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BASELINE ASSESSMENT REPORT
STARRUS ECO HOLDINGS LTD
MATERIALS RECOVERY FACILITY
MILLENIUM BUSINESS PARK
BALLYCOOLIN
CO. DUBLIN

WASTE LICENCE NO. W0183-01

Prepared For: -

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Millenium Business Park,
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Project	Baseline Assessment Report Starrus Eco Holdings Ltd Millenium Business Park.			
Client	Starrus Eco Holdings Ltd W0183-01			
Report No	Date	Status	Prepared By	Reviewed By
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1. INTRODUCTION

Starrus Eco Holdings Ltd, operates its waste management facility at Millennium Business Park under an Industrial Emissions Licence Reg. No.W0183-01 issued by the Environmental Protection Agency (Agency). SEHL has applied to the Agency for a review of the licence and the Agency has requested SEHL to prepare a 'Baseline Report' prepared in accordance with section 86B of the EPA Act 1992. The purpose of the report is to determine the state of soil and groundwater contamination at the site.

1.1 Methodology

OCM's assessment was based on the Environmental Liabilities Risk Assessment and Decommissioning Management Plan prepared for the facility in 2017 and which have been submitted to and approved by the Office of Environmental Enforcement.

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2. CURRENT USE

2.1 Facility Location & Layout

The installation occupies 4.45 hectares (ha) in the east of the Millennium Business Park, Ballycoolin, Dublin 11. The Business Park (Park) is accessed via the Cappagh Road, the entrance to the installation is off an internal road within the Park.

It is intended to develop the facility in a number of Phases. Phases 1 and 2 opened in July 2006 and involved the construction of the Materials Recovery Facility (MRF) building and supporting ancillaries. The licence allows for the construction of a Phase 3 biowaste treatment building, but this has not yet been constructed.

2.2 Services

The facility obtains water from the mains supply provided by Irish Water. Electricity is provided by the Electricity Supply Board. Process wastewater (dust/odour suppression mist) and yard run-off is discharged to the wastewater drainage system via a silt trap and oil interceptor. Sanitary waste water is discharged directly to the Park's wastewater drainage system.

Rainwater run-off from the building roofs, car parks and areas of the yard where wastes are not stored, used to discharge to the municipal storm water sewer; however due to problems with the storm sewer serving the Business Park the run-off has been temporarily diverted to the foul sewer.

2.3 Waste Types & Volumes

The Materials Recovery building was designed to accommodate distinct waste handling areas for the Commercial and Industrial (C&I) waste, Municipal Solid Waste (MSW) and Construction and Demolition (C&D) waste. Each area has separate access for loading and unloading and waste sorting, processing and storage.

Over time the types of waste accepted and the method of processing changed. In 2014 the C&D and C&I processing line were removed and the processing of C&I and C&D waste ceased. The site continued to accept C&D waste, primarily household skip waste and residual household MSW and food waste. These wastes are bulked up and sent to other waste management facilities for treatment. Loose and baled SRF produced at other waste management facilities is accepted and stored at the site. The loose SRF is stored inside the building, while the bales are stored in a designated open area.

2.4 Hazardous Substances

The only hazardous substances used on site in significant amounts is diesel which is stored in two 2,500 litre self-bunded plastic tanks. Relatively small volumes of chemicals and hydrocarbons, such as paints or white spirit for maintenance purposes, drums of hydraulic oils for maintenance of machinery, engine oils and anti-freeze are used. These materials are stored on pallets in the maintenance shed. The maximum amount of diesel and oils on site at any one time are in Table 2.1

Table 2.1 – Volume of Hazardous Materials

Products	Quantity Stored
Diesel	5,000 litres
Engine and Lubricating Oil	200 litres

SEHL has a documented procedure on the handling and storage of potentially polluting substances used at the facility, e.g. oils. The procedure describes how filling the fuel storage tanks and refuelling/servicing the mobile plant should be carried out to minimise the risk of accidental spills and ensure that if these occur there is a rapid and effective response.

2.5 Emergency Response

SEHL has adopted an Emergency Response Procedure (ERP) that identifies potential hazards at the site that may cause damage to the environment and also specifies the roles, responsibilities and actions required to deal quickly and efficiently with all foreseeable major incidents and to minimise environmental impacts.

2.6 Risk Mitigation Measures

The licence conditions require the provision of mitigation measures, both infrastructural and procedural, that effectively minimise the risk of environmental liabilities associated with unplanned events. Such measures, which are subject to regular review by SEHL include:

- Provision of an appropriately experienced Facility Management Team and implementation of appropriate staff training programmes;
- Adoption of site specific Accident Prevention Policy and Emergency Response Procedures (ERPs);
- Provision of impermeable concrete surfaces in areas where hazardous substances are stored and handled;
- Provision and maintenance of appropriate spill response and clean-up equipment in areas where there is a risk of spills occurring;
- Regular site inspections.

3. PAST USE

3.1 Site History

In 2004, An Bord Pleanála granted planning permission for the construction of the facility on a green field site. Prior to this construction the installation was agricultural purposes. There is no record or evidence of any previous development on the site. Development began in January 2005 with the construction of Phase 1 and 2.

The Agency granted the current Waste Licence (Reg No. W0183-01) to Greenstar in April 2004. The Licence was transferred to SEHL on the 4th March 2014. The Licence was transitioned to an Industrial Emissions Licence (IED) on the 16th December 2015.

3.2 Incident History

There have been no incidents (spills, fires, leaks etc) since operations began at the site that had potential to cause soil or groundwater pollution.

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4. SOILS & GROUNDWATER ASSESSMENT

4.1 Geology

Geotechnical site investigations undertaken at the Business Park indicate that the overburden ranges in thickness from less than 1.3 m to 8.45 m thick. At the installation, the thickness is thin in the north-western portion of the site and thickens to the east and south. Information from the Geological Survey of Ireland (GSI) suggests a similar range in subsoil thickness locally in the surrounding area. The subsoils comprises sandy gravelly boulder clays.

4.2 Hydrogeology

The bedrock locally comprises calcareous, shale, limestone, conglomerate of the Tober Coleen Formation. Based on data obtained from the GSI the bedrock aquifer is a locally important (**Lm**) aquifer that is productive in local zones. The aquifer vulnerability rating is Extreme (**E**).

4.3 Soil and Groundwater Quality

There is no evidence to indicate that past and current uses have caused soil or groundwater contamination. The aquifer beneath the site is part of the Dublin Area Groundwater Body (IE_EA_G_005). The condition of a groundwater Water Body is defined by its chemical and quantitative status, whichever is worse, and groundwater quality is ranked in one of two status classes: Good or Poor. The Dublin Area Water Body is categorised as being of 'Good' status, but is 'At Risk' of achieving its objective of protecting the existing status.

At the time this report was prepared there was no available information on the soil groundwater quality beneath the site.