



### Submission

Submitter:	Miss Lisa Fitzpatrick
Organisation Name:	HSE
Submission Title:	HSE Consultation Report
Submission Reference No.:	S010276
Submission Received:	07 April 2022

### Application

Applicant:	Starrus Eco Holdings Limited
Reg. No.:	W0261-03

See below for Submission details.

Attachments are displayed on the following page(s).

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Feidhmeannacht na Seirbhíse Sláinte  
Health Service Executive

First Floor, Unit 4 & 5,  
The Nexus Building,  
Blanchardstown Corporate Park,  
Ballycoolin,  
Dublin 15

Environmental Licensing Programme  
Office of Environmental Sustainability  
Environmental Protection Agency  
Johnstown Castle Estate  
Co. Wexford

7<sup>th</sup> April 2022

**Re: IE Licence No W0261-03  
Starrus Eco Holdings Ltd**

Dear Sir/Madam,

Please find enclosed the HSE consultation report in relation to the scoping of the above proposal. The following HSE departments were notified of the consultation request for this development on 21<sup>st</sup> February 2022.

- Emergency Planning – Brendan Lawlor
- Estates – Helen Maher/Stephen Murphy
- National Clinical Director for Health Protection
- CHO – John Hayes

This report only comments on Environmental Health impacts of the scoping request. If you have any queries regarding this report the contact is Lisa Fitzpatrick, Principal Environmental Health Officer at [fingalfoodcontrol.peho@hse.ie](mailto:fingalfoodcontrol.peho@hse.ie)

Yours sincerely,

Principal Environmental Health Officer



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Dublin 15

**HSE EIS SUBMISSION REPORT**  
**Environmental Health Service Consultation Report**  
(as a Statutory Consultee (Planning and Development Acts 2000,  
& Regs made thereunder).

**Date:** 7<sup>th</sup> April 2022

**Our Reference:** 2063

**Report To:** Environmental Licensing Programme  
Office of Environmental Sustainability  
Environmental Protection Agency  
Johnstown Castle Estate  
Co. Wexford

**EPA Reference:** W0261-03

**Type of Consultation:** Industrial Emissions Licence

**Applicant:** Starrus Eco Holdings Ltd

**Nature of Activity:** 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;

**Introduction**

This report only comments on the Environmental Health impacts of the waste licence

application. All commitments to future actions, including mitigation and further testing have been taken as read, and all data has been accepted as accurate. No additional investigations/measurements were undertaken in the review of the application.

In respect of this application, the areas reviewed were those of concern to Environmental Health and which are:

- Any potential contamination of surface water and ground water
- Emissions to air including odour, noise and process emissions

### **Description**

Starrus Eco Holdings Ltd is a waste management facility that accepts and process mixed and source separated non-hazardous solid household, commercial, industrial and construction & demolition waste. The current licence authorises the acceptance of 250,000 tonnes of waste per annum and planning permission allow operations to be carried out 24 hours a day, 7 days a week; however, this expires in 2022. The applicant is requesting permission to increase the annual waste intake from 250,000 to 450,000 tonnes and to seek approval for permanent 24/7 operations.

There is to be no change to the types of waste accepted at the facility. It is also stated that the existing buildings, plant and equipment have the capacity to process the additional wastes and additional staff numbers and processing equipment are not required. The applicant also claims the development will not result in any material change to the emissions associated with the waste activities.

### **Waste**

The following waste processes are carried out on site:

- Mixed dry recyclables are sorted into the different types and these are then baled and stored before being sent for further treatment.
- Source separated wastes are baled and also stored before being sent off-site.
- Processed mixed solid wastes are accepted from other waste pre-treatment facilities and these are treated to remove recyclables, with the residues then further processed to produce a solid recovered fuel (SRF). The SRF is sent to cement kilns where it is used as a replacement for fossil fuels.
- Food waste (brown bin) and mixed household waste (black bin) that contains odorous materials are accepted and stored in a section of one of the buildings that is fitted with an odour control system. It is then sent to other waste management facilities for further treatment.
- Out of date packaged food from commercial operators is accepted and stored pending transfer to other treatment plants where the packaging is removed. This activity is authorised by the Department of Agriculture, Food and Marine under the Animal By-Products Regulations. Panda has received approval

from the Department to set up a depackaging plant in the building fitted with the odour control system. This will allow Panda to send the depackaged materials directly to biological treatment plants (e.g. composting).

### **Site Location**

A site visit was carried out by Sharon Donnelly, SEHO on 5/4/22.

The site is on Cappagh Road, approximately 2.5 km southwest of Dublin Airport. Stadium Business Park is to the south, Rosemount Business Park to the south-west and to the north is Millennium Business Park. 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 leased to a haulage company. There are ten 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 site itself is surrounded by a fence with some hedging. There were no noticeable odour issues during the site visit.

The site is in an area that is mainly industrial with some office buildings. There are a couple of cafes in the general area along with the National Sports Campus. The roads are in good condition and are capable of handling HGV's. The most dominant source of noise was traffic noise from existing traffic in & out of the Panda facility.

There are no streams or water courses either on site, or in the surrounding area. Water is obtained from an on-site well, however there is public mains in the area.

### **Surface Water**

Rainwater run-off from the buildings is collected and diverted to a rainwater harvesting system for use as 'grey water' in the welfare facilities and for dust suppression in the yards.

Surplus rain water run-off from roofs and run-off from paved areas is collected in the onsite surface water drainage system and directed to an attenuation tank in the south-east corner of the site. This water then passes through an oil Interceptor prior to discharge at a steady rate to the storm water sewer system serving the Stadium Business Park.

The proposed development will not result in any change to the volume and quality of the rainwater run-off and there is no proposed alteration to the existing surface water drainage systems.

## **Soiled Water**

Sanitary and sink wastewater is collected and stored in an underground tank pending removal off-site for treatment in a municipal wastewater treatment plant. As there will be no change to staffing numbers there will be no increase in the volume of sanitary wastewater generated.

It is stated the waste processing carried out on site does not generate a wastewater. The floors of processing buildings are regularly cleaned by a road sweeper. There are two underground concrete holding tanks, each 13.5m<sup>3</sup> capacity, located at the entrances to Buildings A1 and A2 that collect any liquid seeps that occur inside the buildings. The contents are removed as required and sent to a municipal wastewater treatment plant.

## **Climate**

The proposed development will result in additional greenhouse gas emissions associated with increased diesel and electricity consumption due to the increase in waste intake to 450,000 tonnes per annum. It is stated this will be off-set by increasing the diversion rate of biodegradable waste from land fill, the manufacture of solid recovered fuel that replaces fossil fuels and the installation of roof mounted solar panels.

## **Dust**

The primary source of dust emissions is and will continue to be the processing of the wastes, which is carried out in an indoor setting. Secondary sources of dust are vehicle movements on the paved yards, which will be sprayed during periods of dry weather

## **Odour**

It is stated the only wastes accepted at the facility that are a significant source of malodours are the mixed solid waste and brown bin waste, which are handled and stored in the section of Building A 2. The expired food depackaging unit will also be located in this area.

This section of the building is fitted with an Odour Control Unit (OCU) designed to maintain the section under negative pressure and collect and treat the air using an activated carbon filter. It is noted that the building was sealed prior to the installation of the unit to prevent air leaks and is fitted with self-closing doors.

It is stated that the applicant has prepared an Odour Management Plan for the facility. All wastes are processed inside the buildings. The trucks that transport the wastes are fitted with nitrous oxides reduction systems. It is a management objective

to ensure that odorous wastes are removed from the site on the day they are delivered and in all instances within 48 hours. The EPA licence requires monitoring of the emissions from the OCU stack for particulates, odour units and volumetric flow. Monitoring reports included in Appendix 6 show compliance with emission limit values. There were no obvious odour emissions at the time of the site visit.

It should be noted that the efficiency of the activated carbon filter will decline due to the increased intensity of processing as a result of greater volumes of waste being accepted at the facility. The Odour Management Plan for the facility may need to be reviewed in light of the increased volumes of waste being accepted at the facility and the carbon filters in the OCU may need to be changed at more frequent intervals.

## Noise

The current noise sources at the site 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. It is stated the site is in an area that has been extensively developed for industrial and commercial use and mineral extraction. The nearest noise sensitive locations are ten residences approximately 450 m to the south-east of the site.

Daytime, evening and night-time noise monitoring is carried out annually in line with the IE licence and this has established that the dominant source of noise in the locality is road traffic. An assessment of the annual noise monitoring surveys was carried out by Noise and Vibration Consultants Ltd and included in Appendix 7. Results of the assessment confirmed that noise emissions from site activities do not exceed the daytime and night time limits set out in the IE licence and planning permission.

The proposed development will increase the annual waste intake from 250,000 to 450,000 tonnes per annum. It is stated in the EIAR that this will result in an 80% increase in the number of heavy goods vehicles (HGV) accessing the facility. I could not locate an assessment of the potential impact of noise on sensitive receptors as a result of increase traffic flows associated with the operation of the facility. The applicant states "*Vehicle movements in and out of the site are sources of noise; however these activities are part of the normal activities in the area and prevention and mitigation measures are not required*". The EHS does not agree with this statement, particularly in light of the proposal to operate the facility 24 hours a day, 7 days per week which may result in increased HGV movements during quieter nighttime periods.

Current available evidence on the health effects from noise are outlined in 'Environmental Noise Guidelines for the European Union', published by WHO in 2018.

[https://www.euro.who.int/\\_data/assets/pdf\\_file/0008/383921/noise-guidelines-eng.pdf](https://www.euro.who.int/_data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf)

With regard to road traffic noise the following was recommended by the Guideline Development Group (GDG):

**“For average noise exposure, the GDG strongly recommends reducing noise levels produced by road traffic below 53 decibels (dB) Lden, as road traffic noise above this level is associated with adverse health effects.**

**For night noise exposure, the GDG strongly recommends reducing noise levels produced by road traffic during night time below 45 dB Lnight, as night-time road traffic noise above this level is associated with adverse effects on sleep.”**

It is recommended that a noise impact assessment is carried out to assess the impact of noise from HGVs on the sensitive receptors located to the south east of the site. The noise impact assessment should assess the potential for noise nuisance throughout the entire day, particularly during quieter night-time periods.

## Conclusions

1. The Odour Management Plan for the facility and the maintenance and operating criteria for the odour control unit should be reviewed in light of the increased volumes of waste being accepted at the facility.
2. 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 site.

*Lisa Maguire*

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**Lisa Maguire**  
**Environmental Health Officer**