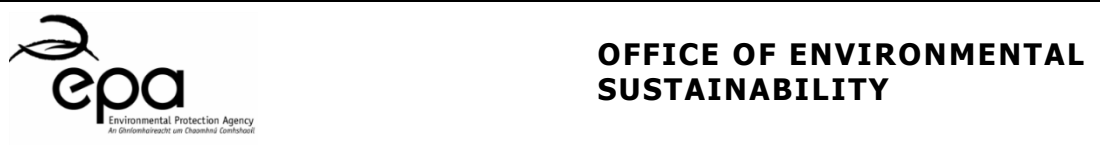


This Report has been cleared for submission to the Director by Programme Manager Warren Phelan

Signed:  **Date: 14th December 2023**



INSPECTOR'S REPORT ON AN INDUSTRIAL EMISSIONS LICENCE REVIEW, LICENCE REGISTER NUMBER W0261-03

TO: DIRECTOR

FROM: JENNIFER COPE

DATE: 14TH DECEMBER 2023

Applicant: Starrus Eco Holdings Limited
CRO number: 527552
Location/address: Cappagh Road, Finglas, Dublin 11, Dublin,
Application date: 09 November 2021

Classes of Activity (under EPA Act 1992 as amended): 11.4 (b)(ii) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, (other than activities to which the Urban Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): pre-treatment of waste for incineration or co-incineration.

11.1 The recovery or disposal of waste in a facility, within the meaning of the Act of 1996, which facility is connected or associated with another activity specified in this Schedule in respect of which a licence or revised licence under Part IV is in force or in respect of which a licence under the said Part is or will be required.

Category/ies of activity under IED (2010/75/EU): 5.3 (b)(ii) Recovery, or a mix of recovery and disposal, of non-hazardous waste with a capacity exceeding 75 tonnes per day involving one or more of the following activities, and excluding activities covered by Directive 91/271/EEC: pre-treatment of waste for incineration or co-incineration.

Main CID: Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) for Waste Treatment, under Directive 2010/75/EU of the European Parliament and of the Council.

All relevant CIDs, BREF documents and National BAT notes are listed in the appendix of this report.

Activity description/background: The operation and management of a non-hazardous materials recovery and waste transfer installation, that proposes to increase the annual waste intake from 250,000 to 450,000 tonnes per annum.

Additional information received: Yes (06/12/2021, 20/05/2022, 26/07/2022, 20/01/2023, 01/08/2023, 14/08/2023, 25/08/2023)

No. of submissions received: 2	
Environmental Impact Assessment required: Yes	Stage 2 Appropriate Assessment required: No
Site visit: 21/09/2023	Site notice check: 27/12/2021

1. Introduction

Nurendale Limited trading as Panda Waste Services was first granted a waste licence on 31 August 2010, Reg. No. W0261-01, for the operation of a non-hazardous materials recovery and waste transfer installation at Cappagh Road, Finglas, Dublin 11. A revised Industrial Emissions Licence, Reg. No. W0261-02, was granted on 11 February 2015. The licence was transferred to Starrus Eco Holdings Ltd (hereafter referred to as SEHL) on 22 June 2018.

The licensee was granted a Technical Amendment A on 22 January 2020 amending the hours of operation in line with planning permission. A Clerical Amendment was granted on 25 February 2020 to correct clerical errors noted in Technical Amendment A.

The current licence (Reg. No. W0261-02) is for the recovery, or a mix of recovery and disposal, of non-hazardous waste up to a limit of 250,000 tonnes per annum (tpa). The licence boundary encompasses 2.5 hectares, and there are approximately 30 full time employees based at the installation.

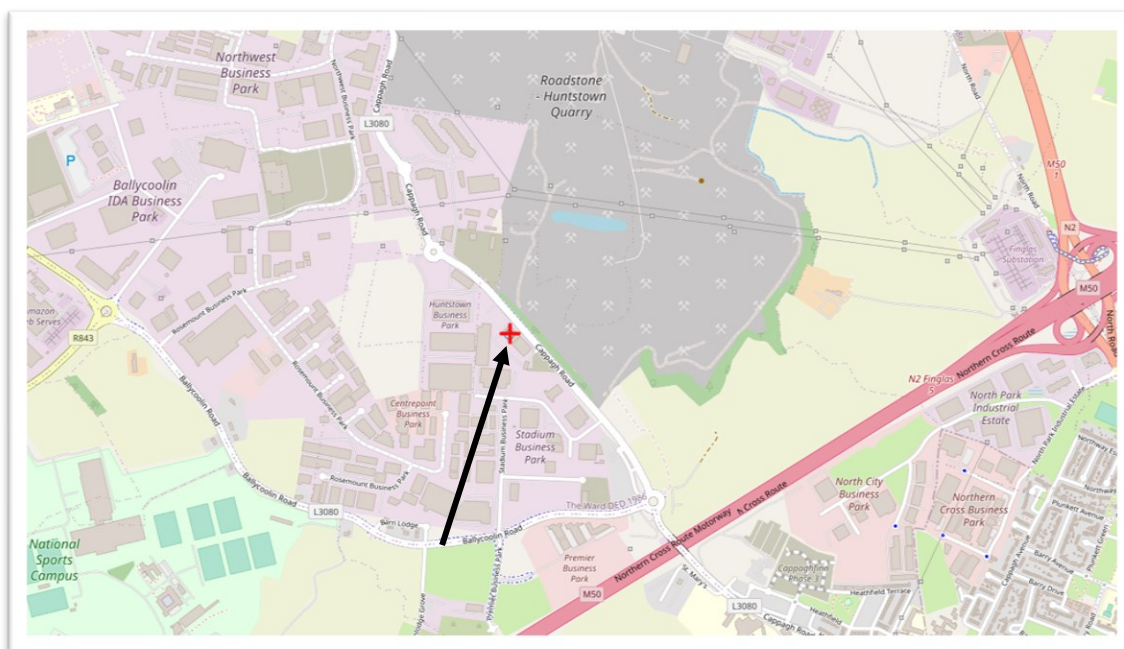
SEHL has applied to the Agency for an Industrial Emissions licence review, to increase the annual waste intake from 250,000 to 450,000 tpa (an increase of 80%).

2. Description of activity

SEHL is located on Cappagh Road, approximately 2.5 km southwest of Dublin airport in an area that has been extensively developed for commercial, industrial and mineral abstraction uses (see Figure 2.1).

The site is surrounded by commercial/industrial business parks on the north, south and southwest boundaries and Huntstown Quarry on the east and northeast boundaries. The site adjoining the installation on the northern boundary is owned by Starrus Eco Holdings Ltd and is leased to a haulage company. There are 10 residential properties within 500m southeast of the installation. The waste acceptance hours are between 06:00 hrs to 23:00 hrs Monday to Saturday inclusive. The installation operates 24 hours a day, 7 days a week, 365 days a year.

Figure 2.1 SEHL, Cappagh Road, Dublin – Site Location Map (Source for Map: EPA Maps¹).



Operation Description

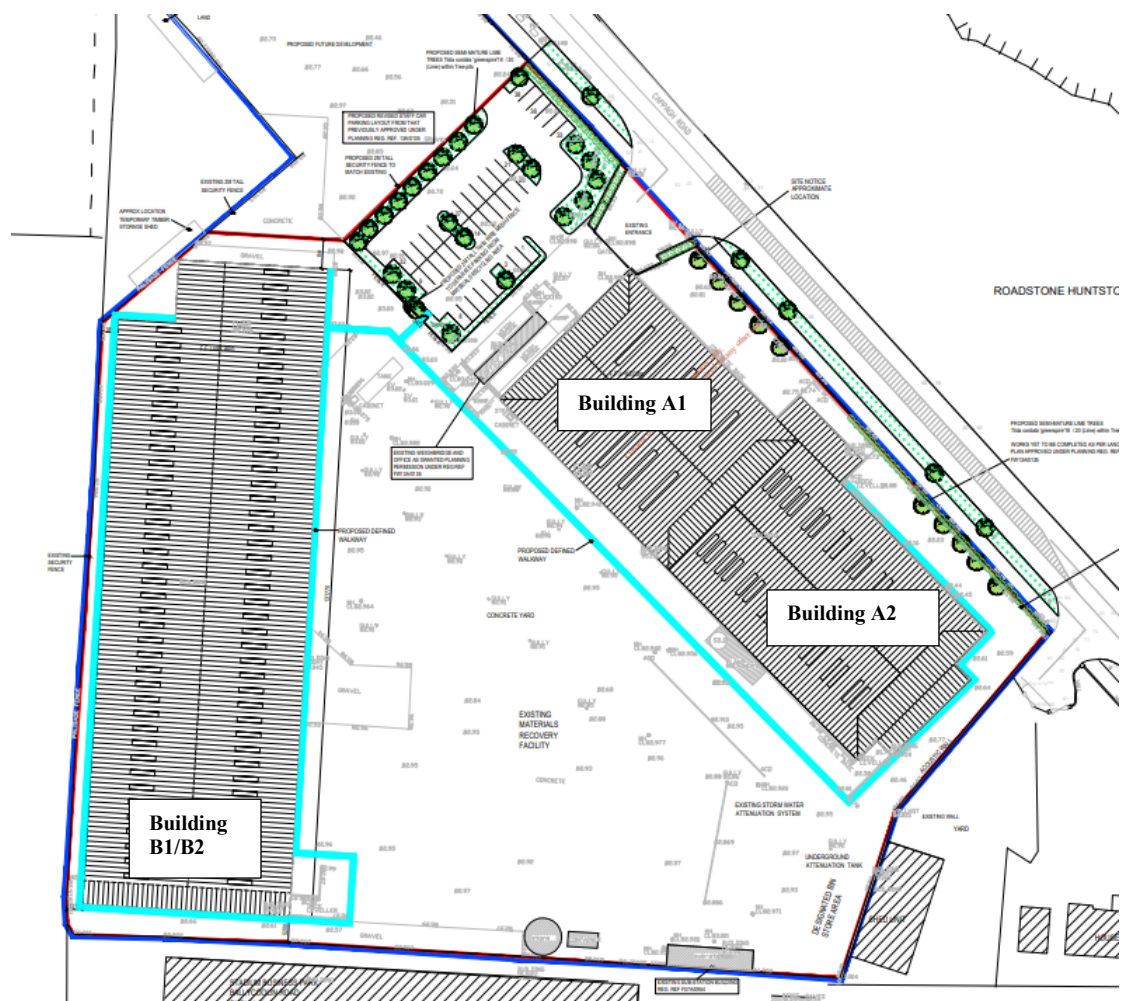
The licence boundary comprises of three waste handling buildings, (see Figure 2.2), an electrical substation, two weighbridges, an office and associated control rooms, staff amenity building, fuel tanks and open paved yards. The plant and equipment used at the installation include balers, shredders, eddy current separators, magnets, optical sorter, density separators, forklifts, mechanical grabs and loading shovels.

The installation accepts and processes household residual waste and food waste, commercial and industrial (C&I) waste, and mixed dry recyclables waste including clean paper and cardboard (household and commercial). Currently construction and demolition (C&D) waste is not accepted at the installation. However, the current licence (W0261-02) provides for the acceptance and processing of C&D waste at the installation and the licensee requests that this is maintained in the revised licence as it may be accepted at the installation in the future. Condition 3 of the RD specifies requirements for the recovery of C&D.

Source separated waste such as plastic and newspapers are baled and stored in Building A1 before being sent off-site. Brown bin food waste and mixed dry recyclables are accepted, bulked up and stored in a section of Building A2 and sent to other waste management installations for further treatment. This section of Building A2 is fitted with an odour control system.

¹ <https://gis.epa.ie/EPAMaps>

Figure 2.2 SEHL, Cappagh Road, Dublin – Site layout (Source: IEL Review Application).



The licensee proposed to accept and depackage out-of-date packaged food from commercial operators as part of the review application. It was proposed that this waste would be depackaged in Building A2 and the contents sent for biological treatment in other treatment plants after the packaging is removed. The out-of-date food depackaging unit was installed in Building A2. For commercial reasons the operation of the unit has ceased and it has been decommissioned, however the licensee states that the depackaging unit may recommence in the future. Out-of-date packaged food from commercial operators is currently accepted for transfer only and sent directly to biological treatment plants. It is noted that this activity is authorised by the Department of Agriculture, Food and Marine under the Animal By-Products Regulations. Condition 1 of the RD requires the licensee to maintain evidence, for inspection by the Agency, that it has the required consent of the Department of Agriculture, Food and the Marine to handle animal by-products at the installation if carrying out transfer or depackaging of out-of-date packaged food.

Processed mixed solid wastes are accepted from other waste pre-treatment installations and these are treated in building B1/B2 to remove recyclables such as steel, aluminium, wood, timber. These materials are bulked up to facilitate transportation to other authorised facilities for further treatment. The residues are

then further processed to produce SRF. The SRF is sent to cement kilns where it is used as a replacement for fossil fuels.

The main emissions from the installation are dust, odour and noise emissions to air and storm water to surface water.

Scope of Review

The licensee proposes to increase the permitted maximum annual quantity of waste to be accepted at the installation from 250,000 to 450,000 tpa (an 80% increase). The licensee proposes to continue to accept the existing waste streams outlined and requests the inclusion of the depackaging line if required in the future. The licensee also requests that the acceptance and processing of C&D waste at the installation is maintained in the revised licence as it may be accepted at the installation in the future.

There are no physical interventions, alterations or changes to the operational processes proposed and the licensee states that the maximum accepted waste totals are based on the capacities of the processing lines. An increase in the site boundary was noted on the application site boundary map and this was confirmed as an area for car parking during the site visit. The revised drawing reference is included in Condition 1 of the RD. The licensee has not proposed any increase in emission limit values to emissions to air, water or noise.

3. Planning Status

A number of planning applications have been made by the licensee for the area within the installation boundary since 2015. Details of these relevant planning applications and permissions have been provided in the application form.

The licensee has submitted the Environmental Impact Assessment Report (EIAR) associated with planning permission ABP-310332-21. Having reviewed the planner's reports for previous planning permission(s), it is considered that the EIAR submitted with the licence application, along with the licence application and further information received, contains adequate information to inform the Agency's assessment and the EIS relating to previous planning permissions is not required for the Agency's assessment.

The Agency has had regard to the reasoned conclusions reached by An Bord Pleanála in undertaking its environmental impact assessment of the activity.

4. EIA Screening

In accordance with Section 83(2A) of the Environmental Protection Agency Act 1992, as amended (hereafter referred to as the EPA Act), the Agency must ensure that before a licence or revised licence is granted, that the application is made subject to an environmental impact assessment (EIA), where the activity meets the criteria outlined in Section 83(2A)(b) and 83(2A)(c).

In accordance with the EIA Screening Determination, the Agency has determined that the activity is likely to have a significant effect on the environment, and accordingly is carrying out an assessment for the purposes of EIA.

An EIAR was submitted to the Agency as part of the application on 9 November 2021. This is dealt with in the EIA Section later in this report.

5. Best Available Techniques

BAT for the installation was assessed against the BAT conclusions contained in the Commission Implementing Decision (EU) 2018/1147 of 10 August 2018 establishing best available techniques (BAT) for Waste Treatment, under Directive 2010/75/EU of the European Parliament and of the Council, and in any other relevant BREF documents specified in the appendices of this report. A detailed BAT assessment was carried out by the licensee and is included in the application form.

Additional conditions to be incorporated into the RD to address BAT Conclusions are detailed in Appendix 5 of this report. Any relevant BAT-AELs are specified in the emissions sections of this report.

I consider that the applicable BAT Conclusion requirements are addressed through the technologies and techniques as described in the application, as well as the conditions and limits specified in the RD.

6. Emissions

6.1 Emissions to Air

This section addresses emissions to air from the installation and the environmental impact of those emissions.

6.1.1 Channelled Emissions to Air

There is one main channelled emission point at the installation, relating to the odour control abatement system. See section 6.1.4 Odour for further details.

6.1.2 Dust

All waste treatment processes with the potential to cause dust nuisance will continue to be carried out in enclosed buildings. Dust generation is associated mainly with vehicle movements within the installation during dry weather. The proposed development will increase the annual waste intake from 250,000 to 450,000 tonnes per annum. This will result in an 80% increase in the number of heavy goods vehicles (HGV) accessing the installation.

Dust monitoring at the installation was undertaken by the licensee for the periods 12/01/22 to 11/02/2022 and 03/05/22 to 02/06/22 as per the licensee dust monitoring returns available on the EPA website. The dust monitoring was carried out to ensure compliance with the requirement for biannual monitoring only at AD1 and AD2 (W0261-02) as no emission limit value is specified in the current licence. The results show that the total deposition dust levels measured at the monitoring locations are well below the 350 mg/m²/day limit value that is now applied in the RD. The EPA received one dust complaint in 2015 and one dust complaint in 2018. There has been no history of dust complaints in recent years at the installation.

The RD includes the following to control the potential impact of additional waste acceptance on dust emissions to air:

- All waste processing and storage is to take place inside buildings.
- Dust curtains (or equivalent approved by the Agency) shall be maintained on the entry/exit points and all doors in units shall be kept closed when not in use for vehicle movement.

- Unless otherwise approved by the Agency, fast action roller shutter doors installed on all entry/exit points used by waste vehicles.
- All vehicles delivering waste to and removing waste and materials from the installation are appropriately covered.
- In dry weather, site roads and other areas used by vehicles to be sprayed with water to minimise dust emissions.
- Condition 6 of the RD requires the licensee to prepare, maintain and implement a programme for the identification and reduction of diffuse emissions using an appropriate combination of the techniques listed in BAT 14 of CID 2018/1147.
- The RD includes a limit for dust deposition (*Schedule B.5*) and requires dust deposition monitoring to be carried out on a biannual basis.

6.1.3 Odour

The main sources of odour are from food waste (brown bin) and mixed dry recyclables that contain odorous materials and animal by-product food waste. All waste treatment processes with the potential to cause odour nuisance will continue to be carried out in enclosed buildings. Rapid action doors are fitted to the vehicle access points. Building A2 is dedicated to the acceptance and processing of odorous waste. Building A2 is fitted with an odour control unit (OCU) designed to maintain the building under negative pressure and collect and treat the air using an activated carbon filter.

Air is drawn from the building using one extraction fan and a system of roof mounted ducts provided with grills. The air passes through a jet pulse dust filter before entering the carbon unit. A damper is fitted to the inlet of the unit to allow the air flow to be balanced. The treated air vents to atmosphere via a single 14m high stack. The model states that the odour control system will achieve a maximum volumetric air flow of 25,000 m³/hour and a maximum exhaust odour threshold concentration of less than 1,000 odour units (OuE/m³). These measures will serve to minimise the escape of odour emissions.

Previous monitoring of emission to air from emission point A2-1, carried out by the licensee, has shown that the licensee can comply with the emission limit values required in the RD.

The EPA has received two odour complaints in 2015 and two odour complaints in 2018, there has been no history of odour complaints in recent years at the installation. Odour emissions were modelled for odour impact at 49 receptors in the air dispersion model submitted by the licensee. The AERMOD prime model was used, and the licensee followed the methodology outlined in the Agency Guidance Note AG4². The table below gives details of the predicted impact of odour from the main channelled emission to air at the worst-case sensitive receptor.

Main channelled emissions impact						
Parameter	Averaging Period	Background concentration (OuE/m ³)	Process contribution to PEC (OuE/m ³)	Predicted Environmental Concentration (PEC) (OuE/m ³)	PEC as % of Air Quality Standard	Air Quality Guidelines (OuE/m ³) <small>Note 1</small>
Odour	1 hour (98%ile)	0	0.53	0.53	35 %	1.5

² Air Dispersion Modelling from industrial Installations Guidance Note (AG4), EPA 2019.

The odour emission concentration chosen for modelling, of 1,000 OU_E/m³, is at the upper limit end of the range of 200-1,000 OU_E/m³ relating to biological treatment. The licensee proposed the use of the ambient standard of 1.5 OU_E/m³, which according to Agency Guidance Note AG4, relates to an installation which would be considered to have a high level of relative odour offensiveness. The assessment took account of forty-nine sensitive receptors within the vicinity of the installation. The model predicted the highest ground level odour impact of 0.53 OU_E/m³ at the receptor R20, the commercial building 14 m south of the installation. This result was below the threshold of 1.5 OU_E/m³. The predicted odour results at all the other forty-nine sensitive receptors was <0.6 OU_E/m³. There is no emission limit value for odour specified in the existing licence. Although the installation is not carrying out 'biological treatment', it is considered appropriate to apply the upper end of range for odour (BAT AEL range is 200-1000 OU_Em³) specified in the waste treatment CID (2018/1147) for biological treatment. Based on the odour model, an emission limit value of 25,000 m³/hour for flow is applied in the RD. This is a reduction from the exiting permitted flow of 45,937 m³/hour. The modelled odour emission concentration of 1,000 OU_E/m³ is also specified in the RD.

The model has predicted that all sensitive receptors in the vicinity of the installation will perceive an odour concentration less than 1.50 OU_E/m³ at the 98th percentile of hourly averages.

Odour management systems currently in place at the installation include:

- Fast Acting doors that remained closed, except for vehicle movements into and out of the buildings;
- No waste transport vehicle will be off loaded or loaded until all doors are fully closed;
- The floor of each building is cleaned daily using an in house sweeper;
- The waste collection vehicles, including the hoppers at the back of the vehicle are regularly cleaned;
- Daily odour checks;
- Fast turnaround times for wastes to prevent the accumulation of large volumes of odour generating waste at the installation;

The RD specifies the following odour control conditions:

- Condition 3 of the RD requires the licensee to provide adequate measures for the control of odours from the installation, including fast action roller shutter doors, all buildings for the storage or treatment of residual, food, odour-forming waste to be maintained at negative air pressure with ventilated gases being subject to treatment as necessary or as may be specified by the Agency.
- Condition 5 of the RD prohibits the licensee from allowing a nuisance to be caused by odour emissions from the installation.
- Condition 6 of the RD requires:
 - All odour forming waste, other than baled and wrapped waste to be removed from the installation within 48 hours of its arrival or generation on site, except at Public Holiday weekends. At Public Holiday weekends, this waste shall be removed within 72 hours of its arrival or generation on site.

- The floors of the waste transfer station and treatment buildings to be cleaned on a weekly basis and on a daily basis where residual food and other odour-forming waste is handled.
- An odour survey of the site operations as required by the Agency in accordance with EPA Air Guidance Note 5.
- The licensee to prepare, maintain and implement, to the satisfaction of the Agency, an Odour Management Plan, in line with the elements listed in BAT 12 of CID 2018/1147.
- Condition 8 requires that:
 - All waste reception, storage and processing shall be carried out inside a building. No waste shall be stored or handled outdoors.
 - Bio-waste shall be stored or held only in the designated area at the installation.
 - The wrapping of baled municipal waste, RDF, SRF and other waste shall be carried out in such a manner that the emission of odour from the wrapped bales is prevented.
 - Requires the maintenance and implementation of a waste and materials storage plan which limits the quantity of waste stored at the installation.
- *Schedule B.1 Emissions to Air* of the RD specifies an emission limit value for odour and volumetric air flow for emission point A2-1.

6.2 Emissions to Water/Ground/Sewer

6.2.1 Emissions to Surface Waters

There are no direct process discharges to surface water from the installation. Floor washdown water and drainage from waste storage and quarantine areas is collected and stored in two underground storage tanks (each 13.5 m³). The tanks are emptied via road tankers and sent for off-site disposal to an Uisce Éireann waste water treatment plant (WWTP). Condition 3 requires that the available storage capacity of the tanks is checked on a weekly basis and Condition 3 also requires high liquid level alarms on all storage tanks.

6.2.2 Emissions to ground/groundwater

There are no emissions to ground/groundwater from the installation.

6.2.3 Emissions to Sewer

There are no direct process discharges to sewer from the installation.

6.3 Storm water discharges

Rainwater run-off from building roofs is collected and diverted to a rainwater harvesting system for use in sanitary facilities and for dust suppression in the outdoor yard areas. Surplus rainwater run-off from site buildings and paved open yard areas is collected in the storm water drainage system and directed to an attenuation tank (1,400m³). The tank provides temporary storage before discharging at emission point

SW-1 to Stadium Business Park storm water sewer. The proposed development will not result in any change to the volume of rainwater run-off generated on site.

The following table gives details of the storm water discharge from SW-1; the sources of potential contamination of the discharge, the type of on-site abatement as well as details of the receiving water:

Stormwater discharge point details					
Emission Reference	Monitored parameters (monitoring frequency)	Abatement	Drainage areas	Discharging to	Trigger levels established (Y/N)
<i>SW-1</i>	<i>Visual (daily); pH, conductivity, suspended solids (daily); total petroleum hydrocarbons & mineral oil (quarterly)</i>	<i>Class I full retention oil interceptor (in place)</i>	<i>Buildings, open yard areas, site roads and walkways, car parks</i>	<i>Tolka River via Stadium Business Park storm water sewer</i>	<i>Y</i>
Automatic diversion in place:	<i>No. There is a shut off valve on the attenuation tank that can be closed in the event of an incident with the potential to contaminate the rainwater run-off.</i>				

Storm water from the business park sewer discharges to the Tolka river (IE_EA_09T011000). The status of the river is poor and at risk of meeting the Water Framework Directive objective of 'good' surface water status by 2027. Trigger values are in place but warning levels and action levels are high and are required to be reviewed by the licensee within three months of the date of grant of the licence in accordance with Condition 6.

The RD requires the licensee to maintain the storm water drainage system. The RD also requires that the storm water discharge is visually inspected daily and monitored for a number of parameters in accordance with *Schedule C.2.3 Monitoring of Storm Water Emissions*.

The RD contains standard conditions in relation to the storage and management of materials and wastes. The RD also requires that accident and emergency response procedures are put in place. The controls pertaining to accidents and emergencies are addressed in Prevention of Accidents section later in this report.

6.4 Noise

The installation is located adjacent to the busy Cappagh Road and is approximately 2.5 km southwest of Dublin airport in an area that has been extensively developed for commercial, industrial use and mineral abstraction. The buildings are enclosed with all the waste activities taking place inside the buildings. The main sources of noise at the installation are fixed/mobile plant, vehicular movements, and fans on the odour control system. The proposed increase in waste to be accepted at the installation will not result in any additional noise sources or changes to noise emissions from the installation.

As part of the existing licence, a noise monitoring survey is carried out annually at individual installation boundary locations, as well as at two noise sensitive locations outside the site boundary. Historical data from these surveys indicate that the installation is consistently compliant with the licence limits. There has been no history of noise complaints in recent years at the installation. The requirement to carry out an annual noise survey has been maintained in the RD. The licensee is required to prepare, maintain and implement a noise management plan.

Noise conditions and emission limit values, which apply at the noise sensitive locations, have been included in the RD.

7. Waste generation

The welfare facilities and office generate small amounts of food waste, plastic and paper which are collected and processed on-site. The licensee has a waste segregation policy for the canteen/office waste to maximise recycling and minimise waste disposal.

The RD requires that all waste generated on site is transported and recovered/disposed off-site in accordance with national and European legislation.

In accordance with the hierarchy specified in the IED, Condition 8 requires that waste generated at the site will, in order of priority, be minimised, be prepared for re-use, recycling, recovery or disposal.

8. Energy Efficiency and Resource Use

The operation of the installation involves the consumption of fuel and electricity. The estimated quantities used are given below.

Resource	Quantity per annum
Electricity	7,216 MWh
Diesel (suction and jetting truck)	2 tonnes
Green diesel (mobile plant)	120 tonnes
Kerosene (power washer)	0.8 tonnes
Groundwater abstraction	6,250 m ³
Public water supply	200 m ³

The licensee states that the diesel fuelled plant engines are only turned on when wastes are being processed and the licensee states it has a policy of not allowing mobile plant engine idling.

In the application of BAT, Condition 7 of the licence provides for the efficient use of resources and energy in all site operations. It requires an energy audit to be carried as required by the Agency and the recommendations of the audit to be incorporated into the Schedule of Environmental Objectives and Targets as outlined in Condition 2 of the licence.

Groundwater is abstracted from one groundwater well for use at the installation. The RD specifies that daily records of water abstraction from the on-site well shall be kept and should usage exceed 25m³ in any 24 hour period, the abstraction shall be registered with the Agency as per the *European Union (Water Policy) (Abstractions Registration) Regulations 2018* S.I. 261 of 2018).

9. Prevention of Accidents

A certain amount of accident risk is associated with the licensable activity. The table below specifies the potential accidents/emergencies relevant to the activity and outlines the measures for the prevention and limitation of environmental consequences.

Potential accidents & measures for prevention/limitation of consequences	
Potential for an accident or hazardous/ emergency situation to arise from activities at the installation	<ul style="list-style-type: none"> • Potential for fire due to large quantities of waste stored at the installation, increased levels of processing resulting in dryer waste and the widespread use of lithium-ion batteries. • Potential for the release of contaminated firewater, diesel/oil, spillages of materials to the environment. • Malfunction of plant/equipment leading to spills or emissions to air/water.
Preventative/Mitigation measures to reduce the likelihood of accidents and mitigate the effects of the consequences of an accident at the installation	<ul style="list-style-type: none"> • Fire detection and protection system in Building B1 which includes high resolution focus thermal imaging cameras combined with remote controlled foam suppression cannons. • A 150 mm ring main has been installed and is connected to the Uisce Eireann mains on Cappagh Road. • Three fire hydrants. • A reel type fire hose is located at each door in the buildings and fire extinguishers provided. • Diesel and oil stored in a fully bunded area. • All storm water drainage from the yards passes through an oil interceptor and into an attenuation tank. • Shut off valve on the storm water discharge. • Maintenance of equipment.
Additional measures provided for in the RD	<ul style="list-style-type: none"> • Limit on the waste types and quantities accepted at the installation. (Schedule A). • Waste and material storage plan (Condition 8). • Accident prevention and emergency response requirements (Condition 9). • Integrity of tanks to be assessed every 3 years and maintenance carried out as required (Condition 6). • Storm water discharges to be visually examined (Condition 6). • Firewater retention risk assessment (Condition 3). • Fire Risk Assessment (Condition 9).

Condition 9 of the RD requires procedures to be put in place to prevent accidents with a possible impact on the environment and to respond to emergencies to minimise the impact on the environment.

In accordance with Agency Environmental Liabilities guidance³, a Environmental Liabilities Risk assessment (ELRA) was submitted to the Agency. (see Fit and Proper Person Assessment section for further details).

³ Guidance on Assessing and Costing Environmental Liabilities (EPA 2014)

10. Cessation of Activity

A certain amount of environmental risk is associated with the cessation of any licensable activity (site closure). For this installation, the main considerations relate to buildings, wastes, plant and equipment. Condition 10 of the RD requires the proper closure of the activity with the aim of protecting the environment.

In accordance with Agency Environmental Liabilities guidance, a costed Closure, Restoration and Aftercare Management Plan (CRAMP) was submitted to the Agency. (See Fit and Proper Person Assessment section for further details).

Condition 10 of the RD requires the proper closure of the activity with the aim of protecting the environment.

Baseline Report

Where an activity involves the use, production or release of Relevant Hazardous Substances, and having regard to the possibility of soil and groundwater contamination at the site of the installation, the IED requires operators to prepare a baseline report.

The baseline report is a tool that permits, as far as possible, a quantified comparison between the state of the site described in that report and the state of the site upon definitive cessation of activities, in order to ascertain whether a significant increase in pollution of soil or groundwater has taken place.

A baseline report was submitted with the revised licence application (Reg. No. W0261-02) and was assessed as part of the licence application (Reg No. W0261-02).

Control Measures

Condition 10 of the RD requires the licensee to affect the proper closure of the activity to the satisfaction of the Agency by decommissioning, rendering safe or removing for disposal/recovery, buildings, plant or equipment, or any waste, materials or substances that may result in environmental pollution.

The RD maintains the requirement for groundwater monitoring for relevant hazardous substances to be carried out annually, and soil monitoring to be carried out every 10 years as per the Baseline report and any other monitoring location(s) approved by the Agency. The substances for monitoring shall be identified by undertaking a risk-based assessment in accordance with the requirements of the IED.

11. Fit & Proper Person

Technical Ability

The licensee has provided details of the qualifications, technical knowledge and experience of key personnel. It is considered that the licensee has demonstrated the technical knowledge required.

Legal Standing

Neither the licensee nor any relevant person has relevant convictions under the EPA Act / the Waste Management Act, or under any other relevant environmental legislation.

ELRA, CRAMP and Financial Provision

The proposed installation was assessed for the requirements of Environmental Liabilities Risk Assessment (ELRA), Closure, Restoration and Aftercare Management Plan (CRAMP) and Financial Provision (FP), in accordance with Agency guidance. Under this assessment it has been determined that ELRA, CRAMP and FP were required.

Under the existing licence (W0261-02), the licensee commissioned a CRAMP and an ELRA and have financial provision in place. The OEE confirmed that the installation is compliant with its requirements for CRAMP, ELRA and FP.

Fit & Proper Conclusion

It is my view, that the licensee can be deemed a Fit & Proper Person for the purpose of this review.

12. Submissions

While the main points raised in the submissions are briefly summarised in the table below, the original submission should be referred to at all times for greater detail.

The issues raised in the submissions are noted and addressed in this Inspector’s Report and the submissions were taken into consideration during the preparation of the Recommended Determination (RD).

Submissions			
1.	<p>Name & Position: Trish Smullen</p>	<p>Organisation: Geological Survey of Ireland (GSI).</p>	<p>Date received: 07/12/2021</p>
	<p>Issues raised: The GSI advised that it <i>“has no specific comment or observation to make on this matter at this time.”</i></p>		
	<p>Agency response: The content of the submission is noted.</p>		
2.	<p>Name & Position: Lisa Fitzpatrick, Principal Environmental Health Officer</p>	<p>Organisation: Health Service Executive, Furst Floor, Unit 4 & 5, The Nexus Building, Blanchardstown Corporate Park, Ballycoolin, Dublin 15.</p>	<p>Date received: 07/04/2022</p>
	<p>Issues raised: The HSE recommends that the Odour Management Plan for the installation and the maintenance and operating criteria for the odour control unit should be reviewed in light of the proposed increase in waste to be accepted at the installation. The HSE also states that a noise impact assessment should be carried out to assess the impact of noise from HGV traffic at nighttime on sensitive receptors in the vicinity of the installation.</p>		

Submissions

Agency response:

Condition 6 requires the licensee to prepare, maintain and implement, to the satisfaction of the Agency, an Odour Management Plan, in line with the elements listed in BAT 12 of CID 2018/1147.

Traffic and the impact of noise from traffic is dealt with in the decision of the An Bord Pleanála to grant permission for the development. Noise conditions and emission limit values in relation to the installation's operation, which apply at the noise sensitive locations, have been included in the RD.

13. Consultations

13.1 Cross Office Consultation

I consulted OEE Inspectors, Brian Duggan in relation to individual licence conditions, OEE Financial Provision Team in relation to financial provision. In general, the OEE have no significant concerns regarding the proposed changes to the licensable activity.

13.2 Transboundary Consultations

There were no transboundary consultations undertaken as there were no transboundary impacts identified.

14. Appropriate Assessment

Appendix 2 lists the European Sites assessed, their associated qualifying interests and conservation objectives.

A screening for Appropriate Assessment was undertaken to assess, in view of best scientific knowledge and the conservation objectives of the site, if the activities, individually or in combination with other plans or projects are likely to have a significant effect on any European Site. In this context, particular attention was paid to the European Sites specified in Appendix 2.

The activities are not directly connected with or necessary to the management of any European Site and the Agency considered, for the reasons set out below, that it can be excluded, on the basis of objective information, that the activities, individually or in combination with other plans or projects, will have a significant effect on any European Site and accordingly determined that an Appropriate Assessment of the activities was not required.

This determination is based on the following reasons:

- The installation is not located within a European site.
- There are no process emissions to surface water or groundwater from the installation.
- The distance and lack of hydrological connectivity connecting the European sites and their qualifying interests listed in No. 1 to 6, and 8 to 11 in Appendix 2 of this report to the installation. The activity will not have a likely significant effect on the European site listed as No. 7 in Appendix 2 of this report in light of the scale and nature of the storm water discharges to the environment and

the distance from the installation to the European site and its qualifying interests.

- The European sites and their qualifying interests are determined to be outside the zone of influence of dust, odour or noise emissions due to the distance from the installation.

The EPA was notified on 12 July 2023 by the Department of Housing, Local Government and Heritage of the Minister's intention to designate a new European site, namely the North-west Irish Sea candidate Special Protection Area (site code 004236). The North-west Irish Sea SPA is 14.2 km from the boundary of the installation. I have reviewed and considered the Appropriate Assessment Screening and the new qualifying interests and conservation objectives of the North-west Irish Sea SPA and I am satisfied that inclusion of the North-west Irish Sea SPA does not change the determination that an Appropriate Assessment of the activity is not required. I am satisfied that the reasons stated in the screening determination are still appropriate.

15. Environmental Impact Assessment

15.1 EIA Introduction

This assessment is being undertaken in accordance with the requirements of Directive 2014/52/EU amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment. The application was accompanied by an Environmental Impact Assessment Report (EIAR) (see section EIA screening of this report for details).

As part of this environmental impact assessment, I have carried out an examination, analysis and evaluation of all the information provided by the (including the EIAR), the existing licence, Register Number: W0261-02, information received through consultation, the documents associated with the assessments carried out by An Bord Pleanála (ABP), and its reasoned conclusion, and the issues that interact with the matters that were considered by that authority and which relate to the activity, written submissions, as well as considering any supplementary information, where appropriate. All of the documentation received was examined and I consider that the EIAR complies with the provisions of Article 5 of the 2014 EIA Directive when considered in conjunction with the additional material submitted with the application.

I am satisfied that the information contained in the EIAR has been prepared by competent experts and that the environmental effects arising as a consequence of the activity have been satisfactorily identified, described and assessed.

Having specific regard to EIA, this Inspector's report as a whole is intended to identify, describe and assess for the Agency the likely significant direct and indirect effects of the activity on the environment, as respects the matters that come within the functions of the Agency, for each of the following environmental factors: population and human health, biodiversity, land, soil, water, air and climate, the landscape, material assets and cultural heritage.

This Inspector's report addresses the interaction between those effects. The cumulative effects, with other developments in the vicinity of the activities have also been considered, as regards the combined effects of emissions. In addition, the

vulnerability of the activity to risks of major accidents and/or disasters has been considered. The mitigation measures proposed to address the range of predicted significant effects arising from the activity have been outlined. This Inspector's report provides conclusions to the Agency in relation to such effects.

A summary of the submissions made by third parties has been set out above in the Submissions Section of this report.

I am satisfied that the public have been given early and effective opportunity to participate in the environmental decision-making process.

15.2 Consultation with Planning Authorities in relation to EIA

Consultation was carried out between An Bord Pleanála and the Agency under the relevant section of the EPA Act.

An Bord Pleanála did not provide any observations to the Agency on the licence application and EIAR.

15.3 Alternatives

The matter of alternatives is addressed in Chapter 3 of the EIAR. SEHL is an existing development and has the capacity to accept and process the increase in waste quantities within the current specification of its current design. The EIAR assesses alternative location, layout, design and processes and the do nothing alternative. In this regard I consider that the matter of the examination of alternatives has been satisfactorily addressed.

15.4 Likely Significant Direct and Indirect Effects

The likely significant direct and indirect effects of the activities on the following factors as set out in Article 3 of the EIA Directive are considered in this section:

- (a) population and human health;*
- (b) biodiversity, with particular attention to species and habitats protected under Directive 92/43/EEC and Directive 2009/147/EC;*
- (c) land, soil, water, air and climate;*
- (d) material assets, cultural heritage and the landscape;*
- (e) the interaction between the factors referred to in points (a) to (d).*

15.4.1 Population & Human Health

Identification, Description and Assessment of Effects

Population and human health are addressed in Chapter 13 of the EIAR. The potential direct and indirect effects on population and human health are associated with emissions to air, dust, odour, noise emissions, emissions to water, and accidental emissions. Should emissions cause an exceedance of environmental quality standards this could have implications for population and human health. The effects identified and described above have been assessed in the following section of this report: Emissions to Air, Emissions to Water/Ground/Sewer, Noise, Waste Generation, Prevention of Accidents, Cessation and Environmental Impact Assessment.

There is also the potential for accidental emissions to the environment, due to fire, explosion, or spillages. Accidental emissions to air/water/ground could occur if fire,

spillages, or leaks, causing deterioration to air and /or water quality in the vicinity of the installation. This is addressed in Prevention of Accidents section of this report.

Cumulative effects of the activity in relation to population and human health have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to population and human health are detailed in the following sections of this report: Emissions to Air, Emissions to Water/Ground/Sewer, Noise, Waste Generation, Prevention of Accidents.

Conclusions

I have examined all the information on population and human health, provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the RD. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of population and human health.

15.4.2 Biodiversity

Identification, Description and Assessment of Effects

Biodiversity is addressed in Chapter 9 of the EIAR. The EIAR describes the habitats and species at and in the vicinity of the installation. SEHL is an existing development and the installation with the exception of a narrow landscape strip at the road frontage, is entirely covered by buildings and paved yards. The nearest European site is greater than 8 km from the installation.

According to the EIAR "*the habitat in the operational area is classified as 'BL3 Buildings and artificial surfaces.'* This habitat is typically not species diverse and the likelihood of protected species within the site boundary is very low." The licensee also submitted an Appropriate Assessment Screening Report (Refer to the Appropriate Assessment section of this report).

The potential direct and indirect effects on biodiversity are related to effects on aquatic flora and fauna and their habitats due to effects on water quality, disturbance to fauna due to noise emissions, and effects due to air emissions. The effects identified and described above have been assessed in the following sections of this report: Emissions to Water/Ground/Sewer, Emissions to Air, Noise and Appropriate Assessment.

There is also the potential for accidental emissions to the environment, due to fire, explosion, or spillages which may impact biodiversity. This is addressed in Prevention of Accidents section of this report.

Cumulative effects of the activity in relation to biodiversity have been assessed and it is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to biodiversity are detailed in the following sections of this report: Emissions to Air, Emissions to Water/Ground/Sewer, Noise, Prevention of Accidents.

Conclusions

I have examined all the information on biodiversity, provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of biodiversity.

15.4.3 Land and Soil

Identification, Description and Assessment of Effects

Land and soil are addressed in Chapter 7 of the EIAR. The installation is located on Cappagh Road, approximately 2.5 km southwest of Dublin airport in an area that has been extensively developed for commercial, industrial use and mineral abstraction. The site is mostly covered with buildings and paving. The subsoils beneath the site comprise of sandy gravelly boulder clays. The bedrock belongs to the Boston Hill Formation and comprises nodular and muddy limestones and shale.

The potential direct and indirect effects on land and soil are associated with emissions to air, emissions to water, accidental emissions. Should emissions cause an exceedance of environmental quality standards this could have implications for land and soil. The effects identified and described above have been assessed in the following section of this report: Emissions to Air, Emissions to Water/Ground/Sewer, Prevention of Accidents.

There is also the potential for accidental emissions to the environment. Accidental emissions to water/ground due to a fire or spillages, which may impact land and soil. This is addressed in Prevention of Accidents section of this report.

Cumulative effects of the activity in relation to land and soil have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to land and soil are detailed in the following sections of this report: Emissions to Air, Emissions to Water/Sewer/Ground, Prevention of Accidents.

Conclusion

I have examined all the information on land and soil, provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects on land and soil.

15.4.4 **Water (including Waste Water, Emissions to Sewer, Storm Water, Emissions to Ground)**

Identification, Description and Assessment of Effects

Water is addressed in Chapter 8 of the EIAR. There are no direct process discharges to surface water from the installation. Floor washdown water and drainage from waste storage and quarantine areas is collected and stored in two underground storage tanks (each 13.5m³) along with the site sanitary waste water. The tanks are emptied via road tankers and sent for off-site disposal to an Uisce Éireann waste water treatment plant (WWTP). The potential direct and indirect effects on water relate to storm water emissions only. Should the emissions cause an exceedance of Water Quality Standards in the receiving water, this could have potential effects on water quality, aquatic biodiversity and human health. The effects identified and described above have been assessed in the following section of this report: Emissions to Water/Ground/Sewer.

There is also the potential for accidental emissions to water or groundwater, which could occur if oils/fuels spilled, release of contaminated firewater, bunds failed and damaged hardstanding created a pathway to surface water or ground, potentially affecting soil and groundwater quality as well as aquatic habitats. However, the likelihood of accidental emissions to water is considered low in light of the measures outlined in the "Prevention of Accidents" section above, and in light of the conditions in the RD. This is addressed in Prevention of Accidents section of this report.

Cumulative effects of the activity in relation to water have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to water are detailed in the following sections of this report: Emissions to Water/Sewer/Ground and Prevention of Accidents.

Conclusions

I have examined all the information on water provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects on water.

15.4.5 **Noise**

Identification, Description and Assessment of Effects

Noise is addressed in Chapter 11 of the EIAR. SEHL is located on Cappagh Road, approximately 2.5 km southwest of Dublin airport in an area that has been extensively developed for commercial, industrial use and mineral abstraction. There is one vacant private residence located approximately 30m southeast of the installation. According to the EIAR "*This has been acquired by Panda and it is intended to redevelop the site as a civic amenity area*". There are 10 residences approximately 500 m to the southeast of the installation.

The potential direct and indirect effects of noise associated with the operation of the activity are vehicular movement, fixed and mobile plant and odour control unit extraction fans.

Noise arising from the installation could have the potential to cause nuisance for those living near the activity or to affect noise sensitive species. The effects have been assessed in the noise section of this report.

There is also the potential for accidental noise emissions due to a fire, causing nuisance to the surrounding area. This is addressed in Prevention of Accidents section of this report.

Cumulative effects of the activity in relation to noise have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to noise are detailed in the following section of this report: Noise.

Conclusions

I have examined all the information on noise provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of noise.

15.4.6 Air (including Dust and Odour)

Identification, Description and Assessment of Effects

Air is addressed in Chapter 10 of the EIAR. The potential direct and indirect effects on air, including dust and odour are associated with emissions from waste processing, malfunction of abatement and vehicular movement. Should emissions cause an exceedance of Air Quality Standards this could have implications for air quality, population and human health and biodiversity within and beyond the installation boundary. General site dust and odour emissions have the potential to impact human health and cause nuisance. The effects identified and described above have been assessed in the following section of this report: Emissions to Air.

There is also the potential for accidental emissions to the environment, due to incorrect storage of waste deliveries and the breakdown or malfunction of abatement technologies on channelled emissions to air. Accidental emissions to air could occur if odour abatement infrastructure malfunctioned, causing interference with amenities, or the environment beyond the installation boundary. This is addressed in Prevention of Accidents section of this report.

Cumulative effects of the activity in relation to air have been assessed and is considered that there is not likely to be a significant cumulative effect from the activity and other activities/developments. There are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to air are detailed in the following sections of this report: Emissions to Air and Prevention of Accidents.

Conclusions

I have examined all the information on Air (including Dust and Odour) provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of Air (including Dust and Odour).

15.4.7 Climate

Identification, Description and Assessment of Effects

Chapter 5 of the EIAR addresses Climatic Factors. Climate change is a significant global issue which affects weather and environmental conditions (air, water and soil) which consequently affects population and human health, material assets, cultural heritage, the landscape and biodiversity. Climate change is caused by warming of the climate system by enhanced levels of atmospheric greenhouse gases (GHG) due to human activities. GHG's are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF₃) and sulphur hexafluoride (SF₆).

The Irish Government published "*Ireland's Climate Action Plan 2023: Changing Ireland for the Better*" (Climate Action Plan 2023) on 21 December 2022 (updated on 19 January 2023), under the Climate Action and Low Carbon Development (Amendment) Act 2021, which will support Ireland's transition to Net Zero, and achieve a climate neutral economy by no later than 2050. Enhanced food waste segregation including separate collection of bio-waste from all households required from the start of 2024, collection and treatment (anaerobic digestion and composting) and implementation of waste policy measures will guide our transition to a circular economy are identified in the Climate Action Plan.

The granting of a revised licence to SEHL to increase the annual waste acceptance threshold from 250,000 to 450,000 tonnes per annum will result in the processing of wastes to recover recyclable materials and manufacture solid recovered fuel (SRF)/ refuse derived fuel (RDF) and the remainder of the wastes are bulked up to facilitate transportation to other authorised facilities for further treatment including out-of-date food waste and brown bin waste. The SRF/RDF is sent to cement kilns where it is used as a replacement for fossil fuels. The out-of-date food waste is sent directly to anaerobic digestion plants for further treatment. Anaerobic digestion is specifically mentioned in the Climate Act Plan 2023, with the aim to increasing heat recovery from agri-food residues through a network of anaerobic digestion/biomethane production plants as set out in the National Biomethane Strategy (due within six months of the publication of the plan).

The potential direct and indirect effects on climate are from the following sources, consumption of energy during waste processing, transport emissions from vehicles entering and leaving the site. The main sources of climate altering substances are from the use of diesel during waste processing.

The installation does not operate under a GHG Emissions Permit in accordance with the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012, (S.I. 490 of 2012 and amendments). Therefore, this site is not subject to the European Communities (Greenhouse Gas Emissions Trading) Regulations 2012, (S.I. 490 of 2012 and amendments). It is therefore a requirement of the IED to investigate how direct emissions of CO₂ might be minimised.

Indirect emissions of CO₂ may arise due to the use of electricity from the national grid. These emissions are covered under the EU ETS at the generating plant but the licensee is also required to address electricity usage as part of energy efficiency management.

In relation to cumulative effects, any combustion process will inevitably produce quantities of gases, including greenhouse gases (GHG), which have the potential to impact on climate. However, it is usually the other combustion gases that negatively impact air quality as opposed to the greenhouse gases. In this assessment, it has already been determined that the emissions from the installation will not significantly affect local air quality, individually or cumulatively.

However, any discussion of GHG emissions must be extended to national and global climate impact. Given the small quantity of climate altering substances that could be released from the activity, in a national context, I consider that the impact of any emissions from the installation on climatic considerations should be minimal.

As part of the non-ETS sector the GHG emissions from this site are covered by Ireland's commitments under the Effort Sharing Decision (Decision No 406/2009/EC) and the Effort Sharing Regulation (Regulation (EU) 2018/842) from 2021. Condition 2 and condition 7 of the RD deal with energy efficiency matters at the installation.

It is considered that the likelihood of accidental emissions occurring which could affect climate is low in light of the measures outlined in the "Prevention of Accidents" section above and the proposed conditions in the RD.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to climate are detailed in the following sections of the licence assessment part of this report: Emissions to Air, Prevention of Accidents, Energy Efficiency and Resource Use.

Conclusions

I have examined all the information on climatic factors provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of air and climatic factors.

15.4.8 Material Assets, Cultural Heritage and the Landscape

15.4.8.1 Material Assets (including resource use and waste generation)

Identification, Description and Assessment of Effects

Chapter 15 of the EIAR addresses Material Assets and Resource Consumption. The potential direct and indirect effects on material assets are the use of natural resources. The activity will require the consumption of electricity and diesel. The amounts used are listed in section 8 of this report. The activity will lead to the generation of 2 tonnes per annum of mixed municipal waste. The use of natural resources by the activity will not be significant. The increase in waste acceptance will result in an increase in the consumption of diesel and electricity associated with the additional traffic and additional waste processing. No significant cumulative effects on material assets have been identified.

Material assets such as roads and traffic and built services are dealt with in the decision of the An Bord Pleanála to grant permission for the development. An Bord Pleanála has considered the effect to be acceptable.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

Mitigation measures and monitoring in relation to material assets are detailed in the following sections of the licence assessment part of this report: Energy Efficiency and Resource Use.

Material Assets Conclusions

I have examined all the information on Material Assets provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of Material Assets.

An Bord Pleanála (ABP-310332-21) has also identified, described and assessed the likely significant direct and indirect effects of the development on material assets concluding that

"I am satisfied that the potential for significant impacts on material assets can be avoided. I am therefore satisfied that the potential for significant direct or indirect impacts on material assets can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise."

"Slight negative traffic impacts arise during the operational phase of the development, these impacts are not significant in terms of magnitude and can therefore be ruled out."

15.4.8.2 Cultural Heritage

Identification, Description and Assessment of Effects

The potential direct and indirect effects on cultural heritage are addressed in Chapter 14 of the EIAR. Any loss of archaeological or architectural heritage could impact negatively on human beings. These matters are dealt with in the decision of An Bord Pleanála to grant planning permission for the developments on site and An Bord Pleanála has considered the effect to be acceptable.

There is no evidence that the site is of any archaeological or cultural significance and there are no recorded monuments or buildings or sites of cultural heritage on site. The nearest sites, are within 500 metres of the site, Cappogue Tower House to the southeast and a Fulacht Fiath to the northwest of the installation.

It is very difficult to envisage any pathway by which emissions from the operation of the activity could impact any feature which might be present.

No significant cumulative effects on the cultural heritage have been identified. Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

There are no specific mitigation measures or monitoring proposed in the RD.

Cultural Heritage Conclusions

An Bord Pleanála (ABP-310332-21) has identified, described and assessed the likely significant direct and indirect effects of the development on cultural heritage concluding that *"I am satisfied that the potential for impacts on archaeology, architecture and cultural heritage can be avoided. I am therefore satisfied that the potential for direct or indirect impacts on architecture and cultural heritage can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise."*

The Recommended Determination does not propose to include any additional mitigation measures in relation to cultural heritage.

15.4.8.3 The Landscape

Identification, Description and Assessment of Effects

The potential direct and indirect effects on the landscape are addressed in Chapter 12 of the EIAR. Any disturbance of the landscape has the potential to impact on human beings and their enjoyment of the surrounding area due to visual impacts. These matters are dealt with in the decision of An Bord Pleanála to grant planning permission for the developments on site and it has considered the effects to be acceptable.

SEHL is located on Cappagh Road, approximately 2.5 km southwest of Dublin airport in an area that has been extensively developed for commercial, industrial use and mineral abstraction. Emissions from the operation of the activity will not affect the landscape of the area.

No significant cumulative effects on the landscape have been identified.

Therefore, there are no likely significant direct, indirect or cumulative effects identified.

Mitigation and Monitoring

There are no specific mitigation measures or monitoring proposed in the RD.

The Landscape Conclusions

An Bord Pleanála has identified, described and assessed the likely significant direct and indirect effects of the development on the landscape concluding that *"Given the nature of the proposed development which relates solely to an increase in waste received at the existing facility and a change to operational hours which are currently temporarily in place it is at the facility, there is no potential for the*

development to give rise to landscape or visual impacts at the site or within the surrounding area. The magnitude of impacts in this regard is therefore imperceptible. I am satisfied that the potential for impacts on landscape and visual amenity can be avoided. I am therefore satisfied that the potential for direct or indirect impacts on landscape and visual amenity can be ruled out. I am also satisfied that cumulative effects, in the context of existing and permitted development in the surrounding area and other existing and proposed development in the vicinity of the site, are not likely to arise."

The Recommended Determination does not propose to include any additional mitigation measures in relation to landscape.

Overall Conclusions for Material Assets, Cultural Heritage and the Landscape

I have examined all the information on material assets, cultural heritage and the landscape provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of Material Assets, Cultural Heritage and the Landscape.

15.4.9 Interactions Between Environmental Factors

Interactions of effects are considered in Section 16 of the EIAR. The most significant interactions between the factors as a result of the activity are summarised below:

Population and human health, air noise and traffic

The proposed development has the potential to impact on human beings from air (including dust and odour) and noise emissions, traffic and major accidents. As demonstrated such effects are considered not to be likely or significant.

Population and human health, traffic, Climate and material assets

It is considered that the predicted increases in traffic and resource consumption as a result of the increase in waste accepted at the installation will be of negligible impact on climate, air quality, resource consumption, and human beings, As demonstrated such effects are considered not to be likely or significant.

Conclusions

I have considered the interaction between population and human health, biodiversity, land, soil, water, air, climate, landscape, material assets, cultural heritage and the interaction of the likely effects identified throughout this report. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects in terms of the interaction between the foregoing environmental factors.

15.4.10 Vulnerability of the Project to Risks of Major Accidents and or Disasters

The EIAR describes the expected effects deriving from the vulnerability of the activity to risks of major accidents and/or disasters that are relevant to the activity. Natural disasters are dealt with in Chapter 13 of the EIAR. Flooding is dealt with in Chapter 8 of the EIAR. The EIAR states "The site is not in an area susceptible to natural disasters

(earthquake, landslide, major flood events). The current operations and the proposed activities do not come under the EC (Control of Major Accident Hazards involving Dangerous Substances) Regulations, 2006; however accidents with the potential to impact on the health of site staff and neighbours can occur at waste management facilities." An accident impact assessment report is included as Appendix 2 of the EIAR which identified and assessed the risk of a number of major accidents that may pose a risk to the site including potential for fire due to large quantities of waste stored at the installation and the potential for the release of contaminated firewater, diesel, spillages of materials to the environment and mitigation measures in place.

The risks of accidents associated with the activities are dealt with in the Prevention of Accidents section of this report.

Mitigation and Monitoring

Below are the mitigation and monitoring measures in relation to the vulnerability of the project to risks of major accidents and disasters specified in the RD and Section 9 of this report.

Conclusions

I have examined all the information on major accidents and/or disasters provided by the licensee, received through consultations, written submissions, as well as considering any supplementary information, where appropriate. I am satisfied that the potential effects identified will be avoided, managed and mitigated by the measures identified and through the proposed conditions of the Recommended Determination. I am, therefore, satisfied that the operation of the activity is not likely to have any unacceptable direct or indirect effects as a result of major accidents and/or disasters.

15.5 Reasoned Conclusion on the significant effects

Having regard to the examination of environmental information contained above, and in particular to the content of the EIAR and supplementary information provided by the licensee, and the submission(s) from the planning authority/authorities and third parties in the course of the application it is considered that the potential significant direct and indirect effects of the activities on the environment are as follows:

- Emissions to air from odour
- Noise emissions
- Accidental leakages or spills
- Major accidents and disasters (e.g. fire).

Having assessed those potential effects, I have concluded as follows:

- Emissions to air from odour sources will be mitigated through: operation of abatement in accordance with BAT, imposing emission limit values to ensure compliance with ground level concentration of odour at sensitive receptors and implementing monitoring, maintenance and control measures;
- Noise emissions will be mitigated through: imposing daytime, evening-time and night-time noise limits at noise-sensitive locations and implementing monitoring, maintenance and control measures; and
- Accidental leakages or spills will be mitigated through: the use of oil interceptor and holding tank, inspection and maintenance of bunds and tanks, and accident and emergency requirements specified in the licence.

- Major accidents and disasters will be mitigated through: accident and emergency requirements specified in the licence implementing monitoring, maintenance and control measures.

Having regard to the effects (and interactions) identified, described and assessed throughout this report, I consider that the monitoring, mitigation and preventative measures proposed will enable the activities to operate without causing environmental pollution, subject to compliance with the Recommended Determination. The conditions of the RD and the mitigation measures proposed will significantly reduce the likelihood of accidental emissions occurring and limit the environmental consequences of an accidental emission should one occur.

16. EPA Charges

The annual enforcement charge recommended in the RD is €13,749, which reflects the anticipated enforcement effort required and the cost of monitoring. This is the same enforcement charge as already set out for 2022 for the installation.

17. Recommendation

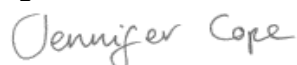
The Agency, in considering an application for a licence or the review of a licence, shall have regard to Section 83 of the EPA Act. The Agency shall not grant a licence or revised licence unless it is satisfied that emissions comply with relevant emission limit values and standards prescribed under regulation. In setting such limits and standards, the Agency must ensure they are established based on the stricter of both the limits and controls required under BAT, and those required to comply with any relevant environmental quality standard. The Agency shall perform its functions in a manner consistent with Section 15 of the Climate Action and Low Carbon Development Act 2015 as amended.

The RD specifies the necessary measures to provide that the installation shall be operated in accordance with the requirements of Section 83(5) of the EPA Act and has regard to the AA and EIA. The assessment is consistent with Section 15 of the Climate Action and Low Carbon Development Act 2015 as amended. The RD gives effect to the requirements of the EPA Act and has regard to submissions made.

This report was prepared with the assistance of Anne Lucey.

I recommend that a Proposed Determination be issued subject to the conditions and for the reasons as drafted in the RD.

Signed

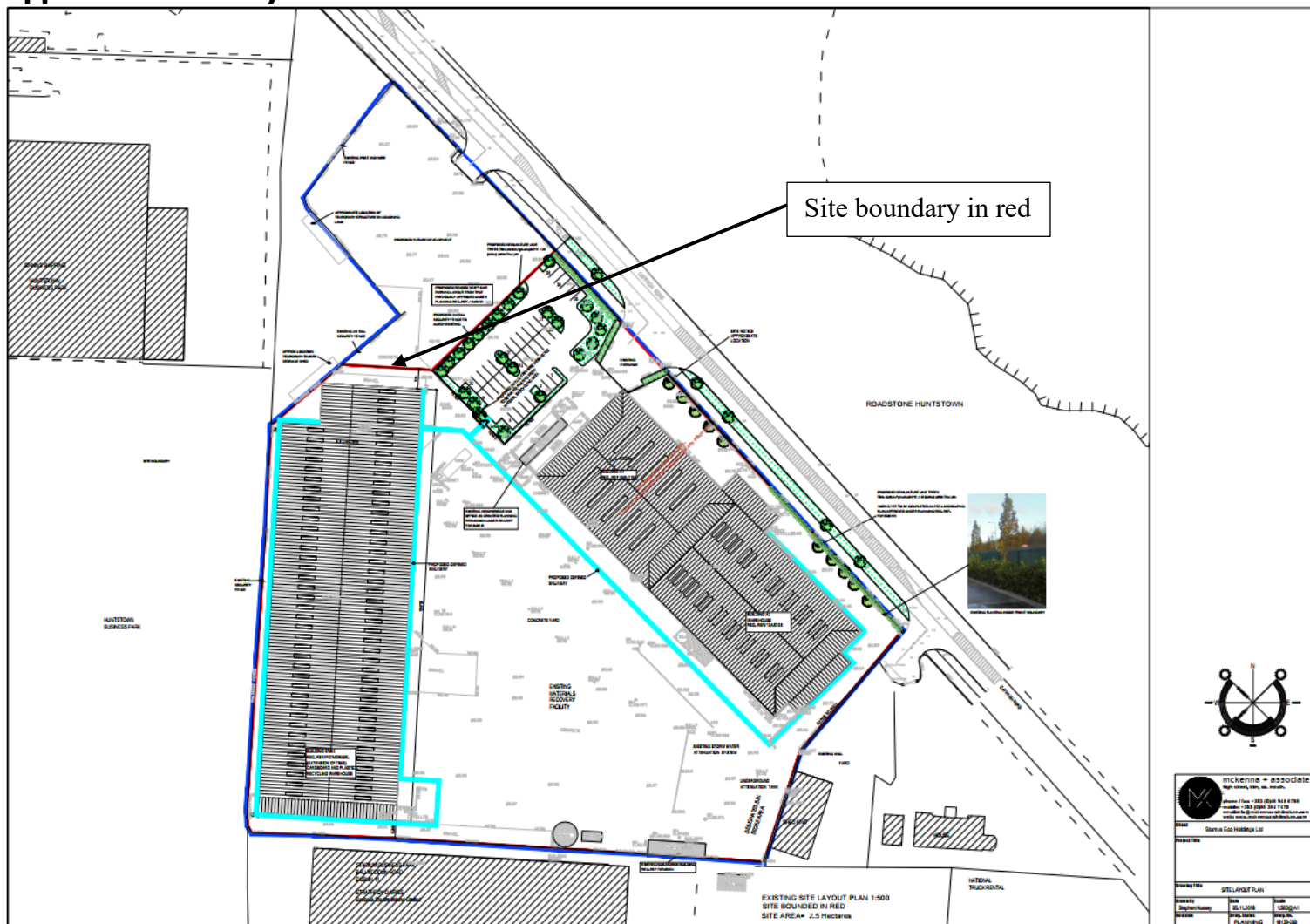


Jennifer Cope

Procedural Note

In the event that no objections are received to the Proposed Determination on the application, a licence will be granted in accordance with Section 87(4) of the EPA Act, as soon as may be after the expiration of the appropriate period.

Appendix 1 Site Layout



Source: W0261-03 Application Form – Site Plan received on 23/11/2021.

Appendix 2 Appropriate Assessment

List of European Sites assessed, their associated qualifying interests and conservation objectives.

Site Name (site code)	Qualifying Interests (* denotes priority habitat)	Conservation Objectives
1. Rye Water Valley/Cartron SAC (Site code: 001398)	Habitats 7220 Petrifying springs with tufa formation (<i>Cratoneurion</i>)* Species 1014 Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) 1016 Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)	NPWS (2021) Conservation Objectives: Rye Water Valley/Cartron SAC 001398. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.
2. South Dublin Bay SAC (Site code: 000210)	Habitats [1140] Tidal Mudflats and Sandflats [1210] Annual vegetation of drift lines [1310] <i>Salicornia</i> and other annuals colonising mud and sand [2110] Embryonic shifting dunes	NPWS (2013) Conservation Objectives: South Dublin Bay SAC 000210. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
3. Malahide Estuary SAC (Site code: 000205)	Habitats 1140 Mudflats and sandflats not covered by seawater at low tide 1310 <i>Salicornia</i> and other annuals colonising mud and sand, 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*	NPWS (2013) Conservation Objectives: Malahide Estuary SAC 000205. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
4. North Dublin Bay SAC (Site code: 000206)	Habitats [1140] Tidal Mudflats and Sandflats [1210] Annual Vegetation of Drift Lines [1310] <i>Salicornia</i> Mud [1330] Atlantic Salt Meadows [1410] Mediterranean Salt Meadows [2110] Embryonic Shifting Dunes [2120] Marram Dunes (White Dunes) [2130] Fixed Dunes (Grey Dunes)* [2190] Humid Dune Slacks [1395] Petalwort (<i>Petalophyllum ralfsii</i>)	NPWS (2013) Conservation Objectives: North Dublin Bay SAC 000206. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Site Name (site code)	Qualifying Interests (* denotes priority habitat)	Conservation Objectives
5. Baldoyle Bay SAC (Site code: 000199)	Habitats 1140 Mudflats and sandflats not covered by seawater at low tide 1310 <i>Salicornia</i> and other annuals colonising mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>)	NPWS (2012) Conservation Objectives: Baldoyle Bay SAC 000199. Version 1.0. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
6. Rogerstown Estuary SAC (Site code: 000208)	Habitats 1130 Estuaries 1140 Mudflats and sandflats not covered by seawater at low tide 1310 <i>Salicornia</i> and other annuals colonising mud and sand 1330 Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) 1410 Mediterranean salt meadows (<i>Juncetalia maritimi</i>) 2120 Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes) 2130 Fixed coastal dunes with herbaceous vegetation (grey dunes)*	NPWS (2013) Conservation Objectives: Rogerstown Estuary SAC 000208. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
7. South Dublin Bay and River Tolka Estuary SPA (Site code: 004024)	Birds A144 Sanderling (<i>Calidris alba</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A149 Dunlin (<i>Calidris alpina</i>) A162 Redshank (<i>Tringa totanus</i>) A179 Black-headed Gull (<i>Chroicocephalus ridibundus</i>) A143 Knot (<i>Calidris canutus</i>) A192 Roseate Tern (<i>Sterna dougallii</i>) A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A194 Arctic Tern (<i>Sterna paradisaea</i>) A193 Common Tern (<i>Sterna hirundo</i>) A137 Ringed Plover (<i>Charadrius hiaticula</i>) Habitats Wetlands	NPWS (2015) Conservation Objectives: South Dublin Bay and River Tolka Estuary SPA 004024. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
8. Malahide Estuary SPA (Site code: 004025)	A048 Shelduck (<i>Tadorna tadorna</i>) A054 Pintail (<i>Anas acuta</i>) A067 Goldeneye (<i>Bucephala clangula</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A162 Redshank (<i>Tringa totanus</i>)	NPWS (2013) Conservation Objectives: Malahide Estuary SPA 004025. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.

Site Name (site code)	Qualifying Interests (* denotes priority habitat)	Conservation Objectives
	A143 Knot (<i>Calidris canutus</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A156 Black-tailed Godwit (<i>Limosa limosa</i>) A140 Golden Plover (<i>Pluvialis apricaria</i>) A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A149 Dunlin (<i>Calidris alpina</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A069 Red-breasted Merganser (<i>Mergus serrator</i>) A005 Great Crested Grebe (<i>Podiceps cristatus</i>) Habitats Wetlands	
9. North Bull Island SPA (Site code:004006)	Birds A160 Curlew (<i>Numenius arquata</i>) A149 Dunlin (<i>Calidris alpina</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A162 Redshank (<i>Tringa totanus</i>) A179 Black-headed Gull (<i>Chroicocephalus ridibundus</i>) A144 Sanderling (<i>Calidris alba</i>) A156 Black-tailed Godwit (<i>Limosa limosa</i>) A143 Knot (<i>Calidris canutus</i>) A169 Turnstone (<i>Arenaria interpres</i>) A054 Pintail (<i>Anas acuta</i>) A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A048 Shelduck (<i>Tadorna tadorna</i>) A052 Teal (<i>Anas crecca</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A056 Shoveler (<i>Anas clypeata</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A140 Golden Plover (<i>Pluvialis apricaria</i>) Habitats Wetlands	NPWS (2015) Conservation Objectives: North Bull Island SPA 004006. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
10. Baldoyle Bay SPA (Site code: 004016)	Birds A137 Ringed Plover (<i>Charadrius hiaticula</i>) A048 Shelduck (<i>Tadorna tadorna</i>)	NPWS (2013) Conservation Objectives: Baldoyle Bay SPA 004016. Version 1.

Site Name (site code)	Qualifying Interests (* denotes priority habitat)	Conservation Objectives
	A140 Golden Plover (<i>Pluvialis apricaria</i>) A157 Bar-tailed Godwit (<i>Limosa lapponica</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) Habitats Wetlands	National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
11. Rogerstown Estuary SPA (Site code: 004015)	Birds A149 Dunlin (<i>Calidris alpina</i>) A046 Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) A048 Shelduck (<i>Tadorna tadorna</i>) A137 Ringed Plover (<i>Charadrius hiaticula</i>) A141 Grey Plover (<i>Pluvialis squatarola</i>) A156 Black-tailed Godwit (<i>Limosa limosa</i>) A056 Shoveler (<i>Anas clypeata</i>) A043 Greylag Goose (<i>Anser anser</i>) A130 Oystercatcher (<i>Haematopus ostralegus</i>) A162 Redshank (<i>Tringa totanus</i>) A143 Knot (<i>Calidris canutus</i>) Habitats Wetlands	NPWS (2013) Conservation Objectives: Rogerstown Estuary SPA 004015. Version 1. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht.
12. North-west Irish Sea SPA (004236)	Birds Red-throated Diver (<i>Gavia stellata</i>) [A001] Great Northern Diver (<i>Gavia immer</i>) [A003] Fulmar (<i>Fulmarus glacialis</i>) [A009] Manx Shearwater (<i>Puffinus puffinus</i>) [A013] Cormorant (<i>Phalacrocorax carbo</i>) [A017] Shag (<i>Phalacrocorax aristotelis</i>) [A018] Common Scoter (<i>Melanitta nigra</i>) [A065] Little Gull (<i>Larus minutus</i>) [A177] Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] Common Gull (<i>Larus canus</i>) [A182] Lesser Black-backed Gull (<i>Larus fuscus</i>) [A183] Herring Gull (<i>Larus argentatus</i>) [A184] Great Black-backed Gull (<i>Larus marinus</i>) [A187] Kittiwake (<i>Rissa tridactyla</i>) [A188] Roseate Tern (<i>Sterna dougallii</i>) [A192]	NPWS (2023) Conservation Objectives: North-west Irish Sea SPA 004236. Version 1. National Parks and Wildlife Service, Department of Housing, Local Government and Heritage.

Site Name (site code)	Qualifying Interests (* denotes priority habitat)	Conservation Objectives
	Common Tern (<i>Sterna hirundo</i>) [A193] Arctic Tern (<i>Sterna paradisaea</i>) [A194] Little Tern (<i>Sterna albifrons</i>) [A195] Guillemot (<i>Uria aalge</i>) [A199] Razorbill (<i>Alca torda</i>) [A200] Puffin (<i>Fratercula arctica</i>) [A204]	

Appendix 3 Relevant Legislation

The following European instruments are regarded as relevant to this application assessment and have been considered in the drafting of the Recommended Determination.
Industrial Emissions Directive (IED) (2010/75/EU)
Environmental Impact Assessment (EIA) Directive (2011/92/EU as amended by 2014/52/EU)
Habitats Directive (92/43/EEC) & Birds Directive (79/409/EC)
Water Framework Directive [2000/60/EC]
Waste Framework Directive (2008/98/EC)
Groundwater Directive (80/68/EEC) and 2006/118/EC
Regulation (EC) No 1069/2009, (Animal by-products Regulation)
Air Quality Directives (2008/50/EC and 2004/107/EC)
Environmental Liability Directive (2004/35/CE)

Appendix 4 Other CIDs/BREF/BAT documents relevant to this assessment

Commission Implementing Decisions	Publication Date
COMMISSION IMPLEMENTING DECISION of 10 August 2018 establishing best available techniques (BAT) conclusions, under Directive 2010/75/EU of the European Parliament and of the Council, for waste treatment ((EU) 2018/1147)	August 2018
Horizontal BREF	Publication date
Reference Document on the Best Available Techniques on Emissions from Storage	July 2006
Reference Document on the Best Available Techniques for Energy Efficiency	February 2009
National BAT notes	Publication date
BAT Guidance Note for the Waste Sector (Transfer & Materials Recovery)	December 2011

Appendix 5 Relevant BAT conclusions for Commission Implementing Decision on waste treatment, CID(EU) 2018/1147 (August 2018)

The following table sets out the applicable BAT conclusions for Waste Treatment, and the relevant condition/schedule in the RD. BAT conclusions not applicable to the site are not included (6-7, 9, 15-16, 20, 22, 24, 26-53).

BAT No.	BAT Requirement	Condition/Schedule
1	Environmental Management System.	Sub-conditions in Condition 2.2.
2	Waste stream management required as part of the EMS to improve the overall environmental performance of the plant.	Condition 2
3	Inventory of waste gas required as part of the EMS to reduce emissions to air.	Condition 2
4	Techniques required to minimise the environmental risk associated with waste storage.	Condition 8.
5	Waste handling and transfer procedures.	Condition 8
8	Monitor channelled emissions to air in accordance with EN standards.	<i>Schedule C: Control and Monitoring.</i>
10	Periodically monitor odour emissions.	<i>Schedule C: Control and Monitoring</i>
11	Annual consumption of resources and generation of residues reduction.	Condition 7
12	Odour management plan.	Condition 2, 6
13	Prevent and reduce odour emissions	Condition 6
14	Prevent and reduce diffuse emissions to air.	Condition 6
17	Noise management plan, as part of the environmental management system.	Condition 6
18	Minimise noise emissions.	Condition 6
19	Optimise water consumption and reduce waste water generation.	Condition 7
21	Accident management.	Condition 2
23	Energy Efficiency.	Condition 7
25	Reduce emissions to air	<i>Schedule B.1</i>