in principle with a variety of EU policies, objectives and targets related to climate change, renewable energy, waste management, the circular economy, and the environment as summarised in section 3.1 above.

More specifically the proposed expansion of capacity would contribute to achieving the objectives the EU Waste Directive (2018/851/EC), which includes the establishment of an integrated network of installations for waste disposal and the recovery of mixed municipal household waste in proximate locations to origin, and also the 7th Environmental Action Programme 2013 which aimed to achieve geographic waste self-sufficiency in Member States. It would also make a positive contribution to the production of renewable energy along with a reduction in reliance on landfill as a waste disposal option for municipal waste in line with the EU Renewable Energy Directive (2009/28/EC).

The proposed expansion in capacity would also contribute to achieving the various objectives of the Circular Economy Action Plan for a Cleaner and More Competitive Europe in relation to the life cycle of products, the European Green Deal 2019 in relation to the delivery of key environmental commitments including clean energy supply and climate targets, and the 20-20-20 targets set out in the European Climate and Energy Policy which seeks to reduce greenhouse gas emissions, increase renewable energy, and improve energy efficiency.

6.1.2 National and regional policy compliance:

The proposed 90,000 tonne per annum expansion of the existing waste to energy facility would be compatible in principle with national and regional policies, objectives and targets in relation to climate change, renewable energy and waste management (incl. increased recycling, reduced reliance on landfill & transitioning to a circular economy), as summarised in section 3.2 and 3.3 above.

In relation to ***national policy***, the proposed expansion of capacity would contribute to achieving several National Planning Framework objectives, and in particular NSO 8 in relation to transitioning to a low-carbon and climate resilient society, NSO 9 & NSO 56 in relation to sustainable waste management, and NPO 55 and NPO 64 in relation to promoting renewable energy use and improving air quality (by reducing reliance of fossil fuels). It would also contribute to achieving several National Development Plan objectives related to transitioning to a low-carbon and climate resilient society by encouraging investment in waste management and waste to energy infrastructure. The proposed development would contribute to achieving several Climate Action Plan objectives which seek to tackle climate breakdown and achieve net zero greenhouse gas emissions by 2050, a transition to a more circular bioeconomy, and the diversion of biodegradable municipal waste away from landfill. It would also contribute to the achievement of several targets set in the Waste Action Plan for a Circular Economy - National Waste Policy, which seek to reduce municipal waste disposal, increase recycling targets, decrease diversion to landfill, reduce reliance of the exportation of waste and support indigenous treatment capacity.

In relation to ***regional policy***, the proposed development would contribute to achieving several RSES policy objectives for the Dublin Metropolitan Area in relation to carbon emissions, sustainable energy, waste management, resource efficiency, and the transition to a low carbon region by 2050. It would also contribute to achieving the main targets of the Eastern - Midlands Region Waste Management Plan which seek a reduction in household waste, increased recycling of municipal waste and a substantial reduction in landfill diversion in favour of higher value pre-treatment processes and indigenous recovery practices. More specifically, the proposed increase in capacity would be compatible with Policy E15a of the regional Waste Management Plan which supports the development of 300,000 tonnes of additional thermal recovery capacity nationally by 2030, subject to a balanced regional spread and compliance with environmental protection criteria. The additional 90,000 tonnes per annum would be compatible with Policy E15a in quantitative and qualitative terms.

6.1.3 Local policy compliance:

The proposed development would be compatible with local planning policies and objectives in relation to climate change, renewable energy, waste management, land use zoning, transportation, and environmental protection, as set out in the Dublin City Development Plan 2016 to 2022, as summarised in section 3.4 above.

In relation to the ***land use zoning objectives*** contained in the current Development Plan, the proposed development, which would comprise an increase in the capacity in the existing permitted and operational waste to Dublin Waste to Energy Facility, would occupy lands which are covered by the Z7 zoning objective which seeks to provide for the protection and creation of industrial uses and facilitate opportunities for employment creation. The existing facility is located within a long-established industrial area, and the proposed development would be compatible with this zoning objective.

The adjoining lands to the S and W are zoned as a Strategic Development Zone for future residential (and other) uses in the Development Plan. The existing permitted waste to energy facility contains the infrastructure to provide for a District Heating System which will ultimately supply low-carbon heat to houses and businesses in the area. This would be in accordance with the terms and conditions of the parent permission and the Council's various climate change policies, and the proposed increase in capacity would contribute to meeting these objectives.

The adjoining lands to the SE are zoned Z9 for open space, recreational amenity and to provide for Green Networks. This area extends S to Irishtown Park and E along the southern section of the Z7 lands towards the Great South Wall. The proposed expansion in waste capacity would not interfere with the Z9 zoned lands.

In relation to the ***specific objectives*** in the Development Plan, the site is identified as a SEVESO Establishment on Map G of the Land Use Zoning Maps and the Facility is listed in Appendix 12 as an Upper Tier SEVESO site (Dublin Waste to Energy Ltd., Pigeon House Road, Dublin 4). The list includes the consultation

distances whereby the Health and Safety Executive (HSA) needs to be informed of any planning applications for development within the stated distances (300m from bund wall in this case). Appendix 12 also notes that as details change from time to time, it is important that the HSA website, which lists the Upper and Lower Tiers, is examined and that the HSA is contacted, where relevant. According to the HSA website, the site and facility are not presently included as either an Upper or Lower Tier SEVESO Establishment in the current lists (December 2020 & April 2021 respectively). Notwithstanding this, the details of the application were circulated to the HSA which did not make a submission in respect of the proposed development.

In relation to ***other objectives*** in the Development Plan (incl. biodiversity, amenity, transportation, & cultural heritage), the extent to which the proposal may interact with these objectives will be addressed in the following sections of this report.

The proposed development would also be compatible with the objectives of the Council's ***Climate Change Action Plan 2019 - 2024*** which contains measures to improve energy efficiency whist reducing greenhouse gas emissions. This Plan references the Dublin District Heating System which aims to supply low-carbon heat to houses and businesses in the area, and which forms part of the existing permitted facility albeit not yet implemented although the technology is in place.

6.1.4 Conclusion:

Having regard to the foregoing, I am satisfied that the proposed development would comply with all relevant European, national, regional and local policies and objectives in relation to climate change, renewable energy, waste management, the circular economy, land use planning, transportation and any other relevant local environmental and amenity policies and objectives for the area. The proposed development would therefore be acceptable in principle.

6.2 Air quality

6.2.1 Project description

The proposed development would comprise an increase in waste acceptance capacity from the permitted 600,000 tonnes per annum to 690,000 tonnes per annum at the waste to energy facility. This would equate to an average additional intake of 57,000 tonnes per month. The existing facility, which comprises furnaces, flue gas treatment and 2 x 100m high chimney stacks, is described in section 1.5 above, and no physical changes are proposed to the facility, it's supporting infrastructure or operational processes. Emissions are subject to an EPA Industrial Emissions (IE) Licence which the applicant has sought to amend to take account of the proposed 15% increase in capacity. The applicants states that the proposed increase in capacity would not give rise to an exceedance of the existing Emission Limits under the current IE Licence. The proposed increase in waste throughput would generate an additional 10 x one-way or 20 x two-way Waste Delivery Vehicles movements per day on average along existing haul routes (refer to section 6.3 below for detailed traffic assessment).

6.2.2 Locational context

The existing waste to energy facility is located on the Poolbeg peninsula to the E of Dublin City Centre and within a predominantly industrial area on the southside of the River Liffey. The Strategic Development Zone (SDZ) lands to the W and S are zoned for future residential and related uses whilst there are existing residential areas located to the nearby W (incl. Ringsend & Irishtown), far N (incl. Clontarf) and far S (incl. Sandymount). The main haul route for the delivery vehicles would skirt existing residential areas to the N and S of the river along the R131 (incl. East Wall, Ringsend & Irishtown). The facility is located c.250m to the S of the River Liffey and c.50m to the N of the South Dublin Bay and River Tolka Estuary SPA. There are several other European sites in the surrounding area (incl. the Dublin Bay SACs & SPAs) which are designated for a variety of coastal habitats and birds. Irishtown Nature Park is located to the S. There are several cultural heritage features in the surrounding area (incl. the Great South Wall & Poolbeg Lighthouse).

6.2.3 Applicant's submission

Section 9.0 of the EIAR dealt with Air Quality impacts and it was informed by an Air Quality Impact Assessment and Air Report which are contained in Appendix A and A9-1 of the EIAR. Section 10 dealt with Climate and Section 13 dealt with traffic impacts. The EIAR quantified the air quality impact of the proposed tonnage increase at the facility and the contribution of emissions from the additional road traffic on mean concentrations of NO_2, NO_x, PM_{10} and $PM_{2.5}$, along with the impact on the stack emissions on the same pollutants, in accordance with EPA guidance.

The assessment quantified pollutant concentrations and impacts at a number of sensitive receptors in the vicinity (incl. human health & ecology). It concluded that the impacts would be imperceptible/negligible in all but one location which would be slight adverse, and that the overall effect would not be significant. The total annual NO_x concentrations were shown to be below the air quality standard for that pollutant in the existing Baseline, 2019 Baseline and 2019 Operational scenarios.

The EIAR concluded that the proposed tonnage increase at the facility will not cause an exceedance of any air quality standards, increase concentrations so as to put any air quality standard at risk of an exceedance, or worsen an existing exceedance, to an extent that would be considered significant. It also concluded that no significant adverse impacts on air quality would occur as a result of the proposed increase in tonnage and additional traffic, in-combination with other plans and projects in the surrounding area.

6.2.4 Policy context

The relevant European, national, regional, and local policies and objectives for the management of waste and protection of air quality are set out in section 3.0 above. Policy SI24 of the current Dublin City Development Plan seeks to monitor and improve air quality in accordance with national and EU policy directives on air quality and, where appropriate, promote compliance with established targets.

The details of the parent permission granted under PL29S.EF2022 including Condition no.1 which stated that the waste thermally treated at the facility shall be in the form of municipal non-hazardous residual waste as proposed in the application, and the EPA's IE Licence are summarised in section 1.5 above.

6.2.5 Planning assessment

I surveyed the site and the surrounding area in September 2021. I had regard to the EIAR air quality and traffic impact studies which are summarised in section 6.2.3 above and section 6.3.3 below. I also had regard to any issues raised by the Observers which are summarised in section 4.0 above, as is the applicant's response to the submissions. The Observers did not raise any specific concerns in relation to air quality and it is noted that the Health Service Executive (HSE) indicated satisfaction with the EIAR conclusions in relation to air quality.

The specific concerns raised by the Department of Agriculture, Food and the Marine (DAFM) in relation to the future disposal of high-risk animal by-products, and the Eastern-Midlands Waste Region & Others (RWMPOS) in relation to the provision of contingency capacity and additional capacity to accept untreated healthcare waste, will be addressed in section 6.2.6 below. I also had regard to national, regional and local planning, environmental and waste management policies as summarised in section 3.0 and 6.2.4 above.

The additional 90,000 tonnes of waste would give rise to a throughput of 690,000 tonnes per annum, along with an additional c. 10 x 1-way or 20 x 2-way Waste Delivery Vehicle movements per day. Potential adverse impacts on air quality therefore relate to an increase in chimney stack and vehicular emissions, with potential resultant impacts on human health and ecology. The EIAR described the Baseline conditions and Operational scenarios and undertook dispersion modelling exercises.

In relation to ***stack emissions***, the EIAR states that emissions will remain well below the limits set in the existing EPA IE Licence after the proposed 15% increase in

waste tonnage has been factored into the equation and dispersion modelling, with no exceedance of air quality standards or adverse impacts on local air quality anticipated. Section 9.1.1 of the EIAR notes that the facility operates comfortably within the IE Licence limit values for all metrics including the worst-case scenario (incl. Flue gas volumetric flow; pollutant concentrations for NO_2, SO_2, dust, HCl & HF; heavy metals & dioxins; and temperature, residence time & excess oxygen levels which are indicative of combustion conditions) as modelled and quantified in the recent Air Quality impact assessment contained in EIAR Appendix A9-1 (c.2019). The modelling exercises concluded that an exceedance of air quality objectives and standards as a result of the proposed increase in tonnage would not occur, either on its own or in combination with other projects in the surrounding area.

In relation to ***vehicle emissions***, the EIAR identified 20 x sensitive human health receptors (R1-R20) in the surrounding area and predicted the NO_2, PM_{10} and $PM_{2.5}$ road traffic impacts at these locations under the 2019 Baseline and 2019 Operational scenarios, along with the change in concentration between the two scenarios. The modelling exercises concluded that an exceedance of air quality objectives and standards as a result of any associated increase in vehicular movements was unlikely. The EIAR also identified 8 x sensitive ecological receptors (E1-E8) in the surrounding area and predicted the NO_x road traffic impacts at these locations under the same Baseline and Operational scenarios. The modelling exercise concluded that an exceedance of air quality standards would not be significant, either on its own or in combination with other projects in the surrounding area.

As previously stated, the additional 90,000 tonnes of waste would give rise to a throughput of 690,000 tonnes per annum which would equate to an average monthly intake of 57,500 tonnes. Section 13.5.1.1 of the EIAR noted that an average of 52,722 tonnes of waste was accepted per month between 10/17 and 07/18. It also noted that the proposed average monthly tonnage was either equalled or surpassed on 3 x occasions during that period when the facility accepted c.57,500 tonnes per month. This would have been on a par with the proposed 690,000 annual tonnage (without actually exceeding the annual permitted tonnage of 600,000). No adverse impacts on air quality were noted or recorded.

6.2.6 Other issues

DAFM raised concerns in relation to the future disposal of high-risk animal by-products (ABP) including meat & bone meal (MBM) which can no longer be exported to the UK for combustion after 2023. It referenced a pilot project that trialled the combustion of 500 tonnes of MBM at the facility with no significant adverse impacts on odours or emissions. It states that increased capacity would allow for the take-in of c.12,000 (tonnes), that a long-term on-island solution is needed as there is no Irish facility that can dispose of the 60,000 TPA although it is looking at a range of possibilities (incl. cement factories, other incinerators & combustion plants).

RWMPOS requested that conditions be attached to ensure the provision of contingency capacity (c.30,000 TPA) and to ensure that additional capacity is available to accept untreated healthcare waste, in addition to pre-treated healthcare waste already accepted, in emergency circumstances, having regard to the situation that has arisen as a result of the current Covid Pandemic.

In relation to the specific concerns raised by the DAFM and RWMPOS in relation to acceptance of additional waste streams and additional contingency capacity, the applicant noted that these issues did not fall within the remit of the current planning application or the requested amendment to the EPA Industrial Emissions licence. The applicant noted that it would be happy to engage in future discussions with these agencies and the EPA in relation to these matters.

Given that none of the aforementioned issues were addressed in the planning application, EIAR or public notices, it would be inappropriate to assess the potential environmental impacts of the additional matters raised by the DAFM and RWMPOS and the suggested conditions, in the absence of relevant scientific data, particularly in relation to the assessment of air quality impacts. This issue could be addressed by way of a planning condition in the interest of clarity and the avoidance of doubt.

6.2.7 Conclusion

Having regard to the foregoing and based on my assessment of the site and surrounding area, I am satisfied that the proposed development would not have an adverse impact on air quality, subject to the continued implementation of the terms and conditions of the parent permission for the waste to energy facility granted by the Board under PL29S.EF2022, and in particular Condition no. 1 in relation to the thermal treatment of municipal non-hazardous residual waste, compliance with any recommended planning conditions, and compliance with the terms and conditions of the EPA Industrial Emissions Licence for the facility. The proposed development would not give rise to any significant adverse local or cumulative impacts in-combination with other developments in the surrounding and wider area.

6.3 Traffic, movement and safety

6.3.1 Project description

The proposed development would comprise an increase in waste acceptance capacity from the permitted 600,000 tonnes per annum to 690,000 tonnes per annum at the waste to energy facility which would equate to an average intake of 57,000 tonnes per month. No physical changes are proposed to the facility it's supporting infrastructure or operational processes. The existing facility is permitted to accept 121 x WDVs per day (242 x combined traffic movements). The existing delivery of waste is catered for by an average of 95 x Waste Delivery Vehicles (WDVs) per day (190 x combined traffic movements). The increase in capacity would give rise to an additional trip generation rate of c.10 x WDVs per day (20 x combined traffic movements). This would result in a total of c.105 Waste Delivery Vehicles per day (c.210 combined traffic movements).

6.3.2 Locational context

The existing waste to energy facility is located on the Poolbeg peninsula to the E of Dublin City and within a predominantly industrial area on the southside of the River Liffey, and the site is bound to the N by Pigeon House Road and W by Shellybanks Road. Strategic vehicular access to the facility is mainly via the M50 and Dublin Port Tunnel to the N (as per condition no.4 of PL29S.EF2022), and then via the R131 / East Link Bridge and the South Bank Road - Pidgeon House Road roundabout at Irishtown to the E. Local vehicular access is off Pigeon House Road to the N. Waste Delivery Vehicles use the entrance/exit to the E off Pigeon House Road whilst staff vehicles use the staff entrance/exit to the W to the 35-space car park.

6.3.3 Applicant's submission

The EIAR assessed the capacity of the strategic and local road network and junctions to accommodate the additional traffic associated with the proposed increase in waste capacity at the facility, on its own and in combination with other developments in the surrounding area.

Section 13 of the EIAR and Technical Appendix B described the proposed development and surrounding road network, provided a traffic and transport assessment, and examined the potential impacts of the proposed development during the operational phase to a Horizon Year of 2035. The existing environment and the regional and local road network were described, several desktop studies and traffic surveys were undertaken and traffic modelling exercises were undertaken. The desktop studies included a general review of traffic information provided by the applicant which included Waste Delivery Vehicle (WDV) data from October 2017 to July 2018. This also comprised a specific examination of 3 x occasions when the monthly tonnage equalled or surpassed the proposed tonnage increase. The traffic surveys (incl. traffic counts, junction turning counts & queue length surveys), were used to establish the baseline and the determination of average trip generation rates of WDVs to and from the facility (incl. current & future rates). The EIAR traffic assessments included committed and permitted developments in the vicinity and the traffic impact from the future development of the adjacent SDZ lands.

The EIAR concluded that no adverse traffic impacts would arise during the operational phase as a result of the 90,000 tonnes per annum increase in waste and that that the strategic and local road network and junctions have adequate capacity to accommodate additional traffic associated with the increase.

6.3.4 Policy context

In relation to the current Development Plan, the relevant policies and objectives are set out in section 3.0 above and the details of the parent permission and relevant traffic conditions granted under PL29S.EF2022 are summarised in section 1.5.

6.3.5 Planning assessment

As previously stated, I surveyed the site, environs and surrounding road network in September 2021. I had regard to the relevant sections of the EIAR and Technical Appendices (incl. the Traffic & Transport Assessment) which are summarised in section 6.3.3 above. The Observers did not raise any issues in relation to traffic, transport or movement. I had regard to national, regional and local planning and

transportation policies which are summarised in section 3.0 above. I also had regard to the terms and conditions of the approval granted by the Board under PL29S.EF2022 for the existing waste to energy facility under which a maximum of 121 x WVDs (242 combined traffic movements) are permitted to access the facility.

The proposed additional 90,000 tonnes of waste would give rise to a throughput of 690,000 tonnes per annum which would in turn equate to an average monthly intake of 57,500 tonnes. The EIAR states that the existing monthly delivery of waste is catered for by an average of 95 x Waste Delivery Vehicles (WDVs) per day (190 combined movements) with an average of 5 x Residual Waste Vehicles (RWVs) per day used to transport residual waste (incl. air pollution control residues & residual bottom ash) away from the facility, along with service and staff vehicles.

Section 13.5.1.1 of the EIAR noted that an average of 52,722 tonnes of waste was accepted per month between 10/17 and 07/18. It also noted that the proposed average monthly tonnage was either equalled or surpassed on 3 x occasions during that period when the facility accepted c.57,500 tonnes per month. This would be on a par with the proposed 690,000 annual tonnage (without actually exceeding the annual permitted tonnage of 600,000).

Traffic data from these 3 x months were used to assess the likely significant effects on ***traffic movement*** by the proposed 90,000 increase in tonnage (15%), which had a trip generation rate of 105 WDVs per day (210 combined movements). The EIAR predicted that the number of WDVs trips is predicted to increase by 10 from 95 to 105 WDVs per day (190 to 210 combined movements) to accommodate the 15% increase in waste. This would be accordance with the terms and conditions of the parent permission under PL29S.EF2022 under which a maximum of 121 WVDs (242 combined movements) are permitted to access the facility. A small increase in RMVs to accommodate a similar 15% increase in residual waste (air pollution control residues & bottom ash) would marginally increase waste removal trips. No change to the numbers of service and staff vehicles were anticipated. Based on these figures, only a very modest increase in traffic growth (c.3.8%) is predicted between the Opening (2021) and Horizon (2036) years, and traffic would continue to be

distributed as per existing distribution arrangements and in accordance with the parent permission under PL29S.EF2022.

The proposed development would interact directly with several existing ***road junctions*** including the multi-arm Pidgeon House Road - South Bank Road roundabout to the E which connects the site to the Port Tunnel via with the R131 and East Link Bridge. Transport Infrastructure Ireland (TII) Guidelines for Transport Assessments set the thresholds for junction analysis in such assessments in terms of a 5% or 10% exceedance of traffic (with or without congestion respectively). Based on the various traffic surveys and the predicted increase in WDVs accessing the facility (as outlined above) the EIAR calculated the percentage impact on the surrounding junctions as falling below 5% during the AM and PM peaks for 6 of the 7 junctions examined. The South Bank Road – Whitebank Road "T" junction within the industrial area and to the SW of the facility returned a high percentage impact score for the AM and PM peaks (29% & 27%). The EIAR carried out a more detailed assessment of this junction in line with TII requirements for threshold exceedance using PICADY junction modelling. The results concluded that the Ratio of Flow to Capacity would be well below the 0.85 value for operational efficiency during the AM and PM peaks under various scenarios including up to and beyond 2036.

The EIAR Traffic and Transport Assessment and supporting documents concluded that the national, regional and local road network (incl. junctions) would continue to operate safely within their capacities during the operational phase. Based on my examination of these reports, the modest predicted level of traffic increase associated with the additional 90,000 tonnes of waste and the residual waste removal per annum between the Opening and Horizon Years, along with my site inspection, I would concur with these conclusions. I am satisfied that any additional traffic would not give rise to any significant congestion, delays, disruption or hazards along any national, regional, local or urban roads, or at any of the main junctions with the road network.

Furthermore, I am satisfied that the results of the EIAR traffic surveys and traffic modelling exercises and subsequent Traffic and Transport Assessment, which incorporated future growth in the surrounding area in line with TII requirements, are

sufficiently robust to support the WDV and RWV traffic associated with the increased capacity at the waste to energy facility.

6.3.6 Conclusion

Having regard to the foregoing, I am satisfied that the regional and local road network has adequate capacity to accommodate the additional traffic generated during the operational phase of the proposed development. The increased use of existing junctions along the wider road network, including the South Bank Road - Pidgeon House Road roundabout to the E and the Southbank Road – Whitebank “T” junction to the SE, would not give rise to a traffic hazard or endanger the safety of other road users during this phase. The proposed development would not have an adverse effect on any other uses in the surrounding area in terms of road safety.

This conclusion of no significant adverse impacts would be subject to the continued implementation of the terms and conditions of the parent permission for the waste to energy facility granted by the Board under PL29S.EF2022 and in particular Condition no. 4 in relation to traffic management, and compliance with any recommended planning conditions. The proposed development would not give rise to any significant adverse local or cumulative impacts in-combination with other developments in the surrounding and wider area.

6.4 Other Issues

Biodiversity: Having regard to the nature and scale of the proposed development which would not comprise any physical works or changes to the operational processes, the operation of the existing facility well with its EPA Industrial Emission Licence limits, the existing measures to prevent entrainment and impingement at the cooling water intake from the River Liffey and the high degree of tidal mixing that occurs at the cooling water outfall, I am satisfied that the proposed increase in waste capacity would not have an adverse impact on ecology or biodiversity (incl. coastal habitats & species, waterbirds and fisheries), subject to the continued implementation of the terms and conditions of the parent permission granted by the Board under PL29S.EF2022. This would include Condition no. 8 in relation to the protection of fisheries at the cooling water intake and outfall points and Condition no.13 in relation to the implementation of the EIS mitigation measures. The proposed development would not give rise to any significant adverse local or cumulative impacts in-combination with other developments in the surrounding and wider area on ecology and biodiversity.

Climate change: A lifecycle greenhouse gas impact assessment was undertaken to assess the impact of the proposed tonnage increase on climate, on its own and in combination with other projects, and whether the proposed increase will impact on Ireland meeting its carbon reduction targets. The assessment indicated that that the gross annual emissions from the facility would be increased by 72,893 tonnes CO_2 equivalent with the proposed tonnage increase. When the avoided emissions from waste disposal and displaced grid electricity are factored into the equation, the net increase in CO_2 emissions is reduced to c.5,866 tonnes equivalent with the capacity at 690,000 tonnes per annum. The assessment concluded that as the emissions would be less than 25,000 tonnes CO_2 equivalent per year the magnitude of the effects during operation would be Low and the significance of the effects Minor Adverse. I am satisfied, based on the information provided which was assessed in accordance with Institute of Environmental Management and Assessment Guidance, that the proposed development would not give rise to substantial additional CO_2 emissions and that it would not affect Irelands carbon reduction targets to any significant extent.

Coastal vulnerability: The concerns raised by Geological Survey Ireland in relation to coastal vulnerability are noted, however the proposed development would not comprise any physical works or alterations to existing operational processes, with no adverse impacts on coastal stability anticipated.

Cultural Heritage: No grounds works, or new structures are proposed with no resultant impacts on archaeology or any heritage features anticipated.

Drainage, water quality & flood risk: No grounds works or alterations to the current drainage arrangements are proposed with no resultant impacts on drainage or flooding anticipated. The increase in Waste Delivery Vehicle movements (10 x 1-way or 20 x 2-way WDVs/day) could result in accidental fuel spills and leakages, however the existing surface water management arrangements would adequately deal with any additional risks. There will be no significant change to cooling water emissions as a result of the proposed increase in tonnage. Recent tests at the cooling water outfall did not detect the presence of any toxic substances in the discharged cooling water. Although the temperature of the discharged water is higher than that of the receiving waters in the River Liffey, the high level of tidal mixing in the estuary would ensure that any localised temperature effects would dissipate rapidly with no adverse impacts on water quality anticipated. The concerns raised by Irish Water in relation to the protection of IW infrastructure are noted however a related planning condition is not required given the absence of physical works.

Residential amenity: The proposed development would be located entirely within an existing and long-established industrial area and there would be no direct adverse impacts on any residential areas in terms of amenity. Issues related to air quality and traffic safety with respect to the proposed increase in waste treatment capacity are addressed in sections 6.2 and 6.3 above (Air Quality and Traffic & Movement).

SEVESO: the site is identified as a SEVESO 11 Establishment in the current Dublin City Development Plan but it is not included as an Upper or Lower Tier Establishment by the HSA in the current lists. (Refer to section 6.1.3 above Local policy compliance – Specific Objectives). It is also noted that Condition no.12 of the parent permission granted by the Board under PL29S.EF2022 stated that flue gas residues shall not be stored at any location outside the site boundaries in such quantities as to result in the storage area becoming an Establishment for the purposes of the EU Major Accidents Directive.

6.5 Screening for Appropriate Assessment

The main issues related to ecology and any concerns raised by the Observers are summarised and addressed in section 4.0 of this report, section 6.4 deals with Biodiversity and section 7.0 below contains an environmental impact assessment. These sections should be read in conjunction with this assessment.

The AA Screening Report

The AA Screening report described the site, the existing operational waste to energy facility and the proposed 90,000-tonne increase in waste capacity, and it referenced the EPA Industrial Emissions Licence and associated monitoring reports. The report confirmed that the proposed development would not be located within a European site. It identified several Dublin Bay European sites within the Zone of Influence (c.10km for airborne emissions from the chimney stacks & traffic and c.2km for water borne emissions from the cooling water outfall). It concluded that the European sites would not be affected by the proposed increase in tonnage at the existing facility and that the preparation of an NIS and progression to a Stage 2 AA was not required.

AA Screening Assessment

The proposed development would not be located within an area covered by a European site designation, and it is not relevant to the maintenance of any such European site. There are 9 x European sites located within the Zone of Influence (c.2km & 10km radius). The Qualifying Interests and approximate separation distances from the facility site boundary to these European sites are listed below.

European sites	QIs/ SCIs	Distance
South Dublin Bay & River Tolka Estuary SPA (004024)	Light-bellied Brent & Oystercatcher Ringed Plover, Grey Plover & Knot Sanderling, Dunlin & Bar-tailed Godwit Redshank & Black-headed Gull Roseate Tern, Common Tern & Arctic Tern Wetland and Waterbirds	Adjacent
South Dublin Bay SAC (000210)	Mudflats and sandflats not covered by seawater at low tide	100m (S)
North Dublin Bay SAC (000206)	Mudflats & sandflats Annual vegetation of drift lines Salicornia & other annuals (mud & sand) Atlantic & Mediterranean salt meadows Embryonic shifting dunes Shifting (white) & Fixed grey dunes Humid dune slacks & Petalwort	2.7km (NE)
North Bull Island SPA (004006)	Light-bellied Brent Goose Shelduck, Teal, Pintail & Shoveler Oystercatcher, Golden Plover & Grey Plover Knot, Sanderling & Dunlin Black-tailed Godwit & Bar-tailed Godwit Curlew, Redshank & Turnstone Black-headed Gull, Wetland and Waterbirds	2.7km (NE)
Rockabill to Dalkey Island SAC (003000)	Harbour porpoise	6.8km (E)
Howth Head SAC (000202)	Vegetated sea cliffs European dry heaths	7.2km (NE)
Baldoyle Bay SAC (001299)	Mudflats & sandflats Salicornia & other annuals (mud & sand) Atlantic & Mediterranean salt meadows	7.4km (NE)
Baldoyle Bay SPA (004016)	Light-bellied Brent Goose & Shelduck Ringed Plover, Golden Plover & Grey Plover Bar-tailed Godwit & Wetland and Waterbirds	7.4km (NE)
Dalkey Islands SPA (004172)	Roseate Tern, Common Tern & Arctic Tern	9.5km (NE)

Conservation Objectives:

- To maintain or restore the favourable conservation condition of the Annex 1 habitat(s) and/or the Annex 11 species for which the SACs have been selected which are defined by a list of attributes and targets (South Dublin Bay, North Dublin Bay, Rockabill to Dalkey Island, Howth Head & Baldoyle Bay SACs).

- To maintain the favourable conservation condition of the species for which the SPAs have been selected which are defined by a list of attributes and targets (South Dublin Bay & River Tolka Estuary SPA, North Bull Island & Baldoyle Bay SPAs).

- To maintain or restore the favourable conservation condition of the bird species listed as Special Conservation Interests for this SPA (Dalkey Island SPA).

The potential effects relate to:

- Release & transport of air borne pollutants to the European sites via chimney stack and traffic related emissions.
- Release & transport of pollutants flowing into the European sites via the water-cooling outfall to the River Liffey.
- Loss of or damage to habitat/resting/foraging places used by QI/SCI species as a result of the above.
- Noise and disturbance to QI/SCI species during facility operations.

The European sites:

The extensive ***South Dublin Bay & River Tolka Estuary SPA*** is designated for several species of wetland and waterbirds. A small linear section of the SPA borders the waste to energy facility to the S between the Ringsend Wastewater Treatment Plant (WTP) and the Irishtown Nature Park. This narrow strip of managed grassland was provided as compensatory grassland for wintering Light bellied brent geese under the terms and conditions of the permitted extension to the WTP in 1997. Bird

surveys indicate that it supports several species of wintering waterfowl (SCI species) in addition to Brent geese. Another small section of this SPA which comprises a colony of breeding Terns (SCI species) is located to the N of the facility on manmade structures within the River Liffey, and to the NE of the cooling water outfall. The site boundary of the extensive ***South Dublin Bay SAC*** is located c.100 m to the S of the site. According to the NPWS Conservation Objectives document, this SAC is designated for its mudflat habitats (Mudflats and sandflats not covered by seawater at low tide). The boundaries of the remaining 7 x European sites are located between c.2.7km and c.9.5km from the existing facility and they are designated for a variety of coastal habitats, and wetland and water birds.

Likely significant effects:

The proposed development would not require any physical works or alterations to the existing facility or its operational processes, and there would be no resultant effects on the Conservation Objectives for the European sites or their constituent QI/SCI habitats and species. However, the proposed 90,000 tonnes per annum increase in waste throughput could give rise to additional emissions from the chimney stacks, delivery vehicles and cooling water outfall, which could have an effect on the European sites.

The existing facility is operating well within the limits set by the EPA Industrial Emissions licence and there would be no exceedance of air quality standards for any of the potential pollutants (incl. NO_x, NH_3 & SO_2 or heavy metals). Refer to section 6.2 above for a more detailed assessment of air quality. Furthermore, there is no evidence of adverse effects on any nearby European sites or their QI/SCI habitats and species (incl. the adjacent South Dublin Bay & River Tolka Estuary SPA or the nearby South Dublin Bay SAC) as a result of the operational airborne emissions, with no adverse impacts on QI habitats and species or SCI wetland and water bird species anticipated as a result of the proposed increase in tonnage. The air quality assessments and dispersion maps confirm that no adverse impacts would arise.

The proposed tonage increase would give rise to an average of 10 x 1-way or 20 x 2-way delivery vehicle traffic movements per day, and the resultant emissions would not have a significant effect the nearby European sites with no adverse impacts on SCI wetland and water bird species anticipated. Refer to section 6.2 and 6.3 above for a more detailed assessment of air quality and traffic movements. The air quality assessments and dispersion maps confirm that no adverse impacts would arise.

There will be no significant change to cooling water emissions as a result of the proposed increase in tonnage. Recent tests at the cooling water outfall did not detect the presence of any toxic substances in the discharged cooling water. Although the temperature of the discharged water is higher than that of the receiving waters in the River Liffey, the high level of tidal mixing in the estuary would ensure that any localised temperature effects would dissipate rapidly before reaching the Dublin Bay European sites with no adverse impacts on SCI wetland and water bird species anticipated as a result of the proposed increase in tonnage.

The existing facility does not give rise to a significant level of disturbance from operational noise or vibrations with no adverse impacts on SCI wetland and water bird species anticipated as a result of the proposed increase in tonnage.

In-combination effects:

Having regard to the established industrial location, and modest scale of the proposed development it is unlikely that the proposed increase in tonnage and associated emissions and vehicular movements would give rise to any significant in-combination effects with other plans and projects in the surrounding area.

Conclusion:

Based on my examination of the AA Screening report and supporting information (incl. the EIAR studies & surveys), NPWS website, aerial imagery, the scale of the proposed works and nature of the likely effects, the separation distance and functional relationship between the proposed works and the European sites and their

conservation objectives, the site specific characteristics and requirements, taken in conjunction with my assessment of the subject site and surrounding area, I conclude that a Stage 2 Appropriate Assessment is not required, and the European sites can be screened out of any further assessment.

AA Screening Conclusion

Having regard to the location, nature and scale of the proposed development, the absence of any proposed mitigation measures related to the protection of European sites, the nature of the qualifying interests, special conservation interests and conservation objectives of the European sites, and to the available information as presented in the submitted documents regarding the current level of compliance with the EPA Industrial Emissions licence and predicted non-exceedance of air quality and water quality standards, and other information available, it is my opinion that the proposed development does not have the potential to affect any European sites having regard to the conservation objectives of the relevant site, and that progression to a Stage 2 Appropriate Assessment is not required.

7.0 ENVIRONMENTAL IMPACT ASSESSMENT

7.1 Introduction

This section of the report deals with the potential environmental impacts of the proposed development during the operational phase. No physical interventions, alterations or changes to the operational processes are proposed. Decommissioning is not under consideration as the proposal relates to a 90,000 tonnes per annum increase in waste acceptance capacity at the existing operational waste to energy facility which currently manages 600,000 tonnes of non-hazardous municipal waste per year.

This section should be read in conjunction with Section 6.0 (Planning Assessment) and Section 6.5 (Screening for Appropriate Assessment).

7.2 Compliance legislative requirements

Directive 2011/92/EU was amended by Directive 2014/52/EU. Dublin City Council has submitted an Environmental Impact Assessment Report (EIAR) which is presented in a 'grouped format' comprising the following:

- Non-Technical Summary
- Main Statement
- Technical Appendices

It is submitted by the applicant that the EIAR has also been prepared in accordance with the European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018 that came into effect on 1st September 2018, and which the Board will be aware, transposed Directive 2014/52/EU into Irish planning law. As is required under Article 3(1) of the EIA Directive 2011/92/EU amended by Directive 2014/52/EU, the EIAR identifies, describes and assesses in an appropriate manner, the direct and indirect significant effects of the project on the following environmental 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 and it equally considers the interaction between the factors referred to in points (a) to (d).

I am satisfied that the EIAR has been prepared by competent experts to ensure its completeness and quality, and that the information contained in the EIAR and supplementary information provided by the applicant, adequately identifies and describes the direct, indirect and cumulative effects of the proposed development on the environment and complies with the requirements of Directive 2011/92/EU as amended by Directive 2014/52/EU.

I am satisfied that the information contained in the EIAR complies with article 94 of the Planning and Development Regulations 2000, as amended, and the provisions of Article 5 of the EIA Directive 2014.

I have carried out an examination of the information presented by the applicant, including the EIAR, and the submissions made during the course of the application. A summary of the results of the submissions made by the prescribed bodies along with the applicant's response to same has been set out in Section 4.0 of this report.

The EIAR describes the proposed development, including information on the site, the existing operational waste to energy facility and the proposed increase in tonnage throughput. A description of the main alternatives studied by the applicant and alternative locations considered, is provided and the reasons for the preferred choice. The impact of the proposed development was assessed under all the relevant headings with respect to population and human health; noise, air and climate; biodiversity; landscape; land, geology and soils; hydrology and hydrogeology; roads and traffic; material assets and cultural heritage; interactions of impacts; and the suggested mitigation measures are set out at the end of each chapter.

The content and scope of the EIAR is in compliance with Planning Regulations. No likely significant adverse impacts were identified in the EIAR following mitigation.

7.3 Consideration of Reasonable Alternatives

The consideration of reasonable alternatives was considered in Section 4.0 of the EIAR. The proposed development would comprise an increase in waste acceptance capacity at an existing operational waste to energy facility. Given that it would not comprise any physical works, alterations, new infrastructure or changes to operational processes, the Alternatives considered related to Alternative Locations, Alternative Processes (incl. Landfill, increased recycling capacity, export overseas, thermal co-processing), and the Do-Nothing Alternative. It concluded that the proposed tonnage increase at the existing facility would be the most sustainable option compared with the alternatives.

7.4 Summary of Likely Significant Effects

Section 6.0 of this report identifies, describes and assesses the main planning issues arising from the proposed development and it should be considered in conjunction with the following environmental impact assessment (EIA). The EIA identifies and summarises the likely significant effects of the proposed development on the environment with respect to several key receptors in the receiving environment. It identifies the main mitigation measures and any residual impacts following the implementation of these measures together with any planning conditions recommended in section 6.0 of this report, and it reaches a conclusion with respect to each of the receptors. It assesses cumulative impacts, identifies interactions between the receptors, and considers the risks associated with major accidents and/or disasters. The EIA reaches a Reasoned Conclusion.

For ease of reference the EIA is presented in a tabular format with respect to:

- Population and Human Health
- Air and Climate
- Landscape
- Biodiversity
- Land soil and water
- Material assets
- Cultural heritage

Population and human health	
EIAR sections 5, 9, 10, 11, 12 & 13 and associated Technical Appendices dealt with: - population & human health; air quality; climate; noise & vibration; landscape & visual; and roads & traffic. The EIAR described the receiving environment and existing operational Waste to Energy Facility, and it noted that no physical works or changes to existing operational processes are proposed. It identified potential impacts on human beings, human health, air quality, employment, local amenities and health & safety. The EIAR did not predict any significant adverse impacts on human beings, population or human health during the continued operational phase as a result of the proposed tonnage increase, subject to the continued implementation of mitigation measures related to the management of the facility and associated traffic.	
Submissions	***Concerns raised***
DAFM, HSE & RWMPOS	Welcome increase in capacity. Satisfied with EIAR conclusions.
Potential impacts	***Assessment & mitigation measures***
Potential for the following impacts on human beings during the continued operational phase of the facility as a result of the proposed increase in waste tonnage and associated increase in airborne emissions and traffic. ***Residential & visual amenity:*** No physical works or alterations are proposed although the increase in capacity could cause minor localised disturbance from traffic and resultant emissions.	There are several residential areas located to N, W & S of the facility (incl. at East Wall, Ringsend & Irishtown), the area to the far NE & SW are characterised by a mix of residential & community uses (incl. at Clontarf & Sandymount), and the SDZ lands to the immediate W & S are designated for future residential & community uses. Refer to section 6.0 of this report for detailed analysis of residential impacts which concluded that there would be minor localised disturbance impacts from the additional waste delivery vehicles, but no adverse effects on residential amenity during the continued operational phase as a result of the tonnage increase.

Air quality: Potential for adverse impacts on air quality during the continued operational phase as a result of the proposed increase in waste tonnage and associated increase in airborne emissions and traffic (WDVs 10 x 1-way or 20 x 2-way per day)..	Refer to section 6.2 of this report for a detailed analysis of air quality impacts. The EIAR states that stack emissions will remain well below the limits set in the existing EPA IE Licence after the proposed 15% increase in waste tonnage has been factored into the equation and dispersion modelling, with no exceedance of air quality standards or adverse impacts on local air quality anticipated. The facility operates comfortably within the IE Licence limit values for all metrics including the worst-case scenario (incl. Flue gas volumetric flow; pollutant concentrations for NO_2, SO_2, dust, HCI & HF; heavy metals & dioxins; and temperature, residence time & excess oxygen levels which are indicative of combustion conditions) as modelled and quantified in the recent Air Quality impact assessment contained in EIAR Appendix A9-1 (c.2019). The modelling exercises concluded that an exceedance of air quality objectives and standards as a result of the proposed increase in tonnage would not occur, either on its own or in combination with other projects in the surrounding area. I am satisfied that the proposed increase in capacity would not have any significant long-term effects during the continued operational phase. This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022), mitigation measures related to traffic management and air

	quality, and the terms and conditions of the EPA Industrial Emissions Licence (as amended). The proposed development would have a positive impact on population and human health as result of diverting waste away from less environmentally sustainable and/or more polluting methods of treatment. Any negative traffic emission impacts would be mitigated by the continued redistribution of traffic away from the more densely populated central area and routing WDVs via the Dublin Port Tunnel, which would in turn improve safety & reduce NO_x and NO_2 emissions in built up areas.
Noise, vibration & dust**:** Limited potential for minor disturbance during the operational phase.	Noise emissions do not significantly exceed the prevailing ambient noise levels within the industrial area or at the nearest sensitive receptors, and there would be no significant additional noise during the operational phase as a result of the increase in tonnage. Waste is delivered to the facility in sealed containers and deposited within the confines of the main building, with no significant dust emissions anticipated. Having regard to the industrial location, the separation distances with the nearest residential properties to the W and the presence of the landscaped berms around the perimeter of the site, I am satisfied that the proposed increase in capacity would not have any significant long-term effects during the continued operational phase. This would be subject to compliance with

	the terms and conditions of the parent permission (PL29S.EF2022) and the relevant mitigation measures.
Traffic: Potential minor localised impacts on air quality, road safety and residential amenity related to disturbance from the additional Waste Delivery Vehicles (10 x 1-way or 20 x 2-way per day).	Refer to section 6.3 of this report for a detailed analysis of movement and traffic impacts. The national, regional and local road network has sufficient capacity to assimilate the additional traffic volumes associated with the increase in tonnage during the continued operational phase (Opening & Horizon years). This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022) and the mitigation measures related to traffic management. Any negative traffic emission impacts would be mitigated by the continued redistribution of traffic away from the more densely populated central area and routing WDVs via the Dublin Port Tunnel, which would in turn improve safety & reduce NO_x and NO_2 emissions in built up areas.
Health & safety: Potential for adverse impacts on health and safety from on-site accidents during the operational phase and from traffic accidents.	On-site accident concerns are and would continue to be addressed by way of compliance with all relevant health and safety legislation. As above for positive impacts on air quality and road safety.

Residual Effects: There will be some increase in airborne emissions from the chimney stacks and Waste Delivery Vehicles during the continued operational phase, however predicted emission levels from the stacks are within guidance limit values and will be subject to compliance with the EPA IE Licence. Residual impacts are not predicted to be significant subject to the implementation of mitigation measures.
Cumulative Impacts: Minor impacts may occur in-combination with existing plans and projects in the industrial location, and with the future development of the adjacent SDZ zoned lands to the S & W, but none predicted to be significant.
Conclusion: I have considered all the written submissions made in relation to population & human health, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.

Air and Climate	
EIAR sections 9, 10 & 13 and associated Technical Appendices dealt with air quality, climate and roads & traffic. The EIAR described the receiving environment and existing operational Waste to Energy Facility, and it noted that no physical works or changes to existing operational processes are proposed. The EIAR identified potential impacts on air quality and climate, and it did not predict any significant adverse impacts during the continued operational phase as a result of the proposed tonnage increase, subject to the continued implementation of mitigation measures related to the management of the facility and associated traffic. The EIAR noted that positive impact on air and climate would accrue from the diversion of waste from other less sustainable waste management methods and by contributing electricity to the grid.	
Submissions	***Concerns raised***
None	None
Potential impacts	***Assessment & mitigation measures***
There is potential for the following impacts on air and climate during the continued operational phase of the facility as a result of the proposed tonnage increase and associated increase in airborne emissions and traffic volumes.	The existing facility is located on made-ground within an established industrial area, it is surrounded by industrial & commercial uses and the SDZ zoned lands to the S & W are zoned for future residential & related uses. There are several existing residential areas to the far N, E and S of the facility and the main WDV haul route interfaces with residential areas to the NW (incl. Eastwall) & W (incl. Ringsend & Irishtown). Refer to section 6.2 of this report for a detailed analysis of air quality impacts which concluded that there would be no significant adverse impacts on air quality as a result of the proposed tonnage increase.

Air Quality: Potential for adverse impacts on air quality during the continued operational phase as a result of the proposed increase in waste tonnage and associated increase in airborne emissions and traffic (WSVs 10 x 1-way or 20 x 2-way per day). .	The EIAR states that stack emissions will remain well below the limits set in the existing EPA IE Licence after the proposed 15% increase in waste tonnage has been factored into the equation and dispersion modelling, with no exceedance of air quality standards or adverse impacts on local air quality anticipated. The facility operates comfortably within the IE Licence limit values for all metrics including the worst-case scenario (incl. Flue gas volumetric flow; pollutant concentrations for NO_2, SO_2, dust, HCI & HF; heavy metals & dioxins; and temperature, residence time & excess oxygen levels which are indicative of combustion conditions) as modelled and quantified in the recent Air Quality impact assessment contained in EIAR Appendix A9-1 (c.2019). The modelling exercises concluded that an exceedance of air quality objectives and standards because of the proposed increase in tonnage would not occur, either on its own or in combination with other projects in the surrounding area. I am satisfied that the proposed increase in capacity would not have any significant long-term effects during the continued operational phase. This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022), mitigation measures related to traffic management and air quality, and the terms and conditions of the EPA

	Industrial Emissions Licence (as amended). The proposed development would have a positive impact on population and human health as result of diverting waste away from less environmentally sustainable and/or more polluting methods of treatment. Any negative traffic emission impacts would be mitigated by the continued redistribution of traffic away from the more densely populated central area and routing WDVs via the Dublin Port Tunnel, which would in turn improve safety & reduce NO_x and NO_2 emissions in built up areas.
Dust: Potential localised impacts on air quality resulting from dust emissions during the operational phase as a result of the proposed increase in tonnage.	There would be no significant additional dust emissions as waste is delivered to the facility in sealed containers and deposited within the confines of the main building, with no significant dust emissions anticipated.
Traffic emissions: Potential localised impacts on air quality (incl. particulate matter & NO_2) resulting from increased traffic volumes associated with the proposed tonnage increase during the operational phases (10 x 1-way or 20 x 2-way per day).	Refer to section 6.3 of this report for a detailed analysis of movement and traffic impacts. The national, regional and local road network has sufficient capacity to assimilate the additional traffic volumes associated with the increase in tonnage during the continued operational phase (Opening & Horizon years). This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022) and the mitigation measures related to traffic management.

	Any negative traffic emission impacts would be mitigated by the continued redistribution of traffic away from the more densely populated central area and routing WDVs via the Dublin Port Tunnel, which would in turn improve safety & reduce NO_x and NO_2 emissions in built up areas.
Climate: Potential for impacts on achievement of Climate Change & carbon emission reduction targets (EU & National).	The proposed development would contribute to a reduction in local & national CO_2 emissions as result of enabling a shift from non-sustainable carbon intensive waste management methods, and by contributing electricity to the grid.
Residual Effects: There will be some increase in air borne and traffic related emissions during the operational phases as a result of the proposed tonnage increase, however predicted levels are within guidance limit values. Particulate, NO_x, NO_2 and other emission levels will be reduced in the more densely populated central areas as a result of the continued diversion of traffic away from built-up areas. Residual impacts are not predicted to be significant.	
Cumulative Impacts: Minor operational impacts may occur in-combination with the future development of the adjacent SDZ zoned lands.	
Conclusion: No submissions were made in relation to air & climate. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

Landscape & Visual Amenity	
EIAR section 12 assessed landscape and visual effects and it described baseline conditions, landscape character and the existing operational waste to energy facility. It noted that no physical works or changes to existing operational processes are proposed. The EIAR did not predict any significant adverse impacts on landscape and views during the continued operational phase as a result of the proposed tonnage increase.	
Submissions	***Concerns raised***
None.	None.
Potential impacts	***Assessment & mitigation measures***
There is no potential for impacts on the landscape or visual amenity as no physical works or alterations are proposed as part of the increase in tonnage.	There would be no adverse effects on visual amenity, sensitive landscapes, protected views, the character or setting of Protected Structures or any other heritage features in the surrounding area.
Residual Effects: None predicted.	
Cumulative Impacts: None predicted.	
Conclusion: No submissions were made in relation to landscape and visual amenity. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

Biodiversity	
EIAR sections 6, 7, 8 & 9 and associated Technical Appendices dealt with: - land & soil; water; biodiversity & air quality. The EIAR described the receiving environment and existing operational Waste to Energy Facility, and it noted that no physical works or changes to existing operational processes are proposed. It referenced several desk top studies & field surveys that were undertaken (incl. air quality monitoring & dispersal modelling for the stack emissions and water quality tests at the cooling water outfall to the river). It noted the proximity of several Dublin Bay European sites (incl. the adjacent South Dublin Bay & River Tolka Estuary SPA & the nearby South Dublin Bay SAC) and the possible presence of protected bird species in the vicinity, and an AA Screening report was prepared. The EIAR did not predict any significant adverse impacts on biodiversity during the continued operational phase as a result of the proposed tonnage increase, subject to the continued implementation of mitigation measures related to the ongoing management of the facility and associated cooling water intake and outfall, and compliance with EPA IE licence emissions limits.	
Submissions	***Concerns raised***
None.	None.
Potential impacts	***Assessment & mitigation measures***
There is potential for the following impacts on biodiversity during the continued operational phase as a result of the proposed tonnage increase as a result of additional traffic movements and emissions.	The existing facility is located on made-ground within an established industrial area, it is surrounded by industrial & commercial uses and the SDZ zoned lands to the S & W are zoned for future residential & related uses. It is located to the S of the River Liffey, N of Irishtown Nature Park and there are several Dublin Bay European sites in the wider area to the NE, E & SE. The site & environs do not contain any sensitive or protected habitats of species although it borders a section of SPA that hosts a population of Light bellied brent geese & other waterbirds.

	Refer to section 6.4 of this report for an analysis of biodiversity impacts which concluded that there would be no significant adverse effects during the continued operational phases.
European sites: Direct & indirect connections to sensitive sites.	Refer to Section 6.7 of this report (Screening for AA) which concluded that there would be no loss, disturbance or damage to any designated sites, habitats or species during the continued operational phase as a result of the tonnage increase.
Habitats, flora & fauna: There is no potential for significant impacts on habitats, flora & fauna in the surrounding area as part of the proposed tonnage increase.	No adverse impacts on habitats, flora or fauna are anticipated during the continued operational phase as a result of the proposed tonnage increase, as no physical works or alterations, or changes to existing operational processes are proposed, and the facility is operating well within it's EPA IE Licence emissions limits.
Birds: Potential for minor localised disturbance to several species of bird resulting from an increase in WDV movements & airborne emissions during the continued operational phase as a result of the proposed tonnage increase.	Several species of ***bird*** frequent the surrounding area including the adjacent section of the River Tolka Estuary and South Dublin Bay SPA to the S (Light bellied brent goose & other species) and the manmade structures within the River Liffey to the N (Terns), and Dublin Bay provides an extensive range of habitats for a wide variety of water birds (wintering & resident). On-going surveys indicate that the existing operational facility has not adversely affected water bird populations in the area, the facility operates well

	within its EPA IE emissions level limits, and the EIAR air quality assessments (incl. dispersion modelling) do not predict any exceedance of air quality standards. The continued implementation of the terms & conditions of the parent permission (PL29S.EF2022) and in particular Condition no.13 which required the implementation of the EIS mitigation measures, and additional measures in relation to environmental monitoring, would ensure the continued protection of bird species.
Aquatic species: Potential for localised disturbance to aquatic species (incl. fisheries) resulting from a deterioration in water quality due to accidental spillages & surface water runoff from the additional WDVs, and at the cooling water intake (entrainment) and outfall (toxicity & thermal) during the continued operational phase as a result of the proposed tonnage increase.	The site drains to the River Liffey which provides a migratory habitat for several fish species (incl. Lampreys & Atlantic salmon) at this location. No adverse impacts on surface water run-off are anticipated during the continued operational phase as a result of the proposed tonnage increase, given the modest increase in traffic (10 x 1-way or 20 x 2-way WDVs/day). This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022) and the mitigation measures related to the management of traffic movements & surface water drainage. There will be no significant change to cooling water emissions as a result of the proposed increase in tonnage. Recent tests at the cooling

	water outfall did not detect the presence of any toxic substances in the discharged cooling water. Although the temperature of the discharged water is higher than that of the receiving waters in the River Liffey, the high level of tidal mixing in the estuary would ensure that any localised temperature effects would dissipate rapidly with no adverse impacts on water quality or fisheries anticipated. The continued implementation of the terms and conditions of the parent permission (PL29S.EF2022) and in particular Condition no.8 which dealt with the protection of fisheries at the cooling water intake to prevent fish entrainment and at the outfall to monitor water quality in the River Liffey, would ensure the continued protection of aquatic species.
Residual Effects: None predicted.	
Cumulative Impacts: None predicted.	
Conclusion: No submissions were made in relation to biodiversity. I have identified the relevant issues in this section of the report, and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

Land, soil and water	
EIAR sections 6 & 7 and associated Technical Appendices dealt with: - land, soils & water. The EIAR described the receiving environment and existing operational Waste to Energy Facility, and it noted that no physical works or changes to existing operational processes are proposed. It referenced water quality tests (for toxicity & temperature) that were undertaken at the cooling water outfall to the River Liffey which is deemed to be "At Risk" by the EPA downstream of this location. It identified potential impacts on land, soil and water, and it did not predict any significant adverse impacts during the continued operational phase as a result of the proposed tonnage increase, subject to the continued implementation of mitigation measures related to the management of the facility and associated cooling water intake and outfall.	
Submissions	***Concerns raised***
Geological Survey Ireland (GIS)	Coastal vulnerability
Potential impacts	***Assessment & mitigation measures***
There is no potential for impacts on the land and soil as no physical works or alterations are proposed as part of the increase in tonnage. There is potential for the following impacts on water during the continued operational phase of the facility as a result of the proposed increase in waste tonnage and associated cooling water uptake and discharge. ***Water quality:*** Potential pollution of watercourses (with resultant impacts on aquatic ecology) via the	Refer to section 6.4 of this report for detailed analysis of potential impacts on drainage, water quality, flood risk & coastal stability, which concluded that there would be no significant adverse effects as a result of the proposed tonnage increase. There will be no significant change to cooling water emissions as a result of the proposed increase in tonnage. Recent tests at the cooling

cooling water outfall to the River Liffey (incl. toxicity & temperature increase) during the continued operational phase as a result of the proposed tonnage increase.	water outfall did not detect the presence of any toxic substances in the discharged cooling water. Although the temperature of the discharged water is higher than that of the receiving waters in the River Liffey, the high level of tidal mixing in the estuary would ensure that any localised temperature effects would dissipate rapidly with no adverse impacts on water quality anticipated.
Ground & surface water contamination: Potential impacts resulting from accidental fuel spillages or leaks from additional Waste Delivery Vehicles.	No adverse impacts are anticipated during the continued operational phase as a result of the proposed tonnage increase, given the modest increase in WDVs (10 x 1-way or 20 x 2-way/day). This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022) and the mitigation measures related to the management of surface water drainage.
Flood risk & coastal stability: There is no potential for increased flood risk or coastal stability impacts as no physical works or alterations, or changes to existing operational processes are proposed.	No adverse flood risk or coastal stability impacts are anticipated during the continued operational phase as a result of the proposed tonnage increase.
Residual Effects: None predicted.	
Cumulative Impacts: None predicted.	
Conclusion: I have considered all the written submissions made in relation to land, soil & water, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

Material assets	
EIAR sections 13 & 15 and associated Technical Appendices dealt with roads & traffic and material assets (incl. vehicular access, power supply, telecommunications, water supply & drainage). The EIAR described the receiving environment (incl. the road network & environmental services) and existing operational Waste to Energy Facility, and it noted that no physical works or changes to existing operational processes are proposed. It noted that the existing facility occupies zoned industrial lands, and several desktop studies and traffic surveys were undertaken. It described the proposed movement, access, and service arrangements. It did not predict any significant adverse impacts on material assets, including the road network during the continued operational phase as a result of the tonnage increase.	
Submissions	***Concerns raised***
Irish Water	Protection of IW infrastructure.
Potential impacts	***Assessment & mitigation measures***
There is potential for the following impacts on material assets in relation to the increase in tonnage during the operational phase of the waste to energy facility. ***Traffic***: Potential minor localised impacts on the road network and traffic safety related to the additional Waste Delivery Vehicles.	The facility is situated within an area that is zoned Z7 for industrial uses and the adjacent lands to the W & S are zoned as an SDZ for future residential and related uses. The existing facility is connected to the local, regional and national road network, and it served by an existing water supply, foul sewer, power supply & telecommunications network, whilst also supplying power to the grid. Refer to section 6.3 of this report for a detailed analysis of movement and access impacts. The national, regional & local road network has sufficient capacity to assimilate the increase in traffic volumes associated with the increase in

	tonnage (10 x 1-way or 20 x 2-way WDV/day). This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022) and the mitigation measures related to traffic management.
Water supply & drainage: There is little potential for impacts on water supply and drainage as no physical works or alterations to the facility or its supporting infrastructure are proposed as part of the increase in tonnage.	There would be no adverse effects on water supply and drainage. Cooling water is already drawn from the River Liffey upstream of the facility and then discharged downstream to the river via an in-situ pipe (under regulated conditions). I am satisfied that the proposed increase in tonnage would not have any significant long-term effects during the continued operational phase. This would be subject to compliance with the terms and conditions of the parent permission (PL29S.EF2022) and the relevant mitigation measures.
Residual Effects: None predicted.	
Cumulative Impacts: None significant impacts predicted.	
Conclusion: I have considered all the written submissions made in relation to material assets, in addition to those specifically identified in this section of the report. I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

Cultural heritage	
EIAR sections 12 & 14 and associated Technical Appendices dealt with landscape and cultural heritage. The EIAR described the receiving industrial environment and existing operational Waste to Energy Facility, and it noted that no physical works or changes to existing operational processes are proposed. It identified several Features of Archaeological Interest, Recorded Monuments and Protected Structures in the vicinity of the River Liffey (incl. the Great South Wall and Poolbeg Lighthouse). The EIAR did not predict any adverse impacts on cultural heritage during the continued operational phase as a result of the proposed tonnage increase.	
Submissions	***Concerns raised***
None.	None.
Potential impacts	***Assessment & mitigation measures***
There is no potential for impacts on cultural heritage as no physical works or alterations are proposed as part of the increase in tonnage.	There would be no adverse effects any cultural heritage features including Areas of Archaeological Interest and Recorded Monuments, or the character or setting of Protected Structures or any other heritage features in the surrounding area.
Residual Effects: None predicted.	
Cumulative Impacts: None predicted.	
Conclusion: No submissions were made in relation to cultural heritage. I have identified the relevant issues in this section of the report and I am satisfied that they have been appropriately addressed in terms of the application and that no significant adverse effect is likely to arise.	

7.5 Cumulative Impacts

Several projects are being progressed in the wider area (incl. industrial, utility, residential & commercial developments, along with smaller scale urban developments). Having regard to the nature and scale of these projects and the scale of the proposed development which comprises an increase in the tonnage capacity of an existing Waste to Energy Facility, I am satisfied that the issue of significant cumulative effects does not arise. There is, therefore, nothing to prevent the granting of approval on the grounds of cumulative effects.

7.6 Interactions and Interrelationships

I have also considered the interrelationships between the key receptors and whether this might as a whole affect the environment, even though the effects may be acceptable when considered on an individual basis. In particular, the potential arises for the following interactions and interrelationships.

Population and human health:

- Noise and dust
- Air quality and climate
- Roads and traffic (air quality, safety & disturbance)

Air & climate

- Noise and dust
- Roads and traffic (emissions)
- Population and Human Health

Landscape

- None noted.

Biodiversity:

- Hydrology (water quality & fisheries)
- Soils and geology (coastal stability)

Land, Soil and water:

- Air quality
- Biodiversity (terrestrial & aquatic)
- Population & Human Health

Material Assets and Cultural Heritage:

- Population & human health
- Roads and traffic (disturbance & safety)

In conclusion, I am satisfied that any such impacts can be avoided, managed, and mitigated by the measures which form part of the proposed development and the aforementioned conditions, as recommended in section 6.0 above.

7.7 Risks associated with major accidents and/or disasters

No outstanding risks associated with major accidents or disasters identified and the potential impacts associated with climate change have been factored into the consideration of the proposed tonnage increase in the EIAR.

7.8 Reasoned Conclusion

Having regard to the examination of environmental information contained above, including the EIAR and the submissions from the prescribed bodies and observers, it is considered that the main significant direct and indirect effects of the proposed development on the environment have been identified in sections 6.0 and 7.0 of this report. It is considered that the main significant direct and indirect impacts of the proposal on the environment are as follows.

- The proposed project would give rise to a modest increase in ***vehicle movements and resulting traffic impacts*** during the operational phase where the Waste Delivery Vehicles would interact directly and indirectly with

the road network and several road junctions, however any negative traffic impacts on the receiving environment would be mitigated by the continued use of the haul route agreed under the terms and conditions of the parent permission (PL29S.EF2022).

- The proposed project would give rise to an increase in airborne emissions from the chimney stacks and Waste Delivery Vehicles with ***resulting air quality impacts*** during the operational phase, however the impact on the receiving environment would not be significant subject to adherence to the emission limit levels set by the EPA Industrial Emission Licence (as amended) and compliance terms and conditions of the parent permission (PL29S.EF2022).
- The project could give rise to minor localised impacts on ***residential amenity*** during operational phase (general disturbance from increased traffic & emissions). These impacts would be mitigated by the continued implementation of measures to manage traffic movements under the terms and conditions of the parent permission (PL29S.EF2022) and adherence to the emission limit levels set by EPA Industrial Emissions Licence related to the protection of air quality.
- The proposed development would have ***potentially significant positive environmental impacts*** during the operational phase by the diversion of non-hazardous municipal waste away other less environmentally sustainable waste management processes, the continued diversion of traffic away from built areas and densely populated areas, and a reduction in carbon emissions resulting from a shift away from other forms of waste disposal and contributing electricity to the grid.

In ***conclusion***, having regard to the above identified significant effects, I am satisfied that the proposed development would not have any unacceptable direct or indirect impacts on the environment, subject to the continued implementation of the mitigation measures and conditions associated with the parent permission (PL29S.EF2022) and any conditions recommended in section 7.0 of this report.

8.0 CONCLUSION AND RECOMMENDATION

I recommend that the application under Section 226 of the Planning and Development Act 2000, as amended for the increase in the capacity of the Dublin Waste to Energy Facility from 600,000 tonnes per annum to 690,000 tonnes per annum should be approved for the reasons and considerations as set out below.

9.0 REASONS AND CONSIDERATIONS

Having regard to:

a. the EU Waste Directive (2018/851/EC),
b. the National Planning Framework Plan 2018-2040,
c. the National Development Plan 2021-2030,
d. the Climate Action Plan, 2021,
e. the Waste Action Plan for a Circular Economy - National Waste Policy, 2020-2025,
f. Regional Spatial and Economic Strategy for the Eastern and Midland Region 2019-2031,
g. the Eastern – Midlands Region Waste Management Plan 2015 – 2021,
h. the policies of the planning authority as set out in the Dublin City Development Plan, 2016-2022,
i. the distance to dwellings or other sensitive receptors,
j. the submissions made in connection with the application,
k. the likely consequences for the environment and the proper planning and sustainable development of the area in which it is proposed to carry out the proposed development and the likely significant effects of the proposed development on European Sites,
l. the Appropriate Assessment screening report of the Inspector, and
m. the report and recommendation of the Inspector,

Proper planning and sustainable development:

It is considered that subject to compliance with the conditions set out below the proposed development would accord with European, national, regional and local planning, transportation, waste and related policy, it would not have an unacceptable impact on the landscape or ecology, it would not seriously injure the visual or residential amenities of the area or of property in the vicinity, and it would be acceptable in terms of traffic safety and convenience. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

Likely Effects on the Environment / Environmental Impact Assessment:

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

(a) the nature, scale, location and extent of the proposed development which would comprise an increase in the capacity of an existing operational facility to accept an additional 90, 000 tonnes of waste per annum,

(b) the Environmental Impact Assessment Report (EIAR) and associated documentation submitted in support of the application,

(c) the submissions received from the prescribed bodies, and

(d) the Inspector's report.

The Board considered that the environmental impact assessment report, supported by the documentation submitted by the applicant, adequately considers alternatives to the proposed development, and identifies and describes adequately the direct, indirect, secondary and cumulative effects of the proposed development on the environment. The Board agreed with the examination, set out in the Inspector's report, of the information contained in the environmental impact assessment report and associated documentation submitted by the applicant and submissions made in the course of the application. The Board

considered that the main significant direct and indirect effects of the proposed development on the environment are, and would be mitigated, as follows:

- The increase in Waste Delivery Vehicle movements and resulting traffic during the continued operational phase would be mitigated by the implementation of the terms and conditions of the parent permission for the Waste to Energy Facility (PL29S.EF2022).
- The increase in airborne emissions from the chimney stacks and Waste Delivery Vehicles and resulting air quality impacts during the operational phase would be mitigated by adherence to the emission limit levels set by the EPA Industrial Emission Licence, and by the continued implementation of the terms and conditions of the parent permission for the Waste to Energy Facility (PL29S.EF2022).
- The minor localised impacts on residential amenity during operational phase would be mitigated by the continued implementation of measures to manage traffic movements under the terms and conditions of the parent permission (PL29S.EF2022) and adherence to the emission limit levels set by EPA Industrial Emissions Licence related to the protection of air quality.
- Positive environmental impacts would result during the operational phase by the diversion of non-hazardous municipal waste away other less environmentally sustainable waste management processes with an associated reduction in carbon emissions, the continued diversion of traffic away from built-up and densely populated areas, and the contribution of electricity tom the grid.

The Board completed an environmental impact assessment in relation to the proposed development and concluded that, subject to the implementation of the mitigation measures proposed, and subject to compliance with the conditions set out below, the effects of the proposed development on the environment, by itself and in combination with other plans and projects in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions of the Inspector.

Screening for Appropriate Assessment:

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 and scale of the proposed development on serviced lands, the nature of the receiving environment which comprises a built-up urban area, the distances to the nearest European sites and the hydrological pathway considerations, submissions on file, the information submitted as part of the applicant's Appropriate Assessment screening documentation and the Inspector's report. In completing the screening exercise, the Board agreed with and adopted the report of the Inspector and that, by itself or in combination with other development, plans and projects in the vicinity, the proposed development would not be likely to have a significant effect on any European Site in view of the conservation objectives of such sites, and that a Stage 2 Appropriate Assessment is not, therefore, required.

10.0 CONDITIONS

1. The development shall be carried out and completed in accordance with the plans and particulars lodged with the application, except as may otherwise be required in order to comply with the following conditions.
   Reason: In the interest of clarity.

2. The continued operation of the waste to energy facility shall be in accordance with the terms and conditions of the parent permission for the facility that was granted approval by An Bord Pleanála under PL29S.EF2022.
   Reason: In the interest of clarity.

3. For the avoidance of doubt, the waste thermally treated at the facility shall be in the form of municipal non-hazardous residual waste generated primarily in the Dublin Waste Management Region as proposed in the application and permitted under the parent permission for the facility that was granted approval by An Bord Pleanála under PL29S.EF2022.
   Reason: In the interest of clarity.

4. The mitigation measures identified in the EIAR, and other plans and particulars submitted with the planning application, shall be implemented in full by the developer, except as may otherwise be required in order to comply with the conditions of this permission.
   Reason: In the interest of clarity and protection of the environment during the operational phase of the proposed development.

_____

Karla Mc Bride
Senior Planning Inspector
15th November 2021