
NON-TECHNICAL SUMMARY

1.0 Introduction

Starrus Eco Holdings Ltd (SEHL) operates its Materials Recovery Facility (MRF) in Millennium Business Park, Ballycoolin, Dublin 11 under an Industrial Emissions Licence (W0183-01) granted by the Environmental Protection Agency (EPA). It is proposed to increase the annual waste intake from 270,000 to 450,000 tonnes.

2.0 Organisation

SEHL is part of the Beauparc Group, Ireland's leading integrated waste management company. SEHL has not been convicted for breaches of the Waste Management Act, the EPA Act, the Water Pollution Act and the Air Pollution Act. SEHL has never had insolvency or bankruptcy proceeding against them or suspended their business activities. SEHL is in a financial position to meet all the financial commitments and liabilities that will be incurred by the activities.

There are approximately 30 full time staff including management, operatives and office staff. The Facility Manager is responsible for day-to-day facility operations, with compliance support provided Environmental Officer. Appropriately trained and experienced staff are present all times when the facility is open to supervise waste acceptance, processing and transfer. SEHL has in place accredited an Integrated Management Systems incorporating Environmental (ISO 14001:2004), Health & Safety (OHSAS 18001) and Quality (ISO9001:2015).

3.0 Site

The site is located in Millennium Business Park, which is one of a number of industrial estates in the area. The Business Park is accessed via Cappagh Road, which connects the M50 to the south and the N2 to the north. The site is in the east of an area that has been extensively developed for commercial and industrial use. The lots to the west are occupied by commercial units and warehousing. To east and north is Huntstown Quarry. The lot to the south is occupied by a cement manufacturing plant and further south and south-west are the Stadium and Rosemont Business Parks. The nearest occupied dwelling is approximately 1km to the south.

The site covers 4.43ha and includes two waste processing buildings, one in the south of the site comprising two adjoining units (MP1 and MP2) with a total area of 4,388m² and one (MP3) in the north (4,226m²); an administration building/staff amenity (625m²); two weighbridges and associated control rooms; back-up generator; above ground bunded fuel tanks, paved open operational yards (5,170m²); vehicle parking and a vehicle wash area. Overhead high voltage overhead power line runs from north-west to south-east through the centre and north east of the site.

4.0 Activity & Capacity

4.1 Sectors & Class of Facility

The facility is in the waste sector and the classes of activities as listed in the First Schedule of the EPA Act as amended are.

Class	Description
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.
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 Water Treatment Regulations 2001 (SI No. 254 of 2001) apply): <ul style="list-style-type: none"> • Pre-treatment of waste for incineration or co-incineration

4.2 Application Type

The application is for the review of an Industrial Emissions Licence.

4.3 Waste Activities

4.3.1 Waste Types and Quantities

SEHL accepts wastes on a commercial basis (Merchant Facility). SEHL proposes to increase the annual waste intake to a maximum of 450,000 tonnes/year, but there will be no change to the types of waste accepted. Normally the annual intake will be 400,000 tonnes and the additional 50,000 tonnes will only be accepted at times when there is a disruption to the national waste management capacity, for example the unexpected closure of other large scale waste treatment plants either in Ireland or overseas.

4.3.2 Waste Acceptance

SEHL has, in accordance with the licence requirements, prepared documented waste acceptance procedures. All incoming waste is subject to a documented waste acceptance procedure. Wastes are delivered by waste collectors that have up to date Waste Collection Permits or are deemed exempt. Wastes are not accepted from either members of the public, or commercial waste collectors that do not have a contract with SEHL.

All deliveries arrive in fully enclosed vehicles that are weighed in at the weighbridge road and the accompanying documentation is checked. The driver is then directed to the waste intake areas in the appropriate building.

4.3.3 Waste Processing

Municipal Solid Waste (MSW) Dry Mixed Recyclables (DMR), Brown Bin (food) waste, sterilised non-hazardous plastic medical waste and Solid Recovered Fuel (SRF) is accepted in the southern building

(MP1 and MP2). Construction and Demolition (C&D) and Commercial & Industrial (C&I) wastes are accepted in the northern building (MP3).

The MSW is off loaded in MP2 where it is inspected for contamination and unsuitable materials are moved to a quarantine area. The materials are then processed to remove the organic, metal fraction and recoverable 'lights' (plastics). Metals are sent for recycling, organic fines fraction sent for composting. The recoverable 'lights' are sent to the SRF production line in MP1. The residue, which contains some putrescible matter, is suitable for use as refuse derived Fuel (RDF) and is baled in an on-site baler and stored externally.

The sterilised medical waste is off loaded inside MP1, inspected and then loaded into the granulator which produces a granulated 'floc' that is sent to the SRF production line. The SRF is stored pending onward transfer to incinerators or cement kilns in Ireland and abroad where it is used as a fuel.

The operators of the Irish incinerators and kilns require the SRF to be delivered loose, whereas for export the SRF must be baled. The incinerators/ kilns regularly close down for maintenance and when this occurs the SRF that is delivered to the facility along with that produced on-site is baled in the on-site baler to facilitate longer term storage.

The Brown Bin waste is off loaded in a dedicated area inside MP2. Currently the Brown Bin waste is not processed, but is bulked up and sent off-site to authorised biological treatment plants. The DMR is off loaded in MP 1, where it is temporarily stored before being loaded into articulated trailers and sent off-site for further treatment at authorised facilities.

The C&I and C&D waste is handled in the northern building (MP3). The waste are off loaded in dedicated bays and are initially sorted using a mechanical grab to remove large items such as timber, metal and oversized light materials, which are removed to other storage areas in the building. The segregated materials are stored pending consignment to authorised treatment plants for further processing.

4.3.4 Waste Storage

Recovered materials are stored inside and outside the buildings in accordance with a Materials and Waste Storage Plan agreed with the EPA. The Plan takes into consideration the EPA Guidance Note: Fire Safety at Non-Hazardous Waste Transfer Stations, (2013) and the EPA Guidance on Fire Risk Assessment for Non-Hazardous Waste Facilities, 2016. Any proposal to extend external storage areas must be approved in advance by the EPA.

The wastes stored inside the buildings include unprocessed and processed materials of which there is a maximum of 2,270 tonnes at any one time. The wastes stored outside are baled SRF/RDF, tyres, waste electronic and electrical equipment (WEEE), rubble and plastic. The maximum amount of waste stored externally any one time is 6,500 tonnes, which includes 6,200 tonnes of SRF/RDF bales.

4.4 Capacity

The plant and equipment used include; trommels, conveyor lines, balers, articulated grab, static grab, loading shovels, excavators, granulator, separators, wheel wash, telescopic handlers, weighbridge, fork lifts, shredder/bag openers. The equipment essential to operations have the processing capacities required by the licence.

4.5 Other Regulations

The waste activities are not subject to the other regulations and directives listed in the Licence Application Form.

4.6 Resource & Energy Usage

The waste processing equipment, the offices, staff welfare facilities and yard lighting use electricity. The mobile plant are diesel fuelled, as are the vehicles that transport materials to and from the site. It is the intention to install roof mounted solar panels by 2024.

4.7 Best Available Techniques (BAT)

An assessment of the compliance of site operations with the EU BAT Reference Document for Waste Treatment has been completed.

4.8 Reports

4.8.1 *Operational Report*

An Operational Report has been prepared that describes the site layout, plant and equipment, methods, processes, ancillary processes, abatement, recovery and treatment systems, and the operating procedures for the activity.

4.8.2 *Baseline Report*

As facility operations involve the use of diesel, which is a hazardous substance, a Baseline Assessment Report has been prepared. There is no evidence that historic or current activities have resulted in soil and groundwater contamination. SEHL can achieve compliance with the requirements of the EC Environmental Objectives (Groundwater) Regulations 2010, SI No. 9 of 2010.

4.8.3 Site Condition Report

The Baseline Report describes the Site Condition.

4.9 Solvents

Organic solvents are not used at the site.

4.10 Large Combustion Plants

Not applicable.

4.11 Incineration & Co-incineration

Not Applicable.

5.0 Financial

The appropriate licence review fee (€6,000) has been paid.

6.0 Stakeholder Engagement

6.1 Planning Permission

Prior to development as a Business Park the lands had been used for agricultural purposes. In 2003, Fingal County Council (the Council) granted Celtic Waste planning permission (Ref F02A/1474) for the construction of the MRF and a Biological Treatment Plant.

The planning application included an Environmental Impact Statement and the permission approved the acceptance of 270,000 tonnes of waste annually. There was a first party appeal to An Bord Pleanála (PL 06F.202468) and the Bord issued its Decision in 2004.

The Materials Recovery Facility (MRF) was constructed and waste operations began in 2006; however the Biological Treatment Plant was not built. In 2006 the Council granted permission (F05A/1764) to erect two high level signs at the facility. In November 2008, the Council granted permission (F08A/0980) for two temporary portakabins for office and storage use, and a separate permission (F08A/0981) for a vehicle maintenance building.

In April 2018, the Council granted permission (FW18A/0016) to install roof mounted solar panels on the MRF. In September 2018, permission (FW18A/0079) was granted for the development of a single storey recycling building in the footprint of the Biological Treatment Plant building and to operate 24 hours a day, 7 days a week. This was constructed and operations began in June 2020. In May 2022, permission (FW/22A/0016) was granted to retain the building constructed under FW/18A/0079 and to install a storm water attenuation system.

6.2 Notices

A newspaper notice regarding the licence review application has been published and a site notice erected. Fingal County Council has been notified of the review application.

7.0 Emissions

7.1 Overview

The actual and potential point and fugitive emissions are:

- Noise from plant and equipment used to process the wastes, including delivery/collection vehicles, shredders, crushers, conveyors, magnets, odour control fans, conveyors, conditioning plant and bagging unit.
- Rainwater run-off from the building roofs and yards.
- Sanitary wastewater, wash water from the vehicle wash and rain water run-off from the entire site.
- Fugitive dust and odours from waste processing.
- Vehicle exhaust gases from the delivery and collection vehicles and mobile plant.

7.2 Emissions to Surface Water (not including Storm Water)

Not applicable.

7.3 Emissions to Sewer

Sanitary wastewater, wash water from the vehicle wash and rain water run-off from the entire site discharges to foul sewer. This is periodic, depending on operations and the weather conditions.

7.4 Emissions to Air

The MSW and Brown Bin wastes are sources of odours. The plastics granulator is a source of dust generation inside MP1. In dry weather, vehicles travelling across paved areas are a potential source of dust emissions. Vehicle and mobile plant exhausts contain a range of compounds that affect air quality, for example carbon monoxide, methane, carbon dioxide, and particulates.

7.5 Noise Emissions and Noise Monitoring Points

The waste processing is a source of continuous noise emissions. Waste transport vehicles, staff private cars and the mobile plant are sources of intermittent emissions occurring during the waste acceptance and processing hours. Noise surveys are carried out annual at the monitoring points specified in the licence.

7.6 Emissions to Ground and Landspreading

Not Applicable.

7.7 Storm Water Discharges

Prior to drainage problems in the Business Park the emissions to storm water comprised rainwater run-off from the building roofs and yards. This was weather dependent and periodic. Pending the resolution of the drainage issues the all rainwater run-off is discharged to the foul sewer.

7.8 Impact Assessment of Emission

7.8.1 *Climate*

As the development does not involve any construction works, there will be no construction stage impacts. In the operational stage there will be a negative impact linked to the additional greenhouse gas emissions from the processing, off-site electricity generation and the extra waste transport vehicle movements. However processing the residual waste to remove recyclables and avoid incineration has a positive impact.

Mitigation measures include the use of energy efficient equipment and carrying out of energy audits to minimise energy consumption. In addition it is proposed to install solar panels on the roof of the main processing building.

The net impact is determined by the greenhouse gas emissions generated minus the reduction due to the diversion of material from incineration. Overall the processing of the additional amounts of residual waste will have a positive impact on greenhouse gas emissions compared to incineration.

7.8.2 *Soils and Geology*

The development does not involve any land take into agricultural or recreational areas, does not require ground disturbance and construction works and will not result in any new emission to ground. There will be no impacts on land and the bedrock. In the operational stage the development, along with the currently authorised activities, has the potential to impact on the soils as a result of the infiltration to ground through damaged paving of contaminants from the ground surface and leaks from the sewers.

7.8.3 *Water*

The facility is in the catchment of the Tolka River, which is approximately 2.5 km to the south west of the site boundary. The bedrock beneath the site is classified as a Poor Bedrock Aquifer which is Generally Unproductive except for Local Zones. The aquifer vulnerability to pollution from sources at the ground surface ranges from High to Moderate across the Business Park.

The site is entirely covered with buildings and paving, which effectively prevents groundwater recharge. The regional direction of groundwater flow is to the south west towards the Tolka River. The local direction of groundwater flow is likely to be greatly influenced by the quarrying activities to the south east of the site.

The current prevention and mitigation measures include the provision of impermeable paving across the operational areas; inspection and repair as required of the paved areas; the provision and maintenance and integrity assessment of spill containment for the above ground oil storage tanks; the routine inspection and survey of the surface water and foul water drainage systems; the adoption of an emergency response procedure, and staff training on appropriate spill response actions.

7.8.4 *Biodiversity*

Millennium Business Park contains a mix of commercial and industrial operations that have low ecological value habitats (Buildings and Artificial Surfaces). The lands to the north and south have been extensively developed and the area is dominated by buildings and artificial surfaces, with landscape planting along the Business Park roads and in the roundabouts. Huntstown Quarry, which is a large hard rock quarry, is to the east and north-east with the undeveloped areas comprise untended former agricultural grasslands. The site is not located in, or adjacent to any Natura 2000 sites. The closest site is approximately 9 km from the site.

The increase in annual tonnages will not result in any changes to the current emissions to surface water and will have no discernible impact on surface water quality. There will be no changes to the emissions to air with the exception of the new odour control system and no change to the operational hours and therefore no potential for disturbance of birds and mammals in the surrounding habitats. It will have no impacts on the habitats either within, or outside the site and will have no significant effect on any Natura 2000 Site.

7.8.5 *Air Quality*

The EPA ambient air quality databases indicate the air quality in the vicinity of the site is good. The potential impacts on air quality associated with the operations include odours, particulates (dust) and exhaust gases from vehicles. There will be an increase in HGV movements to and from the site, with an associated increase in vehicle exhaust emissions which have the potential to adversely impact on

air quality, however given the separation distances this will have no impact on ecological sensitive sites.

The mitigation measures currently applied include handling the waste inside the buildings; regular inspection and cleaning of waste handling areas. The waste transport vehicles are fitted with catalytic converters. An odour control system involving the extraction of odorous air from the building where the residual mixed waste are processed and its treatment in a carbon filter will be installed.

7.8.6 Noise

The closest sensitive residential receptors are more than 800 m from the site boundary. The sources of noise emissions are the staff vehicles, waste transport vehicles and the waste processing and handling equipment. The mitigation measures are the internal processing of waste and keeping building doors closed in the evening. The facility is also surrounded by 2.5m high blockwork walls that provide further mitigation.

Current operations are not a source of noise nuisance at off-site noise sensitive locations. The proposed increase in waste tonnage will not require the provision of any new plant and equipment and will not result in any new or additional noise emission sources.

8.0 Waste Generated on Site

8.1 Waste Generated on Site

The wastes generated by site activities include canteen and office wastes, waste oils from plant maintenance, wash water from the vehicle and bin wash and sanitary wastewater.

8.2 Waste Hierarchy

The foundation policy statement on waste management “Changing Our Ways” bases national policy on the EU Waste Management Hierarchy, which in descending order is:

- Prevention
- Preparing for Reuse
- Recycling
- Other Recovery (including energy recovery); and
- Disposal

The current policy “Waste Action Plan for a Circular Economy” is an action focused plan for Ireland to embrace the opportunities in becoming a circular economy and its objectives include ensuring that measures support sustainable economic models (for example by supporting the use of recycled over virgin materials). The current operations are consistent with the national policy objectives and contribute to the achievement and maintenance of national and regional recycling and recovery targets and encourage circular economy initiatives.

9.0 Environmental Management & Techniques

Condition 2.3 of the licence requires SEHL to develop and implement an Environmental Management System for the facility. The licence requires SEHL prepare operational control procedures for all waste activities and ensure that facility staff are provided with the appropriate skills and training to perform their assigned functions.

SEHL has in place accredited Integrated Management Systems incorporating Environmental (ISO 14001:2015), Health & Safety (OHSAS 18001) and Quality (ISO9001:2015). SEHL has adopted a Fire and Emergency Response Procedures (ERP). The ERP specifies roles, responsibilities and actions required to deal quickly and efficiently with an emergency.

SEHL has prepared an Environmental Liability Risk Assessment (ELRA) and Decommissioning Management Plan (DMP) for the facility and these, along with a proposal for Financial Provision, have been submitted to and approved by the Agency. The ELRA and DMP will be revised following the grant of the revised licence.