NON-TECHNICAL SUMMARY

1.0 Introduction

Starrus Eco Holdings Ltd (SEHL) operates its waste management facility in Sarsfieldcourt Industrial Estate at Glanmire under an Industrial Emissions Licence (W0136-03) granted by the Environmental Protection Agency (EPA). It is proposed to extend SEHL's EPA licence boundary to incorporate an adjoining waste management facility operated by Starrus Property Holdings Ltd (SPHL) that operates under a Waste Permit (WFP-CC-38-2020) issued by Cork City Council.

2.0 Organisation

SEHL and SPHL are part of the Beauparc Group, Ireland's leading integrated waste management company. SEHL and SPHL have not been convicted for breaches of the Waste Management Act, the EPA Act, the Water Pollution Act and the Air Pollution Act. SEHL and SPHL have 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 30 full time staff including management, operatives and office staff. In addition 60 waste collection vehicle drivers and operatives are based at the site. 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 Sarsfieldcourt Industrial Estate is approximately 5km north of Glanmire Village. The Industrial Estate is in a rural area where the surrounding land use is primarily agricultural, with some low density residences. The nearest sensitive location (private residence) is a house at Buck Leary's Cross Roads, approximately 170m to the north-west of the site.

The site covers 22,921m^2 and is made up of two operational areas. The northern area occupies 15,600m^2. The entrance is off an internal access road within the Industrial Estate and there is one main waste processing handling building, office, weighbridges, an odour control unit, vehicle wash, bin wash, wheel wash, non-conforming waste and fire quarantine areas, paved open yards, civic amenity area, parking spaces with a landscaped area and a firewater storage tank.

The civic amenity area has its own dedicated entrance for members of the public. There are a number of dedicated closed skips for mixed municipal waste, dry recyclables (cardboard, plastics, metals, papers) and waste electrical and electronic equipment.

The southern area covers 7,800m^2 and contains a recycling building, a site office, a fire water storage tank, generator, weighbridge and paved storage yards.

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): • 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 and SPHL accept wastes on a commercial basis (Merchant Facility). The waste types include mixed residual municipal household (black bin), segregated food waste (brown bin), mixed commercial and industrial (C&I), construction and demolition (C&D), industrial non-hazardous waste and source segregated and mixed dry recyclables. A small amount (10 tonnes/year) of household hazardous waste is authorised for acceptance at the civic amenity area. Animal By-Products are not accepted. The maximum annual waste intake will be 200,000 tonnes and quantities of each waste type accepted in any given year will vary, based on market conditions.

4.3.2 Waste Acceptance

With the exception of materials dropped off at the civic amenity area by members of the public, wastes are delivered by waste collectors that have up to date Waste Collection Permits or are deemed exempt. The bulk deliveries are subject to a documented waste acceptance procedure. They 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

All wastes are off-loaded and processed inside the buildings. Wastes with the potential to generate odours, for example mixed residual wastes are only handled in the main processing building which is provided with an odour control unit.

The mixed residual wastes are processed to remove organic fines, metal and wood, which are sent of site for further treatment. The remaining non-recyclable material is suitable for the manufacture of refuse derived fuel (RDF) and are baled, wrapped and stored in the open paved yards before being shipped overseas to energy recovery facilities.

The mixed commercial, industrial and construction & demolition waste are off loaded inside the main processing building where recyclables are segregated and sent off-site for further treatment, with the remaining non-recyclable materials, depending on the nature either baled as RDF or sent to licensed landfills.

The source separated dry recyclables arrive either already baled or loose. The bales are off-loaded and stored in the yard. The loose materials are off loaded inside the recycling building and then baled. The mixed dry recyclables are processed to remove non-suitable materials and separated then baled and stored.

4.3.4 Waste Storage

SEHL has prepared a Waste Storage Plan for the northern area that identifies the dedicated storage areas and storage capacities. This will be revised to include the southern area after the revised licence has been issued. The maximum amount of waste stored on site at any one time, varies depending on market conditions and all changes to the Storage Plan must be approved by the OEE.

4.4 Capacity

The plant and equipment used include; trommels, conveyor lines, balers, articulated grab, static grab, loading shovels, 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

Water for use in the toilets, dust suppression and to top up the firewater storage tanks is obtained from an on-site well. Drinking water is provided by a bottled water company. 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 existing and proposed layout, the plant, 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

6.1.1 SEHL

The first planning permission (S/3460/90) was granted to United Transport Ltd in 1990 and was for a warehouse; however this development did not proceed. In 1995, permission (S/95/1339) for the construction of warehouse, offices and toilets for the manufacture and storage of corrugated cardboard products was granted; however this development also did not proceed.

In 2000, permission (S/1517/00) was granted for the development of a recycling and waste transfer station, including a main process building, a weighbridge office, weighbridge platforms and associates external works including truck and bin parking areas.

In 2011, permission (10/5636) was granted to allow for 24 hour waste acceptance and operation, to increase the waste acceptance limit to 200,000 tonnes per annum and to allow the operation of a civic amenity area. An Environmental Impact Statement was submitted with the planning application.

In 2018, permission (18/04525) was granted for the installation of solar panels on the roof of the main processing building. These have not yet been installed and planning permission will expired in 2023. It is anticipated the solar panels will be installed in 2024. The installation of solar panels on commercial buildings no longer require planning permission.

6.1.2 SPHL

In 2004, permission (03/3789) was granted for a warehouse storage facility, offices and weighbridge for shredding and baling of paper and cardboard and the acceptance of 5,000 tonnes of waste annually. In 2007, permission (06/9718) was granted to increase the annual waste intake to 30,000/year and to extend the operational hours to 24 hours/day. In 2016, permission (Ref 15/04813) was granted to pave an open area for the storage of baled waste and skips.

6.2 Notices

A newspaper notice regarding the licence review application has been published and a site notice erected. Cork City 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.
- Emissions from the odour control unit.
- Rainwater run-off from the building roofs and yards.
- Wash water from the vehicle wash, bin wash and wheel wash.
- 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

7.3.1 SEHL

Sanitary wastewater and rainwater run-off from areas where wastes are stored and wash water from the vehicle/bin wash go to two holding tanks (one for sanitary and one for process related runoff) located to the east of the weighbridge. The wheel wash adjacent to the weighbridge has a self-contained tank. The tanks are emptied as required and the contents sent to off-site authorised wastewater treatment plants.

7.4 Emissions to Air

With the exception of the stack on the odour control system in the Main Processing Building, there are no fixed point emission sources. Potential fugitive emissions include dust, vehicle exhausts and odours.

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

There are separate surface water drainage systems serving the northern and southern areas and it is not proposed to combine them. The licence authorises the discharge of run-off from the building roofs and areas of the yard where wastes are not stored in the northern area to discharge to the storm sewer serving the Industrial Estate. However due to quality issues the storm water is currently diverted to the wastewater holding tanks.

In the southern area run-off from the building roof discharges directly to the storm sewer serving the Industrial Estate. Run-off from the paved yards where recyclable materials are stored is directed to an underground holding tank in the south-east of the yard, from where it passes to an internal storm sewer along the eastern boundary via an oil separator and then discharges to the storm sewer serving the Industrial Estate.

7.8 Impact Assessment of Emission

7.8.1 Climate

There will be no change to waste to the waste processes and the number of heavy goods vehicles entering and leaving the facility. The waste processing, which involves electricity and diesel consumption and the vehicle movements to and from the site are sources of greenhouse gas emissions. 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.

7.8.2 Soils and Geology

The site is almost entirely covered by buildings and concrete paving. The subsoils in the locality are Sandstone till (Devonian). The underlying bedrock is Devonian mudstone and siltstone from the Ballytrasna Formation.

There are no direct or indirect emissions to ground and the extension of the licence boundary will not give rise to any new discharges. The current prevention and mitigation measures include inspection and repair as required of the paved areas; the adoption of an emergency response procedure, and staff training on appropriate spill response actions.

7.8.3 Water

The facility is in the catchment of the Glashaboy River, which is approximately 2 km to the south west of the site boundary. An unnamed tributary of the Glashaboy River is approximately 100 m to the east of the site boundary and receives run-off from the facility and other occupants of the Industrial Estate. The bedrock beneath the site is classified as a Locally Important Aquifer (LI), being Moderately Productive only in Local Zones. The aquifer vulnerability to pollution from sources at the ground surface is High.

The site is almost entirely covered with buildings and paving, which effectively prevents groundwater recharge. The direction of groundwater flow is expected to be to the south, towards the Glashaboy River.

Sanitary wastewater and rainwater run-off from areas where wastes are stored and wash water from the vehicle/bin wash go to two holding tanks (one for sanitary and one for process related runoff) which are located to the east of the weighbridge. The wheel wash adjacent to the weighbridge has a self-contained tank. The tanks are emptied as required and the contents sent to off-site authorised wastewater treatment plants.

The extension of the licence boundary will not result in any change to the emission to surface water and will not give rise to any new direct or indirect emissions to groundwater.

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 and wastewater 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

The site is located in the western edge of the Sarsfieldcourt Industrial Estate that contains a mix of commercial and industrial operations that have low ecological value habitats (Buildings and Artificial Surfaces). The area surrounding the Industrial Estate consists of pasture (Improved Grassland) which makes up a large proportion of Ireland's productive farmland. Much of it is reseeded, fertilised or heavily grazed with the result that species diversity is low. The site is not located in, or adjacent to any Natura 2000 sites. The closest site is approximately 8 km from the site.

The extension of the licence boundary will not result in any changes to the current emissions to air or surface water and will have no discernible impact on surface water quality. 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. The extension of the licence boundary will not give rise to any new emissions from waste processing and will not result in any additional vehicle movements and an associated increase in exhaust gases.

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

7.8.6 Noise

The nearest sensitive location (private residence) is at Buck Leary's Cross Roads, approximately 170m to the north-west of the installation 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 eventing. 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 extension of the licence boundary 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 of the licence requires SEHL to develop and implement an Environmental Management System for the facility. The licence and the waste facility requires SEHL and SPHL to 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 14001:2004), Health & Safety (OHSAS 18001) and Quality (ISO9001:2015).

SEHL and SPHL 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 licensed 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 to include all of the activities inside the amended licence boundary.