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BASELINE ASSESSMENT REPORT

MATERIALS RECOVERY AND TRANSFER FACILITY

MILLENNIUM BUSINESS PARK

BALLYCOOLIN

DUBLIN 11

Prepared For: -

Starrus Eco Holdings Limited

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Project	Baseline Assessment Report Millennium Business Park			
Client	Starrus Eco Holdings Ltd.			
Report No	Date	Status	Prepared By	Reviewed By
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1. INTRODUCTION

The Starrus Eco Holdings Limited (SEHL) installation in Millennium Business Park operates under an Industrial Emission (IE) Licence issued by the Environmental Protection Agency. This Baseline Assessment was prepared to support a licence review to increase the annual waste intake from 270,000 tonnes to 450,000 tonnes.

1.1 Methodology

The assessment followed the guidance in Part 5 of the European Commission Guidance concerning baseline reports under Article 22(2) of Directive 2010/75/EU on industrial emissions 2014/C 136/03.

2. STAGE 1 & 2 HAZARDOUS SUBSTANCE

2.1 Stage 1 Hazardous Substances Currently Used, Produced and Released

The materials/products used on site include diesel, hydraulic and engine oils, anti-freeze, detergents and disinfectants. All fuel and oils are stored internally in a bunded area in a dedicated shed located on the northern boundary of the installation.

2.2 Stage 2 Relevant Hazardous Substances

Based on the quantities on site the only hazardous substance of relevance to the baseline conditions is diesel.

3. STAGE 3 - SITE SPECIFIC POLLUTION POSSIBILITY

3.1 Site Location

The site is 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.

3.2 Site Layout

The facility layout is shown on Drawing No. 211_066-ORS-ZZ-00_DR-AR-210. It 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.

3.3 Oil & Chemical Storage

A self-bunded 5,000 litre diesel tank is located to the south of the weighbridge for fuelling the mobile plant. A self-bunded 2,500 litre diesel tank is located in the north of the site. The back-up generator at MP2 has an internal 2,500 litre diesel storage tank. Hydraulic and engine oils are stored on bunded pallets in the maintenance shop in MP2. Bund integrity testing is completed at 3-year intervals.

3.4 Accidents & Emergencies

SEHL have adopted an Accident Prevention Policy and prepared a Safety Statement that identifies and evaluates the major on-site potential hazards and describes the control measures in place. An emergency is an accident/incident that has the potential to result in environmental pollution and/or harm to human health. SEHL has prepared an Emergency Response Procedure (ERP) that addresses any emergency/incident that may occur and makes provisions for minimising the effects on the environment, has been prepared and communicated to all staff members.



INFORMATION

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Figured dimension only to be taken from this drawing. All dimensions to be checked on site. Consultants to be informed immediately of any discrepancies before work proceeds.

REV NO.	DATE:	REVISION NOTE:	DWN BY:	CKD BY:
P01	21/02/2023	ISSUED FOR COMMENT	CB	CB
P02	03/03/2023	ISSUED FOR PLANNING	CB	CB

CLIENT:	STARRUS ECO HOLDINGS LIMITED (SEHL) TRADING AS GREENSTAR		
PROJECT:	PROPOSED ODOUR ABATEMENT SYSTEM MILLENNIUM BUSINESS PK, CAPPAGH ROAD, TOWNLAND OF GRANGE, BALLYCOOLIN, DUBLIN 11		
TITLE:	EXISTING SITE LAYOUT		
DRAWN:	CHECKED:	APPROVED:	JOB NO:
CB	CB	OD	211_066
DATE:	SCALE:	DRAWING NO:	REV:
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4. SITE HISTORY

Prior to development as a Business Park the lands had been used for agricultural purposes. In 2003 Fingal County Council granted planning permission for the development of a Materials Recovery Facility (MRF) and a Biological Treatment Plant. In April 2004, the EPA issued a Waste Licence authorising the operation of the MRF and the Biological Treatment Plant.

The MRF was constructed and waste operations began in 2006; however the Biological Treatment Plant was not built. In September 2018 Fingal County Council granted permission 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. In April 2020 the EPA issued a revised licence authorising the operation of the new building and this was commissioned in June 2020.

Since waste activities began in 2006 there have been no incidents, accidents or emergencies at the installation that had the potential to result in significant adverse impacts on soil and groundwater.

5. ENVIRONMENTAL SETTING

5.1 Surrounding Land Use

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 SEHL Panda Cappagh Road MRF is approximately 400 m to the south. The nearest occupied dwelling is approximately 1km to the south.

5.2 Hydrology

The site is in the catchment of the Tolka River, which is approximately 2.5 kilometres to the south west. 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.

5.3 Geology & Hydrogeology

The subsoils beneath the site are between 1.3 and 8.45 m thick and comprise sandy gravelly boulder clays. The bedrock belongs to the Tober Coleen Formation and comprises calcareous, shale, limestone conglomerate. Immediately to the south, the bedrock consists of massive unbedded fine grained limestones of the Waulsortian Formation.

The bedrock is a poor aquifer which is generally unproductive except for Local Zones. The local direction of groundwater flow is to the south west, but is likely to be greatly influenced by the large scale quarrying immediately to the east of the site (Huntstown Quarry). The aquifer vulnerability to pollution from the ground surface ranges from High to Moderate across the Business Park. The aquifer is part of the Dublin Area Groundwater Body, which is categorised as being of 'Good' status, but is 'At Risk' of achieving its objective of protecting the existing status.

5.4 Designated Sites

There are no habitats of ecological importance within the site boundary and the site is not in or close to a Special Area of Conservation (SAC), Special Protected Areas (SPA) or National Heritage Areas (NHA). The nearest Natura 2000 site is the South Dublin Bay & Tolka River Estuary SPA which is 9.2 km south east of the facility.

6. SITE CHARACTERISATION

6.1 Conceptual Site Model

The site is completely covered by buildings and paved areas. The Geological Survey of Ireland (GSI) Subsoil Distribution Maps indicate the subsoils across most of the site are Tills derived from Limestone. The subsoils are between 1.3 and 8.45 m thick and comprise sandy gravelly boulder clays.

The GSI groundwater vulnerability map indicates the bedrock aquifer vulnerability to contamination from the ground surface ranges from High to Moderate across the Business Park. 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.

6.1.1 *Source-Pathway-Receptor*

The source is the diesel used to fuel the mobile plant and the back-up generator. The potential receptors are the subsoils and the bedrock aquifer. The only pathway between the source and the receptors, and the only potential pathway is damage to the paved floors.

6.2 Groundwater Quality

As the licence does not require monitoring of the groundwater there are no on-site groundwater monitoring wells and no data on water quality beneath the site. The aquifer is part of the Dublin Area Groundwater Body (IE_EA_G_005). The condition of a Groundwater 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 Groundwater Body is categorised as being of 'Good' status, and its Risk status is currently under review.

6.3 Soil Quality

There is no information on the soil quality beneath the licensed area.