

Inspector's Report ABP 319506-24

Development Location	Modifications to existing Waste Treatment Facility to manage 24,000 tonnes of Healthcare Risk Waste. 402 Grants Drive, Greenogue Business Park, Greenogue, Rathcoole, Co. Dublin.
Planning Authority	South Dublin County Council
Applicant(s)	Enva Ireland Limited
Type of Application	Private Development: Hazardous Waste Treatment Plant - Section 37(E)
Prescribed Bodies	Environmental Protection Agency Health Service Executive Transport Infrastructure Ireland
Public Submission(s)	None.
Date of Site Inspection Inspector	07 th October 2024 Brendan Coyne.

Contents

1.0 Introduction
1.1. Pre-application Consultation5
2.0 Site Location and Description
3.0 Proposed Development 6
4.0 Local Authority Submission
5.0 Prescribed Bodies
5.1. Environmental Protection Agency (EPA)10
5.2. HSE
5.3. Transport Infrastructure Ireland (TII)14
6.0 Applicant's Response to Submissions14
7.0 Planning History
8.0 Relevant Legislation 17
9.0 Policy and Context
9.1. Development Plan
9.2. Relevant European, National, and Regional Policy and Guidelines 20
10.0 Natural Heritage Designations21
11.0 EIA Screening22
12.0 Public Submissions
13.0 ASSESSMENT
13.1. Introduction23
14.0 PLANNING ASSESSMENT23
14.2. The Principle of the Proposed Development
14.3. Design, Layout, and Visual Impact

14.4.	Public Consultation	. 28
15.0 EN	VIRONMENTAL IMPACT ASSESSMENT	. 29
15.1.	Statutory Provisions	. 29
15.2.	EIA Structure	. 30
15.3.	Compliance with Article 94 and Schedule 6 of the Regulations 2001	. 31
15.4.	Traffic and Transport	. 36
15.5.	Population	. 40
15.6.	Noise And Vibration	. 43
15.7.	Air Quality And Climate	. 48
15.8.	Human Health	. 54
15.9.	Landscape and Visual Impact	. 61
15.10.	Cultural Heritage	. 65
15.11.	Biodiversity	. 68
15.12.	Water	. 81
15.13.	Land, Soil, Geology and Hydrogeology	. 88
15.14.	Material Assets	. 95
15.15.	Risk of Major Accidents and/ or Disasters	102
15.16.	Interactions between the Environmental Factors	107
15.17.	Cumulative Effects	111
15.18.	Reasoned Conclusion	116
16.0 API	PROPRIATE ASSESSMENT SCREENING	119
16.1.	Compliance with Article 6(3) of the Habitats Directive	119
16.2.	Overview of the Screening Report	120
16.4.	Screening for Appropriate Assessment -Test of likely significant effects 121	3

ning Determination	. 128
ENDATION	. 129
S AND CONSIDERATIONS	. 129
DNS	.134

1.0 Introduction

1.1. **Pre-application Consultation**

- 1.1.1. Enva Ireland Ltd. requested a pre-application consultation meeting with An Bord Pleanála on 11/11/2022, under Section 37B of the Planning and Development Act 2000 (as amended), for the proposed development at No. 402 Grants Drive, Greenogue Business Park. The proposed development comprises modifications to the existing waste treatment facility to manage an additional 24,000 tonnes of healthcare risk waste annually. This meeting is detailed in the written record.
 - 1.2. On 07/02/2023, representatives from An Bord Pleanála met with the applicant to discuss the proposed development. On 02/06/2023, the Board concluded its pre-application consultation by issuing a determination that the proposed development would constitute a Strategic Infrastructure Development (SID) under Section 37A(2) (a), (b), and (c) of the Planning and Development Act 2000 (as amended). Consequently, any application for permission for the proposed development must be made directly to An Bord Pleanála under Section 37E of the Act.

2.0 Site Location and Description

- 2.1.1. The site is located within Greenogue Business Park in southwest County Dublin, under the jurisdiction of South Dublin County Council. The business park is adjacent to Newcastle Village and approx. 1.5 km north of Rathcoole. The site is primarily accessed via the R120 road, which connects to the N7 (Dublin to Limerick Road) and lies c. 7 km west of the M50, providing convenient access to Dublin Airport and Dublin Port via the Port Tunnel. The immediate surrounding area is mainly urban and industrial in nature, with a mix of commercial and transport activities. Nearby business parks include Aerodrome Business Park, Baldonnell Business Park, and Citywest Business Campus. Residential areas in the vicinity include Newcastle Village and Rathcoole.
- 2.1.2. The site itself covers approx.1.1 hectares and is extensively covered in hardstanding concrete, with three main buildings on site. These include Building 1, a metal-clad structure with a floor area of c. 1,900 m², which is used for hazardous waste transfer, storage, and bulking; Building 2, which has a floor area of c. 3,750 m² and is used for

hydrocarbon waste treatment and drum recovery; and Building 3, a smaller office building with a floor area of c. 180 m², located at the entrance to the site facing onto Grants Drive. Current activities at the site include the storage, bulking up and transfer of hazardous wastes such as contaminated soils and electrical transformers, as well as hydrocarbon waste treatment and recovery of used hydrocarbon storage drums.

2.1.3. The site is bounded to the north by the Griffeen River, to the south by Grants Drive, to the west by an adjoining commercial holding used primarily for vehicle parking, and to the east by a commercial building. A strip of landscaping, c. 2 meters wide, is maintained along the inside perimeter of the site. The facility also includes a car park with 32 spaces between the office building and Grants Drive near the facility entrance. Security measures such as gates and fencing are in place, and access to the site is controlled and monitored. The site is part of a broader industrial environment, surrounded by similar commercial and industrial properties. A designated Seveso site is located c. 60m east of the site, on the eastern side of Grants Court Road, occupied by the chemical wholesaler Brenntag Ltd.

3.0 **Proposed Development**

- 3.1.1. The applicant, Enva Ireland Limited, seeks a 10-year permission under Section 37E of the Planning and Development Act 2000 (as amended) for the following modifications and new construction at the existing Waste Treatment Facility:
 - Modifications to the existing facility to manage 24,000 tonnes per annum of Healthcare Risk Waste (HRW) and a corresponding reduction of 24,000 tonnes per annum in the types of waste currently treated.
 - Demolition of the existing ancillary office space (393 sqm, 7.6 m in height).
 - Construction of a new building for trailers, approximately 194 sqm in size and 9.1 m in height.
 - Construction of a new roofed enclosure for the storage of clean bins, measuring approximately 130 sqm (6.5 m wide, 19.9 m long, and 6.2 m high).
 - Installation of a security hut, 7.45 sqm in size and 2.7 m in height, located at the main entrance.

- Construction of a new mezzanine level (91 sqm) within Building 1, along with associated stairs and service lifts.
- Addition of an air emissions point (stack) at roof level of Building 1, approximately 2m in height.
- Creation of internal openings between divisions within Building 1.
- Installation of office, canteen, and welfare facilities on the upper floor of the interdivisional space between Divisions 2 and 3 within Building 1.
- Construction of a pedestrian walkway from the entrance to Building 1, along with the removal of 5 existing car parking spaces and the provision of an additional 10 bicycle parking spaces.
- All associated site development works, including surface drainage and the provision of internal plant.
- 3.2. As stated in the Planning Report, the facility would maintain its gross annual tonnage intake limit of 111,000 tonnes, with 24,000 tonnes of Healthcare Risk Waste (HRW) being treated at the facility. The intake of other waste streams will be reduced by 24,000 tonnes to accommodate the HRW treatment. The volume of HRW is expected to be reduced by approximately 80% during the shredding and treatment process.
- 3.3. The application is accompanied by an Environmental Impact Assessment Report (EIAR) and relates to an activity requiring a review of the existing Industrial Emissions Licence (W0192-03) issued by the Environmental Protection Agency (EPA).

3.3.1. Submitted Documentation

- 3.4. The application included the following accompanying documents:
 - Planning Cover Letter
 - Completed Planning Application Form.
 - Environmental Impact Assessment Report (EIAR), including a Non-Technical Summary (Volume 1), Main Report (Volume 2), and Technical Appendices (Volume 3).
 - Screening for Appropriate Assessment report.

- Copy of Newspaper and Site Notices.
- List of Prescribed Bodies and notification letters.
- EIA Portal Acknowledgement (Portal ID: 2024065).
- Planning drawings, including Site Location Plan, Existing and Proposed Site Plans, Elevations, Floor Plans, Roof Plan, and Drainage Plan.
- USB sticks containing electronic copies of the documents.

4.0 Local Authority Submission

4.1. South Dublin County Council raised the following relevant matters to be addressed:

4.1.1. **Principle of the Proposed Development:**

- The site is zoned 'EE: Enterprise and Employment', 'to provide .for enterprise and employment-related uses' under the 2022-2028 County Development Plan (CDP).
- The proposal would not alter the annual waste intake, maintaining the permitted 111,000 tonnes per year, including the proposed 24,000 Healthcare Risk Waste (HRW) treatment services, by way of a proposed reduction in the volume of existing soil waste processing on-site.
- The established use at the subject site is permitted under applications PA Ref. SD07A/0260 and SD02 A/03130 & ABP Ref. PL06S.201534.
- The principle of development is considered acceptable, subject to compliance with relevant Development Plan policies.

4.1.2. Visual Amenity:

The Planning Authority deems the demolition of the two-storey office block (7m height, 20m width), the addition of a trailer parking structure (194 sqm, 9m high), bin enclosure (130 sqm), and a security hut (2.7m high) acceptable, with no changes to site access or boundaries. The Authority concludes that the proposed developments will not negatively impact the area's visual amenity.

4.1.3. Sustainable Transport:

- A new pedestrian route is proposed, with no changes to vehicular access. A Stage 1 & 2 Road Safety Audit is required for pedestrian and cyclist movements within the yard.
- Parking spaces will be reduced, with bicycle spaces added. The revised layout must meet SDCC's CDP standards, including at least 5% for mobility-impaired parking and 20% for EV charging.

4.1.4. Green Infrastructure:

• The development's scale and nature are not expected to significantly impact green infrastructure or result in a substantial loss of grassland or permeable surfaces. Therefore, no Green Infrastructure Assessment is required.

4.1.5. Waste Enforcement and Licensing:

• No report was submitted by the Waste Enforcement and Licensing section, but any waste operations on the site must comply with EPA regulations.

4.1.6. Services & Drainage:

- Surface water drainage should utilise SuDS measures like green roofs and permeable pavements.
- Surface water should be attenuated to greenfield runoff rates.
- The development is in a flood-prone area, prone to a 1 in 100-year flood event, requiring a justification test.
- Conditions related to drainage and flood risk should be attached in any grant of permission.

4.1.7. Environmental Health:

- 4.1.8. As per the HSE Environmental Health Officer report:
 - Construction phase conditions should include noise and air quality controls, with noise levels monitored regularly.
 - Operational phase noise controls must adhere to EIAR standards to prevent nuisance at nearby residences.

- An Odour Management Plan should be developed to mitigate odour and bioaerosols.
- Standard pest control measures should be applied.

4.1.9. External Consultees:

Uisce Éireann: The applicant must enter into a Connection Agreement with Uisce Éireann for water and wastewater connections and adhere to relevant standards.
Inland Fisheries Ireland (IFI): Hydraulic connectivity to the Griffeen River poses a potential risk. IFI recommends further mitigation measures and increased monitoring.
Health & Safety Authority (HSA): The HSA does not advise against granting permission but highlights the proximity to a SEVESO site.

4.1.10. Environmental Considerations:

• The site is not located in an Architectural Conservation Area and does not affect any protected sites.

4.1.11. **Development Contributions:**

 No Section 49 contributions apply, but Section 48 contributions (€119.52/sqm) are required. No special contribution schemes apply.

4.1.12. Planning Authority's Recommendation:

• If An Bord Pleanála is minded to grant permission, conditions relating to parent permissions and compliance with previously granted permissions should apply.

5.0 **Prescribed Bodies**

5.1. Environmental Protection Agency (EPA)

- The applicant holds a Waste Licence (Register No: W0192-03) for the facility at 402 Grant Drive, Greenogue Business Park, which was issued on 22/07/2010 and amended on 07/01/2014 to comply with the Industrial Emissions Directive.
- The licensed activities include the disposal or recovery of hazardous waste exceeding 10 tonnes per day through physico-chemical treatment, repackaging,

and blending or mixing (Activities 11.2(b), 11.2(d), and 11.2), as well as the recycling or reclamation of inorganic materials other than metals (Activities 11.2(c) and 11.2(f)).

- The license covers the disposal of non-hazardous waste exceeding 50 tonnes per day through physico-chemical treatment (Activity 11.4(a)(i)) and the temporary storage of hazardous waste exceeding 50 tonnes (Activity 11.6).
- The licence for the waste facility (Register W0192-01) was originally issued to Rilta Limited in 2004. The current licence (Register W0192-03) was transferred to Enva Ireland Limited on 30/01/2024.
- A previous licence application (Register No. W0192-02) was accompanied by an Environmental Impact Statement (EIS). Information on this and other licences can be viewed on the EPA website.
- The proposed development may require the current licence (Register No. W0192-03) to be reviewed or amended to accommodate the proposed changes.
- The planning application was accompanied by an EIAR. If an application for a licence review is submitted, it will be subject to an Environmental Impact Assessment (EIA) in accordance with Section 83(2) and Section 87(1G)(a) of the EPA Act.
- Consultation on the licence application and EIAR will be carried out under Section 87 (1B) to (1H) of the EPA Act.
- The EPA would require documentation relating to the Environmental Impact Assessment (EIA) carried out under Section 173(4) of the Planning and Development Act 2000 (as amended).
- The EPA would assess all matters related to emissions from the proposed activities, including the licence review application and EIAR. If the activities cannot be regulated effectively, the EPA will not grant the licence.
- If a licence is granted, conditions will be imposed to ensure compliance with National and EU standards.

 The EPA highlights that, under Section 87(1D)(d) of the EPA Act, it cannot issue a Determination on the licence application until a planning decision has been made.

5.2. **HSE**

- The applicant, Enva Ireland Ltd., currently operates a hazardous waste transfer/recovery facility within Greenogue Business Park under existing planning permission (PA Ref. SD09A/0050) and an EPA Industrial Emissions licence W0192-03,
- The applicant proposes to modify two of the three buildings (Building 1 & 3) at the waste facility to manage 24,000 tonnes of health risk waste (HRW) annually, representing 21% of the total waste managed, while maintaining the facility's overall capacity at 111,000 tonnes per year.
- The construction phase is expected to last 18 weeks, followed by an 8 week decommissioning phase. The facility operates 24 hours a day, 7 days a week for 50 weeks per year.
- The HSE reviewed the EIAR's description of HRW, which involves healthcarerelated waste subjected to high-temperature steam treatment to render it noninfectious. The modification is justified by a rise in HRW production due to factors such as increased hygiene practices, though the HSE questions the expectation of continued growth in single-use PPE.
- The HSE is satisfied that the EIAR provides an adequate description of the proposed project.

5.2.1. Re. Public Consultation and Non-Technical Summary (NTS):

Public consultation is referenced in Chapter 6 of the EIAR, which included a
project website showing documentation and avenues for communication from the
public. However, the absence of phone numbers, addresses, and contact details
could limit public participation.

• The HSE recommends enhanced public consultation, including the appointment of a Community Liaison Officer and the broadening of feedback channels to include phone and postal communication options.

5.2.2. **Re: Physical Environment and Population Health:**

- The site covers 1.1 hectares and includes three phases: the construction phase (18 weeks), the operation phase (undetermined), and the decommissioning phase (8 weeks).
- Climate change impacts on human health, both local and global, and positive and negative, should be considered in the assessment of impacts on human health.

5.2.3. Re. Noise, Air Quality, and Water Impact:

- The listed mitigation measures during the construction and operation phases, as detailed in Sections 9.7.1, 9.7.2 and 9.7.3 of the EIAR, should be implemented.
- A Dust Risk Assessment should be undertaken, which should include nearby commercial properties.
- The listed dust mitigation measures should be implemented as a condition of permission.
- An Odour Management Plan should be implemented during the operational phase to address odour and bio-aerosols.
- Climate change mitigation measures, such as the generation of renewable energy, rainwater harvesting, and the use of low-emission vehicles, should be implemented, as well as a comprehensive Climate Change Risk Assessment (CCRA) for hazards, including heat and drought.

5.2.4. Re. Water Management and Wastewater

- There should be a reassessment of the parameters to be monitored at the wastewater discharge other than those listed, e.g., pharmaceuticals.
- There should be an assessment of water demand and an exploration of opportunities to reduce demand on public water supply.

5.3. Transport Infrastructure Ireland (TII)

• No observations to make on this planning application.

6.0 **Applicant's Response to Submissions**

- 6.1.1. The applicant responded to the issues raised in the submissions from the EPA, HSE and TII detailing the following;
 - The Applicant has appointed a Community Liaison Officer. Contact details for communications are provided, including project website link, postal address and email address.
 - Section 11.3.2 of the EIA details the local population's resilience to climate change.
 - Regarding Noise and Vibration, the applicant is committed to implementing the mitigation measures in sections 9.7.1, 9.7.2, and 9.7.3 of the EIAR.
 - The applicant will adhere to traffic and odour management mitigation measures detailed in section 10.7.2 of the EIAR, which includes an Odour Management Plan.
 - The Applicant is committed to reducing carbon intensity and generating renewable energy, including installing solar PV panels as permitted under PA Ref. SD22A/0326 and installing EV charging points and bicycle racks as detailed in the drawings submitted.
 - Other climate change resilience measures being considered include the use of a greywater recycling system to reduce water demand and shade provision.
 - The applicant will promote active and public transport, including bicycle parking, EV charging stations, and support for active travel modes, as detailed in Section 7.4.2.1 of the EIA.
 - The Applicant is willing to provide a Stage 1 & 2 Road Safety Audit, which includes all pedestrian and cyclist movements in the yard by way of Condition in the event of a grant of permission.
 - The swept-path analysis shows how trailers would move safely throughout facility operations and delivery.

- Regarding wastewater monitoring, the EPA will prescribe discharge limits for any amendments to the IED license (W0192-03), and the applicant will operate in full compliance with this.
- All water on the site is discharged in accordance with the EPA licence (W0192-03).
 Water is discharged to an attenuation tank via an oil interceptor. In the event of an emergency, the discharge point can be sealed by a valve, ensuring that any spillages are isolated from the environment.
- A flood justification text can be provided if required.
- Pharmaceutical waste will be segregated at source and delivered separately to the facility in colour-coded, lockable packaging. This waste is then bulked up and consigned to a licenced waste management facility. Pharmaceutical waste will not be processed in the steam treatment auger.
- Given the type of existing and proposed development, a green roof is not a preferred option.
- Regarding noise, the EHO's recommended condition, which requires that where intrusive machinery is required to be used at short notice, the contractor shall ensure that nearby sensitive locations are informed prior to work commencement, is onerous and not required.
- The nearest noise-sensitive location is c. 300m from the proposed construction activity, with a line of sight blocked by a 4m high wall and multiple large industrial buildings within Greenoge Business Park.
- The predicted noise levels from construction activities at the nearest noisesensitive locations are significantly below construction noise criteria and are not significant. Therefore, the EHO's recommended Condition is not required.
- During the construction phase, compliance verification at the nearest noisesensitive locations would be difficult as the predicted noise levels from construction activities at the nearest noise-sensitive locations are significantly below construction noise criteria and, in some instances, below the existing ambient noise levels.

- As detailed in the EIAR, predicted construction noise effects are not significant. The EHO's requirement to measure noise levels at the nearest noise-sensitive location is not appropriate.
- During the operational phase, compliance verification at the nearest noisesensitive locations would be difficult as the predicted noise levels from the proposed development would be below the measured background levels for daytime, evening, and night-time periods.
- The Applicant acknowledges that some noise compliance measurements will be required in accordance with the facility's IED licence.

7.0 **Planning History**

7.1.1. Subject Site

PA Ref. SD22 A/0326 - Permission granted on the 28th September 2022 for the installation of 410 solar PV panels mounted over the roof of the existing industrial building (Building No. 2) and associated site works and services.

PA Ref. SD09A/0050 - Permission granted on the 12th May 2009 for an extension to the currently licensed oil recovery activities at the existing integrated waste management facility. Permission was also granted for 24-hour operations at the facility (after daytime hours), which would only apply to activities within the existing solid shed relating to the drill-cutting waste processing and recovery.

PA Ref. SD07 A/0260 - Permission granted on the 17th July 2007 for an increase in the annual waste throughput at the existing integrated Waste Management Facility from 62,500 tonnes to 111,000 tonnes per annum. An EIAR was submitted with the application.

PA Ref. SD02 A/0313 and **ABP Ref PL 06S.201534** – Permission granted on appeal on the 18th July 2003 for an integrated Waste Management Facility. The facility includes four main components: a Hydrocarbon Waste Treatment Centre (1,858 sq.m), Drum Recovery Centre (1,858 sq.m), Hazardous Waste Transfer Station (1,859 sq.m), and Non-Hazardous Waste Recycling Centre (3,251 sq.m). Ancillary infrastructure includes a 200 sq.m site office, four weighbridges, two reception kiosks, two bunded fuel storage tanks (20 sq.m), surface and foul water drainage, two stormwater attenuation tanks (666 sq.m), two firewater retention tanks (151.5 sq.m), and car/truck parking areas. An EIAR was submitted with the application.

8.0 Relevant Legislation

8.1.1. Section 37A – An Bord Pleanála's jurisdiction in relation to certain planning applications

Section 37A of the Planning and Development Act 2000 (as amended) specifies An Bord Pleanála's jurisdiction for certain planning applications, as follows:

(1) An application for permission for any development specified in the Seventh Schedule (inserted by the Planning and Development (Strategic Infrastructure) Act 2006) shall, if the following condition is satisfied, be made to the Board under Section 37E and not to a planning authority.

(2) The condition is that, following consultations under Section 37B, the Board serves a notice in writing on the prospective applicant stating that, in the opinion of the Board, the proposed development would, if carried out, fall within one or more of the following paragraphs:

(a) The development would be of strategic economic or social importance to the State or the region in which it is located.

(b) The development would contribute substantially to the fulfilment of any of the objectives in the National Planning Framework or in any regional spatial and economic strategy applicable to the area or areas in which it is located.

(c) The development would have a significant effect on the area of more than one planning authority.

8.1.2. Section 37E – Application to An Bord Pleanála

Section 37E of the Planning and Development Act 2000 (as amended) outlines the application procedure for developments within the scope of Section 37A.

(1) An application for permission for development, in respect of which a notice has been served under Section 37B(4)(a), must be made to An Bord Pleanála and accompanied by an Environmental Impact Assessment Report (EIAR). Section 37E(2) gives the Board the authority to refuse to deal with an application if the application or EIAR is inadequate or incomplete.

Under Section 37E(3), applicants are required to publish public notices, submit relevant documents to prescribed authorities, and consider transboundary impacts where applicable.

Section 37E(4) requires Planning Authorities to submit a report on the environmental and planning implications of the development within 10 weeks, incorporating the views of authority members as outlined in Sections 37E(5)-(6).

Section 37E(8) grants the Board the authority to request further information from the planning authority or authorities regarding the development's impact on proper planning and sustainable development and the environment.

8.1.3. Seventh Schedule – Infrastructure Developments for the purposes of Sections 37A and 37B

The Seventh Schedule of the Planning and Development Act 2000 (as amended) outlines categories of infrastructure developments subject to Sections 37A and 37B. This includes:

3 - Development comprising or for the purposes of any of the following: An installation for the disposal, treatment, or recovery of waste with a capacity for an annual intake greater than 100,000 tonnes.

9.0 Policy and Context

9.1. Development Plan

South Dublin County Council Development Plan 2022-2028 is the statutory plan for the area. The following provisions are considered relevant:

Chapter 4: Green Infrastructure (GI)

Policy GI1 Objective 4: Require all developments to integrate GI into their design and layout by explicitly identifying and enhancing environmental assets through a landscape plan, ensuring links to local and countywide GI networks.

Policy Gl2 Biodiversity Objective 4: Integrate GI and areas managed for biodiversity in all developments.

Policy GI4 Sustainable Drainage Systems Objective 1: Limit surface water run-off using SuDS and ensure nature-based solutions are integrated into new developments.

Chapter 11: Waste Management

Policy IE7 Waste Management: Implement EU, national, and regional waste policies to improve waste management practices.

Objective IE7.2: Support the Eastern Midlands Region Waste Management Plan by adhering to its targets and policies.

Objective IE7.3: Promote and facilitate high-quality, sustainable waste recovery and disposal infrastructure.

Objective IE7.7: Ensure sustainable waste management is designed into all developments, including waste storage, separation, and collection facilities.

Objective IE7.8: Adhere to the National Hazardous Waste Management Plan and cooperate with the EPA in managing hazardous waste.

Objective IE7.9: Support the development of indigenous capacity for non-hazardous and hazardous waste treatment, subject to environmental protection criteria.

Additional Relevant Policies

- Policy G12: Biodiversity
- Policy G13: Sustainable Water Management Policy
- Policy GI4: Sustainable Drainage Sistems
- Policy G15: Climate Resilence
- Policy QDP7: High Quality Design Development General
- Policy SM2: Walking and Cycling
- Policy SMT: Car Parking and EV Charging
- Policy EDE3: Innovative Economy
- Policy EDE26: Major Accidents
- Policy IE2: Water Supply and Wastewater
- Policy IE3: Surface Water and Groundwater
- Policy IE4: Flood Risk
- Policy IE7: Waste Management

- Policy IE8: Environmental Quality
- Section 12.7.4 Car Parking Standards
- Section 12.3.1 Appropriate Assessment
- o Section 12.3.3 Environmental Impact Assessment
- o Section 12.4.2 Green Infrastructure and Development Management
- Section 12.5.1 Universal Design
- Section 12.5.2 Design Considerations and Statements
- Section 12.5.3 Density and Building Heights
- Section 12.5.4 Public Realm: (At the Site Level)
- Section 12.7.1 Bicycle Parking / Storage Standards
- Section 12.9 Economic Development and Employment
- Section 12.9.2 Enterprise and Employment Areas Table
- Section 12.10.1 Energy Performance in New Buildings
- Section 12.10 Energy
- Section 12.11.1 Water Management
- Section 12.11.3 Waste Management
- o Section 12.11.4 Environmental Hazard Management
- Section 12.27 Key Principles for Development within Enterprise and Employment Zones

9.2. Relevant European, National, and Regional Policy and Guidelines

9.2.1. European Legislation:

- Waste Framework Directive (2008/98/EC):
- Directive (EU) 2018/851 amending Directive 2008/98/EC on waste.
- Council Regulation (EU) 2017/997 on hazardous waste.
- Urban Waste Water Treatment Directive (91/271/EEC).
- EU Directive 2011/92/EU (amended by Directive 2014/52/EU) on Environmental Impact Assessment (EIA).
- Water Framework Directive (2000/60/EC).

9.2.2. National Legislation and Guidelines:

- Waste Management Act 1996 (as amended).
- European Union (Waste Directive) Regulations 2020 (SI No. 323 of 2020).
- National Hazardous Waste Management Plan (EPA, 2021-2027).
- National Climate Action Plan 2021.
- National Waste Management Plan for a Circular Economy 2024–2030.
- National Biodiversity Action Plan (DCHG, 2017).
- Project Ireland 2040 National Planning Framework, Government of Ireland, (2018).
- A Waste Action Plan for a Circular Economy 2020-2025, Government of Ireland, (2020).
- Climate Action Plan 2024, Government of Ireland.
- Strategic Infrastructure Development Guide (2021) An Bord Pleanála
- Design Manual for Urban Roads and Streets (2019).
- Appropriate Assessment of Plans and Projects in Ireland Guidance for Planning Authorities, Department of the Environment, Heritage and Local Government, (2009)
- OPR Practice Note PN01 Appropriate Assessment Screening for Development Management' (OPR, 2021).
- The Planning System and Flood Risk Management, Guidelines for Planning Authorities Guidelines (including the associated Technical Appendices) (2009)

9.2.3. Regional Policy:

Regional Spatial & Economic Strategy 2019 - 2031, Eastern & Midlands Regional Assembly (2019).

10.0 Natural Heritage Designations

10.1.1. Natura 2000 European Sites within 15km of the site are as follows:

- Rye Water Valley/Carton SAC (Site Code: 001398), approx. 7 km north-west of the site.
- Glenasmole Valley SAC (Site Code: 001209), approx. 8.5 km south-east of the site.
- Wicklow Mountains SAC (Site Code: 002122), approx. 9 km south-east of the site.
- Wicklow Mountains SPA (Site Code: 004040), approx. 13 km south-east of the site.
- Poulaphouca Reservoir SPA (Site Code: 004063), approx. 12.8 km south of the site.
- 10.1.2. Proposed Natural Heritage Areas within 15km of the site are as follows:
 - The Grand Canal Proposed Natural Heritage Area (Site Code: 002104) approx.
 3.5km north-west of the site.
 - Slade Of Saggart And Crooksling Glen Proposed NHA (Site Code: 000211) approx. 4.1km south-east of the site.
 - Liffey Valley (Site Code: 000128) approx. 6.6km northeast of the site.
 - Glenasmole Valley (Site Code: 001209) 8.2km south-east of the site.
 - Poulaphouca Reservoir Proposed Natural Heritage Area (Site Code: 000731) approx.12.8km south of the site.

11.0 EIA Screening

- 11.1.1. Schedule 5 of the Planning and Development Regulations 2001 (as amended) transposes Annexes I and II of the EIA Directive and sets out the prescribed classes of development that require an Environmental Impact Assessment (EIA). The following relevant class is noted:
 - Class 11: Other projects Installations for the disposal of waste with an annual intake greater than 25,000 tonnes, not included in Part 1 of this Schedule.
- 11.1.2. As outlined in Section 1.1, the proposed development qualifies as Strategic Infrastructure Development (SID) under Section 37A(2) paragraphs (a), (b), and (c) of the Planning and Development Act 2000 (as amended). Accordingly, in compliance

with Section 37E(1) of the Act, any application for permission, where a notice has been served under Section 37B(4)(a), must be submitted to An Bord Pleanála and accompanied by an Environmental Impact Assessment Report (EIAR) for the proposed development.

11.1.3. The application is accompanied by an Environmental Impact Assessment Report (EIAR) and relates to an activity requiring a review of the existing Industrial Emissions Licence (W0192-03) issued by the Environmental Protection Agency (EPA).

12.0 Public Submissions

12.1. None received

13.0 ASSESSMENT

13.1. Introduction

13.2. Having regard to the requirements of the Planning and Development Act, 2000 (as amended), this assessment is divided into three main parts: the Planning Assessment, Environmental Impact Assessment, and Screening for Appropriate Assessment. In each assessment, where necessary, reference is made to issues raised by all parties. There is an inevitable overlap between the assessments, for example, with matters raised falling within both the planning assessment and the environmental impact assessment. In the interest of brevity, matters are not repeated, but such overlaps are indicated in subsequent sections of the report.

14.0 PLANNING ASSESSMENT

- 14.1. Having undertaken a site visit and reviewed relevant policies, the nature of existing and permitted uses on the site and in the vicinity, and the scale of the proposed development, I consider that the main issues for assessment can be addressed under the following headings:
 - The Principle of the Proposed Development
 - Design, Layout, and Visual Impact
 - Public Consultation

14.2. The Principle of the Proposed Development

- 14.2.1. As detailed in Section 3.0, the proposed development comprises modifications and new construction at the existing Waste Treatment Facility, including provisions for the management of 24,000 tonnes of Healthcare Risk Waste (HRW) annually. The site is zoned objective EE, which seeks to provide for enterprise and employment-related uses. Table 12.10 of the South Dublin County Development Plan lists permitted uses for land zoned EE, including Recycling Facilities and Refuse Transfer Stations. Offices (less than 100 sqm) are classified as "Open for Consideration." The proposed development is consistent with these zoning objectives. The proposed modifications to manage 24,000 tonnes per annum of Healthcare Risk Waste, alongside a reduction in other waste types and its transfer to licenced waste facilities, are consistent with Recycling Facilities and Waste Transfer Stations. Processes at the facility would include shredding, disinfection, and bulk transfer of treated waste, which are components of waste treatment. The bulk transportation of waste offsite after treatment aligns with the use of a 'Refuse Transfer Station'. The facility would temporarily hold bulk-treated waste before it is dispatched for recovery or further processing elsewhere. The proposed office, canteen, and welfare facilities within Building 1 are consistent with the use class 'Offices', which are "Open for Consideration".
- 14.2.2. The Planning Report submitted with the application provides a rationale for the proposed development. It notes projections of a 6.8% compound annual growth rate in HRW from 2022 to 2030 in Europe and an 84% global increase in the market size from 2021 to 2030. On this basis, the applicant proposes a HRW management development that will add significant capacity, strengthening the resilience of Ireland's HRW treatment sector by expanding capacity and reducing reliance on the export of HRW. The report provides details on how HRW is solid or liquid waste arising from medical activities such as diagnosis, monitoring, treatment, prevention of disease or alleviation of handicaps in humans or animals, including related research performed under the supervision of a medical practitioner or veterinary surgeon. The report emphasises how HRW management is critical to ensuring the safety and well-being of healthcare professionals and the public, helping prevent the spread of diseases and protecting the environment.

- 14.2.3. The Planning Report states that the proposal will not change the current 111,000 gross annual tonnage intake limits at the subject site. The annual intake of other waste at the facility will be reduced by 24,000 tonnes, meaning that the gross annual tonnage intake at the facility will remain unchanged at 111,000 tonnes, including 24,000 of HRW treatment services.
- 14.2.4. The key processes outlined in the report are:
 - The reception and disinfection of HRW. This would involve shredding and steam heat disinfection of biohazardous, hospital, and biomedical waste, with agitation being applied and the shredded and treated material being bulked into a bulk trailer and consigned off-site for recovery. This would reduce waste by up to 80% in volume.
 - The automated management of reusable sharps containers. Reusable sharps containers will be conveyed to the facility, where they will be weighed, logged, and fed to an automated line. The line will feed the containers into an automated emptying, washing and disinfection system, where they will then be moved to a storage area for outward dispatch to customers.
 - The bulking and transportation of untreated waste. Certain waste streams will be stored in a dedicated transfer station for offsite recovery.
- 14.2.5. Having regard to the rationale for and the nature of the proposed development, the planning history of the site, the permitted use of the existing waste treatment facility and the IED licence governing its operations, I consider that the proposed development is acceptable in principle. The site is an established waste treatment facility. The proposed modifications, including the management of HRW, are consistent with this use. The proposed activities are consistent with the uses permitted in principle under zoning objective EE. The rationale for the proposed development, which seeks to address the increasing demand for HRW management in Ireland, is reasonable and logical. The proposed development would increase the capacity of Ireland's HRW treatment infrastructure, reducing the exportation of waste. The proposed development is consistent with Policy IE7 Objective 3 of the South Dublin County Council Development Plan 2022-2028, which promotes the provision of sustainable waste recovery and disposal infrastructure. The proposal accords with IE7 Objective 9 by supporting the development of indigenous capacity for the treatment of

non-hazardous and hazardous wastes where technically, economically and environmentally practicable, subject to the relevant environmental protection criteria for the planning and development of such activities. The proposed development aligns with National Strategic Outcome (NSO) 9 of the National Planning Framework (NPF), which emphasises the sustainable management of waste. It is also consistent with Policy TP16.1 of the National Waste Management Plan for a Circular Economy (2024-2030), which aims to develop additional capacity for hazardous waste treatment in accordance with the National Hazardous Waste Management Plan by ensuring adequate active treatment capacity. The proposed development would help reduce the need for HRW treatment elsewhere by providing a necessary hazardous waste management facility. I conclude, therefore, that the proposed development is acceptable in principle and subject to compliance with relevant policy requirements and standards, as well as environmental impact assessment and screening for appropriate assessment, as addressed below.

14.3. Design, Layout, and Visual Impact

- 14.3.1. The existing facility consists of two main buildings: Building 1, a 1,900 sqm metal-clad structure in the western section, and Building 2, a 3,750 sqm structure in the eastern section, along with an ancillary office building, Building 3, which has a floor area of 180 sqm and a height of 7.6 meters, located near the site entrance facing Grants Drive. The site is secured with gates, fencing, and monitored access, with all operations contained within fully enclosed buildings to mitigate impacts such as noise, odour, and dust.
- 14.3.2. Building 1 is divided into three sections. Division 1 handles hazardous waste transfer and storage of contaminated soils and is authorised to process waste drill cuttings. Division 2 stores and bulks packaged hazardous waste for off-site disposal or recovery, and Division 3 stores and transfers transformers. Building 2 is dedicated to hydrocarbon waste treatment and drum recovery. The hydrocarbon centre processes waste oils, and the drum recovery centre reconditions steel drums and intermediate bulk containers. Building 3, with a floor area of 180 sqm and a height of 7.6 meters, serves as administrative support but has no direct operational connection to Building 1. The facility also includes a concreted marshalling yard for vehicle movement, a tank

farm at the northern end of the site supporting hydrocarbon treatment, 32 parking spaces, and a 2-meter-wide landscaped perimeter.

- 14.3.3. The proposed development comprises the demolition of the office Building 3. Within Building 1, a new mezzanine level of 91 sqm would be constructed, along with associated stairs and service lifts. New office, canteen, and welfare facilities would be provided on the upper floor between Divisions 2 and 3, including shower and toilet amenities and a kitchen area. The roof of Building 1 would feature a new 2-meter-high air emissions stack, while internal modifications would involve creating openings between divisions within the existing buildings to facilitate the reconfigured operational flows. The proposed development also provides for constructing a new roofed enclosure to the side of Building 1 for the storage of clean bins, with a floor area of c. 130 sqm and dimensions of 6.5 meters wide, 19.9 meters long, and 6.2 meters high. Additionally, the proposal provides a bulk trailer structure with a floor area of 194 sqm and a height of 9.1 meters to the front of Building 1, to support the facility's operations.
- 14.3.4. The proposed development provides for the construction of a new security hut measuring 7.45 sq.m. and 2.7 meters in height at the main entrance. Proposed works also include the installation of a designated pedestrian walkway connecting the car park and security hut to Building 1. Five existing car parking spaces would be removed to allow for the provision of 10 new bicycle parking spaces, and the provision of 2 no. electric vehicle charging spaces are proposed within the parking area.
- 14.3.5. Having reviewed the drawings and documentation submitted, it is my view that the layout and design of the proposed development would not detract from the character and visual amenity of the surrounding area and would be consistent with relevant policies of the South Dublin County Development Plan, including Table 12.27: Key Principles for Development within Enterprise and Employment Zones. The proposed modifications, including the construction of a new trailer parking structure, roofed enclosure, and internal mezzanine level, would respect the established built form and character of the surrounding business park. The building heights and scale of the new structures are appropriate within the context of the existing facility and adjacent commercial developments. The proposed height of the trailer structure, at 9.1 meters, and the new roofed enclosure to the side of Building 1 for the storage of clean bins at 5.5m, rising to 6.1m and the ancillary buildings are consistent with the surrounding built environment and would not exceed the height of the existing buildings. The

proposed development would not result in abrupt changes in height or massing or detract from the overall urban structure of Greenogue Business Park. The proposed elevation materials, including steel cladding, would match existing finishes, ensuring a cohesive visual appearance.

14.3.6. I conclude, therefore, that the proposed works would integrate with the existing structures on-site and would not detract from the character or visual amenity of the surrounding business park. The design would be consistent with the established industrial aesthetic of the area, and the scale and form are appropriate to the context of the site and its surroundings.

14.4. Public Consultation

- 14.4.1. The HSE submission highlights the lack of contact details, such as phone numbers and addresses on the project website, which limits public participation. The submission also recommends expanding feedback methods to include phone and postal options and the appointment of a Community Liaison Officer.
- 14.4.2. Chapter 6 of the EIAR details the consultation process undertaken in the preparation of the planning application. It details how pre-application consultations were held with with South Dublin County Council, where issues such as hours of operation, traffic management, drainage, and Seveso requirements were discussed. Consultation was also held with An Bord Pleanála, who confirmed that the project qualifies as Strategic Infrastructure Development (SID), requiring the application to be submitted directly to An Bord Pleanála. The EIAR provides details of a dedicated project website, www.enva.com/hrw , which makes available all relevant documentation of the application for public access. Notices of the planning application were published in local newspapers, informing the public of the proposed development, the availability of the application and EIAR for inspection, and the process for making submissions to An Bord Pleanála. The EIAR details how prescribed bodies, including the HSE, EPA, and Uisce Eireann, were notified of the proposed development in accordance with the Planning and Development Regulations, 2001 (as amended). The EIAR indicates that provisions were made for An Bord Pleanála to hold an oral hearing, if deemed necessary, to explore issues further and inform decision-making.

14.4.3. In consideration of the above, it is my view that the applicant has conducted adequate public consultation in accordance with the requirements of the Planning and Development Regulations 2001 (as amended). The homepage of the project website, www.enva.com/hrw, details the email address of the Community Liaison Officer and postal address for correspondence. The public was informed of the proposed development through a national newspaper, and site notices were erected on site, informing the opportunity to inspect the application and submit observations to An Bord Pleanála. I am satisfied, therefore, that the public consultation undertaken by the Applicant complied with the requirements of the Planning and Development Regulations 2001 (as amended) and was sufficient to inform and encourage public consultation with the application.

15.0 ENVIRONMENTAL IMPACT ASSESSMENT

15.1. Statutory Provisions

- 15.1.1. The proposed development comprises modifications to an existing waste treatment facility to manage 24,000 tonnes of Healthcare Risk Waste (HRW) per annum. Proposed works include the demolition of an existing ancillary office building (393 sq.m.) and the construction of a new trailer building (194 sq.m.), a roofed enclosure for clean bin storage (130 sq.m.), a security hut (7.45 sq.m.), and a new mezzanine level (91 sq.m.) within Building 1. Other proposed works include the installation of an air emissions stack (2m high), internal building modifications to create openings between divisions, and the provision of an office, canteen, and welfare facilities within Building 1. Proposed works also provide for the removal of 5 no. car parking spaces to allow for the provision of 10. bicycle spaces, along with associated site development works, including surface drainage and the installation of internal plant.
- 15.1.2. An Environmental Impact Assessment Report (EIAR) is required for development that falls under a class of development specified within Annex 1 of the EIA Directive (as amended) or within Schedule 5 of the Planning and Development Regulations 2001 (as amended). Under Schedule 5, Part 2, Class 11(b) of the Planning and Development Regulations 2001 (as amended), an EIAR is required for "installations for the disposal of waste with an annual intake greater than 25,000 tonnes not included

in Part 1 of this Schedule." Given that the total annual waste intake of the facility would remain at 111,000 tonnes, the proposed development requires an EIA.

- 15.1.3. The types and sizes of development that are classified as Strategic Infrastructure Development (SID) for the purposes of Sections 37A and 37B of the Planning and Development Act, 2000 (as amended) are set out in the Seventh Schedule of the Act. Schedule 7, Class 3 specifies such projects as "installations for the disposal, treatment, or recovery of waste with an annual intake capacity exceeding 100,000 tonnes."
- 15.1.4. An Bord Pleanála held a pre-application consultation meeting with the Applicant on 07/02/2023 to discuss the proposed development. Following this meeting, the Board issued a determination on 03/06/2023 confirming that the proposed development would constitute a Strategic Infrastructure Development, as per Section 37A(2) of the Planning and Development Act 2000 (as amended). Accordingly, the proposed development has been submitted directly to An Bord Pleanála under Section 37E of the Act and is accompanied by an EIAR, as required.

15.2. EIA Structure

- 15.2.1. This section of the report comprises the environmental impact assessment of the proposed development in accordance with the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations, 2001 (as amended), which incorporate the European Directives on Environmental Impact Assessment (Directive 2011/92/EU as amended by 2014/52/EU). Section 171A of the Planning and Development Act, 2000 (as amended) defines EIA as:
 - a) consisting of the preparation of an EIAR by the applicant, the carrying out of consultations, the examination of the EIAR and relevant supplementary information by the Board, the reasoned conclusions of the Board and the integration of the reasoned conclusion into the decision of the Board, and
 - b) includes an examination, analysis, and evaluation by the Board that identifies, describes, and assesses the likely direct and indirect significant effects of the proposed development on specified environmental factors and the interaction of these factors, including significant effects arising from the project's vulnerability to risks of major accidents and/or disasters.

- 15.2.2. Article 94 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended) set out requirements for the contents of an EIAR.
- 15.2.3. This EIA section of the report is divided into two sections. The first section assesses compliance with the requirements of Article 94 and Schedule 6 of the Regulations. The second section provides an examination, analysis and evaluation of the proposed development and an assessment of the likely direct, indirect, cumulative and residual significant effects of it on the following environmental factors, having regard to the EIAR and relevant supplementary information:
 - Population and Human Health,
 - Biodiversity, with particular attention to species and habitats protected under the Habitats Directive and the Birds Directive,
 - Land, Soil, Water, Air and Climate,
 - Material Assets, Cultural Heritage and the Landscape,
 - the interaction between the above factors, and
 - the vulnerability of the proposed development to risks of major accidents and/or disasters.
- 15.2.4. It also provides a reasoned conclusion and allows for integration of the reasoned conclusions into the Board's decision, should they agree with the recommendation made.

15.3. Compliance with Article 94 and Schedule 6 of the Regulations 2001

15.3.1. I assess below the proposed development's compliance with the requirements of Article 94 and Schedule 6 of the Planning and Development Regulations, 2001 (as amended).

Article 94 (a) Information to be contained in an EIAR (Schedule 6, paragraph 1)

A description of the	A description of the proposed development is provided in
proposed	Chapter 4 of the EIAR. This includes information on the
development	location, site layout, design, and scale of the proposed
comprising	Healthcare Risk Waste (HRW) Management Facility.
information on the	The EIAR outlines modifications to 2 no. buildings and
site, design, size and	additional structures, including a new roofed enclosure, a
other relevant	security hut, and a bulk trailer building. The proposed
features of the	development also comprises modifications to access, parking,
proposed	and internal configuration, while maintaining the existing annual
development	waste intake of 111,000 tonnes.
(including the	The description of the proposed development is comprehensive
additional	and provides an adequate overview of the project's
information referred	environmental and operational impacts.
to under section	
94(b).	
A description of the	The likely significant effects of the proposed HRW Management
likely significant	Facility on the environment are described in various chapters of
effects on the	the EIAR. Chapter 7 covers traffic impacts, Chapter 9
environment of the	addresses noise and vibration, Chapter 10 discusses air quality
proposed	and climate impacts, and Chapters 14 and 15 provide an
development	analysis of impacts on biodiversity and water quality.
(including the	The EIAR adequately details potential interactions and
additional	cumulative impacts, including risks of major accidents and
information referred	disasters (Chapter 18). The assessment is considered robust
to under section	and sufficient to enable informed decision-making.
94(b).	

A description of the	The EIAR outlines various mitigation measures to address
features, if any, of	likely significant adverse environmental impacts. These include
the proposed	measures to manage emissions, noise, and waste, as well as
development and the	provisions for the use of negative air pressure extraction hoods
measures, if any,	to manage bio-aerosols. Other mitigation strategies are
envisaged to avoid,	embedded within relevant sections, including traffic
prevent or reduce	management plans and water management measures (Chapter
and, if possible,	15).
offset likely	
significant adverse	
effects on the	
environment of the	
development	
(including the	
additional	
information referred	
to under section	
94(b).	
A description of the	The EIAR considers several reasonable alternatives in Chapter
reasonable	3, including a "Do-Nothing" scenario and various design
alternatives studied	options. Chapter 3 outlines the rationale behind the selected
by the person or	design, which prioritises minimising the environmental impact
persons who	while ensuring efficient operation. The final design choice
prepared the EIAR,	focuses on integrating the new facility into the existing site with
which are relevant to	minimal disruption to the surrounding environment, balancing
the proposed	operational needs with environmental sustainability.
development and its	
specific	
characteristics, and	
an indication of the	
main reasons for the	
option chosen,	
taking into account	
the effects of the	
proposed	
development on the	

environment
(including the
additional
information referred
to under section
94(b).

Article 94(b) Additional information, relevant to the specific characteristics of the development and to the environmental features likely to be affected (Schedule 6, Paragraph 2).

A description of the	The EIAR provides a comprehensive description of the
baseline environment	baseline environment, including current conditions regarding
and likely evolution	traffic (Chapter 7), noise (Chapter 9), air quality (Chapter 10),
in the absence of the	biodiversity (Chapter 14), and water quality (Chapter 15). The
development.	assessment also predicts likely changes to these environmental
	features should the proposed development not proceed.
A description of the	The EIAR describes the forecasting methods used to assess
forecasting methods	significant environmental effects in each technical chapter.
or evidence used to	These methods are based on established guidelines and
identify and assess	include impact assessments for air quality, noise, and water
the significant effects	quality.
on the environment,	The EIAR acknowledges some data limitations and
including details of	uncertainties, particularly regarding the long-term effects of bio-
difficulties (for	aerosols and traffic impacts, but the methodologies applied are
example technical	deemed appropriate for informed decision-making.
deficiencies or lack	
of knowledge)	
encountered	
compiling the	
required information,	
and the main	
uncertainties	
involved	

A description of the	Chapter 18 of the EIAR addresses the potential vulnerability of
expected significant	the proposed facility to risks of major accidents and disasters.
adverse effects on	The assessment includes an evaluation of fire risks, flood risks,
the environment of	and chemical spills, along with mitigation measures such as
the proposed	flood-resilient construction and containment strategies for
development	hazardous materials.
deriving from its	
vulnerability to risks	
of major accidents	
and/or disasters	
which are relevant to	
it.	
Article 94 (c) A	The EIAR includes a Non-Technical Summary in Volume 1,
summary of the	which fulfils the requirements of Article 94(c). It provides a clear
information in non-	and concise overview of the proposed development,
technical language.	environmental impacts, and mitigation measures in an
	accessible format for stakeholders and the general public.
Article 94 (d) Sources	The sources used in the preparation of the EIAR are listed in
used for the	each technical chapter. These include environmental
description and the	monitoring data, relevant studies, and expert input. The
assessments used in	sources are considered appropriate for the assessments
the report	conducted.
Article 94 (e) A list of	The EIAR includes a list of experts and their qualifications in
the experts who	Chapter 1, Section 1.7, and Appendix 1.1. The multidisciplinary
contributed to the	team, composed of specialists in environmental science, traffic,
preparation of the	noise, air quality, and biodiversity, contributed to the
report	comprehensive assessment of the proposed development.

15.3.2. Consultations

15.3.3. The application has been submitted in compliance with the requirements of the Planning and Development Act 2000 (as amended) and the Planning and Development Regulations 2001 (as amended) regarding public notices. Submissions from Prescribed Bodies and the Planning Authority have been received and are taken

into consideration in the assessment of the proposed development. I am satisfied that appropriate consultations have been carried out and that third parties have had the opportunity to make observations on the proposed development.

15.3.4. Compliance

15.3.5. Having regard to the above, I am satisfied that the information contained in the EIAR and supplementary information provided by the Applicant complies with Article 94 of the Planning and Development Regulations, 2001 (as amended). On this basis, the following sections of this report set out my examination, analysis and evaluation of the proposed development and assessment of the likely direct and indirect significant effects on environmental factors, as per Section 171A(b) of the Act.

15.4. Traffic and Transport

15.4.1. Issues Raised

15.4.2. The Planning Authority raised concerns regarding the reduction in parking spaces and the provision of bicycle parking. The Planning Authority states that a Stage 1 & 2 Road Safety Audit is required to assess pedestrian and cyclist movements within the yard and recommend a revised parking layout to comply with Development Plan parking standards. This should include a minimum of 5% for mobility-impaired parking and 20% for EV charging.

15.4.3. Methodology

- 15.4.4. The EIAR details the methodology for assessing the traffic and transport impacts of the proposed modifications to the existing waste treatment facility. Referenced legislation and statutory plans include the EU Directive 2008/96/EU on Road Infrastructure Safety Management and the South Dublin County Development Plan 2022-2028. Referenced guidelines to inform the assessment include the TII Traffic and Transport Assessment Guidelines (2014), the Design Manual for Urban Roads and Streets (2019), and the Traffic Signs Manual (2019).
- 15.4.5. The Zone of Influence (ZoI) is defined as the Greenogue Business Park and the approach roads and junctions impacted by the proposed development. The report states that information on traffic and transportation within the ZoI was collected

through a site survey carried out in May 2023 and traffic surveys carried out in April 2022. This provided data on road/lane widths and vehicle movements at junctions. Traffic count data is provided in Appendix 7.1. Key parameters for assessment include TII growth rate factors for heavy and light vehicles to estimate future traffic volumes on the receiving road network, applying traffic growth factors (central) from 2016 to 2050. Forecasted background network traffic levels were derived for the construction year (2024), the year of opening (2025), + 5 years (2030), and +15 years (2040).

15.4.6. The EIAR states that the significance of effects is determined using a two-stage approach by defining both the magnitude of impacts and the sensitivity of the affected receptor roads. The potential magnitudes of traffic impacts are classified based on percentage thresholds as per TII Guidelines. Magnitudes of impact are classified into four categories: high, medium, low, and negligible. Receptor sensitivity is categorised as high, medium, low, or negligible. The EIAR provides a matrix for the assessment of the significance of the effect, which correlates the magnitude and sensitivity of impacts.

15.4.7. Baseline Conditions

- 15.4.8. The EIAR outlines the baseline environment in the Zone of Influence, including road network, public transit, traffic flows, and AADT. The report notes how the R120 facilitates traffic to Greenogue Business Park, which links the N7, Rathcoole, and Newcastle to the southeast and northwest. The report provides a description of the Aerodrome, Greenogue, and Newcastle roundabouts on the R120 and Grants Road and Grants Drive in the business park.
- 15.4.9. The EIAR describes the site's accessibility via bus route no. 68 along the R120 and no. 69 at Rathcoole, a ten-minute walk away. The report estimates 20–30 construction workers for the projected development and that their use of public transport utilisation would be minimal.
- 15.4.10. In order to establish the Annual Average Daily Traffic (AADT), traffic surveys were conducted at Newcastle Roundabout in April and June 2022, recording vehicle volumes and types in all directions. The surveys found that the AADT volumes on the roads surveyed ranged from 5,040 to 11,089. To account for seasonal traffic flow changes, the EIAR used an index factor of 1.01 on the Weighted Average Daily Traffic (WADT) to estimate the AADT in accordance with TII guidelines. The EIAR states that

baseline traffic levels will not change without the proposed development, save for traffic growth from other business park developments.

15.4.11. **Potential Effects**

- 15.4.12. The EIAR estimates that the proposed development would generate 48 daily two-way vehicle movements, including 20 cars or vans for construction workers and up to 4 heavy trucks (HVs). Construction would take c. 18 weeks. The EIAR predicts a negligible traffic increase on the R120 and Grants Road during this period. Traffic flows on the R120 would increase by 0.4% to 0.5%, and Grants Road would increase by 0.9%.
- 15.4.13. The EIAR classifies the sensitivity of the affected roadways as medium, considering their use by residential areas and retail units. However, the EIAR estimates that the significance of the effect would be imperceptible due to the low magnitude of the traffic increase. HV traffic can be accommodated on the R120 and Grants Road, which are over 6.0m wide. The EIAR states that the temporary effects on the road network during construction would be imperceptible and not significant.
- 15.4.14. During the operation phase, the EIAR estimates that the proposed development would generate an additional 97 vehicle movements per day, comprising 79 heavy vehicle (HV) waste movements, 16 staff cars, and 2 non-waste, non-staff-related vehicles. This would create a moderate increase in traffic volume for the facility, which currently generates 66 light vehicles and 228 HVs daily. The EIAR estimates that 100% of these increased vehicle movements would use Grants Road, 90% on the R120 Rathcoole Road (towards the N7), and 10% on the Newcastle Road.
- 15.4.15. Tables 7.15 to 7.17 of the EIAR show that traffic flow from the R120 Greenogue Roundabout to Newcastle Roundabout would increase by 0.7% in 2025, 0.8% in 2030, and 0.7% in 2040. The report classifies this as negligible. Grants Road would increase traffic flows by 1.8% annually, which the EIAR classifies as low. The EIAR rates the R120 and Grants Road as medium sensitive due to their proximity to residential and retail sectors. Table 7.19 of the report shows that the impact would be negligible on all affected routes.
- 15.4.16. ARCADY modelling software was used to test the junction capacity of the R120 Newcastle Roundabout. In the absence of the proposed development, results show

that Arm D (Newcastle R120) already exceeds the recommended 0.85 Ratio of Flow to Capacity (RFC) during the AM peak hour, and Arm B (Rathcoole R120) exceeds it during the PM peak without the development. The EIAR states that the proposed development would result in a minimal increase in RFC values and delays, with impacts on the junction capacity remaining imperceptible and not significant.

15.4.17. According to the EIAR, the decommissioning phase would have similar impacts on traffic and transport as the construction phase but on a lower scale. The report states the proposed development would not create significant residual impacts.

15.4.18. Mitigation Measures

15.4.19. The EIAR details traffic and transport mitigation measures. During the construction phase, the building contractor would create a Construction Traffic Management Plan (CTMP) to minimise impacts on local communities and the road network. The EIAR predicts no significant traffic impacts throughout the operation phase. However, the developer would encourage sustainable transport, including public transport, active travel, the Bike to Work Scheme, and car-sharing. The EIAR states that similar construction traffic measures would be implemented during decommissioning to minimise traffic impacts on local residents and the road network.

15.4.20. Assessment

- 15.4.21. Having examined Chapter 7 of the EIAR, all associated documentation and submissions on file, it is my view that the proposed development would not have significant adverse effects on traffic and the local road network. The proposed removal of 5 no. existing car parking spaces and the provision of 10 no. additional bicycle parking spaces, along with 2 no. EV charging spaces are in accordance with Policies SM7, E4 and COS8 Objective 6 of the SDCC Development Plan 2022-2028. These policies seek to promote the delivery of EV charging facilities and the provision of adequate secure bicycle storage.
- 15.4.22. I consider that the direct and indirect impacts of the construction phase of the proposed development on traffic, a maximum of 48 two-way vehicle movements per day, would not be significant. The impact on roads serving the site, including the R120 and Grants Road, would be minor, with increases in traffic flows ranging from 0.4% to 0.9%. In the absence of evidence to the contrary, I am satisfied that these figures

confirm that the temporary construction traffic would not have a significant adverse effect on the local road network. The implementation of a Construction Traffic Management Plan (CTMP), as proposed in the EIAR, would manage the timing and flow of construction traffic to further minimise disruption. I consider that the requirement for a Road Safety Audit, as recommended in the Planning Authority report, should be incorporated into the CTMP. This would ensure the safety of pedestrians and cyclists on the site.

15.4.23. During the operation phase, I consider the estimated additional 97 vehicle movements per day, while contributing to a considerable increase in overall volumes of traffic, would still be within acceptable limits. The projected increase of 0.7% to 1.8% on the R120 and Grants Road falls well below thresholds that would signal any significant impact on road capacity or traffic flows, as per the Traffic Management Guidelines. The ARCADY modelling shows that the Ratio of Flow to Capacity would remain largely unchanged, which indicates that junction capacity would not be significantly affected. The provision of bicycle parking and EV charging spaces accords with national and county policy objectives, which seek to reduce the use of private vehicles and the promotion of low-emission vehicles. Having regard to other existing and planned developments in the Greenogue Business Park, I do not consider the proposed development would result in significant cumulative impacts on the local road network.

15.4.24. **Conclusion**

15.4.25. In conclusion, I consider that the proposed development, subject to the implementation of the proposed mitigation measures, would not significantly impact traffic on the local road network and would be acceptable regarding road and pedestrian safety.

15.5. Population

15.5.1. Methodology

15.5.2. To estimate potential impacts on people within the zone of influence (ZoI), the EIAR considers residential, working, and visiting communities. The assessment considers

positive and negative impacts on land use, residential amenity and local communities, employment, and demographics. The Zol includes CSO-defined Small Areas (50–200 households) within 1km of the site and data from the 2016 and 2022 censuses. The EIAR states the population assessment includes economic activity, employment, and demographic changes during the construction, operation, and decommissioning phases. The report notes how the EPA guidelines do not need a detailed socio-economic analysis unless the development directly affects economic or settlement patterns. The EIAR acknowledges the limitations posed by the changes in CSO Small Area boundaries between the 2016 and 2022 censuses. The report notes South Dublin County Council's consultation feedback requesting details on staffing levels at the proposed facility when operational.

15.5.3. Baseline Conditions

15.5.4. The EIAR describes the baseline environment for the population, taking into consideration land use, residential and community amenities, economic activity and employment, employment, and local population demographics within the Zol. The site is located in Greenogue Business Park, c. 15 km southwest of Dublin City Centre. The surrounding area is mostly industrial and commercial, with community facilities and residences to the west of the site in and around Newcastle. The EIAR notes that social and community services and sports facilities are located outside the immediate vicinity but within or adjacent to the Zol. The EIAR details economic activity, noting that unemployment rates within the ZoI have decreased significantly, from 11.1% in 2011 to 7.9% in 2016, increasing slightly to 9.4% in 2022. The demographic analysis shows a strong population growth trend within the Zol, with an increase of 28% between 2016 and 2022, significantly higher than the state average of 8.1%. The age profile of the local population indicates a higher proportion of younger age groups (0-14 years) compared to national averages. The report states that in the absence of the proposed development, the existing environment and HRW management sector would remain largely unchanged.

15.5.5. Potential Effects

15.5.6. The EIAR states that there would be negligible direct impacts on population during the construction phase of the planned development. Since all construction would take

place within the site of the existing waste facility, land use and settlement patterns would not change significantly. The EIAR states that the development would not affect local services or community facilities, and impacts from noise and air quality would be imperceptible. The EIAR states that there would be a temporary, positive impact on economic activity due to construction employment.

- 15.5.7. During the operation phase, the EIAR states that the project would not change land use patterns. The report states that the increase in vehicle movements would have a negligible impact on residential amenities, with impacts from noise, traffic, and air quality effects deemed as imperceptible.
- 15.5.8. The report states the decommissioning phase would mirror the construction phase, having a slightly negative impact on employment and a temporary, minor effect on land use. The report states that cumulative impacts with other developments would be minor, with no significant interactions. It is noted that no residual impacts would arise from the proposed development.

15.5.9. Mitigation Measures

15.5.10. The EIAR states that apart from the preparation of a detailed Construction Traffic Management Plan to manage construction traffic, no mitigation measures are required for the construction phase. During the operational phase, the report states that there would be no significant adverse impacts on the population. No additional mitigation measures are proposed apart from those addressing water, air quality, climate, noise, and human health, as addressed in other chapters in the EIAR. The report states that there would be no significant population impacts on population during the decommissioning phase and that no mitigation measures are proposed apart from the implementation of a Decommissioning Plan.

15.5.11. **Assessment**

15.5.12. Having examined Chapter 8 of the EIAR and all of the associated documentation and submissions on file, I consider that the direct and indirect effects of the proposed development on population would not be significant. Regarding land use and settlement patterns, I consider that the proposal is consistent with the land uses permitted under the 'EE' land use zoning of the site. The construction and operational phases would not impact local settlement patterns or change the existing

industrial land use of the site. Impacts on land use during the construction phase would be temporary and minor, with no permanent impacts on the local population.

15.5.13. The proposed development would not have significant adverse effects on residential amenities and local community facilities. The EIAR demonstrates that impacts from noise, traffic, and air quality during the construction and operational phases would be imperceptible. The minor increase in traffic would not be significant. No direct impacts on residential properties would occur. The proposed development would generate employment during the construction phase. However, this would be temporary, and there would be a slight reduction in employment at the waste facility after the construction phase. However, I do not consider that this would significantly affect the local population. Given the scale of the proposed development, cumulative impacts on population would not occur.

15.5.14. **Conclusion**

15.5.15. I conclude that subject to the implementation of the proposed mitigation measures, the proposed development will not have significant effects on the local population, residential amenities, and community facilities.

15.6. Noise And Vibration

15.6.1. Methodology

- 15.6.2. The EIAR methodology for assessing noise and vibration impacts includes a review of relevant guidelines to establish noise criteria, characterisation of the existing noise environment, and the noise and vibration emissions from the proposed development. Relevant European and national legislation includes EU Directive 2011/92/EU, 2014/52/EU, Commission Directive (EU) 2015/996, S.I. No. 549 of 2018 and EC Environmental Noise Regulations. The EIAR also references the South Dublin County Development Plan 2022-2028 and other relevant guidelines, ISO and BS Standards (e.g. BS 4142, BS 5228).
- 15.6.3. The EIAR defines a 600m zone of influence for the construction and operational phases. Sources of information to inform the assessment include datasets from the EPA Waste Licence, traffic flow data from 2023, Baseline Noise Data and Aerial Mapping. Key parameters for assessment include noise impacts during construction

and operations, as well as noise from increased traffic and vibration impacts during construction. Vibration impacts and noise from increased traffic during the operation phase were scoped out due to negligible impact.

15.6.4. The EIAR methodology sets out assessment criteria for the significance of noise impacts during the construction and operation phases, as well as from traffic. The EIAR details how noise-sensitive receptor locations (NSLs) are categorised by their sensitivity (high, medium, low) and the significance rating of noise effects is determined accordingly. For construction noise, the EIAR applies the ABC method from BS 5228-1 to determine the Thresholds of Potential Significant Effect (TPSE), based on the ambient noise level at the nearest NSL. For operational noise, the EIAR refers to the EPA licence conditions imposed under IED licence W0192-03 for the facility. Condition 4.5 of the IED licence states that noise emissions must not exceed specified limits at the site boundary, with additional considerations for tonal or impulsive components (Section 9.2.5.2 of the EIAR). Regarding traffic noise, in the absence of relevant Irish legislation, the EIAR refers to DMRB LA111 criteria, which assesses noise changes based on short-term and long-term impacts, identifying perceptible changes and their significance. No data limitations are identified.

15.6.5. Baseline Conditions

- 15.6.6. The EIAR describes the existing baseline environment, noting that the site is surrounded by industrial premises in Greenogue Business Park. The report identifies seven noise-sensitive locations (NSLs) within 600m of the site, with the closest being c. 300 metres away to the west (refer to Fig. 9-1). The EIAR states that large industrial buildings restrict the line of sight between the proposed development and surrounding NSLs. The report states that this significantly reduces noise impacts experienced by the NSLs from construction and operational activities occurring at the site. The EIAR states that annual noise monitoring at four boundary locations shows historical noise levels of 51 dB LAeq,30min or less, which is lower than the licensed limit of 55 dB LAeq,30min. At present, the facility's operating hours are 07:00 18:00, with allowance for 24-hour operations.
- 15.6.7. The baseline noise survey was conducted during the daytime period on the 26th of April, 2023, and evening/night-time periods on the 2nd of May, 2023, at two noise monitoring locations (NMLs), six locations within the site boundary and one spot

measurement outside the boundary. The EIAR states that the surveys were undertaken in accordance with relevant ISO standards. Baseline Noise Survey Results found an Arithmetic Average of L_{AF90} readings of 42 to 48 dB at NMLs. Dominant noise sources included industrial noise, local and distant traffic, and occasional impulsive sounds within the business park. Noise monitoring results at internal and spot measurement locations found readings ranging from 51 to 94 dB LAeq.

15.6.8. The EIAR uses the ABC method (BS 5228-1) to assess construction noise, determining that Category A (65 dB during daytime periods) is applicable for nearby residential locations. The EIAR states that in the absence of the proposed development, no significant changes in noise levels would occur, apart from those that may occur at other nearby developments and the existing site itself.

15.6.9. Potential Effects

- 15.6.10. The EIAR states that construction activities would last c. 18 weeks during the construction phase. Works would involve the installation of a prefabricated office, constructing a bulk trailer parking area and a clean bin storage shed, demolishing the existing office space, installing a plant within buildings, and associated construction traffic. Regarding demolition works, the report states that predicted noise levels at the nearest Noise Sensitive Location, over 300 metres from the site, would be 46 dB LAeq (refer to Table 9.16). The report indicates this would be below the Threshold of Potential Significant effect of 65 dB LAeq for daytime residential locations as per BS 5228-1. It assesses the significance of impact as not significant.
- 15.6.11. Regarding construction activities, the EIAR presents predicted noise levels at NSLs ranging from 33 to 44 dB LAeq in Table 9.18. The highest level of 44 dB LAeq occurs at NSL3 during plant installation. The EIAR notes that this work would be carried out inside the buildings following construction and would be partially or fully enclosed and reduced in level. The impact of the proposed construction works on the nearest NSLs is assessed as not significant.
- 15.6.12. During the operation phase, the EIAR describes that the main operational noise sources would be a proposed shredder and an air blast cooler. The shredder is expected to emit 77 dB(A) at 10 m. The EIAR predicts noise levels at NSLs ranging from 32 to 37 dB(A) due to the shredder (refer to Table 9.19), which are below measured background noise levels for daytime, evening and night-time. The air blast

cooler would generate 77 dB(A) at a 10m distance, with predicted levels at NSLs between 32 and 37 dB(A) (refer to Table 9.20). The EIAR assesses the significance of impact as not significant. The EIAR notes that tonal or impulsive noise components would not be audible at NSLs, complying with the facility's current IED licence conditions regarding noise emissions.

- 15.6.13. Regarding off-site traffic noise impacts, the EIAR estimates that the proposed development would result in a minor increase in traffic volumes along the R120, leading to a negligible increase in traffic noise levels of less than 1 dB (refer to Table 9.21). Using the Calculation of Road Traffic Noise (CRTN) method and the UK's DMRB LA111 criteria, the EIAR assesses the magnitude of impact as negligible and the significance of effect as not significant. Overall, the impact of off-site traffic noise on the nearest NSLs is assessed as imperceptible.
- 15.6.14. The EIAR states that decommissioning activities would last c. 8 weeks and would include the processing or transferring of any untreated wastes, removing all treated HRW and waste containers, dismantling equipment, and decontaminating the building if required. The EIAR indicates that noise levels during decommissioning would not be significant.

15.6.15. **Mitigation Measures**

- 15.6.16. During the construction phase, the EIAR indicates that no significant noise or vibration impacts are anticipated at the nearest NSLs. However, best practicable means would be employed to minimise potential effects. These measures include:
 - Scheduling noisy work during regular working hours.
 - Use quiet working methods and minimise vibration, especially during demolition and piling.
 - Containing noisy plant and machinery such as pumps and generators within acoustic enclosures.
 - Ensuring all plant and machinery comply with relevant noise regulations (S.I. No. 320 of 1988, S.I. No. 632 of 2001, S.I. No. 241/2006).
 - Adopting guidelines from CIRIA's Environmental Good Practice Site Guide and the London Good Practice Guide: Noise & Vibration Control.

- Maintaining all plant, keeping acoustic covers closed, avoiding unnecessary revving, and switching off equipment when not in use.
- Minimising drop heights of materials and staggering plant start-up times.
- Conducting briefings for site personnel on noise and vibration issues.
- Managing material deliveries to reduce noise and congestion.
- Investigating any noise complaints promptly and reporting to the County Council.
- 15.6.17. During the operational phase, the EIAR notes that no significant noise or vibration impacts are expected during operation, but BPM would still be employed, including:
 - Keeping roller doors closed during internal equipment operation where practicable.
 - Minimising drop heights of materials.
 - Avoiding unnecessary revving and switching off equipment when not in use.
 - Regular maintenance and inspection of equipment.
- 15.6.18. During the decommissioning phase, the EIAR states that no significant noise or vibration impacts are anticipated, but BPM would be implemented to ensure compliance with EPA licence criteria. The report states that no significant residual effects would arise from the proposed development.

15.6.19. **Assessment**

15.6.20. I have assessed Chapter 9 of the EIAR, all of the associated documentation, notably Appendices 9.1 to 9.4, and the submissions received. In the absence of evidence to demonstrate otherwise, I consider that the proposed modifications to the existing waste treatment facility would not have significant effects arising from noise and vibration. During the construction phase, the predicted noise levels (46 dB LAeq) at the nearest NSLs over 300 metres from the site would remain well below the 65 dB LAeq thresholds for daytime residential areas, as set out in BS 5228– 1: 2009 +A1 2014: 'Code of practice for noise and vibration control on construction and open sites – Noise'. As such, direct noise impacts at these NSLs would not be significant. Based on the nature and location of the proposed development, I consider it reasonable and justifiable to scope out vibration impacts, as presented in the EIAR.

- 15.6.21. During the operational phase, the main sources of noise, including the proposed shredder and air blast cooler, are predicted to emit noise levels below background noise levels at the nearest NSLs, with predictions ranging between 32 and 37 dB LAeq. Given that these noise sources would be enclosed within buildings and distant from sensitive receptors, I consider that noise impacts during the operation phase would not be significant. As submitted in the EIAR, I am satisfied that any modifications to the existing IED licence for the proposed development would require compliance with any noise conditions imposed, thereby providing further environmental protection from noise impacts.
- 15.6.22. The EIAR demonstrated that increases in traffic volumes serving the proposed development would result in a negligible increase in noise levels (<1 dB) along the R120. I consider that this increase in noise levels is not significant and, thereby, would not adversely impact the residential amenities of residents in the locality. Having regard to existing and planned development in the Greenogue Business Park, I do not consider significant cumulative impacts would occur. The proposed mitigation measures, as detailed above, including Best Practice measures during the construction and operation phases, would be effective in minimising potential noise impacts. Subject to the implementation of these mitigation measures, residual impacts would not occur. Decommissioning of the facility following closure and the works required, as detailed in Section 9.4.3 of the EIAR, would not be significant.

15.6.23. **Conclusion**

15.6.24. In consideration of the above, I conclude that subject to the implementation of the proposed mitigation measures, the proposed development would not result in any significant adverse noise or vibration impacts on the environment.

15.7. Air Quality And Climate

15.7.1. Issues Raised

15.7.2. The HSE submission recommends that an Odour Management Plan be implemented during the operational phase to address odour and bioaerosols and that air quality controls be implemented during the construction and operation phases. The submission also recommends that a Dust Risk Assessment and Climate Change Risk Assessment be undertaken.

15.7.3. Methodology

- 15.7.4. The EIAR methodology details relevant legislation, policy, and guidance, including the Paris Agreement and the EU Effort Sharing Regulations. The EIAR details Ireland's climate legislation, plans and policies, including the Climate Action and Low Carbon Development Act and successive Climate Action Plans, which seek to achieve a 51% reduction in GHGs by 2030 net zero carbon emissions by 2050. Air quality assessments are based on guidance from the Institute of Air Quality Management (IAQM) and Transport Infrastructure Ireland (TII). Key parameters for assessment include dust, odour, volatile organic compounds (VOCs), greenhouse gas (GHG) emissions and bioaerosols.
- 15.7.5. The zone of influence for assessing air quality is defined as 500 metres from the proposed development. The EIAR states that the assessment of GHG emissions uses the carbon calculator developed by the Environmental Agency in the UK. The carbon calculator calculates embodied carbon dioxide (CO2) of materials and CO2 associated with transportation. The TII Road Emissions Model was used to predict the local impact of traffic-derived pollution during the operation phase.
- 15.7.6. The EIAR details the assessment criteria for assessing dust, combustion gases/particulates, odour, and VOCs, referencing relevant EU and WHO legislation and guidelines. Given that the emissions from the proposed development are arising from medical waste, the EIAR uses a highly offensive odour criterion of 1.5 OUE/m³ for odour based on the EPA's Guidance Note AG9. For bioaerosols, the methodology follows the UK Environment Agency Technical Guidance Note (Monitoring) M9 Environmental monitoring of bioaerosols at regulated facilities (2018).

15.7.7. Baseline Conditions

15.7.8. The EIAR details how land use in the local area surrounding the site is commercial and industrial. There are no residential properties within 300m of the site. The majority of residential properties are in Newcastle, c.1 km from the site. The report states that the main existing sources of pollution in the area come from road traffic, air traffic at the nearby Casement Aerodrome, surrounding businesses within the business park

and surrounding agriculture. Traffic volumes on the N7 between Junctions 4 and 3 increased by 11,456 vehicles in 2023, reaching an AADT volume of 100,380. The report states that agricultural activities generate low levels of dust and odour, varying seasonally throughout the year with higher levels during harvest.

- 15.7.9. The EIAR states that the site lies within Air Quality Zone A: Dublin Conurbation. Baseline air quality in the Rathcoole / Greenogue area is classified as 'Good,' with pollutant levels below ambient air quality limit values. The results of the EPA monitoring station in Tallaght for the last three years indicate compliance with the limits for the protection of human health and the WHO Guidelines. This indicates that the area currently experiences compliant air quality.
- 15.7.10. The report states that the nearest meteorological station to the area is the Met Éireann Station in Casement Aerodrome, which shows a mean annual temperature of 9.9°C, mean wind speeds of 10.1 knots, and mean 783.5mm Annual Total Rainfall. The report notes that extreme weather events, including occasional gales and fog, occur but are infrequent, posing minimal risk to operations. In the 'Do-Nothing' scenario, the EIAR states that air quality would remain neutral, and traffic levels would remain unchanged. The site would continue to operate as a hazardous waste transfer/recovery facility, which holds an existing IED licence that requires that no emissions, including odours, from the activities carried on at the site shall result in an impairment of or interference with amenities or the environment beyond the facility boundary.

15.7.11. **Potential Effects**

- 15.7.12. The EIAR describes that during the construction phase, impacts from dust emissions could occur. However, given that sensitive receptors are located over 300 metres from the site, impacts would not be significant. The EIAR states that construction traffic may affect 10 no. nearby residential properties, but its effects would be temporary and imperceptible. Impact mitigation measures, including dampening, wheel washes, and road sweeping, would ensure no significant impact.
- 15.7.13. The EIAR states that greenhouse gas emissions from construction activities, including embodied emissions, plant machinery, and transport, would be 429.7 tCO2eq. The report considers this to have a slight adverse effect on climate.

- 15.7.14. During the operation phase, the EIAR states that emissions from operation traffic would have an imperceptible effect. The report states that emissions from volatile organic compounds (VOCs) would be controlled through a series of containment and treatment solutions, including negative air pressure, HEPA filtration, and carbon filtration. The EIAR states that ambient concentrations of VOCs would remain below air quality guidelines, with no more than 4% of the maximum 1-hour limit value and no more than 1% of the annual mean limit value at the worst-case off-site receptor.
- 15.7.15. Regarding operational odour emissions, the EIAR states that GLCs would be below the odour nuisance thresholds for each individual VOC. Emissions from the facility would lead to a predicted odour concentration of 6.6% of the odour guideline value at the worst-case sensitive receptor for the worst-case year modelled. The report states that bioaerosol dispersion would not be significant due to controls such as negative air pressure extraction hoods and high-efficiency particulate absorbing (HEPA) filters, which would achieve a 99.97% efficiency in trapping particles as small as 0.3 μm.
- 15.7.16. Regarding operational GHG emissions, the EIAR states that the proposed development would generate GHG emissions both from energy use on-site and from the transport of materials. The report estimates 7,494.2 tCO2 emissions annually, which the report classifies as causing a slight effect on climate. The report notes that the site is not in a location subject to flooding. A flood risk assessment is provided in Chapter 15 Water and confirms the low vulnerability of the proposed development.
- 15.7.17. During decommissioning, the EIAR notes that the proposed development would result in potential impacts on air quality and climate similar in nature to those outlined for the construction phase but on a much smaller scale.

15.7.18. Mitigation Measures

15.7.19. For the construction phase, the EIAR states that dust control measures are based on BRE guidelines for the Control of Dust from Construction and Demolition Activities (2003). These include locating temporary site compounds and material stockpiles at least 100m from the three sensitive receptors at the southwest of the site, regularly cleaning and maintaining site roads, watering during dry or windy conditions, and ensuring all HGV vehicles are managed to prevent tracking mud onto public roads.

Vehicles carrying dusty materials would be dampened or covered in order to avoid fugitive dust along the haul route. The EIAR states that construction traffic emissions would be mitigated by implementing a Traffic Management Plan, designating the delivery route for all materials to/from the site via the N7 and R120, and ensuring all vehicles are properly maintained to minimise pollutants.

- 15.7.20. To reduce construction greenhouse gases, the EIAR details measures, including turning off engines and mobile plant when not in use, regular vehicle maintenance, and reducing idle times. The EIAR states that an energy management system will be implemented for the duration of the work to minimise energy use.
- 15.7.21. During the operation phase, proposed traffic mitigation measures include using a designated delivery route for all materials to/from the site via the N7 and R120 and proper vehicle maintenance. Bioaerosols would be managed through negative air pressure extraction hoods, HEPA filters, and carbon filtration. The EPA will enforce air emissions limits. The EIAR states that these measures can achieve a 99.97% efficiency in trapping particles as small as 0.3 μm.
- 15.7.22. Odour management would be controlled through an Odour Management Plan and mitigation measures, including enclosed refuse vehicles, a 'just in time' escalated management approach for odorous waste material and processing, and regular maintenance of odour control equipment. The report states that the proposed mitigation measures and odour monitoring would comply with the EPA's AG9 guidelines.
- 15.7.23. The EIAR states that GHG emissions during operations would be addressed by improving energy efficiency, installing the permitted solar panels, and implementing energy-saving measures. These would include using thermostatic controls on all space heating systems, sensors for lighting, low energy lighting systems, powersaving functions on office PCs and monitors, and installing low-flow showers and tap fittings.
- 15.7.24. The EIAR states that the same mitigation measures as the construction phase would be used for the decommissioning phase. The report states that with the implementation of the proposed mitigation measures during the construction and operation phases, residual impacts would not be 'not significant'. Monthly monitoring of dust deposition levels would be undertaken at sensitive receptors to ensure dust

levels remain below the guideline of 350 mg/m²/day (for non-hazardous dust). During the operation phase, periodic monitoring of odour, VOC emissions, and stack volume flow would be undertaken, with all results reported to the EPA as required under the IED Licence.

15.7.25. **Assessment**

- 15.7.26. Having examined Chapter 10 of the EIAR, the Aermod Modelling in Appendix 10.1, and all of the associated documentation and submissions on file, I consider the proposed development would not significantly affect air quality or climate. During the construction phase, the proposed mitigation measures would prevent the direct effects of dust and GHG emissions. Mitigation measures controlling dust emissions would include regular cleaning, material dampening, and maintaining a distance of 100 metres from sensitive receptors. Given the site's distance to the nearest sensitive receptors and the implementation of the proposed mitigation measures, I consider that dust nuisance would be minimal. The estimated Greenhouse Gas Emissions during the construction phase, at 429.7 tCO2eq, would not have a significant effect on climate, given the short and temporary duration of construction works.
- 15.7.27. The operation phase would result in minor increases in traffic. However, its impact on air quality would not be significant. VOC concentrations would be no more than 4% of the maximum 1-hour limit at the worst-case receptor, remaining within relevant air quality guidelines. Its impact on air quality would not be significant during the operation phase.
- 15.7.28. Regarding bioaerosol and odour emissions, the proposed use of HEPA filters, negative air pressure systems, and carbon filtration would capture 99.97% of airborne pathogens and prevent bioaerosols from being dispersed. Odour emissions are predicted to be 6.6% of the odour guideline value at the worst-case receptor. This would be below the odour nuisance thresholds for each individual VOC under the proposed operating conditions. I consider the proposed mitigation measures would adequately prevent adverse effects on air quality from bioaerosols and odours.
- 15.7.29. Regarding impacts on climate, the proposed development's GHG emissions during the operation phase are estimated to be 7,494.2 tCO2 annually. The proposed energy-saving mitigation measures, including the installation of the permitted solar panels and improved energy efficiencies, would effectively reduce GHG emissions.

15.7.30. Having regard to existing sources of air pollution in the area, including traffic along the local road network and other developments in the vicinity, I do not consider the proposed development would result in significant adverse cumulative impacts on air quality. Baseline conditions show that the existing environment's air quality is good, and emissions from the proposed development would remain below regulatory thresholds.

15.7.31. **Conclusion**

15.7.32. In conclusion, I consider that the proposed development, subject to the implementation of the proposed mitigation measures, would not have significant direct, indirect, cumulative or residual effects on air quality and climate.

15.8. Human Health

15.8.1. Overview

- 15.8.2. As detailed in Chapter 4 of the EIAR, the proposed development would manage up to 24,000 tonnes of Health Risk Waste (HRW) per annum, using a fully automated shredding and steam heat disinfection treatment process to reduce waste by c. 80%. Waste types to be managed would include materials from human or animal healthcare, such as sharps (e.g. needles, blades and other sharp medical instruments), chemical, toxic, or pharmaceutical substances, and biological materials (e.g.recognisable anatomical waste). These wastes would either be disinfected on site or stored without disinfection prior to transfer offsite. The disinfection process would involve shredding waste and subjecting it to high-temperature steam within a thermal screw system to achieve the required level of decontamination. Treated waste would be bulked up and transferred off-site for recovery. Untreated materials would be stored in a transfer station before being sent to an appropriately licensed treatment/disposal facility.
- 15.8.3. The facility would incorporate strict air quality and water management methods to control emissions and maintain compliance with regulatory standards. Negative air pressure extraction hoods would capture residual air, passing through HEPA and carbon filters before release, ensuring that pollutants are minimised. Wastewater from the disinfection processes would be treated, discharged to the existing sewer and monitored in accordance with the EPA IED Licence Emission Limit Values (ELVs) set

out in Table 4.3 of the EIAR. The reusable sharps containers would be emptied, washed, disinfected, and returned to customers for reuse. The proposed new office and welfare facilities would support operations in the facility.

- 15.8.4. Chapter 11 of the EIAR states that the proposed development represents a key opportunity for improving HRW management in South Dublin and the Republic of Ireland, which aligns with policies in the Healthy Ireland framework and the NPF on improving people's health and well-being and creating a clean environment for a healthy society. The EIAR states that the proposed development supports public health in the Republic of Ireland by improving infrastructure capacity for safe management and treatment of HRW, in accordance with EU Directives and national legislation on waste, including the Waste Management Act 1996.
- 15.8.5. The EIAR states that its assessment adheres to established guidelines and best practices, using a public health perspective of impacts. The health assessment draws inputs from the following chapters in the EIAR: Chapter 7—Traffic and Transport, Chapter 8—Population, Chapter 9—Noise and Vibration, Chapter 10—Air Quality and Climate, and Chapter 15—Water. The health assessment includes the residual effect conclusions for each of these chapters.

15.8.6. Methodology

- 15.8.7. The EIAR states that the assessment of the effects on human health is conducted in accordance with relevant health legislation, including the Safety, Health and Welfare at Work Act 2005 (as amended), EPA Act 1992 (as amended), Air Quality Standards Regulations 2011, the Environmental Noise Regulations 2018 (as amended), and the Local Government (Water Pollution) Acts 1977 to 1990 (as amended). The EIAR also details relevant health guidance the assessment adheres to, including guidelines from the IEMA 2022, EPA 2022 guidelines on EIAR, the IPH 2021 guidelines for Health Impact Assessment, the IAIA, EUPHA and WHO.
- 15.8.8. The EIAR defines the study areas for the assessment to include the Newcastle ED (site-specific area), the administrative area of SDCC, the Dublin region, and the Republic of Ireland. These areas are used to identify representative population groups rather than to set boundaries on the extent of potential effects. The EIAR states that data from other EIAR chapters and interrelated technical disciplines have been used for the health assessment. No separate health-specific data collection surveys were

undertaken. Health baseline assessment used data sources, including the CSO Small Area Population Statistics (2016), CSO StatBank (2020), the Pobal HP Deprivation Index (2023), and Google Earth Pro 2021 images.

- 15.8.9. The scope of assessment uses a proportionate and evidence-based approach, adhering to the IEMA 2022 list of determinants of health and population groups. Issues assessed include air quality, water quality or availability, noise and vibration, and transport modes, access, and connections. The EIAR details impacts scoped out of the human health assessment in Table 11.3. The EIAR states that the methodology for determining the significance of the effect adheres to IEMA 2022 and IPH 2021 guidelines. The report states that the determination of significance identifies the sensitivity and magnitude of the receptor affected to inform professional judgment regarding the public health impact of the proposed development. The report details in tables the methodology criteria for determining health sensitivity, magnitude, and significance. Where significant adverse effects are identified, mitigation measures are proposed to reduce the significance of such effects.
- 15.8.10. The EIAR notes that the assessment is based on publicly available statistics and that new primary research was undertaken. The report acknowledges data limitations, such as reliance on pre-COVID-19 public data, but considers the information available to provide a suitable basis for assessment.

15.8.11. Baseline Conditions

- 15.8.12. The EIAR states that the demographic profile of the Newcastle ED shows a higher percentage of the population under 15 (26.3%) than the national average (19.7%). The Newcastle ED has a lower proportion aged 65+ (12.3%) than the national figure (15.1%). The report identifies that 61.4% of the population in Newcastle ED is aged 15-64, which is below the national average (65.3%).
- 15.8.13. The EIAR details physical and mental health indicators, indicating that life expectancy in Ireland was 80.5 years for males and 84.3 for females in 2021. Healthy life expectancy was briefly impacted during the COVID-19 pandemic. The EIAR states that 54.2 % of the population in Newcastle reported their health as 'very good'. The EIAR details how mortality rates for cancer, circulatory, and respiratory diseases are all lower in Dublin compared to the national averages.

15.8.14. The EIAR describes the evolution of the environment in the absence of the proposed development, stating how longer-term trends and interventions in population health may influence the future baseline. Climate change may also exacerbate physical and mental health risk factors, particularly around flooding and extremes of temperature. To reflect these trends, the assessment scores all vulnerable groups as having high sensitivity for all determinants of health.

15.8.15. **Potential Effects**

15.8.16. <u>Construction Phase:</u>

- 15.8.17. The EIAR states that the duration of the construction works for the proposed development would be c. 18 weeks. Regarding air quality, the EIAR details potential impacts from dust and air pollutants, particularly Nitrogen Dioxide (NO₂) and particulate matter (PM10 and PM2.5) from construction emissions and traffic. The EIAR notes that sensitive receptors include nearby residents and vulnerable groups (e.g., children, the elderly, and vulnerable individuals with poor health). The sensitivity of the general population is deemed low, and vulnerable groups are considered highly sensitive due to respiratory conditions. The EIAR states that, following the implementation of mitigation measures, the magnitude of the air quality impact would be low, with effects considered negligible. However, the report acknowledges that a minor adverse effect (not significant) would remain due to scientific uncertainty (and emerging evidence) about the non-threshold health effects of NO₂ and PM_{2.5}.
- 15.8.18. Regarding noise and vibration, the EIAR states that potential effects from construction activities would be restricted to daytime hours (8:00 AM to 7:00 PM Monday to Friday and 8:00 AM to 4:00 PM on Saturdays). The report notes that noise from construction works would be within acceptable limits, with the magnitude of impact considered low. The report considers the overall significance of the effect of the proposed development on population health as minor adverse (not significant).
- 15.8.19. Regarding transport, the EIAR states that construction traffic could affect public health through changes in road safety and accessibility, including travel times for road users and emergency services. The sensitivity of the general population is deemed low. Vulnerable groups, such as children and older people, are considered highly sensitive due to greater reliance on affected routes, with a greater likelihood that any disruption or disturbance could affect safety or access to health-supporting services.

The EIAR states that the magnitude of transport-related effects on public health is low, with the significance of the impact on population health considered minor adverse (not significant).

15.8.20. <u>Operation Phase:</u>

- 15.8.21. The EIAR states that during the operational phase, the proposed development has potential impacts on human health relating to air quality, water quality, noise and vibration, and transport modes, access and connections.
- 15.8.22. Regarding air quality, the EIAR details potential emissions from the gas boiler, disinfection process, and vehicles delivering/collecting waste, particularly NO₂, PM10, PM2.5, and bioaerosols. The EIAR states that emissions would comply with stringent limits enforced by the EPA under its IED licence and would be independently monitored. The sensitivity of the general population is considered low. Vulnerable populations, including children, the elderly, and those with poor health and respiratory conditions, are considered highly sensitive. The magnitude of change is considered low, with health effects considered negligible to very low due to effective mitigation measures, including an Odour Management Plan, high-efficiency particulate air (HEPA) filters, and activated carbon filtration to remove any trace odour before the air is released to the atmosphere. The EIAR states that the significance of air quality effects would be minor adverse (not significant).
- 15.8.23. Regarding water quality, the EIAR indicates potential risks from wastewater discharges related to the disinfection process of bins and management of condensate into public sewers. These emissions would be subject to relevant permits, including an EPA Industrial Emissions Directive (IED) license and a South Dublin County Council discharge licence. The sensitivity of the general population is considered low, and vulnerable groups, including children, the elderly and those with poor health, are considered to have high sensitivity. The magnitude of impact is deemed low. Wastewater from the proposed HRW activities would be made into the sewer following wastewater treatment and with appropriate monitoring in accordance with the facility's EPA IED licence. The EIAR states that the significance of the effect would be minor adverse (not significant), with minimal risk to public drinking water supplies, with water quality expected to be maintained well within regulatory thresholds.

- 15.8.24. Regarding noise and vibration, the EIAR details the potential sources of noise, including plant and machinery and traffic, but states that noise levels would remain within acceptable limits. The report notes that the general population's sensitivity is low, and vulnerable groups, including those working close to the HRW facility, have high sensitivity. The magnitude of impact is deemed not significant, the magnitude of change is considered low, and the significance of the effect is minor adverse (not significant), with the level of effect not expected to affect the ability to deliver local or national health policy.
- 15.8.25. Regarding transport, the EIAR considers operational changes to transport flow rates and the potential for significant population health effects due to changes in health-related travel times and accessibility and road safety. The general population is considered to have low sensitivity, and vulnerable groups, e.g. children, the elderly, and low-income individuals, have high sensitivity. The magnitude of change due to the proposed development is considered low, with minor changes in road safety. The EIAR states that the significance of transport effects would be minor adverse (not significant), with no significant impact on the population health baseline.
- 15.8.26. The report states that similar effects are expected for the decommissioning phase as for the construction phase and, therefore, are not assessed separately. A Closure, Restoration, and Aftercare Management Plan (CRAMP) would address environmental liabilities associated with the closure and decommissioning of the facility, which would take c. 8 weeks.

15.8.27. **Mitigation Measures**

15.8.28. The EIAR states that no further mitigation measures regarding air and water quality, noise, and transport are proposed. The report states that residual impacts during the construction and operation phases for these environmental factors would remain minor adverse (not significant). During decommissioning, residual impacts would remain the same as during the construction phase. The report states that no further monitoring is proposed for any of the phases of the proposed development.

15.8.29. **Assessment**

15.8.30. Having examined Chapter 13 of the EIAR and all associated documentation and submissions on file, it is my view that the proposed development would not create

significant adverse impacts on human health. Regarding air quality during the construction phase, the potential for effects from dust and pollutant emissions such as NO_2 , PM_{10} , and $PM_{2.5}$ from construction works and traffic would occur. However, I consider their magnitude of impact would be low, subject to the implementation of the proposed mitigation measures. These include dust suppression techniques (e.g., wheel washing, road sweeping, covering of materials, etc.) and adherence to best practice methods. Such measures would prevent significant adverse impacts on human health.

- 15.8.31. Regarding noise and vibration, construction work and traffic would generate noise and vibration impacts. However, these would be confined to daytime hours and remain within acceptable noise limits in accordance with the Environmental Noise Regulations 2018 (as amended) and DMRB LA111. I consider that the likelihood of significant noise impacts would be low, and residual effects would not be significant.
- 15.8.32. Regarding transport impacts during the construction phase, increased construction to and from the site traffic could temporarily affect the health and safety of road users. However, I consider the implementation of the proposed Construction Traffic Management Plan, as detailed in Chapter 7 of the EIAR, would mitigate these effects. As such, impacts on human health from construction traffic would not be significant.
- 15.8.33. During the operational phase, I consider that emissions from the gas boiler, disinfection process, and vehicles would be effectively regulated by the emission limits imposed under its EPA IED licence (subject to review). The implementation of an Odour Management Plan, HEPA filters, and carbon filtration systems would also mitigate any potential impacts. I consider that residual effects on air quality would not be significant, thereby creating no significant risk to human health.
- 15.8.34. Regarding water quality, potential risks from wastewater discharges would be managed and independently monitored under the EPA IED licence. Subject to implementing the proposed mitigation measures, as detailed in Chapter 15 and other chapters of the EIAR, the likelihood of significant effects on water quality and, thereby, on human health would be low and not significant.
- 15.8.35. Regarding noise during the operation phase, noise levels would remain within acceptable limits, as detailed in Chapter 9 of the EIAR. I consider that noise impacts

on human health at the closest sensitive receptors would not be significant, as addressed previously.

- 15.8.36. Regarding traffic during the operational phase, the proposed development would not significantly change traffic volumes. I consider that impacts on road safety would not be significant and, thereby, would have a negligible impact on human health.
- 15.8.37. Having reviewed existing and planned developments in the surrounding area, I do not consider the proposed development would create cumulative effects on human health. Subject to the implementation of the proposed mitigation measures, the proposed development would not result in significant adverse residual effects. As stated in the EIAR, the proposed development would accord with the stringent limits of its IED licence, providing further assurance that the proposed development would not have significant adverse impacts on human health.

15.8.38. **Conclusion**

I conclude that the proposed development, subject to the implementation of the proposed mitigation measures as detailed in other chapters of the EIAR, would not have significant effects on human health.

15.9. Landscape and Visual Impact

15.9.1. Methodology

- 15.9.2. The EIAR states that the methodology for the Landscape and Visual Impact Assessment (LVIA) adheres to the process outlined in TII's technical documents for LCA and LVIA. The assessment focuses on Protected Views as identified in the SDCC Development Plan and an assessment of predicted visual impacts from selected representative viewpoints within the study area.
- 15.9.3. The EIAR cites relevant policies from the SDCC Development Plan, including Policy NCBH14, which aims to preserve and enhance the landscape character of areas with medium to high landscape value and sensitivity and Policy NCBH15, which seeks to preserve views, prospects, and amenities of natural beauty both within and outside the county. The EIAR states that the methodology adheres to guidance from the Landscape Institute's Guidelines for Landscape and Visual Impact Assessment, 3rd

Edition (GLVIA 3) and the Technical Guidance Note on Visual Representation of Development Proposals (2019).

- 15.9.4. The EIAR states that baseline conditions were informed by data from OS Ireland Discovery maps (2023), GeoDirectory (2023), and aerial photography (2019). A site visit was carried out on 06/03/2023 to assess the existing environment, establish the existing landscape and visual resources and identify sensitive receptors, e.g. residential properties and scenic viewpoints
- 15.9.5. The EIAR outlines key parameters for assessment by considering the changes that would occur to the existing landscape and visual amenities as a result of the proposed development. Assessment Criteria uses a six-point scale (from none to profound) to determine the significance of effects, with profound and major effects considered significant. The EIAR states no data limitations or technical difficulties were encountered during the preparation of this chapter of the EIAR.

15.9.6. Baseline Conditions

- 15.9.7. The EIAR states that the study area for assessing landscape and visual effects was defined using desk data and field surveys, taking into consideration the industrialised nature of the site and the scale of the proposed modifications. The site is located within Greenogue Business Park, which is zoned 'EE' for enterprise and employment uses under the SDCC Development Plan. Greenogue Business Park features industrial buildings and mature hedgerow vegetation along its boundaries.
- 15.9.8. The EIAR describes the surrounding landscape as industrial, characterised by buildings of similar scale to those on the site. It assesses the landscape as having negligible sensitivity. The report details how the site lies within the Newcastle Lowlands landscape character area, which is characterised by its rolling farmland, historic settlements, and small settlements, including Newcastle and Rathcoole. According to the SDCC Development Plan, the Newcastle Lowlands is assessed as having medium to high landscape value and medium sensitivity. Table 12.4 of the EIAR details key Preserved Views and Prospects identified in the SDCC Development Plan, including views near Rathcreedan and along the N7 road. It also describes additional views from selected viewpoint locations, including distant views from the Newcastle Cemetery and short-range views from Grants Drive. The EIAR states that

in a 'do-nothing' scenario, the site would not be redeveloped, and the baseline would remain unchanged.

15.9.9. Potential Effects

- 15.9.10. The EIAR describes that during the construction phase, visual impacts would arise from site clearance, temporary working areas, construction machinery movement, and demolition of the existing steel-clad office at the southern end of Building 1. These effects are considered temporary (c. 18 weeks) and variable depending on the activities being undertaken at any given time.
- 15.9.11. During the operational phase, the EIAR states that the main sources of landscape and visual effects would arise from the construction of new structures, including a 130 m² roofed enclosure (6.6m wide, 19.9m long and 6.2m high) located on the east face of the Building 1, a security hut (4.3 sq.m. area and 2.7m high), a 191 m² structure for bulk trailers (9.1m high), a stack (2m high) to the roofline of Building 1, and a walkway linking the carpark to the side of Building 1.
- 15.9.12. The report states that the proposed modifications would directly affect the existing industrial landscape of the Greenogue Business Park but would not lose landscape elements of value, such as trees or woodlands. The EIAR states that the impact on the industrialised landscape of Greenogue Business Park would be negligible and not significant. The report states that its impact on the Newcastle Lowlands landscape character area would not be significant as the scale of the proposed change would be so limited that it would be almost indistinguishable from the surrounding built-up industrial area.
- 15.9.13. Regarding effects on visual amenities, Table 12.6 of the EIAR indicates that views near Rathcreedan (View 96) and along the N7 road near City West (Views 127 and 128) would be screened by existing vegetation and industrial buildings, resulting in no change and no significant adverse effects. From Athgoe Hill (Prospect 1), the proposed development would be scarcely discernible at a distance of over 2.5 km, resulting in a negligible magnitude and minor, not significant, adverse effect. For specific viewpoint locations, including Grants Drive (VP 1 and VP 2), the EIAR indicates that short-range views of the proposed structures would be noticeable but remain consistent with the area's industrial character. This would result in a small magnitude of impact and minor, not significant, adverse effects. At Newcastle

Cemetery (VP 3), the proposed development would be largely screened from view by existing large-scale buildings, resulting in a negligible impact and no significant adverse effect. The EIAR states that during the decommissioning phase, the building would remain in situ, albeit decontaminated, and the effects on landscape and visual amenities would be similar to those during the operational phase.

15.9.14. Mitigation Measures and Monitoring

15.9.15. The EIAR states that no landscape or visual mitigation measures are proposed for the construction, operation, or decommissioning phases of the proposed development. As a result, residual effects would be the same as those during the operational phase for landscape and visual amenity.

15.9.16. **Assessment**

- 15.9.17. Having examined Chapter 12 of the EIAR, all associated documentation, drawings and submissions on file, I consider the proposed development would not have significant adverse effects on the landscape or visual amenity of the surrounding area. The direct impacts of the proposed development would primarily relate to the construction of additional structures, including a 130 m² roofed enclosure, a security hut, a 191 m² bulk trailer structure, and a stack extending 2 metres above the roofline of Building 1. The elevation drawings detail the proposed materials and finishes for the proposed structures, which would match the existing industrial buildings on the site. They feature steel cladding and neutral colours that would integrate with the existing industrial aesthetic of the business park. I consider that these structures would be minor in scale and integrate into the industrial setting of Greenogue Business Park, which is characterised by buildings of similar height, form, and materials. Due to their industrialised nature, the site and immediate surrounding area have negligible landscape sensitivity. In my view, the proposed modifications would have no significant adverse effects on the landscape character or visual amenity of the immediate surrounding area.
- 15.9.18. Taking into consideration the Newcastle Lowlands character area, which is classified as medium sensitivity, I am satisfied that the proposed development would not be visually prominent in this area due to its scale, height and the intervening structures in the business park. As such, I consider the visual impact of the proposed

development on the landscape would be negligible and not significant. The proposed development would not result in the removal of trees or vegetation or interrupt views of surrounding landscape features. Therefore, I consider the impact of the proposed development on the Newcastle Lowlands landscape character would be minimal.

- 15.9.19. Indirect impacts on identified viewpoints, such as from Rathcreedan (View 96), the N7 road near City West (Views 127 and 128), and Athgoe Hill (Prospect 1), would be limited due to the existing screening provided by hedgerows and industrial structures in the Greenogue industrial estate. Having reviewed the drawings, I am satisfied that the effects on these viewpoints would not be significant, as the development would be mostly screened and imperceptible from distant locations. From closer viewpoints, such as at Grants Drive (VP 1 and VP 2), I consider the proposed modifications would be consistent with the industrial character of the area. The proposed materials and finishes for these new structures would be similar to those of existing structures. The proposed structures, while noticeable, would not be out of character with the existing built environment.
- 15.9.20. Taking into consideration the pattern of existing and permitted development in the surrounding area, the industrial context of the site and existing screening, I am satisfied that the proposed development would result in significant adverse cumulative impacts on the landscape and visual amenities of the surrounding area.

15.9.21. **Conclusion**

15.9.22. In conclusion, it is my view that the proposed development would not have significant adverse effects on the landscape or visual amenity of the surrounding area.

15.10. **Cultural Heritage**

15.10.1.Methodology

15.10.2. The EIAR methodology for assessing cultural heritage took into consideration the Architectural Heritage Act (1999), Heritage Act (1995), National Monuments Act (1930–2014), relevant policies of the Granada and Valletta Conventions, the Faro Convention, and guidelines including the UNESCO World Heritage Convention (1972) and ICOMOS declarations.

- 15.10.3. The EIAR states that the zone of influence (ZOI) for Cultural Heritage includes the application site and the surrounding area within a 1 km radius to identify direct and indirect effects on recorded archaeological monuments and designated architectural heritage sites, including Protected Structures and NIAH sites. The assessment is based on a desk study. The EIAR uses sources, including the National Monuments Service, Record of Monuments and Places (RMP), Sites and Monuments Record (SMR), topographical data, aerial imagery, and OS maps. The report classifies the site as brownfield, with no archaeological or architectural heritage sites nearby.
- 15.10.4. The EIAR details three parameters for assessing impacts: direct physical impacts, indirect physical impacts, and impacts on the setting of heritage sites. The EIAR states that the significance of effects is determined by the magnitude of the development's impact on the cultural heritage asset and the sensitivity/value of the asset. Classifications range from imperceptible to profound. The EIAR states that no data limitations or technical difficulties were encountered in its assessment of landscape and visual impacts.

15.10.5. Baseline Conditions

- 15.10.6. The EIAR describes the baseline environment for the proposed development. The report states that there are no known subsurface archaeological deposits or cultural heritage sites within the immediate vicinity of the site. The closest recorded archaeological site is a ring-ditch (SMR DU021-103), located c. 865 metres southeast, now built over in Greenogue Business Park. The EIAR details the location of two fulachtaí fia (ancient cooking sites) c. 910-930m west of the site, along with evidence of possible Bronze Age habitation activity c. 840 metres to the west of the site. The report details two possible Bronze Age burial sites within Greenogue (RMP DU021-028) and Rathcreedan (DU021-027).
- 15.10.7. From the early medieval period, the EIAR identifies an enclosure in Ballynakelly (Licence No. 06E0176), c. 995 metres west, and a second enclosure near Newcastle village (SMR DU021-105). The EIAR states that there are no designated national monuments, protected structures, or buildings listed on the NIAH within 1km of the site. The closest NIAH sites are on the outskirts of Newcastle village, including a detached farmhouse c.1900, a water pump c. 1860, and a post-box c. 1960.

15.10.8. The report states that there were no stray finds recorded in the Topographical files of the National Museum of Ireland within the Zol. The EIAR states that in a 'do-nothing' scenario, the site would not be redeveloped, and the baseline would be unchanged, with no adverse impacts to any as yet undiscovered subsurface archaeological deposits on the site.

15.10.9. **Potential Effects**

- 15.10.10. The EIAR states that during the construction stage, there would be no effect on any designated Cultural Heritage assets given the closest asset, a ring-ditch site (SMR DU021-103) is located c. 865 metres to the southeast and now built over within Greenogue Business Park. The report states that although the wider area contains evidence of prehistoric, early medieval, and medieval activity, previous archaeological investigations within Greenogue Business Park, c. 220 metres southwest of the site, did not uncover archaeological interest.
- 15.10.11. The EIAR states that the potential for discovering previously unknown subsurface archaeological deposits, features, or finds within the site has been significantly reduced by previous disturbances. On this basis, the report states that there will be no potential effect on archaeological heritage, and no other effects were identified in relation to cultural heritage. No effects are identified for the operation or decommissioning phases.

15.10.12. **Mitigation Measures**

15.10.13. No mitigation measures are proposed for the proposed development's construction, operation, and decommissioning phases, and no residual impacts are identified. Consequently, no monitoring measures are proposed.

15.10.14. **Assessment**

15.10.15. Having examined Chapter 13 of the EIAR and all associated documentation, I consider that the proposed development would not result in any significant direct or indirect effects on known cultural heritage assets. Having reviewed the SDCC Development Plan Maps and the National Monuments Service's SMR Database, I am satisfied that the EIAR correctly identifies that there are no designated cultural heritage sites within the immediate vicinity of the application site. The nearest archaeological

sites are distant from the proposed development, and some have already been impacted by previous development.

15.10.16. I consider the likelihood of discovering unknown subsurface archaeological deposits on the site minimal due to the limited extent of groundwork and previous disturbance to the site. As such, potential effects on known and unknown cultural heritage assets during the construction phase would not be significant. There would be no impacts during the operation and decommissioning phase of the proposed development. I have no evidence or reason to believe that cumulative impacts would occur with other nearby developments.

15.10.17. **Conclusion**

15.10.18. I conclude that the proposed development would not significantly impact cultural heritage assets in the surrounding area.

15.11. **Biodiversity**

15.11.1. **Methodology**

- 15.11.2. The EIAR details the principal legislation, policy and guidance relevant to the assessment, including the EIA Directive, Habitats Directive, Birds Directive, Wildlife Act 1976 (as amended), National Biodiversity Action Plan and the South Dublin County Development Plan. The EIAR states that the assessment had regard to guidelines from the CIEEM on Ecological Impact Assessment (2018), the EPA on EIAR, and the NRA on Assessment of Ecological Impacts of National Roads Schemes.
- 15.11.3. The EIAR describes the Zone of Influence for the proposed development as the area over which habitats, species, and/or ecosystems (i.e. ecological features) may be subject to significant impacts as a result of the proposed development. The assessment includes different Zols for different ecological features depending on their sensitivity to an environmental change, as detailed in Table 14.2 of the report.
- 15.11.4. Information on biodiversity was collected through a detailed desktop review of datasets, including the National Biodiversity Data Centre and NPWS. A field study was conducted on 06/01/2023, comprising a general ecological walkover of the site as well as an assessment of the stream along the site's northern boundary.

15.11.5. The EIAR methodology details the key parameters for the assessment, the key activities, and possible impacts, with the potential to result in likely significant effects on ecological receptors during the construction, operational, and decommissioning phases if not properly managed. These include, *inter alia*, site clearance works, noise, water runoff, air pollution, and habitat destruction/fragmentation. The report details how the impacts will be quantified in magnitude, extent, duration, frequency, timing and reversibility. Data limitations are acknowledged but considered not to affect the overall certainty or predictability of the assessment.

15.11.6. Baseline Conditions

- 15.11.7. The EIAR states that the site of the proposed development is not located within or adjacent to any nationally or internationally designated sites for nature conservation. The report details the site is location in the Liffey and Dublin Bay surface water catchment, which connects to ten SACs and seven SPAs, including the Rye Water Valley/Carton SAC and Wicklow Mountains SAC. The EIAR identifies the closest pNHAs to the site, which include the Grand Canal pNHA (3.3 km north), Slade of Saggart and Crooksling Glen pNHA (4 km south-east), and Lugmore Glen pNHA (5.4 km south-east). The Brittas Ponds Wildfowl Sanctuary is located c. 5.9 km south of the site.
- 15.11.8. The EIAR states that there is potential for hydrological connectivity with downstream coastal Natura 2000 sites, pNHAs, Ramsar sites, Nature Reserves and Wildfowl Sanctuaries via the surface water network, which flows in an easterly direction towards the Dublin Bay coastal waterbody. However, the report states that, given the scale and nature of the proposed works, the distance between these designated sites and the application site (all over 18 km) and the dispersive nature of open coastal waters, the potential for likely significant effects on these sites is ruled out and therefore excluded from further assessment. The report states that several designated sites are excluded from further assessment, given their distance from the application site, location upstream within the surface water catchment, or absence of hydrological pathways.
- 15.11.9. Regarding waterbodies, the EIAR states that the Greenogue Business Park is located within the Liffey and Dublin Bay catchment and is intersected by the Griffeen River, which flows north and is classified as having "poor" status and deemed "at risk"

under the WFD monitoring period (2016–2021). The report describes how surface water is managed through a settlement tank and oil interceptor before being discharged into the Griffeen River via a discharge point (SW3), which is visually inspected daily. Groundwater is monitored on-site via three groundwater monitoring wells. These are monitored as per the site's EPA licence and on occasion by the EPA during the year. The groundwater is classified as having 'good' status in the 2016-2021 WFD monitoring period and discharges directly into Dublin Bay.

- 15.11.10. Regarding habitats, the EIAR notes the CORINE classification of the vicinity of the site as "Artificial Surfaces Industrial, commercial and transport units" with minimal ecological value. It details the presence of a managed hedgerow along the inside perimeter of the site consisting, *inter alia*, of hawthorn, cherry laurel and butterfly bush. The report notes how the site is bounded to the north by the Griffeen River and is characterised by overhanging scrub and trees, soft soils, and reinforced stone along its southern banks. The EIAR notes that no protected flora species were identified in the field study. The only noted species of conservation concern from the desktop study is the common gromwell, which was found c.4.5 km northwest of the site adjacent to the Grand Canal.
- 15.11.11. Regarding protected fauna, the EIAR notes the presence of five protected terrestrial mammals within the Biodiversity Study Area. These included the Eurasian badger, Irish hare, west European hedgehog, soprano pipistrelle, and Daubenton's bat. These species are protected under the Wildlife Act 1976 (as amended), with the two bat species also protected under Annex IV of the Habitats Directive. The report states that given the presence of hedgerows, treelines and the Griffeen River within the Greenogue Business Park, there is potential for bat species (including others not recorded in the desk study) to utilise these habitats for commuting and foraging purposes.
- 15.11.12. Regarding birds, the EIAR identifies 14 protected bird species within 5 km of the site, including 6 SCI species. However, the report notes that the majority of habitats around the application site provide little value for nesting, refuge or foraging birds. The report notes that the construction phase would not involve the removal of vegetation, and existing hedgerows may provide suitable habitat for a small number of nesting birds.

- 15.11.13. Regarding amphibians and reptiles, the common frog was the only amphibian identified in the desk study. However, no common frog frogs or reptiles (common lizards) were found during the field study, and suitable habitats were not recorded.
- 15.11.14. The report states that four terrestrial invertebrate species of conservation concern were noted in the desk study. However, the report states that the site's buildings and artificial surfaces offer negligible ecological value. The EIAR identifies the Griffeen River as having the potential to support white-clawed crayfish along its course, stating that the river has "fair" habitat suitability.
- 15.11.15. The EIAR identifies six listed invasive alien plant species recorded in the region, including Japanese knotweed, Indian balsam and giant hogweed. However, none were found on the application site. Additionally, the brown rat and eastern grey squirrel were noted as invasive alien animals, although no evidence of their presence was observed on the site.
- 15.11.16. The EIAR states that all ecological features identified within the ZoI of the proposed development were assessed to determine whether they qualify as Important Ecological Features (IEFs). The EIAR defines IEFs as habitats, species and ecosystems, including ecosystem function and processes that may be affected, with reference to a geographical context in which they are considered important, as per the CIEEM 2018 guidelines.
- 15.11.17. The EIAR describes the valuation of these ecological features using the geographic scales provided in the NRA Guidelines for Assessment of Ecological Impacts of National Roads Schemes (2009). The IEFs were scoped into the impact assessment based on their ecological valuation combined with whether or not they are at risk of significant negative impact from the proposed development.
- 15.11.18. Table 14.7 of the EIAR details the valuation of ecological features within the Zol of the proposed development, identifying their highest ecological valuation within the Zol, the risk of a potentially significant negative impact and whether or not they are scoped into the assessment. A summary of the findings of Table 14.7 is provided as follows:

Designated Sites for Nature Conservation:

• Rye Water Valley/Carton SAC, Glenasmole Valley SAC, Wicklow Mountains SAC, Red Bog, Kildare SAC: These sites are considered of international

importance due to their designation as SACs under the Natura 2000 network. The EIAR states that no direct or indirect impacts are expected, as there are no hydrological or other connections between these SACs and the development. These SACs are excluded from further assessment.

- Poulaphuca Reservoir SPA, Wicklow Mountains SPA: Considered of international importance as part of the Natura 2000 network, these SPAs show no risk of significant impacts, given the absence of hydrological pathways or supporting habitats for SPA species. These SPAs are also excluded from further assessment.
- Grand Canal pNHA, Liffey Valley pNHA and others: Recognised of national importance. The EIAR rules out significant impacts due to the absence of hydrological connectivity from the application site. These pNHAs are excluded from further assessment.

Habitats and Flora:

- BL3 Buildings and artificial surfaces: This habitat is deemed of negligible value, as it consists of artificial structures. No ecological impacts are anticipated, and this feature is excluded from further assessment.
- WL1 Hedgerows: Rated as local importance (lower value), these hedgerows are not considered vital ecological corridors. As the development will not involve removal or interference with the hedgerows, no significant impacts are predicted, and they are excluded from further assessment.
- **FW2 Depositing lowland river**: Classified as local importance (higher value) due to its hydrological connectivity and potential to support protected species, the EIAR identifies potential risks of biodiversity loss and pollution. This feature is considered an IEF and will be further assessed for significant effects.
- Protected Flora/Species of Conservation Concern: Valued at local importance (lower value), no impacts are predicted, and this feature is excluded from further assessment as no protected flora were found on-site, and connectivity to nearby records is absent.

 Invasive Alien Plants: With local importance (lower value), no impacts are expected as no invasive plants listed under the Third Schedule were found on-site. This feature is excluded from further assessment.

Fauna:

- Bats (roosting): Rated local importance (lower value), no impacts are anticipated since no suitable roosting features exist, and no vegetation will be removed. Excluded from further assessment.
- **Bats (commuting and foraging)**: With local importance (higher value), the EIAR acknowledges potential risks from noise, lighting, and human disturbance. This feature is considered an IEF and will be taken forward for impact assessment.
- **Badger (breeding, commuting, and foraging)**: Rated local importance (lower value), no significant impacts are predicted due to the lack of suitable habitat in the business park environment. Excluded from further assessment.
- Otter (breeding, commuting, and foraging): Valued at local importance (higher value), the EIAR identifies risks related to habitat fragmentation, disturbance, and pollution. Although otters were not observed during the survey, the precautionary principle is applied due to known habitat connectivity. This feature will be assessed for significant impacts.
- Other protected mammals (hedgehog, Irish hare, etc.): Rated local importance (lower value), no significant impacts are expected due to the absence of suitable habitat. Excluded from further assessment.

Birds:

- **Breeding birds**: Rated *local (higher value)*, the EIAR notes potential impacts from noise, lighting, and human presence. As the surrounding hedgerows may provide nesting habitats, this feature will be assessed further.
- **Overwintering birds**: Rated *local (lower value)*, no significant impacts are predicted due to the absence of suitable habitats for these species. Excluded from further assessment.

Protected Amphibians and Reptiles: The common frog was noted in the baseline study, but no suitable habitat was found. Rated *local importance (lower value)*, no impacts are predicted, and this feature is excluded from further assessment.

Terrestrial Invertebrates: Rated *local importance (lower value)*, the EIAR finds no significant impacts as no habitats will be disturbed. This feature is excluded from further assessment.

Aquatic Invertebrates (i.e., freshwater white-clawed crayfish): Valued at *local* (*higher value*), the EIAR identifies potential risks of biodiversity loss and pollution. Although the habitat is classified as "fair", this feature will be assessed further due to the potential presence of crayfish in the river systems.

Invasive Alien Animals: Rated *local importance (lower value)*, no impacts are expected, as no invasive species were recorded on-site. This feature is excluded from further assessment.

15.11.19. The EIAR states that if the proposed development does not proceed, habitats, flora, and fauna within the ZoI would likely remain as described in the baseline section of the EIAR, with any current pressures and threats remaining in the absence of the proposed development.

15.11.20. **Potential Effects**

15.11.20.1. <u>Construction Phase</u>

- 15.11.21. During the construction phase, the EIAR considers the effects of disturbance from noise, vibration, lighting and human presence due to the presence of construction staff on site, the movement of vehicles and construction materials and the operation of plant and machinery. The assessment also considers surface water runoff, air pollution, and habitat destruction fragmentation or deterioration arising from construction activities, which may negatively affect sensitive ecological receptors in both the terrestrial and aquatic environment. The EIAR identifies potential impacts for each issue and evaluates their magnitude, sensitivity, and significance.
- 15.11.22. Regarding FW2 depositing lowland rivers, the EIAR states that biodiversity loss, fragmentation, alteration and pollution may arise from surface runoff, particularly under high rainfall conditions. While the extent of the impact is the Griffeen River, the EIAR indicates that these effects are short-term and reversible after construction. The report states that the Griffeen River is currently classified as having a 'poor' status and deemed to be 'at risk' under the WFD monitoring programme. The report states that it

is not considered that there is a risk of the proposed development contributing significantly to the current poor status of the Griffeen River. Therefore, the predicted impact on this IEF is assessed as slightly adverse, short-term, and reversible. The magnitude of the impact is not quantified, but it is considered slight-adverse and short-term with a reversible effect. Air pollution during construction may cause indirect effects, such as dust deposition on water surfaces and smothering of vegetation, but the EIAR considers these effects negligible and temporary. Overall, the effect on FW2 Depositing lowland rivers is deemed not significant.

- 15.11.23. Regarding bats (commuting and foraging), the EIAR describes the impact of disturbance from noise, vibration, lighting, and human presence during the construction phase. The report indicates that while there are two common bat species recorded in the area, the magnitude of impact would be low due to the limited presence of bats. Furthermore, construction activities would be confined to daylight hours, reducing the likelihood of significant nocturnal disturbance from noise, vibration, lighting, and human presence. The impact is predicted to be not significant and short-term.
- 15.11.24. Regarding otters (breeding, commuting, and foraging), the EIAR states that impacts of pollution to water and/or air and biodiversity loss, fragmentation, and alteration on otters during the construction phase are linked to the effects on the Griffeen River. The EIAR notes how a reduction in water quality in the Griffeen River resulting from pollution from construction activities may have an adverse effect on aquatic organisms and subsequent adverse effects on foraging and commuting otters within the watercourse. However, it notes that otters have large home ranges (c. 2-20 km) and are likely to accommodate local changes in water quality, prey distribution, and abundance. The EIAR predicts the impact of pollution on otters as not significant, short-term and reversible. The magnitude of the effect from noise and human presence is considered to be low, given the nocturnal nature of otters and the absence of night-time construction. Consequently, the EIAR predicts the effect of disturbance from noise, vibration, lighting, and human presence on otters during the construction phase from the proposed development to be not significant.
- 15.11.25. Regarding breeding birds, the EIAR identifies the impact of disturbance from noise, vibration, lighting, and human presence, particularly affecting nesting birds in nearby hedgerows. The EIAR states that the magnitude of impacts would be low due

to the limited number of suitable nesting habitats and breeding birds recorded in the baseline assessment, which are not of national or international importance. The duration of effect would be short-term and confined to the construction phase, with the magnitude higher during the breeding season (i.e., works between 1st March and 31st August, inclusive). However, given the low magnitude of the effect and short-term duration, the EIAR predicts that the effect of disturbance would not be significant.

15.11.26. Regarding freshwater white-clawed crayfish, the EIAR details potential adverse effects from biodiversity loss, fragmentation, alteration and pollution to water and/or air due to the proposed development. Pollution to water during construction would arise through surface water runoff carrying silt or contaminants into the Griffeen River. The EIAR notes that crayfish are considered to be extremely vulnerable to pollution events (industrial, domestic and agricultural) and that increased sediment can result in decreased dissolved oxygen concentrations and create unsuitable conditions for crayfish. The report notes how the magnitude of the effect cannot be measured due to a lack of specific data on crayfish populations in the Griffeen River. The precautionary principle has been applied as the field study recorded 'fair' crayfish habitat within the surveyed section of the Griffeen River, and this species is known to occur elsewhere within this watercourse and in the River Liffey downstream. The report states that although the habitat is classified as 'fair', the effect is considered slight-adverse, short-term, and reversible. The EIAR proposes precautionary additional mitigation measures to address possible impacts.

15.11.26.1. Operation Phase:

- 15.11.27. Regarding FW2 Depositing Lowland Rivers, the EIAR details the potential effects of surface water runoff during high-intensity rainfall events, which may carry chemicals and other contaminants into the Griffeen River. However, it states that the settlement tanks and oil interceptors would minimise such risks. The magnitude of effect is considered low due to the design of the stormwater drainage system and compliance with the facility's EPA IED licence. The predicted impact on biodiversity is considered not significant.
- 15.11.28. Regarding bats (commuting and foraging), the EIAR states that an increase in disturbance from noise, vibration, and lighting could affect commuting and foraging behaviour. The magnitude of the effect is considered low based on the presence of

two common/widespread bat species that are not of national or international importance. Noise from night-time vehicle movements is not predicted to have a significant effect due to noise from within the building not radiated externally. However, the EIAR applies the precautionary principle regarding artificial lighting changes and predicts a slight adverse, long-term, and irreversible effect from lightspill on bats in the absence of mitigation measures.

- 15.11.29. Regarding otters, the EIAR states that while there is potential for impacts from operational noise and lighting, the magnitude of disturbance would be low, as there is no significant evidence of otter populations of national or international importance in the vicinity, and noise from vehicles and equipment would be controlled. The effects on otters are predicted to be not significant. However, applying the precautionary principle in the absence of mitigation measures for artificial lighting, the EIAR considers a slight adverse, long-term, and irreversible effect from light.
- 15.11.30. Regarding birds (breeding), the EIAR indicates that disturbance from increased noise, vibration, lighting, and human presence during the operation phase could impact nesting birds within the vicinity, e.g. in nearby hedgerows. However, the magnitude of the effect is predicted to be low due to the low number of breeding birds recorded in the baseline study and the limited availability of suitable nesting habitats. The potential for light spill onto the surrounding hedgerows is acknowledged. However, the hedgerows on site are not considered significant for breeding or roosting birds, so the potential for disturbance would be limited. As such, the EIAR predicts the impacts would not be significant.
- 15.11.31. Regarding freshwater white-clawed crayfish, the EIAR links potential impacts on this species to pollution impacts on the Griffeen River. The report notes that surface water run-off poses a pollution risk. However, existing surface water and foul water control measures, including compliance with the EPA IED licence, reduce risk. Therefore, the EIAR predicts the effects of biodiversity loss, fragmentation, alteration and pollution to water and/or air on freshwater white-clawed crayfish during the operational phase of the Proposed Development to be not significant.
- 15.11.32. In the decommissioning phase, the EIAR considers potential impacts on FW2 Depositing Lowland Rivers, bats (commuting and foraging), otters, birds (breeding), and freshwater white-clawed crayfish. It states that the potential effects would be

similar to those in the construction phase but smaller in scale due to the reduced nature and duration of the works required.

15.11.33. For FW2 Depositing Lowland Rivers, the EIAR identifies the risk of localised pollution and subsequent loss of biodiversity, estimating a slight adverse, short-term, and reversible effect. For bats (commuting and foraging), otters, and birds (breeding), the EIAR predicts no significant effects due to smaller-scale disturbance from noise, vibration, and human presence during the decommissioning phase. The EIAR states that for freshwater white-clawed crayfish, potential effects from pollution, biodiversity loss, and fragmentation would mirror those in the construction phase but would be of lower magnitude. The predicted impact is slight adverse, short-term, and reversible, with measures required to mitigation effects.

15.11.34. Mitigation Measures

- 15.11.35. During the construction phase, the EIAR details pollution prevention controls to protect watercourses, particularly the Griffeen River. These include prohibiting stockpiling of materials within 15m of any watercourse, and ensuring hazardous materials are stored on hardstands within bunded areas. Refuelling and maintenance activities would be strictly controlled to prevent contamination. Sediment runoff mitigation measures include collector ditches and settlement ponds/silt traps. Excavated materials would be promptly backfilled to avoid prolonged exposure. The EIAR states that a suitably qualified ecologist will assess and verify that appropriate demarcation and signage are in place before works commence to identify an ecological sensitivity.
- 15.11.36. Regarding protecting freshwater white-clawed crayfish, the report states that proposed mitigation measures would be the same as those for FW2 depositing lowland rivers.
- 15.11.37. Regarding birds, the EIAR states that vegetation clearance, if required, would avoid the nesting season (between 1st March and 31st August inclusive), and any active nests discovered would be protected with an appropriate buffer zone (≥5 m) until the chicks have fledged.
- 15.11.38. During the operational phase, the EIAR states that all artificial lighting installed on site shall be directional lighting in order to prevent overspill onto the Griffeen River

corridor and surrounding hedgerows. The report states that this approach would reduce potential impacts on breeding birds by maintaining darkness in nesting areas.

15.11.39. During the decommissioning phase, the EIAR states that the same pollution prevention and biodiversity protection measures applied during the construction phase would be applied.

15.11.40. **Residual Impacts and Monitoring**

- 15.11.41. Table 14.9 of the IER identifies residual Effects on Important Ecological Features. Regarding FW2 Depositing Lowland River, the EIAR describes that biodiversity loss, fragmentation, and alteration during the construction and decommissioning phases would result in slight adverse effects. However, no residual effects are predicted after mitigation. Pollution to air during these phases is deemed not significant, with no residual effects. The EIAR details that for bats (commuting and foraging), disturbance from operational lighting would have a slight adverse effect. However, with mitigation measures, no residual effect is predicted. The EIAR identifies that for otters, biodiversity loss, fragmentation, and pollution of water would not be significant, and no residual effects would occur. Disturbance from operational lighting would result in a slight adverse effect. However, mitigation measures would ensure no residual effect. Pollution to air would not be significant, with no residual effects. The EIAR considers that disturbance to breeding birds from noise, vibration, lighting, and human presence would not be significant, and no residual effects would occur. For aquatic invertebrates, e.g. the freshwater white-clawed crayfish, slight adverse effects during construction and decommissioning are identified. However, the EIAR indicates that with mitigation, no residual effects would occur.
- 15.11.42. Regarding monitoring, the EIAR states that no monitoring is required during the construction, operation, or decommissioning phases to test the predictions made in the impact assessment.

15.11.43. **Assessment**

15.11.44. Having examined Chapter 14 of the EIAR, all associated documentation, and submissions on file, I consider that the proposed development would not have significant adverse effects on biodiversity. The main potential direct impacts during the construction and operation phases relate to biodiversity loss, habitat fragmentation

and alteration, pollution of ground and surface water that may arise from contaminated surface runoff, noise, vibration, lighting, and human presence, all of which could significantly impact habitats and species in the ZoI and downstream of the site. However, I consider that the implementation of proposed mitigation measures, as detailed in Section 14 and other interrelated chapters of the EIAR, would reduce these risks and ensure that direct impacts on biodiversity are not significant. Furthermore, the existing facility and any revisions arising from the subject application would operate under an EPA IED licence, subject to strict water quality monitoring of the Griffeen River conducted by the operator and the EPA as a condition of this licence. This regulatory oversight by the EPA would protect the ecological integrity of the river by ensuring that any potential pollutants are quickly identified and managed.

- 15.11.45. Regarding indirect effects, the potential for pollution of the Griffeen River during construction or operation phases is a concern, given its proximity to the proposed development. However, I consider that the existing foul and surface water drainage systems, proposed mitigation measures and daily water quality monitoring would minimise this risk. As detailed on the EPA mapping portal, the Griffeen River is already classified as 'poor' under the Water Framework Directive. I consider that subject to the implementation of the proposed mitigation measures and adherence to the EPA IED licence, the proposed development would not exacerbate this condition. Thereby, I am satisfied that indirect impacts on biodiversity species and habitats in the vicinity and downstream of the site would not be significant.
- 15.11.46. Regarding cumulative impacts, I consider the proposed development, along with other existing and permitted developments in the business park, would not result in significant cumulative impacts on biodiversity, subject to the implementation of the proposed mitigation measures and compliance with the conditions of the IED licence under which the facility would operate. The implementation of these mitigation measures would ensure there would be no residual impacts on biodiversity in the surrounding environment. I am satisfied that the issues raised in the submissions regarding surface water run-off and potential effects on biodiversity are adequately addressed by the proposed mitigation measures.

15.11.47. **Conclusion**

15.11.48. I conclude that subject to the implementation of the proposed mitigation measures, the proposed development will not have significant adverse effects on biodiversity.

15.12. Water

15.12.1. **Issues Raised**

15.12.2. As detailed in the Planning Authority submission, Inland Fisheries Ireland (IFI) raised concerns about potential risks to the Griffeen River due to hydraulic connectivity and recommended mitigation measures and monitoring be implemented to protect water quality. Specifically, it is recommended that the surface water monitoring limits and the frequency of monitoring during construction phases, as detailed in the existing IED Licence (W0192-03), be reviewed and increased. All discharges from the site should comply with EC (Surface Water) Regulations 2009 and (Groundwater) Regulations 2010. IFI also express concerns about the lack of proper maintenance of approved drainage infrastructure, e.g. interceptors and attenuation tanks, and recommends that a SuDS/Drainage Maintenance checklist be submitted for approval by the Planning Authority. This checklist should include typical inspections and maintenance requirements, with a maintenance programme conditioned as part of any planning permission, which should be implemented by a management company or the local authority if the development is to be taken in charge.

15.12.3. **Methodology**

- 15.12.4. The EIAR references relevant Legislation, Policy and Guidance, including the Water Framework Directive (2000/60/EC), Floods Directive (2007/60/EC), and national regulations on surface and groundwater quality, water pollution, and flood risk. The assessment also takes into consideration the SDCC Development Plan (2022-2028), National Biodiversity Action Plans and River Basin Management Plans.
- 15.12.5. The report states the surface water ZOI extends beyond the site footprint to include hydrological pathways to adjacent waterways, including the Baldonnell Stream and Griffeen River. A wider study area extends downstream to the River Liffey. The methodology details additional sources of information to inform the assessment, including Water Framework Directive data, flood hazard mapping, and historic rainfall

and evapotranspiration data. Key parameters examined surface water quality, drinking water resources, flood risk, and fluvial geomorphology during the different phases of the development.

- 15.12.6. The EIAR identifies impacts scoped out the assessment and their justification, such as the lack of sensitive receptors in the area or the absence of anticipated significant changes in surface runoff or flood risk. The report states that the site is located in Flood Zone C, with a low risk of flooding. The report states that there will be no changes to impermeable surfaces within the site or drainage systems and that there will be no increase in surface water runoff because of the proposed development.
- 15.12.7. The report details the criteria for assessment in Table 15.4 for determining the significance of effects, defining the sensitivity of the receptors and the magnitude of the predicted impacts. Sensitivity ranges from Low to Extremely High, and attributes range from low quality or value on a local scale to high quality or value on an international scale.
- 15.12.8. The report notes limitations in the data used, such as the CFRAM flood maps not reflecting recent developments, but states that there were no technical difficulties in the assessment.

15.12.9. Baseline Conditions

- 15.12.10. The EIAR describes the baseline hydrological environment surrounding the proposed development site at Greenogue Business Park. The report notes how the site is located near three watercourses, including the Griffeen River, Baldonnell Stream, and River Camac, which are all tributaries of the River Liffey. The report notes how the Griffeen River and Baldonnell Stream have been extensively modified by industrial development, with culverts and realigned channels, and flow in a north-westerly direction through the Greenogue business park.
- 15.12.11. The EIAR states that the site is located in Flood Zone C, with a low probability of flooding. The Eastern CFRAM study shows the site is outside the fluvial flood extents for events up to a 0.1% AEP. The report states that the recent development, Mountpark Baldonnell Phase 2, has substantially reduced flood risk to Greenogue Business Park by intercepting overland flow from the River Camac. The report states that predictive surface water flooding mapping prepared by GSI demonstrates that

surface water flooding is likely upstream and downstream of the site. However, there is no identified surface water flooding within Greenogue Business Park or the vicinity of the site.

- 15.12.12. The EIAR details the application of the EU Water Framework Directive to the assessment. The report notes how the Griffeen River, located in the Liffey catchment, is noted to have "poor" ecological status for the 2016-2021 period and is classified as "At Risk" under the WFD. The significant pressures on this water body are attributed to domestic and urban wastewater.
- 15.12.13. The EIAR details the baseline surface water quality, stating that sampling from four locations along the Liffey_170 watercourse has shown poor Q value ecological conditions over the period 1988 to 2022.
- 15.12.14. The EIAR states that there is no known water abstraction infrastructure or licenced wastewater discharges from wastewater treatment plants within the study area. The report states that wastewater from the proposed activities will be discharged into the sewer, including the Healthcare Risk Waste and washing of bins (which will contain a biodegradable detergent used to decontaminate the bins). The report states that steam treatment will neutralise infectious liquids within the proposed HRW treatment plant before discharge into the foul water network, which will combine with the treated output from the existing bulk liquid waste treatment facility on-site in Building 2. The report states that the water quality of wastewater discharged from the site is routinely checked and sampled for BOD, COD, pH, and suspended solids in accordance with the EPA IED license.
- 15.12.15. Surface water runoff is managed within the facility through a system of grit traps, oil interceptors, and a water attenuation tank with a retention capacity of 600,000 litres and an attenuation rate of 6 litres/second/hectare from the facility. The report states that this ensures that surface water is treated and controlled before being discharged into the Griffeen River. The EIAR describes how visual inspections are carried out daily, the results of which are logged as part of the environmental management programme. Where issues are identified, the facility can shut off the discharge to the surface water (i.e., Griffeen River) via open/closed valves.
- 15.12.16. The EIAR provides details of two other current EPA-licensed facilities within Greenogue Business Park. The report indicates that while there are no cumulative

impacts predicted from nearby licensed facilities, all drainage systems within Greenogue Business Park are required to comply with GDSDS through the implementation of SuDS measures. The report notes that there are no nationally or internationally designated conservation sites in the vicinity, although there is potential for hydrological connectivity to coastal Natura 2000 sites, pNHAs, Ramsar sites, Nature Reserves and Wildfowl Sanctuaries via the surface water network. However, given the nature and scale of the proposed development and the distance (all greater than 18km), the potential for likely significant effects on these sites is ruled out and, therefore, excluded from further assessment.

15.12.17. The report states that in the absence of the proposed development, the current EPA-licensed operations at the site would continue, and the current surface water within the Study Area would most likely remain unchanged.

15.12.18. **Potential Effects**

- 15.12.19. The EIAR states that the two likely significant effects of the proposed development on the surrounding hydrological environment would be activities that may increase the risk of sediment discharge to watercourses and accidental spillages of chemical/hazardous substances into watercourses.
- 15.12.20. During the construction phase, the EIAR states that sediment-laden water could result in exposed ground and interaction with loose soil/rubble during demolition and construction. The report states that the existing drainage system, including an attenuation tank, would manage sediment runoff. However, during periods of high-intensity rainfall, overland runoff into the Griffeen River could occur. The magnitude of this impact on hydrology is considered Small Adverse, affecting a medium-sensitivity receptor. The overall significance of the effect is deemed Slight, i.e., an effect that alters the character of the environment without affecting its sensitivities.
- 15.12.21. The EIAR indicates the potential for accidental emissions of hazardous substances during the construction phase. Although the drainage system includes a hydrocarbon interceptor to treat water before release into the Griffeen River and a stop valve to prevent contaminated discharge from the site, high-intensity rainfall could result in contaminated run-off entering the Griffeen River. The impact is assessed as Small Adverse, with a Slight Significance.

- 15.12.22. During the operation phase, the EIAR describes how accidental spillages of chemicals or other contaminants during normal operation of the facility could result in contamination of surface water in the local reach of the Griffeen River. However, the report states that the surface water site drainage network, which includes hydrocarbon interceptors and shut-off valves, would treat water before release into the Griffeen River and prevent contaminated discharge from the site into the river. The potential magnitude of the impact is deemed Small Adverse, with a Slight Significance on a Medium Sensitivity attribute.
- 15.12.23. During the decommissioning phase, the EIAR indicates the potential for sediment runoff and accidental spillage during the removal of waste containers and the dismantling of the treatment plant. Also, high-intensity rainfall could cause runoff to the Griffeen River. However, the report states that the existing surface water site drainage network will retain functionality throughout the construction phase, including the settlement of sediment within the attenuation tank before restricted release to the Griffeen River at a maximum rate of 6 l/s/ha. The magnitude of impact is deemed Small Adverse, with Slight Significance. However, for accidental emissions and release of potentially hazardous substances, the magnitude could be Large Adverse, leading to a significant effect on the river due to partial/extensive reduction in amenity value.
- 15.12.24. Regarding Water Framework Directive (WFD) considerations, the EIAR states that the development aligns with the key objectives of WFD, noting that no in-stream works will be undertaken, and the existing riparian zone will remain in its current condition. Surface water discharged from the site would continue to be treated in accordance with the facility's IED licence and monitored regularly to prevent deterioration of the status of the Griffeen River.

15.12.25. Mitigation Measures

15.12.26. During the Construction Phase, the EIAR states that sediment runoff would be controlled through mitigation measures, including preventing the risk of spillage from vehicles transporting loose materials, limiting the time stockpiles remain on-site to as short as possible, and ceasing excavation during heavy rain. Silt fencing would be installed for all work within 15m of the Griffeen River, and sediment in the attenuation tank would be monitored and removed as necessary. The EIAR also details measures for accidental emissions and release of potentially hazardous substances, including

routine monitoring and cleaning of the hydrocarbon interceptor and implementing a stop valve on the stormwater drainage network to contain any contaminated runoff. An Environmental Incident and Emergency Response Plan would be established to manage incidents or accidents during construction that may give rise to pollution in watercourses proximal to the works.

- 15.12.27. For the Operation Phase, the EIAR details how stormwater would pass through the attenuation tank before being discharged into the Griffeen River. Sediment accumulation within the attenuation tank would be monitored and removed as necessary. The hydrocarbon interceptor would be routinely maintained, and in the event of accidental emissions contaminating surface water run-off from the site, the cut-off valve would prevent discharge, allowing for on-site containment. The report states that it would be possible to provide emergency pumping from the attenuation tank to the foul water sewer in the event of a continued spillage. There will be 24-hour staff working the site, managing operations and traffic movements, and providing emergency response.
- 15.12.28. During the decommissioning phase, the EIAR states that the mitigation measures proposed for the construction phase will be implemented for decommissioning where relevant and residual impacts would be reduced to imperceptible with the proposed mitigation measures.

15.12.29. **Monitoring**

- 15.12.30. The EIAR states that all environmental monitoring will be carried out in accordance with the conditions of the EPA IED license. The report notes that routine monitoring began in 2004, and monitoring data is reported monthly, quarterly, and annually to the EPA. An Annual Environmental Report is produced each year, comparing data from previous years to identify any adverse impacts from the development of the facility.
- 15.12.31. During the construction phase, the EIAR states that sediment run-off and surface water will be monitored, and a qualified person will ensure that any contaminated material from excavations is identified, segregated and disposed of appropriately. Sediment control measures would also be monitored, and weather forecasts would be monitored to cease certain works during heavy rainfall to minimise exposed soil entering surface water runoff. Surface water sampling would occur

quarterly at three locations: upstream, downstream, and midpoint of the licenced discharge point. Parameters including pH, chemical oxygen demand, suspended solids, and mineral oils will be tested, with results compiled in the AER, which will be submitted to the EPA.

15.12.32. During the Operation Phase, the EIAR states that surface water monitoring would continue as per the construction phase, with results submitted to the EPA in the AER. In the Decommissioning Phase, the EIAR states that surface water monitoring would continue at six-month intervals until a closure license has been issued by the EPA. Aftercare and monitoring would be agreed upon as part of the closure licence.

15.12.33. **Assessment**

- 15.12.34. Having analysed Chapter 15 of the EIAR, all of the associated documentation, and the submissions on file, I consider that the proposed development would not result in significant adverse effects on the water environment. It is my view that the potential for sediment run-off and accidental spillages during the construction, operation, and decommissioning phases would be adequately mitigated by the existing and proposed mitigation measures, as detailed in the EIAR. These include the existing attenuation tanks, hydrocarbon interceptors, cut-off valves, and the proposed construction phase mitigation measures, including installing silt fencing, controlled stockpiling, and suspension of works during periods of heavy rainfall. The EIAR proposes enhanced surface water monitoring and regular maintenance of foul and surface water drainage infrastructure, including interceptors and attenuation tanks. I am satisfied that these would address hydraulic connectivity issues raised by Inland Fisheries Ireland and ensure the protection of the Griffeen River. The facility can isolate contaminated runoff via cut-off valves, which reduces the risk of significant adverse impacts during both the construction and operation phases. During the operation phase, the 24/7 operations and management of the facility and the proposed Environmental Incident and Emergency Response Plan would ensure rapid response to any incidents. Surface water monitoring would ensure that pollution incidents are swiftly identified and addressed.
- 15.12.35. Regarding cumulative impacts, I consider that the drainage infrastructure in the Greenogue Business Park, which is required to comply with Sustainable Urban Drainage System (SuDS) policies, would ensure no significant degradation of water

quality from the proposed development or other development in the business park. There would be no significant interaction between the proposed development and other licensed facilities in the business park. Therefore, I consider that cumulative impacts would not be significant.

- 15.12.36. I am satisfied that the proposed mitigation measures, along with compliance with the conditions of the EPA IED licence, would effectively prevent significant deterioration of the water quality of adjacent watercourses. No in-stream works will be undertaken, and the existing riparian zone will remain in its current condition.
- 15.12.37. The site is located in Flood Zone C (currently under review by the OPW), which has a low probability of flood risk. Given that the proposed development would not result in changes to impermeable surfaces or drainage systems, I am satisfied that the proposed development would not increase flood risk in the area. The retention and discharge system, controlled by the attenuation tank and hydrocarbon interceptor, would manage surface water effectively during normal and heavy rainfall conditions. I am satisfied that the proposed that the proposed mitigation measures and monitoring plans are consistent with best practice guidelines and would effectively control surface water run-off.

15.12.38. **Conclusion**

15.12.39. I conclude that subject to the implementation of the proposed mitigation measures, monitoring plan, and maintenance arrangements, the proposed development will not have significant adverse effects on the water environment, including the Griffeen River and other nearby watercourses.

15.13. Land, Soil, Geology and Hydrogeology

15.13.1.Methodology

15.13.2. The EIAR defines the study area's Zone of Influence to include a 1km buffer zone from the site boundary to examine the potential impacts on adjacent soils and land and 2km for groundwater to account for local aquifers and the Dublin Groundwater Body (GWB). The report notes that key information was gathered from publicly available sources, including the EPA, GSI, and relevant planning portals. Site-specific data included annual environmental reports and EIS for the existing facility.

15.13.3. The EIAR states that assessment criteria and significance were determined using TII Guidelines on Procedures for Assessment and Treatment of Geology, Hydrology and Hydrogeology for National Road Schemes (2009). For the purposes of assessment, a rating of moderate and above is considered significant in EIA terms. The report details rating criteria for site importance of geology and hydrogeology attributes, magnitude of impact on geological and hydrogeological attributes and significant environmental impacts. No data limitations were encountered in the assessment.

15.13.4. Baseline Conditions

- 15.13.5. The EIAR notes that the site lies in a low-lying, relatively flat region with a gentle slope towards Athgoe Hill, with an elevation of c. 87.5m OD. The site is located in the Liffey and Dublin Bay catchment, and the Griffeen River flows north of the site. The EIAR states that the site's soils consist primarily of artificial surfaces/made ground, with underlying soils consisting of poorly drained basic mineral soils in the western section of the site and deep, well-drained basic mineral soils in the eastern section. The importance of the made ground for drainage purposes is considered low. The subsoils consist of limestone till, classified as deep, well-drained, and considered of high significance (Importance) on a local scale. The report details that the bedrock geology underneath the site is the Lucan Formation, comprising dark grey limestones, with bedrock expected to be greater than 3 metres below ground level. The report states that no karst features have been mapped within 2 km of the site, and no soft ground is present within the study area. Furthermore, there have been no records of landslides in the study area. Therefore, the potential for landslides is considered low to minimal.
- 15.13.6. The EIAR notes several historic pits and quarries within 1 km of the site. The report notes that Made Ground at the site can potentially contain waste components and contaminated soils stored in the warehouse proposed to house the Health Risk Waste (HRW) processing plant for more than 15 years. However, the warehouse on the site, used for the storage of waste, is fully bunded with a 'physical lip' bund to allow for the holding of any leachate that may be produced during the storage process. The report states that the warehouse floor is regularly inspected, and any sitting leachate

on the warehouse floor is removed by a vacuum tanker. The report states that to date, no contamination has been attributed to the soil storage process.

- 15.13.7. The EIAR notes that the Newcastle Buried Channel County Geological Site (CGS), is located 800m west of the site. The report notes that while this CGS is of high importance, the limited nature of excavation at the site means no significant impact on this geological feature is expected. Therefore, no further consideration is required for the CGS.
- 15.13.8. The EIAR states that groundwater vulnerability is classified as "moderate" to "high" within the study area, increasing to "extreme" moving from west to east. The report details how Building 1 and 3 are located in areas of moderate vulnerability, with a depth to bedrock greater than 5 metres below ground level, whereas Building 2 is in an area of high vulnerability with bedrock depths of 3-5 mbgl. The EIAR details that the bedrock beneath the site is part of a locally important aquifer, which is moderately productive only in local zones. The aquifer is rated as of medium importance.
- 15.13.9. Regarding groundwater recharge, the EIAR details how the Greenogue Business Park acts as a cement cap, limiting recharge to the underlying aquifer. The report states that recharge rates are low, ranging from 51-150 mm/year, and the aquifer has a low storage capacity. Some recharge in the upper fractured zone will likely discharge quickly to nearby streams. The EIAR states that there is no publicly available historical groundwater level or quality data for the study area, with the closest EPA groundwater monitoring stations located 12 km away. On-site groundwater monitoring conducted in Condition No. 6 of the EPA licence (W0192-03) shows groundwater flows in a west/north-westerly direction. Groundwater monitoring results over the last 5 years indicate the presence of groundwater pollution, including electrical conductivity, total petroleum hydrocarbons, nickel, chloride, sodium, and MTBE. The EIAR references the 2021 Annual Environmental Report, which indicates that the source of these pollutants may be historic or migrating from elsewhere. Studies are ongoing.
- 15.13.10. The EIAR details how the Dublin Groundwater Body underlies the site, and its current WFD Status for 2016 2021 is 'Good'. The EIAR references the GSI database of groundwater boreholes and wells across Ireland and states that there are no GSI-listed wells within 2 km of the application site. The report states that while there is

potential for private wells to exist in the area not listed by the GSI, this is considered unlikely due to the poor productivity of the underlying aquifer. The report notes no public supply source protection areas or group scheme preliminary source protection areas mapped by the GSI within 2 km of the proposed development.

15.13.11. The EIAR states that the site is not located within or adjacent to any nationally or internationally designated sites for nature conservation. Furthermore, there is no Annex I Groundwater Dependant Terrestrial Ecosystem (GWDTE) in the vicinity of the study area. The report states that in the absence of the proposed development, the current geological and hydrogeological regime within the study area would remain unchanged.

15.13.12. **Potential Effects**

- 15.13.13. The EIAR states that during the construction phase, site clearance and enabling works, demolition, shallow excavations, new footpath and parking reconfiguration would potentially impact soils, geology, and hydrogeology. The report states the risk of accidental emissions and release of hazardous substances, such as chemicals or contaminants, could result in localised contamination of soils and groundwater underlying the site if materials are not stored and used in an environmentally safe manner. The EIAR states that, without mitigation measures, such accidental spillages of hazardous chemicals would have a short-term, small adverse effect of moderate to slight significance on soils. However, the natural subsoil would provide adequate attenuation and filtration before reaching the groundwater. Therefore, the effect on groundwater is considered negligible and of imperceptible significance on groundwater.
- 15.13.14. The EIAR states that the construction phase will result in the removal of subsoils for shallow excavations for the installation of drains and foundations. The removal of subsoils during excavation works is a direct and permanent impact. The potential loss of aggregate reserves is considered negligible and of imperceptible significance due to the limited footprint of the construction area. The EIAR notes that site clearance and excavation works within Made Ground have the potential to encounter contaminated material from former industrial activities. The report states that if not handled correctly, the excavation and handling of potentially contaminated Made Ground or contaminated soil can result in the mobilisation of contaminants

impacting soil and groundwater quality. Depending on the pollutants, these impacts can include leachate of contaminants to clean soils and groundwater, surface water runoff from exposed contaminated Made Ground, and a risk to human health due to direct contact and from volatile or semi-volatile vapours. The report states that these impacts would be of moderate/slight significance on soils but would be temporary and localised. The effect on groundwater is considered to be negligible and of imperceptible significance.

- 15.13.15. During the operation phase, the EIAR states that accidental emissions and release of hazardous substances could affect the quality of groundwater and/or soils. However, such spillages would be minor and easily controlled by complying with the conditions and monitoring requirements of the facility's EPA IED licence. Without mitigation measures, this effect is considered short-term, with a small adverse impact of moderate/ slight significance on soils and groundwater.
- 15.13.16. In the decommissioning phase, the report states that removing waste containers and dismantling the treatment plant could lead to minor accidental emissions, with small adverse impacts of slight significance on soils and groundwater. Table 16.8 of the EIAR summarises the predicted impacts on soils, geology, and groundwater from the proposed development.

15.13.17. Mitigation Measures

- 15.13.18. The EIAR refers to mitigation measures detailed in Chapters 14 (Biodiversity) and 15 (Water) for managing accidental emissions and release of hazardous substances during construction. Similarly, mitigation measures are detailed in Chapters 14 (Biodiversity) and 15 (Water) to control surface water runoff. The EIAR notes that subsoil removal is an unavoidable consequence of construction work. However, limited volumes of waste would arise. Surplus soil that is not reused will be segregated and removed off-site for treatment, recycling, or disposal at an authorised waste management facility off-site. The report states that a Waste Management Plan and Construction Environmental Management Plan will be implemented, reducing impacts to an imperceptible level.
- 15.13.19. The EIAR states that an appointed contractor will be responsible for regular testing of excavated soils to monitor the suitability of the soil for reuse. If contamination is encountered, suitable measures will be implemented to avoid mobilising the

contamination based on best practices for contaminated land management. The report states that no groundwater contamination has been attributed to the contaminated soils that have been stored in the warehouse (proposed to house the HRW processing plant) for more than 15 years. The warehouse would be washed down and inspected before housing the proposed HRW processing plant.

15.13.20. During the operation phase, the EIAR states that mitigation measures will be the same as those for the construction phase, where relevant. The report states that the site includes a hydrocarbon interceptor, and stormwater and foul water monitoring must comply with the EPA IED licence. Furthermore, foul water discharge must comply with the EPA IED Licence Emission Limit Values (ELVs). Consideration will be given to adjusting ELVs to manage wastewater from the HRW process, if necessary. The EIAR states that mitigation measures from the construction phase will be applied during decommissioning, as appropriate. No residual effects are identified.

15.13.21. Monitoring

- 15.13.22. The EIAR details a groundwater monitoring programme for the construction phase, detailing how it would involve three sampling locations, with one upgradient and two downgradient boreholes in relation to groundwater flow at the site. The report details how groundwater samples would be collected quarterly and analysed in accordance with EPA guidelines. Parameters to be monitored would include pH, Electrical Conductivity, Arsenic, Mercury, MTBE, BTEX, PAHs, and Mineral Oils. The results will be included in the Annual Environmental Report, which will be submitted to the EPA.
- 15.13.23. For the operation phase, the EIAR states no additional groundwater monitoring is proposed as the site is regulated by an EPA IED licence. The report notes that a review of the licence will be carried out to account for changes arising from the proposed development.

15.13.24. **Assessment**

15.13.25. Having examined Chapter 16 of the EIAR and all of the associated documentation and submissions on file, it is my view that the proposed development, subject to the implementation of the proposed mitigation measures, would not result in significant adverse effects on land, soil, geology, or hydrogeology. The baseline

conditions described in the EIAR, which include the presence of made ground, welldraining subsoils, and the moderate importance of the underlying aquifer, indicate that the geological and hydrogeological attributes of the site are of medium to low sensitivity to impacts.

- 15.13.26. I consider that the identified direct effects during the construction phase, including soil erosion, accidental spillages and emissions, and potential soil contamination, are adequately addressed through the proposed mitigation measures. As detailed above, these include using bunded areas to store hazardous chemicals, sediment control structures to prevent runoff, and implementing a Waste Management Plan to ensure proper handling of materials. Regular testing of excavated soils would identify and manage any contamination. I consider that these mitigation measures would ensure that the risk of significant contamination of soils or groundwater would be low.
- 15.13.27. Regarding indirect effects, I consider the infiltration of surface water runoff and potential groundwater contamination unlikely to occur to any significant degree. The natural filtration provided by the subsoils and the lack of karst features reduce the likelihood of groundwater contamination. The existing groundwater monitoring regime under the IED licence, which includes sampling for key contaminants, would continue throughout the operation and decommissioning phases of the proposed development. I consider that the proposed monitoring and mitigation strategies would be sufficient to protect groundwater quality and that no significant residual impacts would occur.
- 15.13.28. Regarding cumulative impacts, I have assessed the interaction between this proposal and other existing developments within the Greenogue Business Park. Given the controlled EPA licensed environment of the business park and the specific measures implemented to manage water and soil quality, I consider that there would be no significant cumulative impacts on land, soil, geology, or hydrogeology. The drainage systems in the business park would prevent cumulative adverse impacts on water. I consider that the proposed mitigation measures and the operational controls under the existing IED licence would ensure no significant effects on land, soil, geology, or hydrogeology.

15.13.29. **Conclusion**

15.13.30. In conclusion, it is my view that subject to the full implementation of the proposed mitigation measures, the proposed development would not give rise to significant effects on land, soil, geology, or hydrogeology.

15.14. Material Assets

15.14.1. **Methodology**

- 15.14.2. The EIAR describes the methodology for assessing the potential impacts of the proposed development on material assets and waste management based on a desktop review of existing data sources, including the SDCC Development Plan 2022-2028, aerial imagery, utility providers and data from the EPA's licence database. No modelling software was used in the assessment.
- 15.14.3. The EIAR states that the ZoI for material assets was defined by the potential for direct and indirect impacts on land, roads, housing, and commercial properties, specifically focusing on the haulage route, covering a 3 km area surrounding the site. Haulage routes include junction 4 of the N7, R120, College Road, and Grants Drive. A ZoI was set at 5 km from the proposed development for utilities. For waste management, the EIAR follows the IEMA (2020) guidelines, establishing study areas for the development footprint and regional areas where construction materials would be sourced within the Eastern and Midlands Region and where the waste would be managed.
- 15.14.4. The EIAR details the key parameters for assessing sustainable resource use, waste, utilities, and services. Assessment criteria include sensitivity of receptors ranging from negligible to very high, magnitude of an impact, and a matrix for the assessment of the significance of the effect. The matrix correlating the magnitude of impact with receptor sensitivity, with "moderate" and "major" effects considered significant. The EIAR describes the capacities of waste-to-energy facilities and landfills in Ireland, including thermal recovery facilities and operational municipal waste landfills.

15.14.5. Baseline Conditions

15.14.6. The EIAR states that the site area is c.1.1 ha and is bordered by commercial properties to either side, the Griffeen River to the north and Grants Drive to the south,

with a mixture of industrial and commercial activities in the business park. The overall site comprises three main buildings, and Enva is the sole occupant. Security arrangements, including gates, fencing, and personnel monitoring control access. The EIAR describes the surrounding area as primarily commercial and industrial, with nearby operations such as logistics, manufacturing, distribution services, and research centres. The site is situated approximately 2 km from Casement Aerodrome and 2.5 km from Peamount Hospital. Several EPA-approved facilities, such as Pfizer Ireland and Takeda Ireland, are located in the vicinity. The EIAR lists nearby authorised local authority sites and businesses operating within proximity to the site.

- 15.14.7. The EIAR states that there are no residential properties within 300 m of the site. Most residential properties are located in Newcastle, c. 1 km away. Much of the area surrounding the Greenogue Business Park is utilised for agricultural practices. The nearest farm is c. 300m from the site. The EIAR states that the site is connected to the Gas Network Ireland grid for natural gas and ESB Networks for electricity. Natural gas consumption has increased by 209% since the construction of a new boiler in 2020. In 2022, energy consumption increased to 5,478 GJ, primarily due to the operation of a natural gas-fired boiler and new equipment in the packaging division. Enva's environmental objectives, as detailed in Table 17.7, include converting to water-based paints, reducing landfill pollution, and reducing lighting, heating, and water consumption.
- 15.14.8. The site is connected to the Irish Water main. The report states that there was a 3% reduction in water usage in 2022 compared to 2021. Wastewater generated onsite is treated before being discharged to the local sewer. The on-site laboratory monitors discharge to comply with the EPA IED licence. Regarding waste management, the EIAR states that the site is subject to the EPA IED licence, which limits the total annual intake to 111,000 tonnes of waste, as per Condition 4.b of the planning approval Reg. Ref. SD09A/0050. This includes hazardous and non-hazardous waste streams, with specific limits set out in the IED Licence.
- 15.14.9. Table 17.9 of the EIAR describes the waste types permitted at the Enva facility, which includes, *inter alia*, commercial waste (500 tonnes), construction and demolition waste (500 tonnes), and industrial sludge (1,000 tonnes). The total annual limit for non-hazardous waste is 5,000 tonnes. Permitted hazardous waste types include, *inter alia*, interceptor sludges (10,000 tonnes), wastes containing oil (2,000 tonnes), and

asbestos-containing materials (8,100 tonnes). The total hazardous waste intake is 106,000 tonnes annually.

- 15.14.10. Table 17.10 of the EIAR details waste accepted figures for 2022 at the site. The site processed 82,518 tonnes of waste, with hazardous waste showing a 10% increase from 2021 and non-hazardous waste showing a 36% increase. Recovery rates were 51% for hazardous waste and 47% for non-hazardous waste. Regarding waste generated at the facility, the EIAR notes a total of 87,807 tonnes in 2022, an increase of 22% from the previous year. The recovery rate for hazardous waste was 100%, and 30% for non-hazardous waste recovery.
- 15.14.11. In the 'Do-Nothing' scenario, the EIAR states the site would continue to operate as a hazardous waste transfer/recovery facility. The use and existing traffic volumes would remain unchanged, and the site would continue to operate under its IED licence.

15.14.12. **Potential Effects**

- 15.14.13. The EIAR states that the construction phase of the proposed development would last c. 18 weeks. Work would involve the installation of a prefabricated office near the entrance to the site, the construction of a bulk trailer parking area, and the construction of a clean bin storage shed adjacent to Building 1. All construction works would take place within the existing waste facility. The EIAR states that the potential effects on land use and settlement patterns would be temporary and "not significant." The EIAR states that gas, electricity, water, telecommunications, and sewerage modifications would be required. However, they would not disrupt existing utility infrastructure. The effect on utilities would be temporary and "not significant."
- 15.14.14. During the construction phase, the EIAR states there would be a slight, temporary increase in traffic due to construction material deliveries and the transfer of waste. However, the impact on the road network would be "imperceptible," and no significant effects would occur. The EIAR states that limited volumes of waste would arise from demolishing the existing office building and constructing the new buildings. Table 17.12 details the waste materials that would be generated, including concrete, bricks, wood, metals, and mixed municipal waste. All waste would be segregated and managed by licensed collectors. The report considers the significant."

- 15.14.15. During the operation phase, the EIAR states that the site would continue to operate as a hazardous waste transfer and recovery facility. There would be no changes to land use. The impact on land use is considered long-term and "imperceptible." The EIAR states that the proposed development would lead to a 196% increase in on-site energy consumption, representing an estimated 10,738 GJ per annum. The report states that of the 24,000 tonnes for treatment, only the 2,278 tonnes is additional to the HRW currently being treated in Ireland. The remainder of the HRW (21,722 tonnes) is already being treated elsewhere in Ireland (all of it in Dublin). The report considers this impact on the national electrical and gas networks as long-term and "imperceptible." Power and fuel consumption would continue to be recorded and reported to the EPA in the applicant's AER.
- 15.14.16. The EIAR details that an increase in telecommunications demand would occur due to the control and monitoring functions required for HRW treatment equipment. This increase is considered long-term and "imperceptible."
- 15.14.17. The report states that water consumption would increase by up to 7,178 m³ per annum, representing a 92% increase. This increase would be primarily due to the water-intensive plant and equipment used for HRW treatment and bin washing. However, the report notes that much of this water consumption is already occurring elsewhere in Dublin. The impact on water consumption is considered long-term and "not significant."
- 15.14.18. Regarding wastewater, the EIAR states that 20 m³/day of additional wastewater would be generated, primarily from the bin washers. Wastewater would be discharged in accordance with EPA licence requirements. Analysis, including independent analysis, would be conducted as required in accordance with the IED licence. The impact on the wastewater network is considered long-term and "imperceptible."
- 15.14.19. The EIAR states that the operation phase would result in an additional 97 HV movements per day. This increase in traffic would be spread throughout the day and is considered to have a long-term but "imperceptible" impact on the local road network.
- 15.14.20. The EIAR states that operational waste, including waste from equipment maintenance and office activities, would be similar to the existing waste streams. Waste, including HEPA filters, would be managed in a specialist off-site management facility. The impact of operational waste is considered long-term and "imperceptible."

- 15.14.21. Regarding Process Waste, the EIAR states that the applicant proposes to manage up to 24,000 tonnes of HRW per annum during the operation phase. Table 17.13 lists the specific types of HRW proposed for acceptance at the HRW facility for treatment or storage prior to transfer. The EIAR states that the existing EPA IED licence does not authorise some of these waste types and would require a review by the EPA. The EIAR states that it is not proposed to change the 111,000 gross annual tonnage intake limits. The annual intake of other waste at the facility will be reduced by 24,000 tonnes, meaning that the gross annual tonnage intake at the facility will remain unchanged at 111,000 tonnes.
- 15.14.22. Table 17.13 details the various types of Healthcare Risk Waste proposed for acceptance at the facility. This would include sharps, body parts and organs, blood bags, blood preserves, and chemicals. Waste categories cover human and animal healthcare, with some requiring disinfection (e.g., sharps) and others transferring off-site for further treatment (e.g., body parts, chemicals and medicines). Several waste types, such as certain infectious and cytotoxic wastes, are not currently authorised by the existing EPA IED licence, necessitating further approval.
- 15.14.23. The EIAR states that the HRW would be shredded, steam disinfected, and transported offsite for thermal recovery. The process would reduce the volume of the HRW by c, 80%. A small portion of HRW would be bulked up for export to specialised treatment facilities abroad. Miscellaneous operational waste, including oil and equipment maintenance greases, would be managed offsite appropriately. The EIAR states that 100% of the disinfected HRW would be sent for energy recovery. The report states that none of the HRW would be new or additional to the existing national treatment system, as it is already being treated domestically or exported. The EIAR estimates the facility would generate 22,800 tonnes of treated HRW for thermal treatment with heat recovery, with 1,200 tonnes exported for further processing in other countries. The EIAR states that the long-term impact of the proposed development on national landfill and waste-to-energy capacity would be imperceptible. It would reduce the national treatment capacity by less than 1%, which the report considers "not significant" according to the IEMA methodology.
- 15.14.24. The EIAR states that the decommissioning phase would take c. 8 weeks. It would involve processing or transferring the remaining untreated waste, dismantling the treatment plant, and decontamination if necessary. The report states that the

impacts during decommissioning would be temporary and "insignificant," similar to those in the construction phase.

15.14.25. **Mitigation Measures**

- 15.14.26. The EIAR states that all mitigation measures implemented will be in accordance with the facility's IED licence and planning permission. The EIAR states that during the construction phase, the appointed contractor would prepare a Resource and Waste Management Plan (RWMP) per the EPA's 2021 Best Practice Guidelines. The RWMP would address waste analysis, prevention, reuse, and recycling methods, material handling procedures, and disposal plans at licensed facilities. The EIAR details that a Resource and Waste Manager would be responsible for its implementation.
- 15.14.27. The EIAR describes specific measures to be implemented by the Contractor, including source segregation of waste, waste auditing, appropriate storage and efficient removal of hazardous materials. Waste would be removed promptly to licenced facilities. Any unforeseen hazardous material encountered during construction would be managed appropriately, with relevant authorities notified. The EIAR states that staff would be trained to identify and manage potential contamination. Contaminated materials would be sampled and analysed in a laboratory if necessary. Records would be maintained on all waste leaving the site.
- 15.14.28. The EIAR states that a Construction Environmental Management Plan (CEMP) would be prepared. The CEMP would incorporate all mitigation measures outlined in the EIAR, and the contractor would be responsible for its implementation.
- 15.14.29. During operation, the EIAR states that any odour emissions from handling and processing Healthcare Risk Waste would be managed per an Odour Management Plan. The report states that wastes will be delivered to the site in enclosed vehicles to ensure no fugitive odours during transport and waste reception. The EIAR states that process waste would be treated within the main processing building. All headspace air would be treated using appropriate technologies, e.g. scrubbers and carbon filters, before being discharged through an appropriately designed emission stack. Further details on odour mitigation are provided in Chapter 10 of the EIAR regarding Air Quality and Climate. The EIAR states that mitigation measures for the local road network and site-related haulage are detailed in Chapter 7 of the EIAR on Traffic and

Transportation. Noise mitigation measures are detailed in Chapter 9 on Noise and Vibration.

- 15.14.30. The EIAR states that the facility would adhere to best available techniques (BAT) from the Commission Implementing Decision (EU) 2018/1147, including BAT 11 and BAT 19. The EIAR details that Enva has been granted planning permission to install photovoltaic solar panels under PA Ref. SD22 A/0326, which would help reduce electricity demand during the operation phase. Due to the facility's 24-hour operation, the report considers the site well-suited for using the energy generated.
- 15.14.31. During the decommissioning phase, the report states that potential impacts would be similar to those during the construction phase, though smaller in scale. Mitigation measures from the construction phase would be applied, and residual impacts would be temporary and not significant.

15.14.32. **Monitoring**

15.14.33. The EIAR states that during the construction phase, the contractor would undertake monitoring, which would include keeping a record of all truck movements related to the removal of site clearance materials and construction soil. Records would include details on the quantity, type, and quality of materials and their disposal locations. The report states that no additional monitoring is required for the operation phase beyond the requirements for monitoring already established in the site's IED Licence. For the decommissioning phase, monitoring would be similar to those outlined for the construction phase but on a much smaller scale.

15.14.34. **Assessment**

15.14.35. Having examined Chapter 17 of the EIAR, along with the associated documentation and submissions on file, I consider the proposed development would not result in significant adverse impacts on Material Assets. In examining the direct and indirect impacts of the proposed development, the key issues for consideration relate to land use, utilities, waste management, and associated infrastructure. The proposed development is consistent with the 'EE' land use zoning of the site and the existing industrial nature of the Greenogue industrial estate. The operations of the proposed development would remain confined to the existing site. I consider that the long-term impact on land use would be imperceptible.

- 15.14.36. Regarding utilities, there would be a 196% increase in energy consumption and a 92% increase in water use, which is a significant increase. However, these increases are offset by much of the waste already being treated elsewhere in Dublin. Therefore, I consider the effects on utilities to be imperceptible, with no significant impact on energy and water utility networks.
- 15.14.37. Waste management is a critical issue for consideration. The facility's intake of 111,000 tonnes of waste annually would remain unchanged, whereby HRW would replace an equivalent volume of contaminated soils currently processed at the facility. I consider that waste impacts during the operational phase would be minimal, as the HRW taken into the facility would be appropriately treated, and the volume would be reduced by c. 80%, as stated in the EIAR. All disinfected waste would be sent for energy recovery. Therefore, I consider that the impact on national waste-to-energy and landfill capacity, at less than 1%, would not be significant in the broader context of Ireland's waste management capacity.
- 15.14.38. Given that some of the materials listed in Table 17.13 of the EIAR proposed for acceptance at the HRW facility are not permitted under the current EPA IED licence, a review of the existing IED licence by the EPA would be required to permit the proposed changes. I am satisfied that the existing facility and proposed changes under the current application must comply with EPA IED licence requirements. This regulatory oversight by the EPA would further mitigate the potential for adverse impacts associated with the proposed acceptance of new waste types. Any concerns in the submission regarding odour, noise, and traffic have been addressed in previous chapters of the EIAR, as assessed above, with appropriate mitigation measures, which I consider sufficient to prevent significant effects.

15.14.39. **Conclusion**

15.14.40. In conclusion, I consider that the proposed development would not significantly adversely impact material assets, subject to the implementation of the proposed mitigation measures and adherence to the EPA IED licence requirements.

15.15. Risk of Major Accidents and/ or Disasters

15.15.1. **Methodology**

- 15.15.2. The EIAR methodology refers to relevant legislation, including the EIA Directive, Seveso III Directive, and other policy documents. The assessment uses a risk-based approach based on the IEMA 2020 guidelines, which focuses on "low likelihood but high consequence" events, e.g. major spills or explosions. The report states that the Zone of Influence for assessment aligns with those of other chapters in the EIAR, taking into consideration nearby Seveso sites. Information was taken from a desktop review of existing datasets, including the National Risk Assessment for Ireland and the SDCC County Major Emergency Plan. The report states that the assessment criteria apply the approach set out in Major Accidents and Disasters in EIA: A Primer (IEMA, 2020). This approach focuses on potential sudden events of low likelihood, which may reasonably occur, resulting in major negative impacts on receptors. Significance is defined as a "significant environmental effect" which "could include the loss of life, permanent injury and temporary or permanent destruction of an environmental receptor which cannot be restored through minor clean-up and restoration". The assessment applies to the proposed development lifecycle, following the approach in the IEMA Primer (IEMA, 2020).
- 15.15.3. The EIAR states that Stage 1 of the assessment identifies whether the proposed development is vulnerable to major accidents or disasters and whether this could lead to a significant effect. For Stage 2, Scoping is undertaken to determine in more detail whether there is potential for significant effects as a result of major accidents and/or disasters associated with the Proposed Development. If Screened in, Stage 2 aims to provide a more detailed determination as to whether there is potential for significant effects. Stage 3 of the EIAR assesses risks by identifying worst-case impacts, the likelihood of occurrence, and the need for further mitigation measures.
- 15.15.4. The EIAR states that the potential hazards brought forward to Stage 3 are evaluated using a risk matrix. The matrix classifies hazards based on the likelihood of occurrence and consequence of impact. Likelihood of occurrence is rated from "extremely unlikely" to "very likely". Consequences of impact are classified from "slight" to "profound." The EIAR groups risks into categories including high (red), medium (orange), and low (green) based on their score (5-25).

15.15.5. **Risk Assessment**

- 15.15.6. The EIAR states that the proposed development has been screened in for consideration of major accidents and/or disasters because of its scale, activities during the construction and operation phases, and the sensitivity of the receiving environment. The report states that while it is highly unlikely, the proposed development could result in a major accident, interact with other sources of hazards, or exacerbate risks with other hazardous sources.
- 15.15.7. In Stage 2, a scoping exercise was undertaken to assess the potential for significant effects. The EIAR considered the broad categories from the National Risk Assessment for Ireland 2023, including geopolitical, economic, social, environmental, and technological risks and project-specific hazards identified in other chapters of the EIAR. Hazards were scoped out if the potential environmental impact was minimal, sufficient mitigation was in place, or there was no source-pathway-receptor linkage. Hazards considered to have potentially significant environmental impacts were carried into Stage 3 for further assessment.
- 15.15.8. Table 18.5 of the EIAR summarises the scoping assessment for major accidents and/or disasters during the construction phase. The EIAR states that the risk of major road traffic accidents would be negligible. There would be a minor increase in construction traffic, and HGVs would not pose significant risks. A Construction Traffic Management Plan would be prepared and implemented. The report states potential impacts on critical utilities and infrastructure would be minimal. Excavations would be minor and unlikely to damage utilities or significantly impact power and water demand. Regarding accidents at Seveso sites/COMAH establishments, the EIAR states that the proposed development does not have the potential to cause an accident at the Brenntag Chemicals Distribution (Ireland) Ltd., a COMAH/Seveso site. Table 18.5 identifies the potential release of hazardous materials into surface and groundwater bodies. However, design measures have mitigated such risks, including designated refuelling areas, spill containment, and emergency procedures. Flood and extreme weather events, geopolitical, social/economic and aviation risks are all scoped out due to low probability or absence of pathways. Aviation collision risk is scoped out as the site is over 850 metres from the Casement Aerodrome Outer Public Safety Zone (PSZ).
- 15.15.9. Table 18.6 of the EIAR details the scoping assessment for major accidents and/or disasters during the operation phase. The EIAR states that a major road traffic

accident risk during the operation phase is scoped out due to no significant traffic impacts. The EIAR states that while the proposed development would see a 92% increase in water demand and a 196% rise in power demand, these would be manageable due to the limited additional HRW being treated at the facility. The report states that the national increase in power and water demand would be marginal. Best Available Techniques (BAT) would be implemented to monitor and optimise water consumption, energy, and raw materials. The EIAR scopes out the risk of sewer flooding and overflow discharge, as any population exposure to wastewater would be brief and one-off. Design and mitigation measures would be put in place to prevent significant impacts. Accidents at nearby Seveso/COMAH sites, including Brenntag Chemicals Distribution Ltd., are considered unlikely to be exacerbated by the proposed development. The report states that the risk of hazardous material release into surface and groundwater bodies is extremely unlikely. Mitigation measures would be put in place, including regular monitoring, covered conveyor belts, and emergency procedures to address the extent of external spillages. Surface water discharge would comply with the conditions of the EPA IED licence. Flood and extreme cold weather event risks are scoped out, as the development will be located on hard standing, outside of flood zones, and designed to operate under various environmental conditions. Geopolitical, social/economic and aviation collision risks are scoped out, as there are no pathways for impact.

15.15.10. Table 18.7 of the EIAR details the scoping assessment for major accidents and/or disasters during the decommissioning phase. The risks identified are similar to those in the construction and operation phases, but they are less significant in terms of impact on major accidents and/or disasters. The EIAR states that, due to the scale of the proposed development and the mitigation measures in place, the likelihood of a major accident and/or disaster occurring is very low to extremely unlikely. The report states that the implementation of monitoring measures and the Emergency Response Plan would reduce the potential impacts to a very low level of significance.

15.15.11. Mitigation Measures and Monitoring

15.15.12. The EIAR refers to Chapter 7 of the EIAR for mitigation measures on Traffic and Transport. For accidental spillage risks, the EIAR refers to mitigation measures in Chapter 14 (Biodiversity) and Chapter 15 (Water), which address managing hazardous substance emissions. For extreme weather events, the EIAR refers to health and safety regulations, including the Safety, Health & Welfare at Work (Construction) Regulations (2006-2019) and the Safety, Health & Welfare at Work Act 2005, which would be adhered to.

- 15.15.13. During the operation phase, the EIAR states that disturbances to critical utilities and infrastructure would be mitigated through measures detailed in Chapter 17 (Material Assets). Risks of accidental spills would be managed by implementing mitigation measures from the construction phase, as detailed in Chapters 14 (Biodiversity), 15 (Water), and 16 (Land, Soil, Geology, and Hydrogeology). For the decommissioning phase, mitigation measures similar to those used in the operation phase would be implemented to manage critical utility and infrastructure.
- 15.15.14. The EIAR states that, following implementing these mitigation measures, the risk of major accidents or disasters would be "very unlikely to extremely unlikely" across all of the phases. An Emergency Response Plan would improve response times, thereby limiting the magnitude of potential impacts.
- 15.15.15. Regarding monitoring, the EIAR states that the measures detailed in Chapters
 15 and 16 (Water, Land, Soil, Geology, and Hydrogeology) would be applied during all of the phases of the proposed development.

15.15.16. **Assessment**

- 15.15.17. Having examined Chapter 18 of the EIAR, I consider the proposed development would not result in significant adverse effects relating to risks of major accidents or disasters.
- 15.15.18. I am satisfied that the EIAR's risk assessment adequately identifies the risks of the proposed development during the construction, operation, and decommissioning phases. Because of its location, design, proposed mitigation measures, and adherence to the IED licence under which it would operate, I consider the likelihood of any major accident or disaster occurring from the proposed development to be low.
- 15.15.19. The main risks of the proposed development are traffic accidents, accidental spills of hazardous materials, contaminated surface water run-off, and potential impacts on critical utilities and infrastructure. I consider these risks would be mitigated through the proposed Construction Traffic Management Plan, operational monitoring

required under the IED licence, and adherence to BAT. The increase in traffic would not be significant, and the proposed mitigation measures would ensure that the risk of traffic accidents would be negligible. The implementation of the proposed Emergency Response Plan would limit the severity of any impacts that could occur.

- 15.15.20. Regarding potential risks from external factors, such as the proximity to Seveso sites, I consider these risks adequately mitigated. The EIAR demonstrates that the proposed development would not increase the risk of accidents at nearby COMAH establishments such as Brenntag Chemicals Distribution Ltd. The proposed development is designed with robust containment and spill prevention systems, which would reduce the likelihood of hazardous materials impacting surface and groundwater bodies.
- 15.15.21. I consider the proposed development to have no significant cumulative effects on the environment. The proposed mitigation measures, including measures for managing spills and monitoring water quality, would ensure no significant residual impacts.

15.15.22. **Conclusion**

15.15.23. In conclusion, I consider the proposed development, subject to the implementation of the proposed mitigation measures and adherence to conditions imposed under the EPA IED licence, would not result in significant effects related to major accidents and/or disasters.

15.16. **Interactions between the Environmental Factors**

15.16.1. **Methodology**

- 15.16.2. The EIAR methodology refers to relevant legislation, policies, and guidelines for assessing interactions between environmental factors, including the EIA Directive 2011/92/EU and EPA guidelines on EIA and EC Guidelines for the assessment of indirect and cumulative impacts. The EIAR coordinator's assessment was facilitated through data exchange with relevant competent to inform the assessment.
- 15.16.3. The study area is defined by the zone of influence for each environmental topic, as detailed in Chapters 7-17 of the EIAR. The description of likely significant effects

uses a matrix to identify potential interactions between environmental factors throughout the project's phases.

15.16.4. **Potential Effects**

- 15.16.5. Table 19.1 of the EIAR provides the interactive effects summary matrix, which identifies the interactions between different environmental topics throughout the proposed development's construction, operation, and decommissioning phases. The EIAR details how the proposed development would generate interactions between Traffic and Transport and other environmental factors, including Population, Noise and Vibration, Air Quality and Climate, and Material Assets.
- 15.16.6. Regarding Traffic and Population, the EIAR states that during the construction phase, 48 vehicles would enter and exit the site daily. The report states that the effects would be temporary and imperceptible, but there would be no significant impact on residential amenities. During the operational phase, there would be up to 97 vehicle movements. However the effects on residential amenities are also deemed negligible. Decommissioning effects would be similar to those during construction but on a smaller scale, with no significant effects anticipated. The EIAR states that interactions between Traffic and Transport and Noise and Vibration are possible due to increased traffic movements. However, the EIAR considers the impact of noise on nearby sensitive locations to be not significant during operations.
- 15.16.7. Regarding interactions between Traffic and Air Quality and Climate, the EIAR states that while there would be minor emissions due to increased traffic, these effects would be imperceptible during both the construction and operation phases. The EIAR states that traffic and transport interact with material assets due to transferring waste and materials. However, the report states the increased traffic during the construction and operation phases would have an imperceptible impact on the local road network. The report states that the removal of the export of waste will reduce net miles travelled by the HRW.
- 15.16.8. Regarding interactions between population and noise and vibration, the EIAR states that construction noise at the nearest noise-sensitive locations would not be significant. Operation noise from equipment such as the shredder and blast cooler is deemed not significant. Regarding interactions between Population and Air Quality and Climate, the EIAR states that the temporary effects on air quality during

construction and decommissioning phases would be imperceptible. The operation phase would have an imperceptible impact on people's enjoyment of their homes. The EIAR states that interactions between Population and Landscape and Visual and Population and Cultural Heritage would not be significant, as there would be no interactions. Regarding Population and Water, the EIAR states that there is the potential for short-term effects on water quality due to high-intensity rainfall. However, the report states that no significant interactions with the population would occur.

- 15.16.9. Regarding interactions between noise, vibration, and biodiversity, the EIAR states that noise during construction and operations could disturb fauna, including otters, birds, and bats. However, the report states that the assessment in Chapter 14 of the EIAR concludes that no significant effects on biodiversity would occur. The report states that interactions between Noise and Vibration and Material Assets would have imperceptible effects on residential amenities during construction.
- 15.16.10. The EIAR states that interactions between Air Quality, Climate, and Biodiversity could generate dust and airborne contaminants affecting local terrestrial and aquatic environments. However, the report does not consider these impacts to be significant. Best practice measures for dust suppression during construction would be implemented.
- 15.16.11. Regarding Human Health, the EIAR identifies potential inter-relationships between the development's construction, operation, and decommissioning phases. The report states that site-specific populations could experience impacts related to air quality, water quality, noise, and transport during all phases, but these would not result in significant health effects. However, receptor-led effects would be short-term, temporary, or transient or incorporate longer-term effects. The report states that at the population level, it is not expected that the combination of effects would interact in a way that would reinforce health outcomes or exacerbate health inequalities.
- 15.16.12. The EIAR identifies interactions between Biodiversity and several environmental factors related to the proposed development. Regarding Biodiversity and Water, the report identifies potential impacts on aquatic habitats and species during all phases of the proposed development. The report states that the Griffeen River, flowing north of the site, could be affected by silt-laden/contaminated runoff during the construction and decommissioning phases. This could result in short-term

slight adverse effects on surface water quality. However, the report states that the proposed development would not contribute significantly to the current poor status of the Griffeen River under the WFD monitoring programme. The report states that the operation phase would not significantly impact biodiversity due to limited interaction with hazardous substances. Effects on species like otters are assessed as not significant.

- 15.16.13. Regarding biodiversity and land, soils, geology, and hydrogeology, the EIAR states that air pollution has the potential to generate dust and air-borne contaminants that may negatively affect local terrestrial and aquatic environments. However, the effects of air pollution on biodiversity would not be significant. Impacts on groundwater are scoped out under this interaction.
- 15.16.14. Regarding the interaction between Biodiversity and Material Assets during construction, the report states that best practice measures for dust suppression will be implemented, and no significant effects are anticipated.
- 15.16.15. Regarding the interaction between Water and other environmental factors, including Population, Biodiversity, and Soils, the EIAR states that surface water quality could be affected during the construction and decommissioning phases due to silt-laden/contaminated runoff. However, the significance of these effects is considered slight and short-term. Given the site's location in Flood Zone C, it has a low flood risk. Surface water runoff would be managed through the site's drainage network and attenuation tank, and discharge would be controlled via a petrol interceptor and shut-off valve in case of potential contamination.
- 15.16.16. Regarding interactions between land, soil, geology, and hydrogeology with biodiversity and water, the report identifies potential risks from soil disturbance during construction. However, the report states that these impacts would be limited. Waste soil material would be either reused or transported to a recovery facility.

15.16.17. **Mitigation Measures**

15.16.18. The EIAR states that potential interactive negative impacts are addressed by mitigation measures outlined in the relevant environmental topic chapters of the EIAR (Chapters 7–17). The report states that the implementation of these mitigation measures would reduce or remove the potential effects. Residual impacts and their

significance are detailed in each relevant chapter. No additional mitigation measures are proposed.

15.16.19. **Assessment**

- 15.16.20. Having examined Chapter 19 of the EIAR, it is my view that the interactions between the various environmental factors arising from the proposed development have been adequately assessed for all phases of the proposed development in the EIAR.
- 15.16.21. In the absence of evidence to demonstrate otherwise, I consider that the interactions between the environmental factors are unlikely to result in significant environmental impacts. The proposed mitigation measures, as detailed in each of the environmental topic chapters of the EIAR, would ensure that the potential interactions between environmental factors are controlled to a level where no significant adverse effects would occur. The proposed mitigation measures align with best practices and would ensure that any residual impacts would not be significant.

15.16.22. **Conclusion**

15.16.23. I conclude that no significant adverse impacts would arise from any interactions between the environmental factors. The proposed mitigation measures would effectively manage any potential interactions and prevent any adverse impacts on the environment.

15.17. Cumulative Effects

15.17.1. **Methodology**

- 15.17.2. The EIAR methodology for assessing cumulative effects details relevant legislation and guidelines, including the EPA Guidelines (2022) and the EIA Directive 2014/52/EU and provisions therein.
- 15.17.3. The EIAR states that the zone of influence (ZoI) for assessing cumulative effects was based on the environmental factor with the largest ZoI, i.e. Material Assets, which extended up to 5 km from the site boundary. The report states that the assessment considers developments within this ZoI over five years, excluding

incomplete, withdrawn, and refused applications. The EIAR states that a desk study and planning database searches, including the EPA and MyPlan map viewers, were undertaken to identify development with potential cumulative impacts. This included other EPA-licenced facilities.

15.17.4. The EIAR states that Stage 2 of the Cumulative Impact Assessment (CIA) involves screening the plans, projects, and activities identified in Stage 1. This process was carried out by topic specialists using defined screening criteria, as detailed in Table 20.1. The criteria assess whether potential cumulative impacts exist, whether there are physical/conceptual pathways for impact, and whether projects have potential cumulative impacts or temporal overlaps with the proposed development. Criteria also include low data confidence. Table 20.2 details the criteria for the allocation of data confidence, with a three-point scale (high, moderate, low) used to categorise the reliability of available data. Only projects with high or moderate data confidence are screened into the CIA. Low-confidence data is screened out for assessment.

15.17.5. **Potential Cumulative Effects**

- 15.17.6. The EIAR details the potential cumulative effects of the proposed development on each environmental topic. It considers other permitted projects in the vicinity and analyses the potential cumulative impacts based on data confidence, effect-receptor pathways, and spatial/temporal scales involved. Each project was considered on a case-by-case basis, with relevant projects screened in or out for further analysis.
- 15.17.7. The EIAR states that cumulative effects on Traffic & Transportation were assessed as not significant, referencing potential reductions to traffic flows due to access rearrangements at nearby developments.
- 15.17.8. Regarding Population, Table 20.3 of the EIAR details several projects screened in for potential cumulative effects. These include warehouses that generate over 100 jobs each during their operation phases. The report states that the cumulative impact on population growth and economic activity is considered not significant.
- 15.17.9. Regarding Noise & Vibration, the EIAR states that projects within the 600m Zol were screened in for assessment. However, the overall potential for cumulative noise and vibration impacts is considered not significant.

- 15.17.10. Regarding Air Quality & Climate, the EIAR states that there may be modest cumulative dust impacts during construction from nearby projects. However, the report states that the potential for significant adverse dust effects is unlikely and not significant.
- 15.17.11. Regarding climate, the report states that there is the potential for cumulative impacts from greenhouse gas (GHG) emissions during the construction phase. However, these would be mitigated by the renewable energy solar panel projects, which would lead to a net beneficial impact in the long term.
- 15.17.12. Regarding human health, the EIAR states that the sensitivity of populations remains unchanged from the main assessment in Chapter 12 of the EIAR. However, the magnitude of impact is reassessed considering cumulative effects. The report identifies the potential pathways that affect human health through air, water quality, noise and vibrations, and transport.
- 15.17.13. The EIAR states that cumulative effects related to air quality during the construction and operational phases and water quality would not be significant. Regarding Noise and Vibration, the report states that the in-combination effects of the proposed development with other projects would not lead to significant adverse impacts. The report states that the population groups and sensitivity, magnitude and significance relevant to these cumulative health assessments are not materially different from those identified in Chapter 11 of the EIAR (Human Health).
- 15.17.14. Regarding transport modes, access, and connections, the report does not consider the cumulative effects significant. There would be no material difference from the specific chapter in the EIAR.
- 15.17.15. Regarding Landscape & Visual impacts, the EIAR indicates that two projects were screened in as having the potential for cumulative impacts. However, the proposed development will be largely screened with surrounding buildings and surrounding vegetation, and therefore, there would be no significant cumulative landscape and visual effects.
- 15.17.16. Regarding Cultural Heritage, the EIAR states that only one project within the buffer zone (Enva Ireland's Solar Panel Project) was assessed, and no cumulative impacts on cultural heritage were identified.

- 15.17.17. Regarding Biodiversity, the EIAR assessed ten screened-in projects within a 2 km buffer zone. The EIAR states that projects such as Electrical Waste Management Ltd.'s Waste Metal Transfer Facility, Jordanstown Properties Ltd.'s warehouse unit, and South Dublin County Council's residential units could cause cumulative impacts on surface water through potential dust, sediment runoff, or chemical spills during the construction phase. However, the report states that mitigation measures for surface water quality.
- 15.17.18. Regarding Biodiversity, particularly disturbance to local bat populations, the EIAR states that there is potential for cumulative disturbance from operational lighting and the removal of linear habitats. Development, including Nocsy 2 Ltd.'s warehouses and Lidl Ireland GmbH's supermarket construction, has the potential for disturbance caused by combined lighting. However, the EIAR states that the proposed mitigation measures would avoid significant impacts.
- 15.17.19. Regarding Water, the report states that projects within a 1 km buffer zone were assessed for cumulative impacts on surface water. The report states that the residual impacts on surface water from the proposed development are reduced to imperceptible significance. The potential for significant adverse effects due to incombination water effects is deemed insignificant.
- 15.17.20. Regarding Land, Soil, Geology, and Hydrogeology, the EIAR states that some projects would result in a small quantity of soil. However, the cumulative effects are not considered significant.
- 15.17.21. The EIAR assesses the potential cumulative effects of the proposed development on Material Assets by considering projects within a 5 km zone of influence (ZoI). The projects screened in include Strategic Housing Developments at Cooldown Commons, Mill Road, Garters Lane and Boherboy. They are assessed for their potential cumulative impacts to affect power, water, and waste management systems.
- 15.17.22. For power, the EIAR states that while the construction phase of the proposed development would increase energy consumption, its effect would not be significant given the scale and short-term nature of the works. During the operational phase, energy demand would be high due to using energy-intensive equipment to treat HRW. However, the report states that the planned use of Waste-to-Energy (WtE) thermal

treatment will generate heat and electricity, reducing the demand on the national grid. This would mitigate any potential cumulative impacts and, therefore, is deemed not significant.

- 15.17.23. For water, the EIAR states that during the construction phase, water consumption would not be substantial. The report states that the potential impacts could be amplified if construction activities for the proposed development proceed simultaneously or concurrently with the project listed in Table 20.8. However, the proposed mitigation measures would ensure that any adverse effects are not significant. During the operation phase, the report states that the proposed mitigation measures would mitigate the additional water required for HRW treatment. The potential for significant adverse effects is deemed unlikely and not significant.
- 15.17.24. Regarding waste management, the EIAR states that the construction phase would generate relatively small quantities of waste. However, with the implementation of the proposed mitigation measures, the potential for significant adverse effects would be unlikely and not significant. During the operation phase, the report highlights how the proposed development would not increase the total waste intake at the site. The facility would maintain its annual intake limit of 111,000 tonnes while shifting part of its waste intake to HRW. The annual intake of other waste at the facility will be reduced by 24,000 tonnes of hazardous waste to facilitate the intake of HRW. The report states that given that the site currently accepts hazardous waste and the volume of waste will remain unchanged, there will be no significant cumulative impacts arising from the proposed development with other approved projects.

15.17.25. **Assessment**

15.17.26. I have examined Chapter 20 of the EIAR and the associated Appendices 20.1 and 20.2 with regard to Cumulative Effects. It is my view that the proposed development, along with other approved developments in the surrounding area, would not result in any significant cumulative effects. I am satisfied that the EIAR's screening process within the zone of influence (ZoI) is comprehensive, identifying potential interactions across the environmental factors affecting the proposal. The potential for spatial, temporal, and conceptual overlap has been adequately assessed. It is my view that none of the identified cumulative effects would result in significant adverse impacts.

- 15.17.27. Regarding traffic, population, and noise, I consider that the effects identified would not significantly impact local infrastructure or residential amenities. The proposed mitigation measures in the EIAR would address any potential increases in vehicle movements and the impacts of noise on the local population. Effects on air quality and climate would be minimal, and there would be no significant cumulative impacts from dust or greenhouse gas emissions. The renewable energy elements of surrounding developments would further mitigate long-term impacts on climate, leading to long-term positive effects.
- 15.17.28. Regarding biodiversity, I consider that the proposed mitigation measures for surface water management and lighting would effectively prevent cumulative disturbance to sensitive habitats and species, including the local bat population and watercourses.
- 15.17.29. Regarding material assets, I consider that the project's energy and water requirements and waste management operations would not create any significant cumulative impact on utilities. Treated HRW would be consigned to thermal treatment via Waste-to-Energy (WtE) processes. This would generate heat and electricity, reducing demand on the national grid and mitigating potential adverse effects on energy consumption.

15.17.30. **Conclusion**

15.17.31. The proposed development's impacts, combined with those of other projects in the surrounding area, would not be significant. The proposed mitigation measures would ensure that cumulative impacts are minimised. Therefore, I conclude that the proposed development would not have significant cumulative impacts on the environment.

15.18. **Reasoned Conclusion**

15.18.1. Having regard to the examination of environmental information detailed above, the EIAR and supplementary information provided by the applicant, and the issues raised in the Prescribed Bodies report submissions, I consider that the main significant effects of the proposed development on the environment are as follows;

- 15.18.2. **Traffic and Transport:** The proposed development would not have significant impacts on traffic during the different phases of the proposed development. The construction phase would generate a slight increase in vehicle movements. However, there would be no significant adverse effects on the local road network. A Construction Traffic Management Plan would manage construction traffic. During the operation phase, the additional 97 no. daily vehicle movements would result in a minor increase in traffic flows. However, these levels would remain within acceptable thresholds. The proposed mitigation measures, including bicycle and EV parking spaces, would promote sustainable transport options. There would be no significant adverse impacts on road or pedestrian safety.
- 15.18.3. Population: The proposed development would not impact the local population. There would be no significant changes to land use or local settlement patterns. The impact of noise and traffic and the effects on air quality would not be significant. The increase in employment during the construction phase would have a positive effect. However, it would be temporary, and there would be a small reduction in staff during the operation phase, which would not be significant.
- 15.18.4. **Noise and Vibration:** The proposal would not result in significant impacts from noise and vibration. Estimated construction noise levels at the nearest noise-sensitive locations would be below significant thresholds. Noise from operation equipment, including the shredder and air blast cooler, is estimated to remain below background noise levels. Vibration impacts are scoped out due to having minimal risk. Any increase in noise from traffic would be negligible (<1 dB) and not perceptible. The proposed mitigation measures, including limiting noise generating activities to normal working hours, would minimise noise effects. There would be no significant cumulative effects from noise.
- 15.18.5. Air Quality and Climate: The proposed development would not impact air quality and climate during the phases of the development. Dust emissions during construction would be controlled through standard best-practice mitigation measures. GHG emissions would not be significant. During construction, traffic emissions and VOC levels would remain within air quality guidelines. Bioaerosol and odour emissions would be mitigated through the facility's filtration systems. GHG emissions would be mitigated through the facility's filtration systems. GHG emissions would be mitigated by the implementation of energy-saving measures and the installation of solar panels.

- 15.18.6. **Human Health:** The proposed development would not significantly affect human health during its lifecycle. Impacts on air quality from dust, NO₂, and particulates would be minimised through dust suppression, filtration systems and compliance with the EPA IED licence. Noise and vibration effects would be within acceptable limits. Traffic impacts would be managed through the Construction Traffic Management Plan. Cumulative effects on human health would be minimal.
- 15.18.7. Landscape and Visual Impact: The proposed development would significantly impact the surrounding landscape. The additional buildings, including a roofed enclosure, security hut, and bulk trailer structure, would integrate into the industrial character of Greenogue Business Park. There would be no significant adverse effects on the landscape character area or viewpoints.
- 15.18.8. **Cultural Heritage:** The proposed development would not significantly impact cultural heritage assets in the surrounding area. The site is a brownfield with no known archaeological or architectural heritage assets within the immediate locality. The possibility of discovering unknown subsurface archaeological remains is low because of prior site disturbances and the limited scope of groundwork. The closest cultural heritage site, a ring ditch located c. 865 metres away, has already been impacted by previous development.
- 15.18.9. **Biodiversity:** Biodiversity would not be adversely impacted by the proposed development. Potential impacts to sensitive habitats and species, including contaminated and silt-laden surface water runoff, habitat alterations, and disturbance to fauna such as bats and otters, would be effectively mitigated through mitigation measures, including settlement tanks, oil interceptors, and the implementation of directional lighting. The Griffeen River is already classified as "poor", and the proposed development would not result in further degradation.
- 15.18.10. **Water:** The proposed development would not significantly impact water. The proposed mitigation measures, including silt fencing, hydrocarbon interceptors, and cut-off valves, would mitigate impacts from surface water run-off. Surface water monitoring as required under the IED licence and regular maintenance of drainage infrastructure would address hydraulic connectivity risks to the River Griffeen. The site is located in a low flood-risk zone.

- 15.18.11. Land, Soil, Geology, and Hydrogeology: The proposal would not result in significant adverse impacts on land, soil, geology, or hydrogeology. Potential impacts during the construction phase, such as soil erosion and contamination, would be mitigated through the proposed mitigation measures, including the implementation of a Waste Management Plan and Construction Environmental Management Plan, as well as the appointment of a contractor responsible for regular testing of excavated soils to monitor the suitability of the soil for reuse. Foul water discharge must comply with the EPA IED Licence Emission Limit Values. Residual effects would not occur, and cumulative effects would not be significant.
- 15.18.12. **Material Assets:** The proposed development would not result in significant adverse impacts on material assets. The facility's intake would remain unaltered, and waste would be replaced with the same volume of HRW. Increased demands on energy and water utilities would not have significant impacts. All waste management would be regulated and monitored under the EPA IED licence.

7.1.76. Having regard to the above, I am satisfied that the proposed development would not have any significant adverse impacts on the environment, subject to the implementation of the proposed mitigation measures as detailed in the EIAR and associated documents.

16.0 APPROPRIATE ASSESSMENT SCREENING

16.1. Compliance with Article 6(3) of the Habitats Directive

16.1.1. This section addresses the requirements under Article 6(3) of the Habitats Directive, which requires the screening of developments to determine the necessity for an Appropriate Assessment. The screening for appropriate assessment is carried out in accordance with Part XAB, Section 177U of the Planning and Development Act 2000 (as amended), which requires that all potential impacts for designated Natura 2000 European sites are thoroughly assessed. The format of the screening for appropriate assessment below follows the steps detailed in the OPR's Practice Note PN01: Appropriate Assessment Screening for Development Management (2021) and other relevant guidelines.

16.2. Overview of the Screening Report

- 16.2.1. The applicant has submitted a Screening Report for Appropriate Assessment, prepared by RPS Group and dated April 2024. The Screening Report summarises the proposed development at the existing waste treatment facility. The screening was informed by a desk study, which examined ecological and water quality data and citizen science biodiversity records. Field surveys were also conducted to assess the potential impacts on the qualifying interests (QIs) and special conservation interests (SCIs) of relevant Natura 2000 European sites.
- 16.2.2. The Screening Report lists Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) within a 15 km radius of the application site. Table 4 of the report outlines a list of these Natura 2000 Sites, describing their QIs, SCIs and conservation objectives.
- 16.2.3. The screening utilises a source-pathway-receptor model to evaluate the Zone of Influence (ZoI) of the proposed development, stating that the proposal is not directly connected to or necessary to the management of any Natura 2000 European site. Furthermore, the report states that the project is not likely to result in any significant effects on any Natura 2000 site within the ZoI, and would not result in potential incombination or cumulative effects with other projects. The report asserts that, given the distance from these Natura 2000 sites to the proposed development and the nature of the works involved, no significant effects are anticipated on the Natura 2000 European sites.
 - 16.3. The applicant's AA Screening Report concludes that there are no likely significant impacts on any Natura 2000 European sites due to the proposed development, either individually or in combination with other plans and projects. On this basis, the report states that a Stage 2 Natura Impact Statement is not required to examine the adverse effects of the Proposed Development.
- 16.3.1. Having reviewed the submitted documents and submissions from prescribed bodies, I am satisfied that the information submitted allows for a thorough examination and identification of any potential significant effects of the proposed development, both alone and in combination with other plans and projects on Natura 2000 European sites.

16.4. Screening for Appropriate Assessment -Test of likely significant effects

16.4.1. The project is not directly connected with or necessary to the management of a Natura 2000 European Site. Therefore, it needs to be determined if the development is likely to have significant effects on a European site(s). The proposed development is examined in relation to any possible interaction with Natura 2000 European sites designated Special Conservation Areas (SAC) and Special Protection Areas (SPA) to assess whether it may give rise to significant effects on any European Site.

16.4.2. Brief Description of Site Characteristics

- 16.4.3. Section 2 of the AA Screening report describes the site's location and characteristics. The site is located in Greenogue Business Park, adjacent to Newcastle Village and approximately 1.5 km north of Rathcoole. The business park is characterised by commercial and industrial activity and is accessed from the N7 Naas road via the R120. The site covers approximately 1.1 hectares and is predominantly covered in hard-standing concrete and buildings. The Griffeen River binds the site to the north, Grants Drive to the south, and commercial holdings to either side.
- 16.4.4. Current activities on the site include a hazardous waste transfer facility for contaminated soil, packaged waste, and transformers in Building No. 1, and a hydrocarbon waste treatment and drum recovery centre in Building No. 2. The site is managed in accordance with the requirements of an existing planning approval (PA Ref. SD09A/0050) and the Environmental Protection Agency (EPA) Industrial Emissions licence (IED Licence W0192-03).

16.4.5. Brief Description of the Proposed Development

- 16.4.6. Section 2.2 of the AA Screening Report provides a description of the proposed development. The applicant, Enva, currently operates a hazardous waste transfer/recovery facility within Greenogue Business Park in southwest County Dublin. The proposed development comprises modifications to Buildings 1 and 3 to replace some activities to provide for the disinfection of 24,000 tonnes per annum of HRW before its onward consignment to energy recovery treatment.
- 16.4.7. The report states how healthcare-related waste (HRW) originates from healthcare facilities and refers to any waste that can be harmful due to its possible infectious properties. This includes items stained with blood or bodily fluids, waste from patients

with contagious diseases, and other infectious materials from healthcare settings. Recent strategies have focused on managing hospital waste by separating HRW from the majority of waste, which is primarily domestic in nature.

- 16.4.8. The duration of the construction work would be c. 18 weeks. The proposed construction hours would be 8:00 AM to 7:00 PM, Monday to Friday, and from 8:00 AM to 4:00 PM on Saturdays. Preparatory construction works would involve the demolition of existing office space (366 m²) on the gable side of the building facing Grants Drive (Building 3), the removal of the existing hazardous soil management and hazardous waste transfer operations located in Divisions 1 and 2 of Building 1, and modifications to the car parking area including the repainting of the lines and the footpath.
- 16.4.9. A thermal treatment area will be installed in Division 1 of Building 1, supported by plant and equipment, including a bin-emptying unit that collects waste into a hopper and shredder, two thermal screws designed to disinfect healthcare risk waste through steam heat application, and an air management system, a natural gas-fired steam generation boiler, a blast chiller, a weighing cell, and a reception area. Washing units will be used to wash and disinfect emptied bins alongside a bin reception and marshalling area. Construction of a new roofed enclosure c.130 m² (dimensions 6.6 m wide x 19.9 m long and 6.2 m high) will be located on the east face of Building 1 for the storage of clean bins. A new steel-clad structure, approximately 191 m² and 9.1 m in height, will be constructed to accommodate two bulk trailers. The Office, Canteen, and Welfare Facilities Area will include office space, shower, wash, and toilet facilities, as well as a kitchen and break room. Details are provided in the report of the Health Risk Waste bulking-up transfer area, Sharps management equipment, and facilities to be installed.
- 16.4.10. Ancillary Services and Infrastructure include a new portacabin-type weighbridge office structure (4.3 m² and 2.7 m in height) at the main entrance to the facility, situated beside the main facility gate; a footpath connecting the car parking area to the new portacabin-type weighbridge office structure, also providing access to Building 2; and modification to integrate wastewater and stormwater into the existing wastewater and stormwater management system. Proposed lighting includes lighting for the proposed new structures using energy-efficient LEDs.

16.4.11. Section 2.3.1 of the AA Screening report provides an overview of the proposed process that will be undertaken within the proposed HRW management facility. Details are provided on processes relating to the reception and disinfection of HRW, the management of reusable sharps containers, and HRW transfer station and office waste.

16.4.12. **Prescribed Bodies Consulted**

16.4.13. An Bord Pleanála consulted with the following prescribed bodies: Environmental Protection Agency (EPA), Health Service Executive (HSE), and Transport Infrastructure Ireland (TII). Response reports were subsequently received from all three bodies and are summarised in Section 5 above.

16.4.14. Relevant Natura 2000 European Sites

16.4.15. Table 1.0 below outlines Natura 2000 European Sites within a 15 km radius of the proposed development, identified using the Source-Pathway-Receptor model. It includes information on qualifying interests, conservation objectives, and potential pathways between the proposed development and these Natura 2000 sites.

Table 1.0 Identification of European Sites within 15 km of the ProposedDevelopment, including Qualifying Interests, Conservation Objectives, andPathways

European Site (code)	List of Qualifying Interest/Special Conservation Interest	Distance from proposed development (km)	Connections (Source- Pathway- Receptor)	Considered further in screening Y/N
Rye Water Valley/Carton SAC (001398)	Petrifying springs with tufa formation [7220], Narrow- mouthed Whorl Snail [1014], Desmoulin's Whorl Snail [1016]	c. 7 km	No direct surface water pathways. Potential hydrological connections through groundwater via Dublin groundwater body (IE_EA_G_008),	No

			but ruled out on the grounds of distance, the nature and location of the proposed development and lack of significant impact.	
Wicklow Mountains SAC (002122)	Oligotrophic waters [3110], Blanket bogs [7130], Wet heaths [4010],	c. 9 km	No direct pathways; surface water is distant and disconnected	No
	Dry heaths [4030], and others			
Glenasmole Valley SAC (001209)	Semi-natural dry grasslands [6210],	c. 8.5 km	No direct hydrological connections	No
	Molinia meadows [6410], Petrifying springs [7220]			
Poulaphouca Reservoir SPA (004063)	Greylag Goose [A043], Lesser Black- backed Gull [A183]	c. 13 km	No hydrological or ecological connections	No
Wicklow Mountains SPA (004040)	Merlin [A098], Peregrine Falcon [A103]	c. 13 km	No direct connection; no significant impacts anticipated	No

16.4.16. It should be noted that the Griffeen River, which borders the northern boundary of the site, flows into the River Liffey approx. 10.5 km downstream. The River Liffey ultimately discharges into Dublin Bay, encompassing both the South Dublin Bay SAC

(000210) and the South Dublin Bay & River Tolka Estuary SPA (004024). However, these European sites are located approximately 18 km from the proposed development site by direct measurement and are therefore outside the 15 km likely Zone of Impact, as per Ministerial guidance (DEHLG, 2010) on Appropriate Assessment.

16.4.17. Assessment of Likely Significant Effects

- 16.4.18. The site is not located within or directly adjacent to any designated Natura 2000 European Site. As such, the proposed changes to current activities and materials accepted at the Enva facility would not give rise to any direct loss, deterioration, fragmentation, or disturbance of Annex I habitats or Annex II species (or their supporting habitats), which may be listed as QIs/ SCIs of European Sites, as noted above. The potential for indirect effects relates to noise, vibration, lighting, human presence, surface water run-off, changes in groundwater quality, and emissions to air.
- 16.4.19. Internal noise sources would consist of equipment, plant, heating, and ventilation. Excavations, earthworks, machinery, vehicles, and personnel during the construction and decommissioning phases may generate noise and vibration. During all phases of the proposed development, the primary external noise sources would come from vehicles operating at the facility. However, the proposed changes at the facility would not result in a significant change in the amount of noise, vibration, lighting, and human presence. The existing and proposed operations will be located within an already busy industrial area. Because of the degree of separation from Natura 2000 European sites, noise-sensitive QIs are significantly removed, ensuring no significant effects will occur. Therefore, these effects would not result in any likely significant effects and are, therefore, scoped out from further assessment.
- 16.4.20. Regarding surface water run-off, pollution of the water environment during all phases of the proposed development could result from surface water run-off carrying suspended silt or contaminants into local watercourses during high rainfall events when the capacity of the current mitigation may be exceeded. However, given the scale and nature of the proposed development, the hydrological distance between the proposal and any downstream Natura 2000 sites (i.e. all greater than 18 km from the site), and the dispersive nature of open coastal waters, no significant effects on European sites are likely to occur via surface water run-off. The proposed

development would not result in fugitive emissions to water during operation, and no replacement of water management on site is required to mitigate any potential impacts to waterbodies. The proposal would not result in any likely significant effects on water quality and is therefore scoped out from further assessment.

- 16.4.21. Regarding changes to groundwater quality, accidental spillages of fuels, chemicals, or other contaminants during construction and decommissioning can result in localised contamination of the soils and groundwater underlying the site if materials are not stored and used in an environmentally safe manner. However, should any localised accidental spillages of fuel, oil, or chemicals occur on-site, the natural subsoil would provide adequate attenuation and filtration before reaching the groundwater. Given the distance between the Proposed Development and any Natura 2000 European site (i.e. all located more than 7 km from the site), no significant effects on European sites are likely to occur via groundwater pathways. The site is covered by hardstanding, and there will be no direct emissions to the ground from operational activities at the site. As such, the effects of the proposed development would not impact groundwater quality, yield, and/or flow paths or result in any likely significant effects.
- 16.4.22. The EPA IED licence requires that any air emissions from the proposed development do not cause air pollution or odour nuisance. There are no Natura 2000 sites within the ZoI of the Proposed Development. Emissions from the site would not likely result in significant effects on any Natura 2000 European site, given the intervening distance and dispersion that would occur. Therefore, the effects of emissions to air would not result in significant effects and are therefore scoped out from further assessment.
- 16.4.23. In-combination effects with other nearby developments would not result in significant impacts. Given the distance of the application site to Natura 2000 European sites and the existing waste facility, and the proposed development would operate within the parameters and regulatory oversight of an EPA-approved IED licence and management and monitoring systems, any potential cumulative impacts would be negligible.

16.4.24. Description of any likely changes to European sites:

16.4.25. The site is not located adjacent to or within a European site. As a result, there is no risk of habitat loss, fragmentation, or direct effects on Qualifying Interest (QI) species, either on-site or ex-situ. The existing environment includes urban drainage systems, and the site connects to the County Council's sewer line, which eventually leads to the Council's wastewater treatment plant off-site. Given the significant distance of the proposed development from any European site and the weak, indirect ecological pathways, the proposal would not result in any likely changes to the European sites that form part of the Natura 2000 network in the region.

16.4.26. **Mitigation Measures**

16.4.27. No specific mitigation measures have been required or relied upon to rule out likely significant effects on European sites in this screening exercise. While best practice construction methods, such as surface water management and pollution prevention, are referenced in the report, these measures are standard and not designed or required to avoid or reduce any impacts on a European site. Therefore, the conclusion that there are no likely significant effects on any European site has been reached independently of any such measures. No measures designed or intended to avoid or reduce any harmful effects of the project on a European site have been relied upon in this assessment.

16.4.28. Screening Determination

16.4.29. Based on the information provided and in light of the requirements of Section 177U of the Planning and Development Act 2000 (as amended), I have undertaken a screening for Appropriate Assessment (AA) for the proposed development. Given the nature and scale of the development on a fully serviced site, the intervening land uses, and the significant distance from the nearest Natura 2000 European sites, it is concluded that the proposed development is not likely to result in significant effects on any European site, either individually or in combination with other plans or projects. Furthermore, there are no direct pathways or hydrological connections from the proposed development site to any European sites, and no mitigation measures were relied upon to conclude that the project would be no likely significant effects. In light of these factors, it is determined that the project would not adversely impact the conservation

objectives of the identified European sites, and therefore, an Appropriate Assessment is not required.

16.5. Screening Determination

- 16.5.1. Having carried out Screening for Appropriate Assessment of the proposed, it is concluded that the project individually or in combination with other plans or projects would not be likely to give rise to significant effects on any of the above listed Natura 2000 European Sites, or any other European designated Natura 2000 site, in view of the sites' Conservation Objectives, and Appropriate Assessment is not therefore required. This determination is based on the following:
 - The proposed development would maintain the existing waste tonnage limits and operate within the parameters set out by the Environmental Protection Agency (EPA) under Industrial Emissions Licence W0192-03. Any changes resulting from the proposed development will require a review of this licence to ensure compliance with regulatory standards.
 - The facility is located within an established industrial park, which supports the suitability of the proposed development, ensuring minimal disruption to the surrounding environment.
 - The site is serviced by well-established infrastructure, including appropriate drainage systems and access to the County Council's sewer network.
 - There are no direct ecological or hydrological connections to Natura 2000 European sites, and the Appropriate Assessment Screening has demonstrated that no likely significant effects on Natura 2000 sites would result from the development, either individually or in combination with other projects.
 - The proposed development is of a scale and nature that would not introduce significant new risks.
 - Construction works would be temporary and short-term, limiting potential impacts from noise, vibration and air emissions.
 - Best practice construction methods would prevent contamination of surface water runoff.

- The balance between the increase in HRW treatment and the reduction of other waste streams ensures that the development would not overburden the existing facility or local infrastructure.
- Cumulative impacts with other existing or planned developments in the surrounding area would not be significant.

17.0 **RECOMMENDATION**

17.1. Having regard to the assessment set out above, I recommend that planning permission be granted for the proposed development, subject to the reasons, considerations, and conditions set out below.

18.0 **REASONS AND CONSIDERATIONS**

In coming to its decision, the Board had regard to the following:

- a) EU Legislation, including in particular:
 - EU Directive 2014/52/EU amending Directive 2011/92/EU (Environmental Impact Assessment (EIA) Directive), which outlines requirements for assessing the effects of certain public and private projects on the environment.
 - Directive 92/43/EEC (Habitats Directive) and Directive 79/409/EEC (Birds Directive), as amended by 2009/147/EC, which set out requirements for the conservation of natural habitats, wild fauna, and flora across the European Union.
- b) National Legislation, including in particular:
 - Planning and Development Act 2000 (as amended), specifically Sections 37A and 37E, which govern Strategic Infrastructure Development (SID) applications and Environmental Impact Assessments (EIA).
- c) National and Regional Policy and Guidance, including in particular:
 - National Planning Framework, which supports the sustainable development of industrial and commercial facilities within business parks and the sustainable management of waste.

- Climate Action Plan 2024, which promotes energy efficiency in industrial processes and waste management practices to align with national climate goals.
- Eastern and Midland Regional Spatial and Economic Strategy (RSES) 2019-2031, which encourages the sustainable management of industrial waste.

d) Local Planning Policy, including in particular:

 South Dublin County Development Plan 2022-2028, including its objectives for enterprise and employment zones (EE), which supports sustainable waste recovery infrastructure and the development of hazardous waste treatment capacity in accordance with the EU waste hierarchy and environmental protection standards.

e) Other Considerations:

- The nature, scale, and design of the proposed development, including the handling and processing of Healthcare Risk Waste (HRW), which is consistent with the site's existing industrial use.
- The Environmental Impact Assessment Report and the accompanying documentation submitted, which adequately assess the direct, indirect, and cumulative impacts of the proposed development.
- Submissions from Prescribed Bodies, including the Environmental Protection Agency (EPA), Health Service Executive (HSE), and Transport Infrastructure Ireland (TII), along with observations from local authorities, all of which informed the Board's decision-making process.
- Potential impacts on nearby European sites: The Appropriate Assessment screening concluded that the proposed development, either alone or in combination with other projects, would not have a significant adverse impact on any designated European Sites.

18.1.1. Proper Planning and Sustainable Development

18.1.2. The Board is satisfied that, subject to compliance with the conditions set out below, the proposed development complies with European, national, regional, and local planning and related policies. The use of the proposed development is consistent with the EE zoning objective of the site, which seeks to provide for enterprise and employment-related uses. The nature of the proposed development aligns with the objectives of the South Dublin County Development Plan 2022-2028, which promotes the enhancement of industrial infrastructure and supports sustainable waste management practices in compliance with environmental standards. The proposed development accords with the recommendations of the National Hazardous Waste Management Plan 2021–2027, which promotes the safe management, treatment, and recovery of hazardous healthcare waste. The proposed development aligns with the National Planning Framework (NPF), which emphasises the sustainable management of waste and is consistent with the National Waste Management Plan for a Circular Economy (2024-2030), which aims to develop additional capacity for hazardous waste treatment in accordance with the National Hazardous Waste Management Plan by ensuring adequate active treatment capacity. The proposed development would help reduce the need for HRW treatment elsewhere by providing a necessary hazardous waste management facility. The proposed development would, therefore, be in accordance with the proper planning and sustainable development of the area.

18.1.3. Environmental Impact Assessment

- 18.1.4. The Board completed an environmental impact assessment of the proposed development, taking into account the following:
 - The nature, scale, and extent of the proposed development, which includes modifications to an existing hazardous waste facility to accommodate Healthcare Risk Waste (HRW) without increasing the overall waste intake beyond the permitted capacity.
 - The Environmental Impact Assessment Report, which comprehensively examines potential impacts on human health, biodiversity, air quality, water resources, and traffic.
 - Submission reports from Prescribed Bodies and the Local Authority, which provided relevant environmental and planning considerations.
 - The Inspector's report, which evaluated the environmental and operational impacts, ensuring that all significant issues were addressed.

18.1.5. 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 adequately describes the direct, indirect, and cumulative impacts 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.

18.1.5.1. Reasoned Conclusion of the Significant Effects:

- 18.1.6. The Board considered that the main significant effects, both positive and negative, of the proposed development on the environment are:
 - Positive indirect impacts on population and human health would include increased capacity for managing healthcare risk waste, supporting Ireland's indigenous waste treatment capabilities, and reducing dependency on waste exportation. The development would also generate employment during both the construction and operational phases.
 - In relation to biodiversity, the proximity to the Griffeen River requires careful management. Mitigation measures, including surface water drainage systems and appropriate pollution controls, would ensure that the risk to local ecosystems, particularly regarding water quality, is minimal.
 - In relation to water quality, potential short-term impacts during construction, such as runoff and chemical spills, would be mitigated through the implementation of a Construction Environmental Management Plan (CEMP) and adherence to best practice water protection measures.
 - In relation to material assets, the development would enhance Ireland's infrastructure for hazardous waste treatment, improving local waste management capacities. Modifications to the existing facility, including new storage enclosures and plant installations, would support operational efficiency without negatively impacting surrounding land uses.
 - In relation to noise and visual impact, the design and layout of the proposed modifications, including the addition of an air emissions stack and new storage

structures, are compatible with the industrial setting of Greenogue Business Park. Noise levels would remain within acceptable limits due to the use of enclosed operations and noise mitigation measures, minimising disturbance to nearby receptors.

- In relation to air quality, the proposed installation of air emissions control systems would ensure that potential emissions remain within regulated limits, safeguarding the local environment and air quality standards.
- 18.1.7. The Board completed an environmental impact assessment in relation to the proposed development and concluded that subject to the implementation of the proposed mitigation measures, including proposed monitoring as appropriate, and subject to compliance with the conditions set out below, the effects on the environment of the proposed development, by itself and in combination with other development in the vicinity, would be acceptable. In doing so, the Board adopted the report and conclusions set out in the Inspector's report. The Board is satisfied that this reasoned conclusion is up to date at the time of making this decision.

18.1.8. Screening for Appropriate Assessment:

18.1.9. The Board noted that the proposed development is not directly connected with or necessary to the management of any European Site. In completing the screening for Appropriate Assessment, the Board accepted and adopted the screening assessment and conclusions reached in the Inspector's report. This assessment identified the relevant European sites that could potentially be affected by the proposed development and evaluated the potential for likely significant effects, either individually or in combination with other plans or projects, on these sites in view of their Conservation Objectives. The Board is satisfied that the proposed development, either alone or in combination with other plans or projects, would not be likely to have a significant effect on any European site, in view of the site's Conservation Objectives.

19.0 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.
	Where such conditions require details to be agreed with the planning
	authority, the developer shall agree such details in writing with the planning
	authority prior to commencement of development and the development
	shall be carried out and completed in accordance with the agreed
	particulars.
	Reason: In the interest of clarity.
2.	Apart from any modifications specifically authorised by this permission, the
	development shall comply with the relevant conditions of the previous
	grants of planning permission on this site under PA Ref. SD02A/0313 and
	ABP Ref. PL 06S.201534, PA Ref. SD07A/0260, PA Ref. SD09A/0050, and
	PA Ref. SD22A/0326, unless the conditions set out hereunder specify
	otherwise.
	Reason: In the interest of clarity and to ensure that the overall
	Reason: In the interest of clarity and to ensure that the overall development is carried out in accordance with the previous permission(s).
3.	
3.	development is carried out in accordance with the previous permission(s).
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction Environmental Management Plan (CEMP), Construction Traffic
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP), Waste Management Plan, SuDS/Drainage
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP), Waste Management Plan, SuDS/Drainage Maintenance Checklist, Odour Management Plan, Emergency Response
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP), Waste Management Plan, SuDS/Drainage Maintenance Checklist, Odour Management Plan, Emergency Response Plan (ERP), Resource and Waste Management Plan (RWMP),
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP), Waste Management Plan, SuDS/Drainage Maintenance Checklist, Odour Management Plan, Emergency Response Plan (ERP), Resource and Waste Management Plan (RWMP), Decommissioning Plan, and the Closure, Restoration, and Aftercare
3.	development is carried out in accordance with the previous permission(s). Prior to the commencement of development, the applicant shall submit for the written agreement of the planning authority all detailed mitigation and monitoring plans as outlined in the Environmental Impact Assessment Report (EIAR). These shall include, but not be limited to, the Construction Environmental Management Plan (CEMP), Construction Traffic Management Plan (CTMP), Waste Management Plan, SuDS/Drainage Maintenance Checklist, Odour Management Plan, Emergency Response Plan (ERP), Resource and Waste Management Plan (RWMP), Decommissioning Plan, and the Closure, Restoration, and Aftercare Management Plan (CRAMP). All agreed plans shall be implemented in full

4.	Water supply and drainage arrangements, including the attenuation and
	disposal of surface water, shall comply with the requirements of Irish Water
	and the planning authority for such works and services as appropriate.
	Reason: In the interest of public health and to ensure a proper standard of
	development.
5.	(a) No storage, either permanent or temporary of any materials shall occur
	within the site which is outside of any structure shown on the Proposed Site
	Layout Plan (Drawing no. E000113-RPS-DG-XX-D-T-0010 RevC01)
	submitted with the application.
	(b) Any waste vehicles parked on the apron of the facility shall not contain
	waste. All organic materials shall be transported to and from the site in
	sealed containers. No materials that would attract birds shall be present on
	the open areas of the site at any time.
	Reason: In the interest of public health.
6.	The facility shall not be available for use directly by members of the general
_	
	public.
7.	public.
	public. Reason: In the interest of proper planning and development of the area.
	public.Reason: In the interest of proper planning and development of the area.The developer shall pay to the planning authority a financial contribution in
	 public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the
	 public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by
	 public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the
	 public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning
	public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid
	public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as
	public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable
	public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the
	public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed upon between the
	public. Reason: In the interest of proper planning and development of the area. The developer shall pay to the planning authority a financial contribution in respect of public infrastructure and facilities benefiting development in the area of the planning authority that is provided or intended to be provided by or on behalf of the authority in accordance with the terms of the Development Contribution Scheme made under section 48 of the Planning and Development Act 2000, as amended. The contribution shall be paid prior to the commencement of development or in such phased payments as the planning authority may facilitate and shall be subject to any applicable indexation provisions of the Scheme at the time of payment. Details of the application of the terms of the Scheme shall be agreed upon between the planning authority and the developer, or, in default of such agreement, the

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

I confirm that this report represents my professional planning assessment, judgement and opinion on the matter assigned to me and that no person has influenced or sought to influence, directly or indirectly, the exercise of my professional judgment in an improper or inappropriate way.

Brendan Coyne Planning Inspector

10th December 2024