

# EPA Application Form

## 1.2 – Non-Technical Summary Attachment

**Organisation Name: \***

Starrus Eco Holdings Limited

**Application I.D.: \***

LA007361

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## **1. Introduction**

Starrus Eco Holdings Ltd (SEHL) operates its waste management facility on the Cappagh Road, Finglas, Dublin 11, under an Industrial Emissions Licence granted by the Environmental Protection Agency (EPA) and planning permissions granted by Fingal County Council. The installation currently accepts and process mixed and source separated non-hazardous solid household, commercial, industrial and construction & demolition waste.

The licence and the planning permission authorise the acceptance of 250,000 tonnes of waste per annum. The planning permission allow operations to be carried out 24 hours a day 7 days a week; however, this expires in 2022 unless a further permission is granted. It is proposed to increase the annual waste intake to 450,000 tonnes and seek approval for permanent 24/7 operations. A planning application under the Strategic Infrastructure Development Regulations has been made to An Bord Pleanála.

## **2. Planning & Licensing History**

### ***Planning***

Prior to development as a waste management facility the site had been used for agricultural purposes. In April 2006 permission (F05A/1156) was granted for Stage 1 - development of a building to process construction and demolition and commercial and industrial waste. The permission restricted the amount of wastes to 50,000 tonnes per annum because of the condition of the local road network.

In December 2007, permission (F07A/0954) was granted for Stage 2 - to construct a new building to process dry recyclable waste and increase the annual waste intake to 200,000 tonnes. In May 2014 permission (13A/0135) was granted for Stage 3 - construction of a new building to process municipal solid waste and increase the amount of waste accepted annually to 250,000 tonnes.

In June 2018, permission was granted (FW18A/0067) to extend the operational hours at the installation to 24 hours a day 7 days a week. The permission to extend operating hours was limited to 1 year from the date of grant of permission. In December 2019, permission was granted (FW19A/0145) to operate 24/7 for three years from date of grant of permission.

In February 2021, permission was granted (FW20A/0037) to install roof mounted solar panels over two of the existing waste buildings.

### ***Licensing***

The original Waste Licence (W0261-01) was issued to SEHL by the Agency in August 2010 authorising the acceptance of 200,000 tonnes of waste per annum. In February 2015 the Agency issued the current Industrial Emissions Licence (W0261-02) authorising the acceptance of 250,000 tonnes per annum.

### 3. Existing Installation

The site is on Cappagh Road, approximately 2.5 km southwest of Dublin Airport, in an area that has been extensively developed for industrial and commercial use and mineral extraction. Stadium Business Park is to the south, Rosemount Business Park to the south-west and to the north is Millennium Business Park. The Business Parks are occupied by commercial activities including logistics companies, chemical distributors, light engineering, food distributors and cement manufacturers. The lands to the west are zoned for commercial use and Hunstown Quarry is to the east and north-east. The lot adjoining the northern site boundary is owned by SEHL and is leased to a haulage company.

There are ten (10 No.) occupied residences approximately 450 m to the south east, also on the southern side of the Cappagh Road. These are the only private residences within 500m of the installation

The site covers 2.5 hectares and comprises three waste handling buildings (Building A1 -2,030 m<sup>2</sup>; Building A2 - 2,800 m<sup>2</sup> and Building B1 - 4,088 m<sup>2</sup>) an electrical substation, two weighbridges, an office and associated control rooms, staff welfare building (100 m<sup>2</sup>), fuel tanks and paved open yards.

The majority of the wastes are processed to recovery recyclable materials and to manufacture solid recovered fuel (SRF), while the remainder of the wastes is compacted/bulked up to facilitate transport to other authorised facilities for additional treatment.

### 4. Proposed Changes

It is proposed to increase the annual waste intake from 250,000 to 450,000 tonnes. The development is required to accommodate the increasing amount of waste arising in the Eastern Midlands Waste Management Region and to allow SEHL to increase its recycling and recovery capacity in support of circular economy initiatives it has already implemented and that are in the development stages.

The increased intake does not require either new buildings, or extensions to existing ones and does not involve any changes to the layout of external areas and drainage systems. The existing current staff complement and the existing plant and equipment have the capacity to process the additional wastes and additional staff numbers and processing equipment are not required. There development will not result in any material change to the emissions associated with the waste activities. A review of the IE licence is required.

### 5. Classes of Activity

The classes of activities as listed in the First Schedule of the EPA Act as amended will be.

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 Waste Water Treatment Regulations 2001 (S.I. No. 254 of 2001) apply): pre-treatment of waste for incineration or coincineration;

## 6. BAT Documents

The facility has been assessed against the BAT Conclusions in Commission Implementing Decision (EU) 2018/1147 establishing best available techniques (BAT) conclusions for waste treatment, under Directive 2010/75/EU.

## 7. Waste Management Policies

The proposed changes are consistent with European Union, national and regional waste management policies and plans, the objective of which is to maximise the recovery/recycling of waste.

## 8. Resource Consumption and Energy Use

Operations involve energy (electricity) and resource (groundwater) consumption. The GMC resource consumption in 2019 was

- Electricity : 7,216 MWhrs,
- Groundwater : 6,250 m<sup>3</sup>
- Public water supply : 200 m<sup>3</sup>

## 9. Sources of Emissions

Potential and actual emissions associated with the waste activities include noise, air, dust and storm water.

### Noise

The current noise sources include:

- Transport vehicles
- Fixed and mobile plant
- Odour Control Unit extraction fans

The facility is operational 24/7 and therefore the plant and fans are in constant use. The proposed development does not require the provision of any new sources of noise emissions, or changes to the operational hours.

### Air

The potential emissions to air from the waste activities that are and will be carried out include dust, vehicle exhausts and odours.

The primary source of dust emissions is and will continue to be the processing of the wastes. Secondary sources are vehicle movements on the paved yards during dry periods. Vehicle exhausts contain a range of compounds that affect air quality, for example nitrous oxide, carbon monoxide, methane, carbon dioxide, benzene and particulates.

Odours are associated with the types of wastes accepted, the type of processing carried out and the time the wastes are retained on site. The only wastes accepted at the facility that are a significant source of malodours are the mixed solid waste, brown bins waste. The depackaging of the expired food wastes is also a potential source of odours.

### **Water**

Sanitary wastewater is collected in an underground storage tank which is emptied regularly. AS there will be no change to staffing numbers there will be no increase in the volume of sanitary wastewater generated.

Rainwater run-off from the building roofs and paved open yards discharges to the storm sewer serving the Stadium Business Park. The proposed development will not result in any change to the volume and quality of the rainwater run-off.

There are no current direct or indirect emissions to groundwater and the proposed development will not result in any new emissions.

## **10 Environmental Monitoring**

The environmental monitoring programme includes air, dust deposition, storm water, and groundwater. The licence specifies the emission limit values that must be achieved

## **11 Existing Environment, Potential Impacts, Mitigation and Residual Impacts**

### **11.1 Climate**

The climate in the area is mild and wet, with the prevailing wind direction from the south and south-west.

There is a link between direct and indirect greenhouse gas (carbon dioxide, methane and nitrous oxide) emissions and climate change. Direct emissions from waste management plants are associated with on-site processing and off-site electricity power generation, while indirect emissions are linked to the vehicles transferring wastes to and from the site and staff transport. All greenhouse gas emissions, regardless of the source, contribute to a cumulative negative environmental effect unless offset by mitigation or compensatory measures.

The proposed development will result in additional direct and indirect emissions associated with the increased electricity and diesel consumption. This will be somewhat off-site by increasing the diversion rate of biodegradable waste to landfill and expanding the production of SRF.

### **11.2 Land & Geology**

The site, with the exception of a narrow landscape strip along the road frontage, is entirely covered with buildings and paving. The subsoils are between 1.3 and 8.45 m thick and comprise sandy gravelly boulder clays. The bedrock belongs to the Boston Hill Formation and comprises nodular and muddy limestones and shale.

The development does not involve either any land take, or ground disturbance and will not result in any new emission to ground.

The licence specifies the prevention and mitigation measures that must be applied to avoid impact on land and geology, which include; the routine inspection and repair of paved areas, regular integrity tests of storage containment areas and drainage systems; the adoption of an emergency response procedure and staff training on appropriate spill response actions.

### 11.3 Water

The site is in the catchment of the Tolka River, which is approximately 2 kilometres to the south west and south. There are no streams or water courses either on site, or in the surrounding area. The Tolka River is part of the Liffey Water Management Unit, as designated by the Eastern River Basin District Management Plan. The overall status of the river is 'Moderate', and it is considered 'At Risk' of not achieving its restoration objective of at least 'Good' status by 2027.

The bedrock is a locally important (Lm) aquifer that is productive in local zones. The local direction of groundwater flow is to the south, but is likely to be greatly influenced by the large scale quarrying immediately to the east and north of the site (Huntstown Quarry). The aquifer vulnerability to pollution from the ground surface is Extreme. The aquifer is part of the Dublin Area Groundwater Body. This is categorised as being of 'Good' status, but is 'At Risk' of achieving its objective of protecting the existing status.

The proposed development does not require any alteration to the existing surface water and foul water drainage systems. It will not result in any change to the volume and quality of the rainwater run-off. There are no current direct or indirect emissions to groundwater and the proposed development will not result in any new emissions.

The prevention and mitigation measures required by the EPA licence will be implemented.

### 11.4 Biodiversity

The site, with the exception of a narrow landscape strip at the road frontage, is entirely covered by buildings and paved yards. The habitat in the operational area is classified as 'BL3 Buildings and artificial surfaces'. This type of habitat is typically not species diverse and the likelihood of protected species within the site boundary is very low. The site is not in a Special Area of Conservation (SAC), or a Special Protection Area (SPA) and the closest such sites are all approximately 10km from the site.

The proposed development will not result in the loss of any habitats either inside, or outside the site boundary. It will not result in any new emissions to atmosphere, surface water or groundwater, or a change to the current operational hours.

The proposed development will not result in the loss of or any damage to any habitats or disturbance of protected species either in, or outside the site boundary. The site is not in or adjacent to any Natura 2000 Sites and there are no viable pathways between the site and any Natura 2000 Sites.

### 11.5 Air

The site is in an area that that has been extensively developed for industrial and commercial use and mineral extraction. The ambient air quality, based on the results of continuous monitoring conducted by the EPA in Finglas, is good.

The potential emissions to air from the waste activities that are and will continue to be carried out include dust, vehicle exhausts and odours.

SEHL implements the control measures specified in the EPA licence that are designed to ensure waste activities do not give rise to negative impacts on air quality and these will continue to be applied.

All wastes are processed inside the buildings. The odour control system provided in the section of the building where odorous materials are handled has been proven to be effective in controlling odours and this system will continue to operate. The trucks that transport the wastes are fitted with nitrous oxides reduction systems and it is SEHL policy not to allow engine idling.

The proposed development will have an ongoing imperceptible, negative impact on air quality, but will have no permanent impact.

#### 11.6 Noise

The site is in an area that has been extensively developed for industrial and commercial use and mineral extraction. There are ten residences approximately 450 m to the south-east. The licence requires SEHL to carry out noise surveys to assess the impacts associated with its operations. Daytime, evening and night-time noise monitoring is carried out annually and this has established that the dominant source of noise in the locality is road traffic.

SEHL implements the noise control measures specified in the licence that are designed to ensure operations do not give rise to emissions that are a cause of nuisance or impairment outside the facility boundary and these will continue to be applied.

The proposed development will have an on-going, imperceptible, neutral impact over its lifetime.

#### 11.7 Landscape & Visual Impact

The facility is an area where the land cover use is industrial/commercial in an established and extensively developed industrial zone. It is not in an area designated as highly sensitive and is not overlooked by any designated views or prospect areas. The shape and mass of the existing buildings are similar to those of other commercial and industrial operators in the estate.

The proposed development does not involve any change to either the appearance of the buildings, or the site layout.

#### 11.8 Population & Human Health

Fingal's population is 296,214 persons, which equates to approximately 22% of the total population of Dublin. Fingal's share of the Dublin population has risen steadily since 1986, when it was just 14% and is projected to further increase.

Traffic movements can, depending on the size, location and capacity of the local road network, be a cause of congestion that affects local residents. Vehicle exhaust gases can affect air quality with consequent implications for human health. While odours, noise and dusts do not present a direct risk to health, they can be a significant nuisance and cause of discomfort that indirectly affect human health.

The site is not in an area susceptible to natural disasters (earthquake, landslide, major flood events); however accidents with the potential to impact on the health of site staff and neighbours could occur. SEHL has completed an accident impact assessment that identifies the plausible accidents that could occur and assesses the likely effects.

SEHL implements the control measures specified in the EPA licence to ensure waste activities do not give rise to emissions that will be a cause of nuisance or impairment outside the facility boundary. The licence conditions also require the provision of mitigation measures, both infrastructural and procedural, that effectively minimise the risk of adverse impacts associated with major accidents.

The proposed development will have an on-going, imperceptible, negative impact on human beings.

#### 11.9 Archaeology, Architecture and Cultural Heritage

There is no record of any archaeological or cultural heritage features within the site boundary and it is not in a designated Architectural Conservation Area.

The proposed development will not involve any ground disturbance and therefore there is no risk of affecting any unidentified archaeological features.

The development will no impact on any known/unknown cultural heritage feature.

#### 11.10 Material Assets & Resource Consumption

The site is surrounded on all sides by commercial/industrial lots and an operational quarry. The local area does not have any significant amenity value for members of the general public.

The development will not result in any impairment of amenity value and material assets. The development will contribute to sustaining employment levels at the facility and increasing waste recovery and recycling rates. It will result in an increase in electricity and diesel consumption.

SEHL implements the nuisance control measures specified in the EPA licence to prevent impacts on local amenities and also applies resource consumption control measures to minimise usage.

The development will have no impacts on amenity values and a slight socio-economic benefit in maintaining employment levels. It will have a slight negative impact in relation to resource consumption.

### **12. Proposed technology and other techniques to prevent or eliminate, or where this is not practicable, limit, reduce or abate emissions from the installation**

The current licence specifies the manner in which the facility must operate so as to ensure that pollution and or nuisance to neighbours and the general public is prevented. The licence conditions require the site management team to have the appropriate training and qualifications; they specify the types of wastes and processes that can be carried out; stipulate how wastes and raw materials that have the potential to cause pollution are handled and stored; describe the control measures that must be applied to prevent nuisance, for example litter and dust control, and require appropriate emergency response procedures to be in place.



### **13. Measures to Comply with Waste Management Hierarchy**

The proposed development will contribute to the implementation of the principles of the waste hierarchy through the expansion of waste recovery capacity which will facilitate the management of wastes generated within the region and nationally, in an EPA approved facility incorporating the best available techniques to ensure environmental protection, thus supporting the self-sufficiency and proximity tenets of the Waste Directive.

### **14. Abnormal Operating Conditions**

SEHL has adopted an Emergency Response Procedure (ERP) and a Fire Risk Assessment. The ERP identifies the responsibilities and actions required to deal quickly and efficiently with an emergency.

### **15. Avoidance of the Risk of Environmental Pollution due to Closure of the Facility**

SEHL has prepared an Environmental Liability Risk Assessment (ELRA) and a Decommissioning Management Plan (DMP) for the facility and these, along with a proposal for Financial Provisions, have been approved by the Agency.

### **16. Environmental Monitoring**

SEHL currently conducts monitoring of the following:

- Storm water discharge
- Groundwater
- Dust
- Air

### **17. Measures to Comply with an Environmental Quality Standard**

The emission limit values set in the current licence are based on achieving compliance with the relevant EQS. The measures also effectively minimise the risk of pollution over long distances.

The environmental quality standards that are relevant to the overall assessment for the licence application are those specified in:

- European Communities Environmental Objectives (Surface Water) Regulations S.I. No 272 of 2009, as amended;
- European Communities Environmental Objectives (Groundwater) Regulations S.I. No 9 of 2010, as amended;
- Air Quality Standards Regulations (S.I. No 271 of 2002), and
- Directive 2008/50 EC on ambient air quality and cleaner air for Europe.

**18. Measures to comply with Council Directive 80/68/EEC and 2006/118/EC in relation to the protection of groundwater.**

There are no direct discharges to groundwater.

**19. The Main Alternatives to the Proposed Technology, Techniques and Measures**

The existing site layout and design comply with best practice and allows the implementation of effective mitigation measures. The current processing is industry standard and meets the Best Available Technique (BAT) requirements specified at EU level.

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