SITE CONDITION REPORT TEMPLATE

For full details, see H5 *SCR guide for applicants* v2.0 4 August 2008

COMPLETE SECTIONS 1-3 AND SUBMIT WITH APPLICATION

DURING THE LIFE OF THE PERMIT: MAINTAIN SECTIONS 4-7

AT SURRENDER: ADD NEW DOC REFERENCE IN 1.0; COMPLETE SECTIONS 8-10; & SUBMIT WITH YOUR SURRENDER APPLICATION.

1.0 SITE DETAILS	
Name of the applicant	ENVA battery recycling Ltd
Activity address	Immingham Materials Recycling Facility, Unit 1-5 Pelham Industrial Estate, Manby Road. Immingham, Lincolnshire DN40 2LF.
National grid reference	518650, 415470

Document reference and dates for Site Condition Report at permit application and surrender	317213 Site Condition report, August 2025 (this document)

Document references for site plans (including location and boundaries)	317213 DW01 Site Location Plan 217213 DW07 Permit boundary extension plan

Note:
In Part A of the application form you must give us details of the site's location and provide us with a site plan. We need a detailed site plan (or plans) showing:

- Site location, the area covered by the site condition report, and the location and nature of the activities and/or waste facilities on the site.
- Locations of receptors, sources of emissions/releases, and monitoring points.
- Site drainage.
- Site surfacing.

If this information is not shown on the site plan required by Part A of the application form then you should submit the additional plan or plans with this site condition report.

2.0 Condition of the land at permit issue	
Environmental setting including: • geology • hydrogeology • surface waters	Geology: Reference to the British Geological Survey Online Geology viewer (accessed 220825) indicates the solid bedrock geology beneath the site is the Burnham Chalk Formation. This formation is described as white, thinly-bedded chalk with common tabular and discontinuous flint bands and sporadic marl seams. The superficial geology beneath the site is recorded as Tidal Flat Deposits. Tidal flat deposits, including mud flat and sand flat deposits. They consist of unconsolidated sediment, mainly mud and/or sand. Hydrogeology: reference to the Envirocheck Report indicates the solid strata beneath the site are considered to be a Principal Aquifer. The superficial strata are considered unproductive. The Envirocheck report and the MAGIC mapping service (accessed 220825) indicates that the groundwater vulnerability is considered to be Low.

	Records (Envirocheck, MAGIC) demonstrate that the site is in a Zone 2 (Outer) Source Protection Zone. This zone is defined by the 400-day travel time from a point below the water table. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants. Hydrology: the nearest surface water feature appears to be a unnamed dyke or stream located approximately 125m to the northwest of the site. The Envirocheck report and the flood maps available on Gov.UK (accessed 220825 indicate that the site is in an area that is susceptible to surface water flooding (1:30 and 1:100 year) as well as being located in flood zones 2 and 3 extreme flooding/flooding from rivers or sea. The site have confirmed that the site has never been flooded while ENVA have been operating the site.
Pollution history including: • pollution incidents that may have affected land • historical land-uses and associated contaminants • any visual/olfactory evidence of existing contamination • evidence of damage to pollution prevention measures	Site History: The earliest historic mapping in the Envirocheck Report (1887) shows the site as agricultural fields. An unnamed drain runs across the site in an approximately southeast-northwest orientation. From 1964 a small pond is also shown on the site. By 1975 the general buildings that are located on site today are present. They are noted as warehouses and a depot. The pond and drain have been removed. Pollution Incidents: The Envirocheck notes 1 pollution incident on site. This is recorded as a minor incident although the records do not indicate the pollutant or the cause. The incident was dated 25th May 1993.
Evidence of historic contamination, for example, historical site investigation, assessment, remediation and verification reports (where available)	A site investigation has been undertaken recently by Geo-Matters Ltd on both the ENVA Batteries facility and that occupied by SARS Metals to the northwest which ENVA are intending to occupy. Both reports are available for consultation. Works at both sites involved the drilling of several window-sample type boreholes with the installation groundwater monitoring equipment in a number of boreholes. Borehole drilling logs demonstrate that the geology is similar to that would be expected from geologic records i.e. a layer of Made Ground overlying Tidal Flat deposits. The depth of the Tidal Flat layer was not proven by investigation (max. thickness 4.80 m; WS1). The largest depth of Made Ground was found in WS6 (1.50mbgl), generally much less Made Ground in borehole logs.

	The reports conclude that: 'Chemical analysis results have been compared with current relevant guidance and site-specific screening values which indicates that there are no significant elevated levels of contaminants present within the soil and or water samples obtained from the site.'
Baseline soil and groundwater reference data	Reference soil and groundwater data can be found in Table 5.1 and Table 5.2 of each of the investigation reports
Supporting information	• Source information identifying environmental setting and pollution incidents • Historical Ordnance Survey plans • Site reconnaissance • Historical investigation / assessment / remediation / verification reports • Baseline soil and groundwater reference data

3.0 Permitted activities	
Permitted activities	Battery recycling
Non-permitted activities undertaken	n/a
Document references for: • plan showing activity layout; and • environmental risk assessment.	317213 DW02 Site Layout Plan 317213 Env. Risk Assessment (Sep 25)

Note:

In Part B of the application form you must tell us about the activities that you will undertake at the site. You must also give us an environmental risk assessment. This risk assessment must be based on our guidance (*Environmental Risk Assessment - EPR H1*) or use an equivalent approach.

It is essential that you identify in your environmental risk assessment all the substances used and produced that could pollute the soil or groundwater if there were an accident, or if measures to protect land fail.

These include substances that would be classified as 'dangerous' under the Control of Major Accident Hazards (COMAH) regulations and also raw materials, fuels, intermediates, products, wastes and effluents.

If your submitted environmental risk assessment does not adequately address the risks to soil and groundwater we may need to request further information from you or even refuse your permit application.

4.0 Changes to the activity	
Have there been any changes to the activity boundary?	If yes, provide a plan showing the changes to the activity boundary.
Have there been any changes to the permitted activities?	If yes, provide a description of the changes to the permitted activities
Have any 'dangerous substances' not identified in the Application Site Condition Report been used or produced as a result of the permitted activities?	If yes, list of them
Checklist of supporting information	• Plan showing any changes to the boundary (where relevant) • Description of the changes to the permitted activities (where relevant) • List of 'dangerous substances' used/produced by the permitted activities that were not identified in the Application Site Condition Report (where relevant)

5.0 Measures taken to protect land	
Use records that you collected during the life of the permit to summarise whether pollution prevention measures worked. If you can't, you need to collect land and/or groundwater data to assess whether the land has deteriorated.	
Checklist of supporting information	• Inspection records and summary of findings of inspections for all pollution prevention measures • Records of maintenance, repair and replacement of pollution prevention measures

6.0 Pollution incidents that may have had an impact on land, and their remediation	
Summarise any pollution incidents that may have damaged the land. Describe how you investigated and remedied each one. If you can't, you need to collect land and /or groundwater reference data to assess whether the land has deteriorated while you've been there.	
Checklist of supporting information	• Records of pollution incidents that may have impacted on land • Records of their investigation and remediation

7.0 Soil gas and water quality monitoring (where undertaken)

Provide details of any soil gas and/or water monitoring you did. Include a summary of the findings. Say whether it shows that the land deteriorated as a result of the permitted activities. If it did, outline how you investigated and remedied this.

Checklist of supporting information	• Description of soil gas and/or water monitoring undertaken • Monitoring results (including graphs)

8.0 Decommissioning and removal of pollution risk

Describe how the site was decommissioned. Demonstrate that all sources of pollution risk have been removed. Describe whether the decommissioning had any impact on the land. Outline how you investigated and remedied this.

Checklist of supporting information	• **Site closure plan** • **List of potential sources of pollution risk** • **Investigation and remediation reports (where relevant)**

9.0 Reference data and remediation (where relevant)

Say whether you had to collect land and/or groundwater data. Or say that you didn't need to because the information from sections 3, 4, 5 and 6 of the Surrender Site Condition Report shows that the land has not deteriorated.

If you did collect land and/or groundwater reference data, summarise what this entailed, and what your data found. Say whether the data shows that the condition of the land has deteriorated, or whether the land at the site is in a "satisfactory state". If it isn't, summarise what you did to remedy this. Confirm that the land is now in a "satisfactory state" at surrender.

Checklist of supporting information	• Land and/or groundwater data collected at application (if collected) • Land and/or groundwater data collected at surrender (where needed) • Assessment of satisfactory state • Remediation and verification reports (where undertaken)

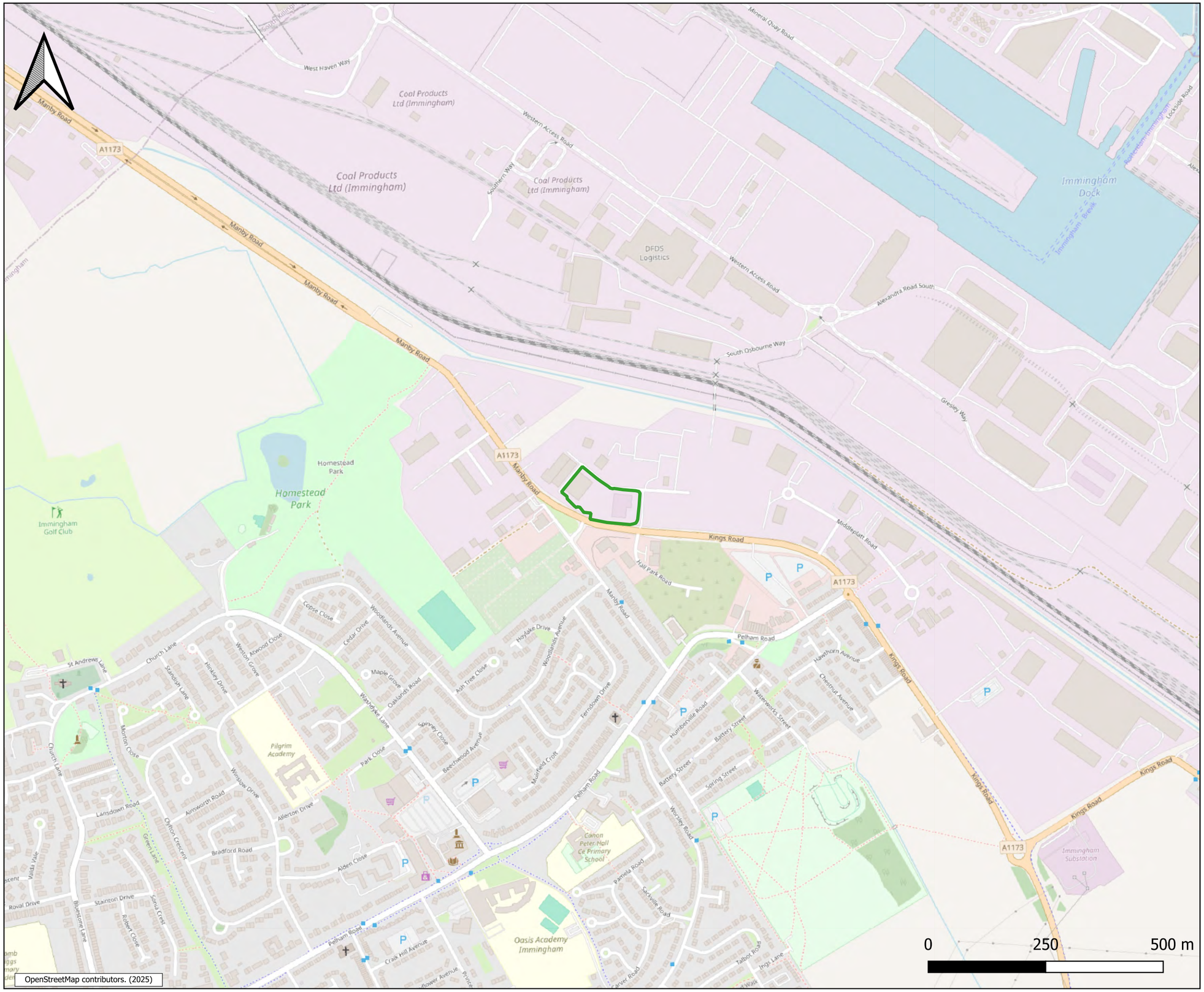
10.0 Statement of site condition

Using the information from sections 3 to 7, give a statement about the condition of the land at the site. This should confirm that:

- the permitted activities have stopped
- decommissioning is complete, and the pollution risk has been removed
- the land is in a satisfactory condition.

Drawings

317213 DW01 Site Location Plan
217213 DW07 Permit boundary extension plan
317213 DW02 Site Layout Plan



Legend:

Permit Boundary

Consultant:

Arthain Ltd

Client:

Enva Battery Recycling Ltd

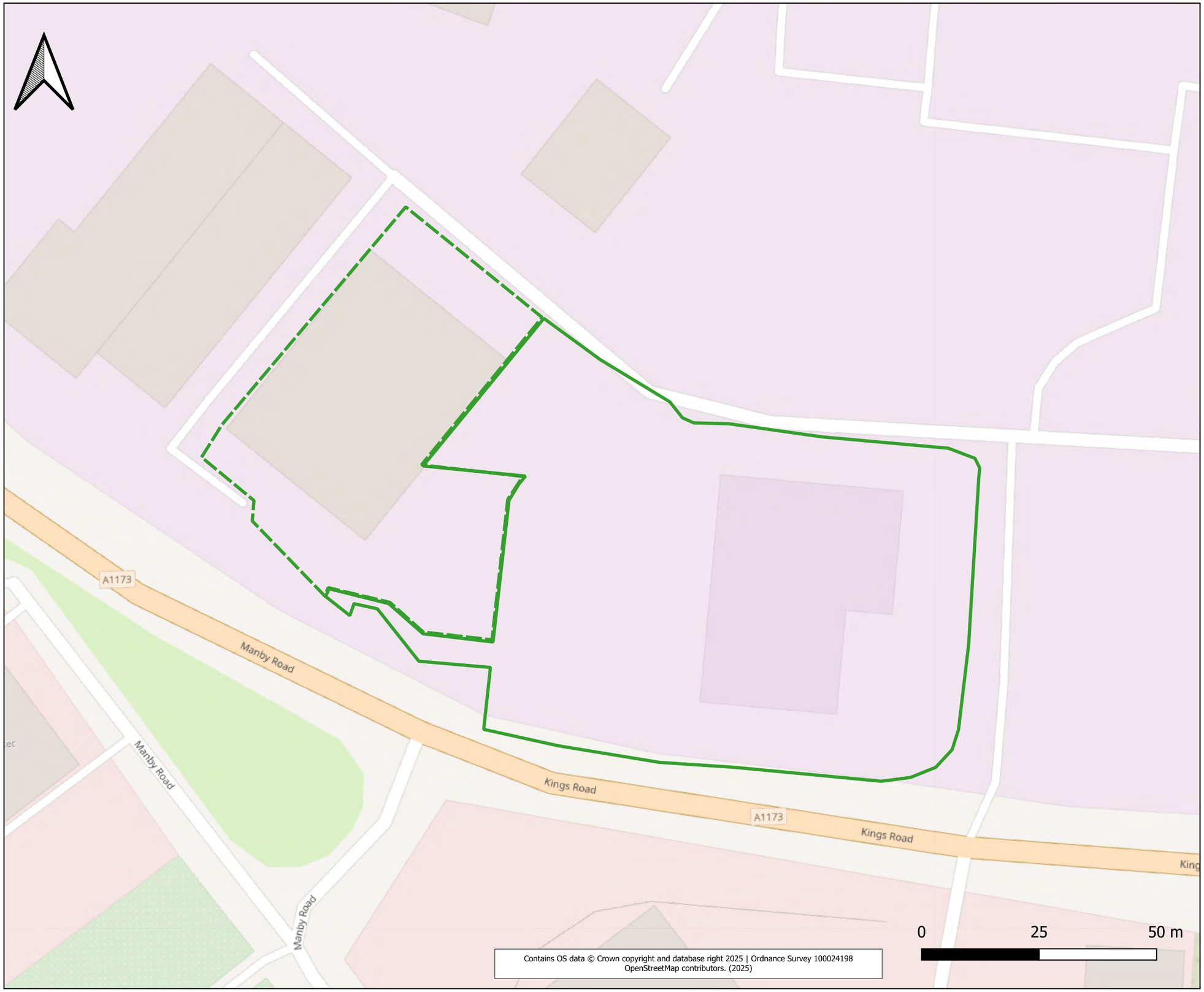
Site: Pelham Industrial Estate, Manby Road, Immingham, Lincolnshire, DN40 2LF

Drawing title: Site Location Plan

Date:	Scale:	Paper size:
16/09/25	1:8,000	A3 (420×297mm)

Drawn by:	Checked by:	Status:	FInal revision
RM	KB	Final	-

Drawing Ref:	Drawing No:
317213 DW01	DW01



Legend:

- Permit boundary (V012)
- Proposed permit boundary extension

Consultant:

Arthain Ltd

Client:

Enva Battery Recycling Ltd

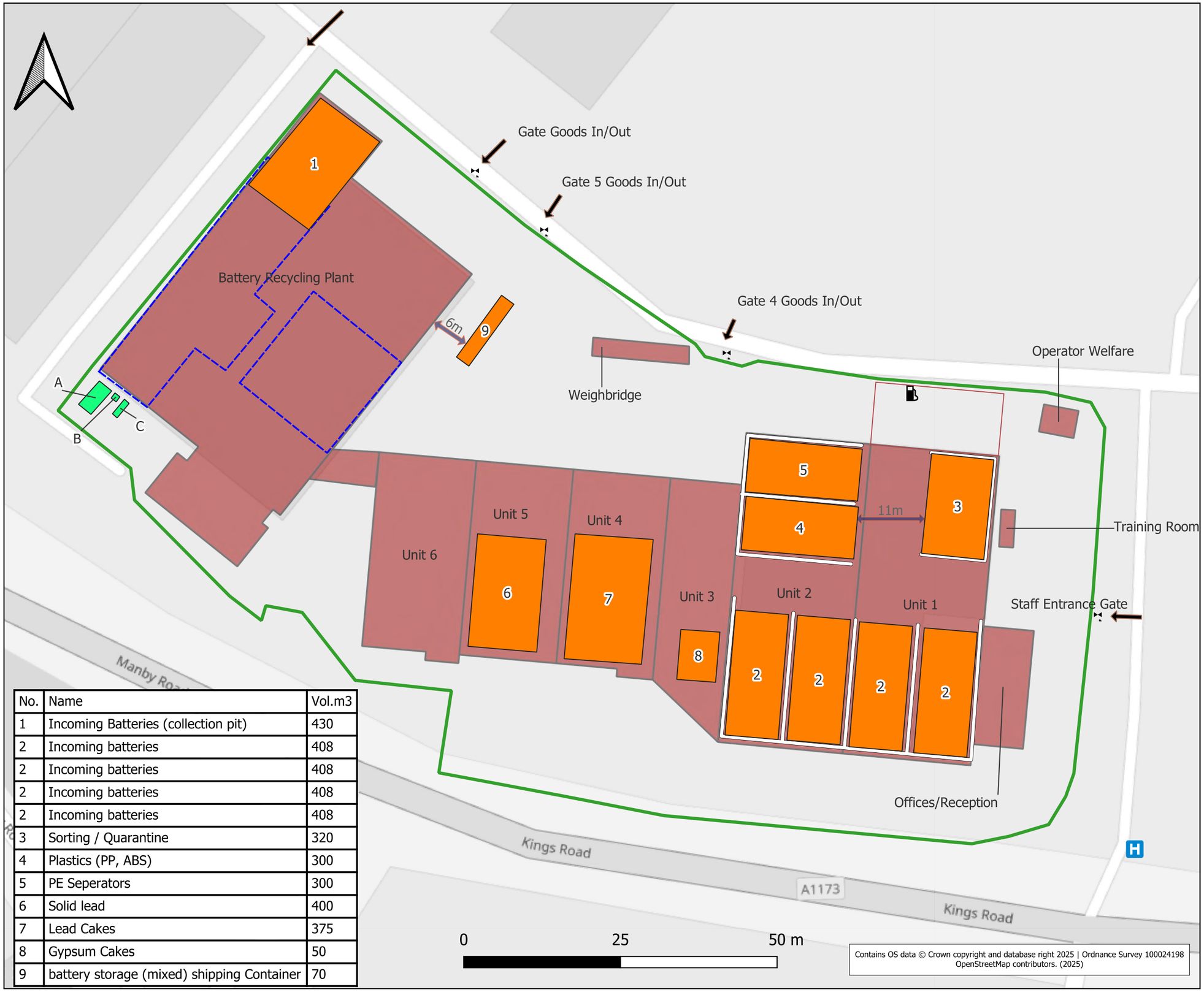
Site: Pelham Industrial Estate, Manby Road, Immingham, Lincolnshire, DN40 2LF

Drawing title: Permit boundary extension plan

Date:	Scale:	Paper size:
30/09/2025	1:800	A3 (420×297mm)

Drawn by:	Checked by:	Status:	FInal revision
RM	KB	Final	-

Drawing Ref:	Drawing No:
317213 DW07	DW07



No.	Name	Vol.m3
1	Incoming Batteries (collection pit)	430
2	Incoming batteries	408
2	Incoming batteries	408
2	Incoming batteries	408
2	Incoming batteries	408
3	Sorting / Quarantine	320
4	Plastics (PP, ABS)	300
5	PE Seperators	300
6	Solid lead	400
7	Lead Cakes	375
8	Gypsum Cakes	50
9	battery storage (mixed) shipping Container	70

Legend:

- Permit Boundary
- Waste storage
- Raw materials
- Concrete bay
- Separation distances
- Access gates
- Fire engine access
- Bunding
- Hydrant
- Diesel
- Battery Recycling Plant

Consultant:

Arthain Ltd

Client:

Enva Battery Recycling Ltd

Site: Pelham Industrial Estate, Manby Road, Immingham, Lincolnshire, DN40 2LF

Drawing title: Site Layout Plan

Date:	Scale:	Paper size:
15/10/25	1:600	A3 (420×297mm)

Drawn by:	Checked by:	Status:	FInal revision
RM	KB	Final	-

Drawing Ref:	Drawing No:
317213 DW02	DW02

Appendix A

317213 Env. Risk Assessment (Sep 25)

Environmental Risk Assessment

Prepared by: Rowena Maitland

For: ENVA Battery Recycling Ltd

Site: Immingham Materials Recycling Facility, Immingham

Date: 11/09/2025

Document Ref: 317213-ERA

Issue-01

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Quality Assurance

Issue Record

Revision	Description	Date	Author	Reviewer	Approver
1.0	Issue	11/09/2025	RM	KB	KB

Staff Detail

Initials	Name	Position
RM	Rowena Maitland	Senior Environmental Consultant
KB	Kate Bradt	Principal Environmental Consultant

Contents

Tables

Drawings

Sensitive Receptors Plan	317213 DW03
Sensitive Receptors Plan (Habitats)	317213 DW03b

Appendices

1. Introduction

1.1 Brief

ENVA Battery Recycling Ltd (ENVA) (the Operator) run a battery recycling facility at Immingham Materials Recycling Facility, Unit 1-5 Pelham Industrial Estate, Manby Road, Immingham, Lincolnshire, DN40 2LF (the Site).

The proposed variation is to allow for the extension of the current permit boundary, to extend into the land adjacent to the site currently operated as a catalytic converter recycling facility operated by S.A.R. Metals. The boundary extension will allow installation of a new battery recycling plant, so that the recycling activities can run concurrently, without interruption. It is proposed that the existing recycling plant will be decommissioned, following successful commissioning of the new plant. The variation will also increase throughputs through the site and authorise the storage (and not treatment) of lithium-ion batteries.

1.2 Site Location

The Site is located at National Grid reference TA 18613 15507, within an industrial estate, located to the northeast of Immingham town centre. The A1173 runs parallel to the southern boundary and an industrial estate bounds the north, east and west boundary of the Site.

1.3 Methodology

This report has been prepared following the Environment Agency's Risk Assessment guidance; Risk assessments for your environmental permit - GOV.UK. Specifically relating to the potential risks associated with odour, noise and vibration, fugitive emissions and accidents and incidents.

The risk assessment addresses the above risks and is based on the following methodology:

1. Identify and consider risks at the site, and the sources of the risks.
2. Identify the receptors at risk from the site.
3. Identify the possible pathways from the sources of the risks to the receptors.
4. Assess risks relevant to the activities on site and check they are acceptable and can be screened out.
5. State control risks if they are too high.

The Environmental Risk Assessment assesses the risks to the environment and human health from activities carried out by ENVA's Battery recycling facility and identifies the pollutant linkage i.e. source – pathway – receptor for each risk type.

2. Control of Wastes

2.1 Permitted activities

- AR1 – battery shredding
- AR2 – battery cutting
- AR3 – battery repackaging
- AR4 – plastic shredding
- AR5 – hazardous waste storage
- AR7 - battery sorting (addition of AR7 to installation permit as proposed variation).

2.2 Directed associated activities

- AR6 - physical treatment for batteries for the purpose of the recycling
- AR7 – physical treatment of WEEE waste for the purpose of recycling
- AR8 – storage of non-hazardous waste
- AR9 – washing of plastics from the shredding process
- AR10 – storage of acid
- AR11 – testing of batteries unsuitable for treatment
- AR13 – physical treatment of non-hazardous waste (addition of AR13 to installation permit)

2.3 Permitted waste types

A list of waste codes is provided below. Codes highlighted in green are already accepted at the installation for treatment.

Table 2-1 Permitted Waste Types and Quantities for Activity AR2 - Battery Cutting

Maximum Quantity	The annual throughput of all combined activities shall not exceed 40,000 tonnes (60,000 tonnes post variation). Hazardous properties HP8.
Waste Code	**Description**
16	Wastes not otherwise specified in the list
16 06	Batteries and accumulators
16 06 01*	Lead batteries
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	Separately collected fractions (except 15 01)
20 01 35*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

Table 2-2 Permitted waste types and quantities for activity AR4 and AR5 – lead and plastic from lead acid battery processing only

Maximum Quantity	The annual throughput of all combined activities shall not exceed 40,000 tonnes (60,000 tonnes post variation). Hazardous properties HP8.
Waste Code	**Description**
19	
19 12	
19 12 11*	Other waste (including mixtures of materials) from mechanical treatment of waste containing hazardous substances (consisting only of lead and plastic from lead acid battery processing)

Table 2-3 Permitted waste types and quantities for activity AR1, AR3 and AR5 – battery shredding and storage

Maximum quantity	The annual throughput of all combined activities shall not exceed 40,000 tonnes (60,000 tonnes post variation). Hazardous properties HP8.
Waste Code	**Description**
16	Wastes not otherwise specified in the list
16 06	Batteries and accumulators
16 06 01*	Lead batteries
16 06 02*	Nickel-Cadmium batteries – for sorting and transfer
16 06 03*	Mercury-containing batteries – for sorting and transfer
16 06 04*	Alkaline batteries (except 16 06 03) – for sorting and transfer
16 06 05*	Other batteries and accumulators – for sorting and transfer
16 06 06*	Separately collected electrolyte from batteries and accumulators – for sorting and transfer
19	
19 12	
19 12 11*	Other waste (including mixtures of materials) from mechanical treatment of waste containing hazardous substances (consisting only of lead and plastic from lead acid battery processing)
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	Separately collected fractions (except 15 01)
20 01 33*	Batteries and accumulators included in 16 06 01, 16 06 02, or 16 06 03, as well as unsorted batteries and accumulators containing these batteries.
20 01 34*	Batteries and accumulators other than those mentioned in 20 01 33
20 01 35*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21 and 20 01 23 containing hazardous components

20 01 36*	Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

Table 2-4 Permitted waste types and quantities for activity AR6 – bulking, storage and transfer of non-hazardous waste

Maximum Quantity	The annual throughput of all combined activities shall not exceed 40,000 tonnes (60,000 tonnes post variation). Hazardous properties HP8.
Waste Code	**Description**
16	Wastes not otherwise specified in the list
16 06	Batteries and accumulators
16 06 04	Alkaline batteries (except 16 06 03) – for sorting and transfer
16 06 05	Other batteries and accumulators – for sorting and transfer
20	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collected fractions
20 01	Separately collected fractions (except 15 01)
20 01 34	Batteries and accumulators other than those mentioned in 20 01 33
20 01 36	Discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35

3. Potential Hazards

The potential hazards resulting from the activities carried out at the ENVA battery recycling facility have been considered, and are summarised below:

- Odour:
    - Waste materials
- Noise and vibration:
    - Use of battery treatment plant
    - Use of plant and machinery
    - Use of reverse vehicle warnings
    - Engine noise from vehicles
- Fugitive emissions:
    - Particulate matter i.e. dust
    - Scavenging birds, pests and vermin
    - Mud and litter
- Accidents:
    - Fire
    - Leaks and spillages
    - Flooding
    - Unauthorised access

4. Pathways

The pathway identified for each risk type are shown in Table 4-1.

Table 4-1 Potential pathways

Risk Type	Pathways
Odour	Air
Particulate matter (dust) – point source	Air (point source)
Fugitive emissions (dust)	Air
Noise and Vibration	Air
Accidents / Incidents	Surface water run-off
	Infiltration
	Percolation
	Air

5. Receptors

5.1 Sensitive Receptors

Receptors within 1km of the site have been identified are shown in Table 5-1. See Drawing Sensitive Receptors.

Table 5-1 Location of potential receptors

Receptor	Distance from site (m)	Direction
Residential		
Residential area north of Immingham	80m	South
Protected habitats		
Chalk rivers (protected habitats)	180	North
Homestead Park Pond (LWS)	550	West
Humber Estuary RAMSAR site	1500	Northeast
Sensitive Land uses		
Supermarket	500m	South
Primary School	600m	South
School and Leisure Centre	800m	South
Industrial/Commercial		
Business units on Pelham Ind. Estate	20m	West
Industrial units N. of Hall Park Road	20m	North
Industrial units E. of Hall Park Rd	20m	East
Manby Hall Business Park	20m	Southeast
Business units SW. of Manby Rd	100m	West
Petrol Station	100m	South
Immingham Dock	250m	North
Infrastructure/utilities		
Hall Park Road	0m (adjacent)	North
Hall Park Road	0m (adjacent)	East
A1173 Manby Road	0m (adjacent)	South
Railway passing west to east	250m	North
Railway passing northwest to southeast	500m	East
Controlled waters		
Zone 3 – total catchment	0m	Onsite
Zone 2 – outer protection zone	0m	Onsite
Zone 1 – inner protection zone	220m	East

5.2 Sites of Environmental Importance

As part of the pre-application advice, a Nature and Heritage Conservation Screening report was carried out and identified nature and heritage conservation sites, protected species and habitats and other features of significance. Table 5-2 identifies sites of environmental significance which were identified in the Nature and Heritage Conservation Screening report and will be considered within the risk assessment.

Table 5-2 Sites of environmental importance

Sites and Features within screening distance	Name	Screening distance (km)	Source
Special Areas of Conservation (cSAC or SAC)	Humber Estuary	10	Joint Nature Conservation Committee and Magic map
Special Protection Area (pSPA or SPA)	Humber Estuary	10	Joint Nature Conservation Committee and Magic map
Ramsar	Humber Estuary	10	Joint Nature Conservation Committee and Magic map
Sites of Special Scientific Interest (SSSI)	Humber Estuary	2	Natural England and Magic map
Local Wildlife Sites (LWS)	Homestead Park Pond Rosper Road Pools	2	Appropriate Local Record Centre (LRC)
Protected Habitat	Chalk rivers	2	Natural England

6. Risk Assessment

6.1 Risk Assessment

The Environmental Risk Assessment, Table 6-2, looks at each specific hazard identified and assesses the likelihood of those hazards impacting on nearby receptors. This is achieved by fulfilling the following objectives:

- Identify the location and nature of each hazard
- Identify the specific receptors potentially at risk and assess the sensitivity of each receptor
- Provide an assessment of the risk posed to each sensitive receptor
- Identify management and monitoring techniques to remove or mitigate the risk
- Provide recommendations for more detailed assessments where necessary.

The risk rating is worked out by combining the Likehood of exposure with the magnitude of the potential consequences. Categorised as high, medium or low as shown in Table 6-1.

Table 6-1 Key for magnitude of the risk

High
Medium
Low

Table 6-2 Environmental Risk Assessment

Risk				Judgement				Action	
Receptor	**Source**	**Harm**	**Pathway**	**Probability of exposure**	**Consequence**	**Magnitude of risk**	**Judgement for Magnitude**	**Risk Management**	**Residual risk**
Protect from risk	Agent or process with potential to cause harm	Harmful consequences if things go wrong	How receptor comes into contact with the source	Contact likelihood	Consequence severity	Risk magnitude	Judgement basis	Risk management	Risk following risk management
Local human population	Release of particulate matters (dusts)	Harm to human health – respiratory irritation and illness. Nuisance – dust on cars, clothing etc.	Air transport then inhalation	Low	Medium	Low	Permitted waste types do not include dusts, powders or loose fibres. Treatment activities include transfer, sorting, separating, shredding/	Refer to the Dust Emissions Management Plan. All waste accepted at the site will be treated in an enclosed building and include abatement of emissions to air. The whole Site, including operational areas, is maintained in an orderly and tidy state.	Low
Local human population	Waste, litter and mud on local roads	Nuisance, loss of amenity, road traffic accidents	Vehicles entering and leaving the site	Low	Medium	Low	Road safety, local residents often sensitive to mud on roads	The whole Site, including operational areas, is maintained in an orderly and tidy state. Wastes accepted pose low risk of litter or mud. All waste is handled and treated indoors.	Low
Local human population	Odour	Nuisance, loss of amenity	Air transport then inhalation	Low	Medium	Low	Local residents often sensitive to odour, however, permitted waste	Permitted wastes pose very low risk of odour. Treatment of waste within an enclosed building. Emissions	Low

Risk				Judgement				Action	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Judgement for Magnitude	Risk Management	Residual risk
							types have low odour potential	shall be free from odour at levels likely to cause pollution.	
Local human population	Noise and vibration	Nuisance, loss of amenity, loss of sleep	Noise through the air and vibration through the ground	Medium	Medium	Medium	Local residents often sensitive to noise and vibration	The battery recycling plant is fully enclosed. Plant and equipment serviced and maintained regularly. No complaints from existing treatment activities.	Low
Local human population	Scavenging animals and birds, pests (e.g. flies).	Harm to human health from waste carried off site. Nuisance and loss of amenity	Air transport and over land	Low	Low	Low	Permitted wastes unlikely to attract scavenging animals and birds or pests.	The whole Site, including operational areas, is maintained in an orderly and tidy state. All waste handled and stored indoors.	Low
Local human population and local environment	Flooding off site	If waste is washed off site may contaminate building / gardens / natural habitats downstream	Flood waters	Medium	Medium	Medium	Medium risk of flooding from rivers, and very low risk of surface water flooding. However, waste is either stored within an enclosed building or stored in appropriate weatherproof containers, or in appropriate cover containers.	The accident management covers: • Assessing the risk of flooding and measures to prevent or reduce risk • Contingency plans for diversion of waste, if required • Emergency procedures which are clearly communication to	Low

Risk				Judgement				Action	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Judgement for Magnitude	Risk Management	Residual risk
								all site operatives	
Local human population and local environment	Fire from arson and, or vandalism or spontaneous combustion	Respiration irritation, illness and nuisance to the local population. Injury to staff, firefighters or arsonists and vandals Air, water or land pollution	Polluting materials (smoke or fumes) to travel through air, water or over land Spillages and contaminated firewater – direct runoff, surface water drains and ditches	High	High	High	Combustible wastes (including lithium-ion batteries) accepted at the site.	A site-specific fire prevention plan has been prepared for the site. Storage of waste in accordance with Fire Prevention Plan. Written management system identifies and minimises risk or pollution, including those arising from operations, maintenance, accidents, incidents, non-conformances, therefore included measures to prevent and control fires. Robust waste acceptance procedure. No burning of wastes.	Medium
Local human population and local environment	Arson and / or vandalism causing the release of polluting materials to air (smoke or fumes), water or land	Respiratory irritation, illness and nuisance to local population. Injury to staff, firefighter or arsonists / vandals. Pollution of water or land.	Air transport of smoke. Spillages and contaminated firewater by district run-off from site.	Low	Medium	Medium	Site security measures at the facility to prevent theft.	Activities managed and operated in accordance with the management system, including site security to prevent unauthorised access. Site secured overnight. CCTV surveillance in operation.	Low
Local human population,	Gaining unauthorised access to site	Injury to humans or livestock	Direct physical contact	Low	Low	Low	Management system includes procedures for	Activities are managed and operated in accordance with all appropriate measures and a	Low

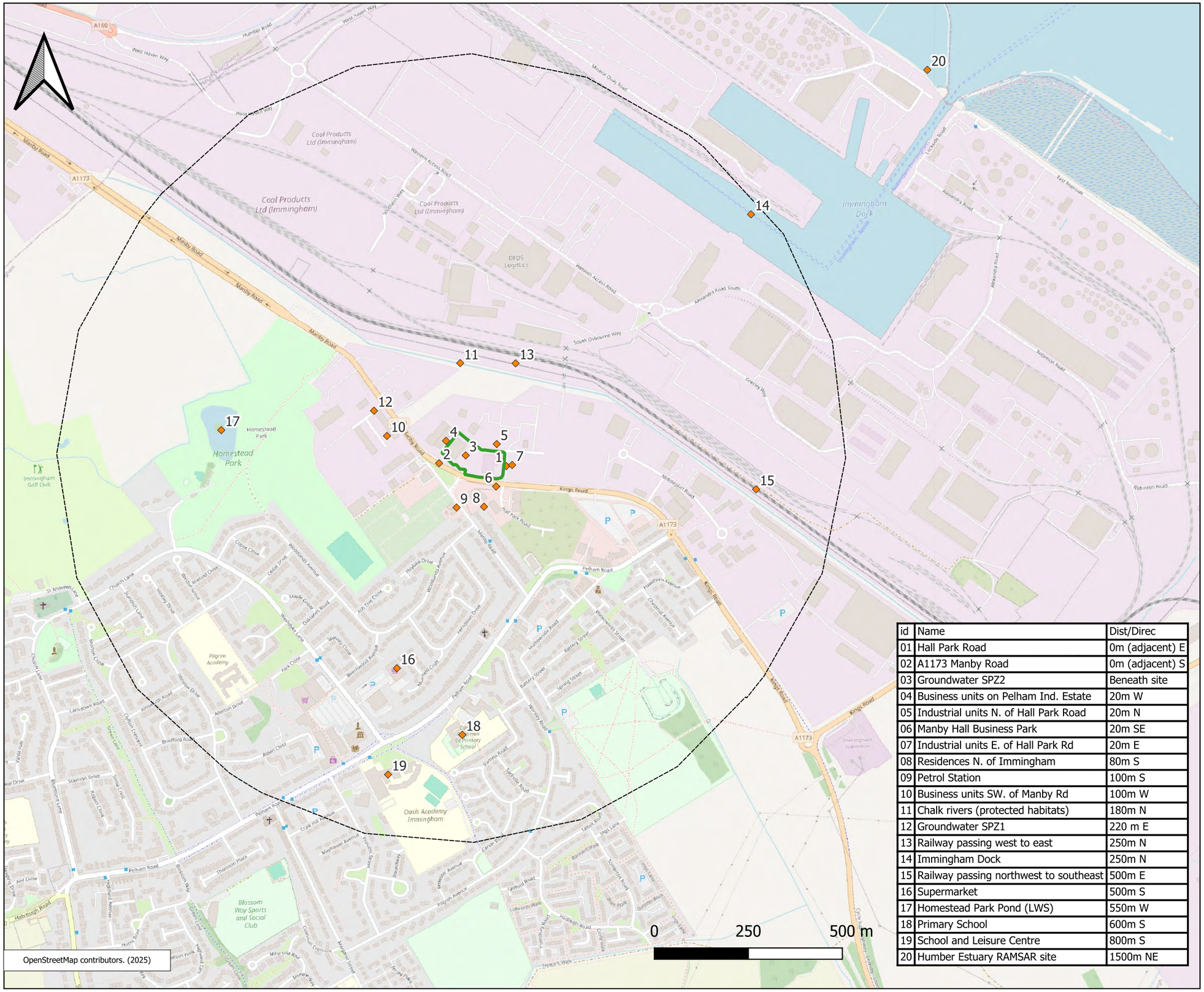
Risk				Judgement				Action	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Judgement for Magnitude	Risk Management	Residual risk
livestock and wildlife							worker and visitor safety	management system stipulates all appropriate measures and emergency responses should accidents occur. Emergency contact details displayed at site entrance. CCTV and gated site.	
Local human population and local environment	Storage of Lead Acid Batteries	Harm to health from spillage or leakage from batteries stored	Direct physical contact	Low	Medium	Low	All batteries are stored on an impermeable surface with sealed drainage.	Management system (will include storage of materials)	Low
Local human population and local environment	Storage of acid from treated batteries.	Harm to health from spillage or leakage of acid stored	Direct physical contact	Low	Medium	Low	Acid from the batteries is collected in the tank – loading point is within bunded area.	Management system (will include storage of materials)	Low
Surface water close to and downstream of site	Spillages of liquids, leachate from waste, contaminated rainwater	Acute effects: oxygen depletion, fish kill, algal blooms	Direct run-off from site over land, surface water drains and ditches	Low	Medium	Low	Lead battery treatment is within an enclosed building. Storage of all hazardous waste will be on impermeable surface with sealed drainage.	Battery treatment is with an enclosed building with impermeable pavement and sealed drainage. Chemical and spillages incident procedure to be followed. All effluent storage containers are fully bunded. Storage either within an enclosed building or stored on an impermeable surface with	Low

Risk				Judgement				Action	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Judgement for Magnitude	Risk Management	Residual risk
								sealed drainage system to prevent contaminated run-off. Appropriate measures are followed. Flood risk contingency plan for diversion of waste can be activated. Emergency procedures and contingency plans clearly communicated to all site operatives.	
Surface water close to and downstream of site.	Spillage of liquids, leachate from waste, contaminated rainwater run-off from waste contamination	Chronic effects: deterioration of water quality	Direct run-off over land, through surface water drains and ditches and indirect run-off through soil	Low	Medium	Low	Pollution likely to be detected quickly and effects are temporary and reversible	Chemical and spillages incident procedure to be followed. All liquids are in containers with secondary containment. Run-off is restricted to within the buildings which is sealed. All effluent storage containers are fully bunded. Storage either within an enclosed building or stored on an impermeable surface with sealed drainage system to prevent contaminated run-off.	Low
Groundwater	Liquid spills, leachate from waste, contaminated rainwater run-off from waste	Chronic effects resulting in the groundwater requiring treatment or causing closure of a borehole	Soil and groundwater – then abstracted from a borehole	Low	Low	Low	No potential for contaminated rainwater runoff or leachate from operations, as all waste treated indoors.	Chemical and spillages incident procedure to be followed. Site is not within a groundwater SPZ1. Secondary containment meets CIRIA 736 standards.	Low

Risk				Judgement				Action	
Receptor	Source	Harm	Pathway	Probability of exposure	Consequence	Magnitude of risk	Judgement for Magnitude	Risk Management	Residual risk
								All effluent storage containers are fully bunded. Storage either within an enclosed building or stored on an impermeable surface with sealed drainage system to prevent contaminated run-off.	
Protected sites - European sites and SSSIs including SAC, SPA and Ramsar	Any	Harm to protected site through toxic contamination, disturbance, predation etc.	Any	Low	High	Medium	The site is within 10km of SAC, SPA, Ramsar and within 2km of SSSI and two LWS. See Table 5-2 for further details and Appendix A	All waste is stored and treated indoors. All effluent storage containers are fully bunded.	Low

Drawings

Sensitive Receptors Plan	317213 DW03
Sensitive Receptors Plan (Habitats)	317213 DW03b



id	Name	Dist/Direc
01	Hall Park Road	0m (adjacent) E
02	A1173 Manby Road	0m (adjacent) S
03	Groundwater SPZ2	Beneath site
04	Business units on Pelham Ind. Estate	20m W
05	Industrial units N. of Hall Park Road	20m N
06	Manby Hall Business Park	20m SE
07	Industrial units E. of Hall Park Rd	20m E
08	Residences N. of Immingham	80m S
09	Petrol Station	100m S
10	Business units SW. of Manby Rd	100m W
11	Chalk rivers (protected habitats)	180m N
12	Groundwater SPZ1	220 m E
13	Railway passing west to east	250m N
14	Immingham Dock	250m N
15	Railway passing northwest to southeast	500m E
16	Supermarket	500m S
17	Homestead Park Pond (LWS)	550m W
18	Primary School	600m S
19	School and Leisure Centre	800m S
20	Humber Estuary RAMSAR site	1500m NE

Legend:

Sensitive Receptors

1km Buffer

Consultant:

Arthain Ltd

Client:

Enva Battery Recycling Ltd

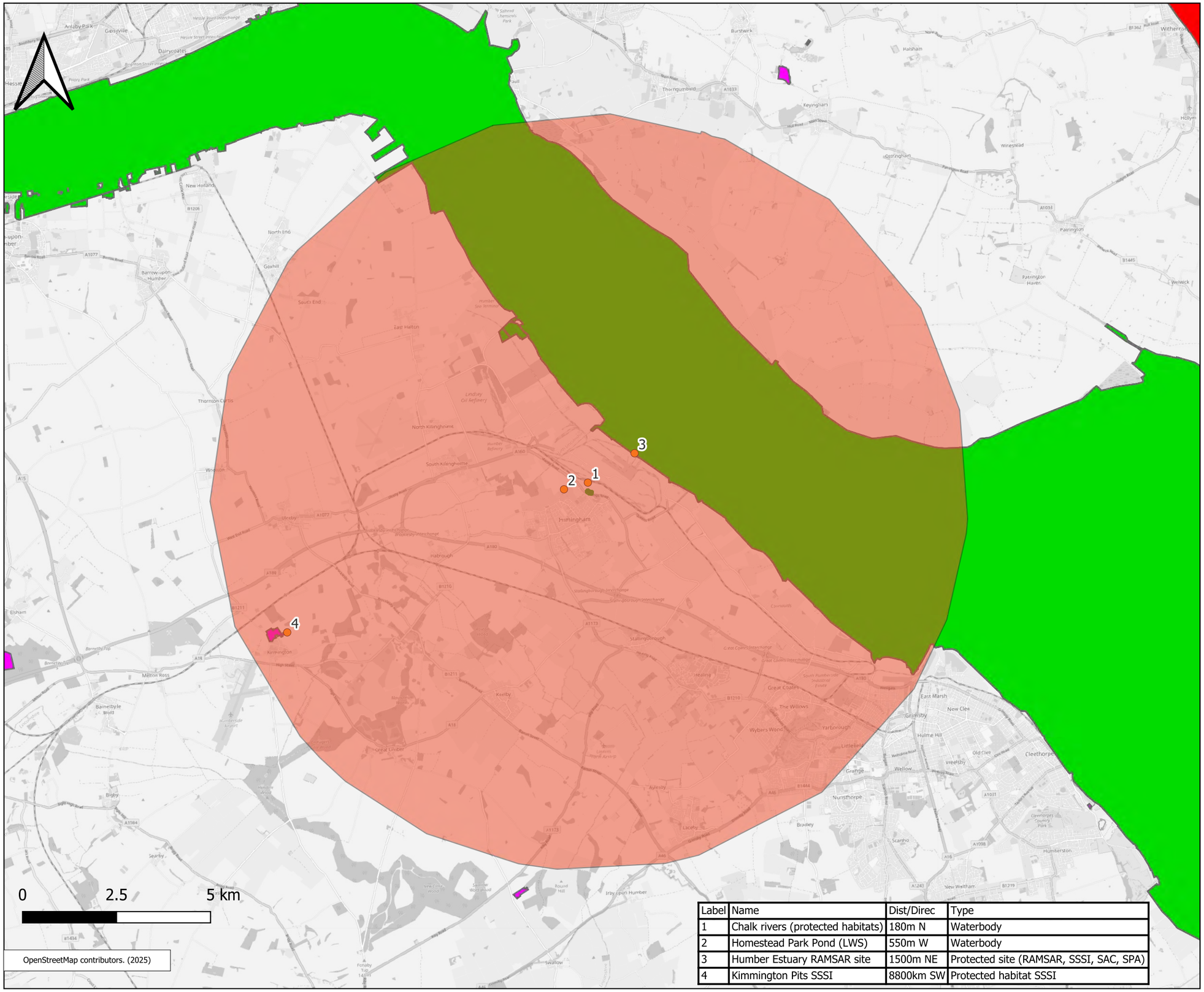
Site: Pelham Industrial Estate, Manby Road, Immingham, Lincolnshire, DN40 2LF

Drawing title: Sensitive Recpetors Plan

Date:	Scale:	Paper size:
16/09/25	1:10,000	A3 (420×297mm)

Drawn by:	Checked by:	Status:	FInal revision
RM	KB	Final	-

Drawing Ref:	Drawing No:
317213 DW03	DW03



Label	Name	Dist/Direc	Type
1	Chalk rivers (protected habitats)	180m N	Waterbody
2	Homestead Park Pond (LWS)	550m W	Waterbody
3	Humber Estuary RAMSAR site	1500m NE	Protected site (RAMSAR, SSSI, SAC, SPA)
4	Kimmington Pits SSSI	8800km SW	Protected habitat SSSI

Legend:

10km buffer

Permit Boundary (v3 proposed)

Habitat receptors 10km

Ramsar_England

Sites_of_Special_Scientific_Interest_England

Special_Protection_Areas_England

Special_Areas_of_Conservation_England

Consultant:

Arthain Ltd

Client:

Enva Battery Recycling Ltd

Site: Pelham Industrial Estate, Manby Road, Immingham, Lincolnshire, DN40 2LF

Drawing title: Sensitive Recpetors Plan (habitats)

Date:	Scale:	Paper size:
16/09/25	1:100,000	A3 (420×297mm)

Drawn by:	Checked by:	Status:	FInal revision
RM	KB	Final	-

Drawing Ref:	Drawing No:
317213 DW03b	DW03b

Appendices

Appendix A Pre-application Conservation Screening Report

Nature and Heritage Conservation

Screening Report: Bespoke installation

Reference	**EPR/CP3294LE/P001**
NGR	**TA 18650 15466**
Buffer (m)	**200**
Date report produced	**06/05/25**
Number of maps enclosed	**2**

This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on Magic map. Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. Help videos are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

Sites and Features within screening distance	Screening distance (km)	Further Information
Special Areas of Conservation (cSAC or SAC)	10	Joint Nature Conservation Committee and Magic map
Humber Estuary		
Special Protection Area (pSPA or SPA)	10	Joint Nature Conservation Committee and Magic map
Humber Estuary		

Ramsar **Humber Estuary**	10	Joint Nature Conservation Committee and Magic map
Sites of Special Scientific Interest (SSSI) **Humber Estuary**	2	Natural England and Magic map
Local Wildlife Sites (LWS) (see map below) **Homestead Park Pond** **Rosper Road Pools**	2	Appropriate Local Record Centre (LRC)

Protected Habitats within screening distance	Screening distance (km)	Further Information
Chalk rivers (see map below)	up to 2	Natural England

Where protected species are present, a licence may be required from Natural England to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

Please note we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and planning legislation, this information does not imply that no other checks or permissions will be required.

The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the

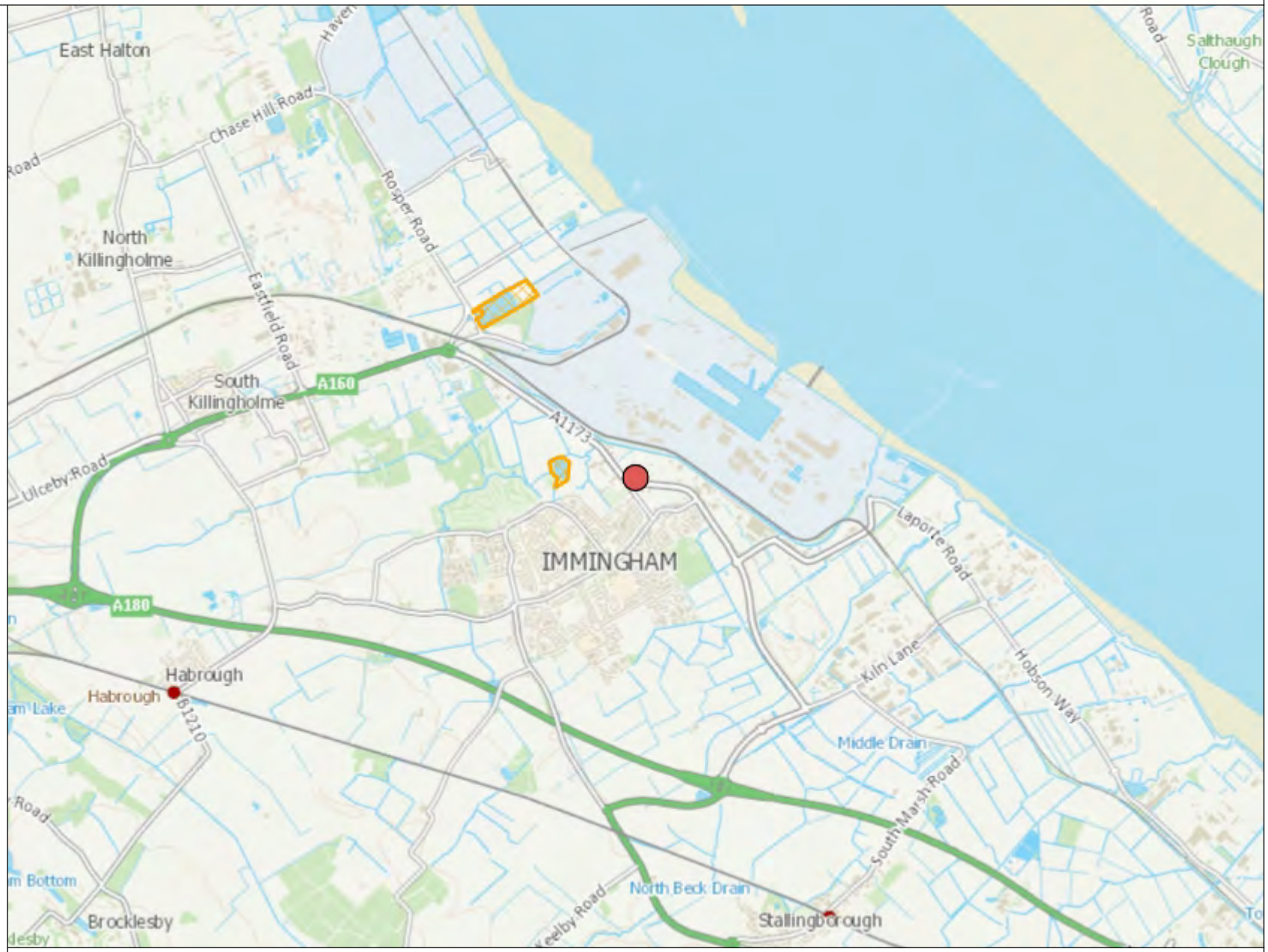
date of this report and the submission of the permit application, which could result in the return of an application or requesting further information.

Local Wildlife Sites

Environment Agency

Legend

Local Wildlife Sites



1: 50,000

0 1,250

Metres

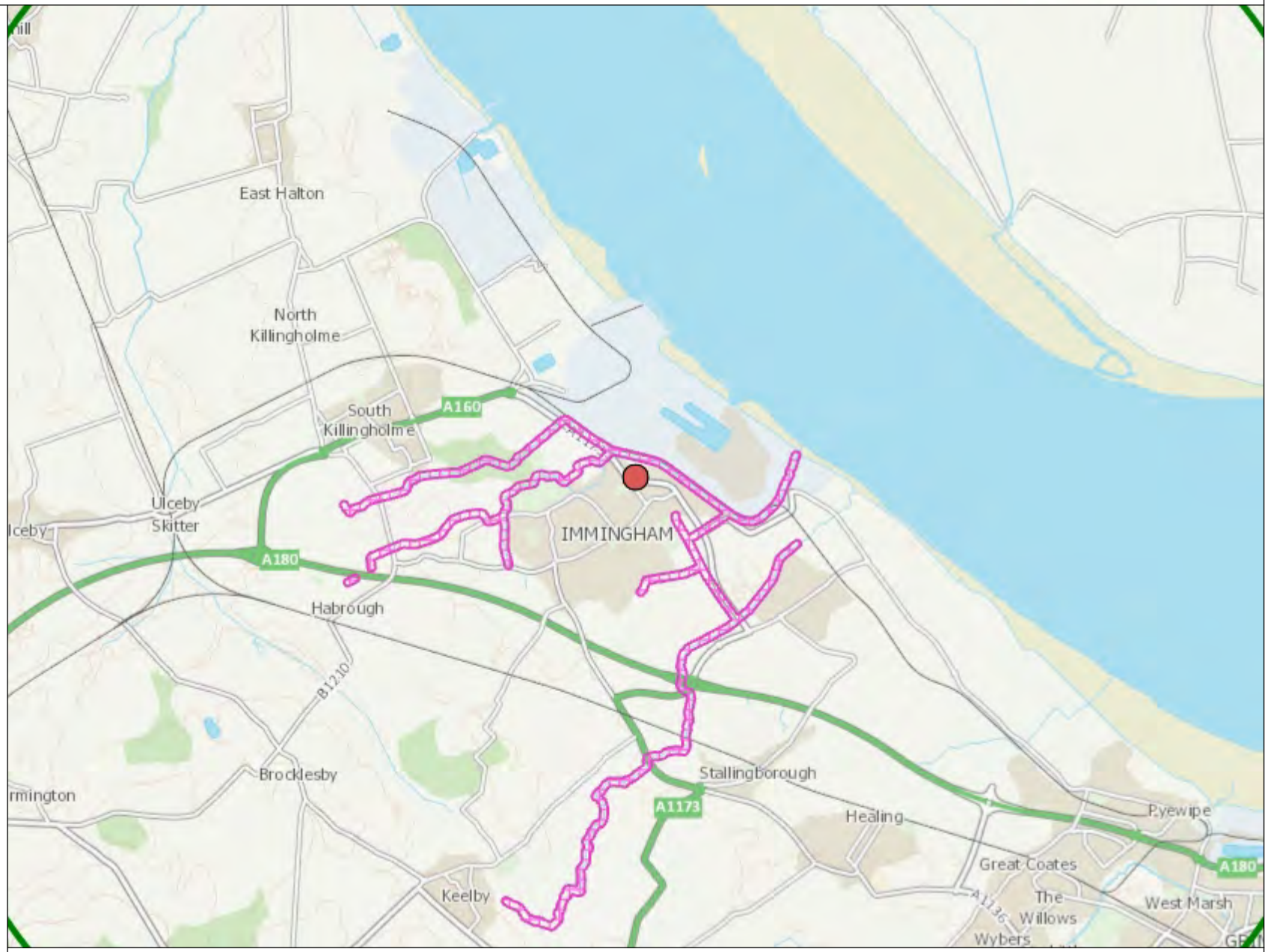
N W E S

Protected Habitats

Environment Agency

Legend

Protected Habitats screened for Env Permits



1: 75,000

0 1,875

Metres

N W E S

Appendix B

Baseline report additional information

Baseline report

Prepared by: Richard Howarth

For: Enva Battery Recycling Ltd

Site: Immingham

Date: 30/09/2025

317213 Site Condition Report Appendix 1 – Baseline info

Issue-01

www.arthian.com

Quality Assurance

Issue Record

Issue	Description	Date	Author	Reviewer	Approver
01	Issue	31/09/2025	RH	KB	KB

Revision Detail

Rev No.	Detailed Description of Change	Ref. Section

Contents

Tables

Photos

1. Introduction

1.1 Industrial Emissions Baseline Report

European Commission guidance provides an overview of the steps required to develop a baseline report in accordance with Directive 2010/75/EU on Industrial Emissions. ENVA are also providing a Site Condition report in accordance with Environment Agency requirements for compliance with the Environmental Permitting Regulations, 2016. There are differences between these approaches which will be managed through provision of additional information herein.

It should also be noted that ENVA are looking to revise their operational approach and cease to manually break batteries moving instead to an automated approach. This will change the process and likely reduce the overall potential environmental impact of the operations as battery breaking will be undertaken in an enclosed machine, consequently changing the outputs.

1.2 Approach

The European Commission guidance1 provides a staged approach for the production of baseline reports:

- **Stage 1**: Identifying the hazardous substances that are currently used, produced or released at the installation - Produce a list of all hazardous substances dealt with inside the installation boundary (either as raw materials, products, intermediaries, by-products, emissions or wastes).
- **Stage 2**: Identifying the relevant hazardous substances - From the list produced in Stage 1, determine the potential pollution risk of each hazardous substance by considering its chemical and physical properties. Where it is clear that the hazardous substances used, produced or released at the installation are incapable of causing contamination of soil and groundwater a baseline report does not need to be produced.

It should be noted that 'relevant hazardous substances' are those substances or mixtures defined within Article 3 of Regulation (EC) No 1272/2008 on the classification, labelling and pack aging of substances and mixtures (CLP Regulation) which, as a result of their hazardousness, mobility, persistence and biodegradability (as well as other characteristics), are capable of contaminating soil or groundwater and are used, produced and/or released by the installation.

- **Stage 3:** Assessment of the site-specific pollution possibility - Each substance brought forward from Stage 2 should be considered in the context of the site to determine whether circumstances exist which may result in the release of the substance in sufficient quantities to represent a pollution risk, either as a result of a single emission or as a result of accumulation from multiple emissions.
- **Stage 4**: Site history - which of the relevant hazardous substances identified by Stage 3 have the potential to be present on site in the soil and groundwater already as a result of activities to date.
- **Stage 5**: Environmental setting - Stage 5 aims to determine the fate of any such emissions, the strata and groundwater which may be affected and to establish the extent and depth to which the land needs to be characterised.
- **Stage 6**: Site characterisation - A description of the site should in particular demonstrate the location, type, extent and quantity of historic pollution and potential future emissions sources noting the strata and groundwater likely to be affected by those emissions. Individual models for each area of concern at the installation may be relevant
- **Stage 7**: Site investigation – If required.

- **Stage 8**: Production of the baseline report – If required.

2. Stage 1: Hazardous Substances

ENVA have provided a list of all the hazardous substances used on site and their total capacities. This can be found in Table 1.

It is understood from correspondence with SARS Metals that they do not store any relevant hazardous substances on their site. They only stock small volumes of general cleaning materials and maintenance items along with some spray paints. It is understood that the volumes stocked would not pose a credible risk to soil and groundwater. They have indicated that they do not stock oils and fuels on site.

Table 1: List of Hazardous of Hazardous Substances provided by ENVA Batery recycling Limited

Substance	Description	Hazard Type	Quantity In Use
Hammerite Direct to Rust smooth wild thyme paint	Hammerite Direct to Rust smooth wild thyme paint	Liquid	750 ml tins as required
Stiga 2 stroke oil	Stiga 2 stroke oil	Liquid	0.6 L bottle
Multicem - cement	Multicem - cement	Dust	25kg bags
Aerosol Solutions Linemarker (All Colours)	Aerosol Solutions Linemarker (All Colours)	Other	750ml spray cans
FLOWFRESH ESD/HF/RT	FLOWFRESH ESD/HF/RT	Dust	25kg bag
Pumadur MD Resin	Pumadur MD Resin	Other	2l tubs
One-Coat Steel Enamel	One-Coat Steel Enamel	Liquid	5ltr tins
B&Q Walls and Ceiling Paint	B&Q Walls and Ceiling Paint	Liquid	5 ltr tin
B & Q Bathroom Midsheen paint	B & Q Bathroom Midsheen paint	Liquid	5Ltrs tin
Sikagard® Universal Wood Treatment	Sikagard® Universal Wood Treatment	Liquid	<5litre tubs/bottles
NX Rapid Set Wall and floor tile adhesive	NX Rapid Set Wall and floor tile adhesive	Other	5l tub
Pumadur HF - Hardener (Part B) Floor coating 3 Part product Part A + B = Liquid Part C = Powder	Pumadur HF - floor coating 3 Part product	Liquid	5L bottles/tubs
Everbuild 203 Accelerator and Frostproofer	Everbuild 203 Accelerator and Frostproofer	Liquid	5L bottles/tubs
Hammerite Red Oxide Primer	Hammerite Red Oxide Primer	Liquid	250 ml tins, 2L tins
Sika Mould Buster	Sika Mould Buster	Liquid	<5L a time
Bostik Quick drying Flexacryl primer	Bostik Quick drying Flexacryl primer	Liquid	5L tins
Diall white spirit	Diall white spirit	Liquid	Limited quantities <1L
Bostik Frost proofer - cement accelerator	Bostik Frost proofer - cement accelerator	Liquid	Ambient temperature expected to fall to -4°C 850 – 900ml per 25kg cement. Ambient temperature

Substance	Description	Hazard Type	Quantity In Use
			expected to fall below – 4°C 1700 – 1800ml per 25kg cement
Dulux white paint	Dulux white paint	Liquid	
Pumexpand P Resin	Pumexpand P Resin	Liquid	
Sodium Carbonate	Sodium Carbonate	Other	25kg bags
Magnafloc 1011 - flocculation agent	Magnafloc 1011 - flocculation agent	Dust	25kg bags
Ronseal Diamond Hard Garage Floor Paint	Ronseal Diamond Hard Garage Floor Paint	Liquid	5L tin
PROline Floor Paint - Anti Slip, Stone Gray	PROline Floor Paint - Anti Slip, Stone Gray	Liquid	5 ltr tubs 20-25m2
Teamac Chlorvar Chlorinated Rubber Paint	Teamac Chlorvar Chlorinated Rubber Paint	Liquid	5 litre tins
Lithium Button Cell Battery	Lithium Button Cell Battery	Other	< 1 tonne
Lithium Thionyl Chloride Battery	Lithium Thionyl Chloride Battery	Other	Unknown - depends on quarantine but limited quantities
Lithium Manganese Dioxide Battery	Lithium Manganese Dioxide Battery	Other	unknown - limited quantities
310 Chemical Resistant Coating - curing agent	310 Chemical Resistant Coating - curing agent	Liquid	1-10 litres depending on area
310 Chemical Resistant Coating - Base	310 Chemical Resistant Coating - Base	Liquid	< 1 litre
Jayes Urinal blocks blue	Jayes Urinal blocks blue	Other	< 5 tablets a time
Furniture Polish	Furniture Polish	Mist	< 1 litre
Harpic Power Plus Toilet Cleaner	Harpic Power Plus Toilet Cleaner	Liquid	< 1 litres
Gojo Hair and Body wash	Gojo Hair and Body wash	Liquid	<1litre
Intergard 410 Yellow	Intergard 410 Yellow	Liquid	<1 Litre a time
International Thinner GTA220	International Thinner GTA220	Liquid	<1 Litre
Descaler EC-9 washroom	Descaler EC-9 washroom	Liquid	Small amounts < 1 Litre
Domestos Bleach	Domestos Bleach	Liquid	<1 litre a time

Substance	Description	Hazard Type	Quantity In Use
Batereezy Absorbant	Batereezy Absorbant	Other	5-10 kg tubs
Alkaline Battery	Alkaline Battery	Other	< 1 tonnes at a time
Hydraulic Oil	Hydraulic Oil	Liquid	205 ltr drums, up to 4 drums may be stocked at any one time
Nickel Cadmium Battery	Nickel Cadmium Battery	Other	< 2 tonnes at any time
Nickel Metal Hydride Battery	Nickel Metal Hydride Battery	Other	small amounts of quarantined waste
Surf Wash Powder	Surf Wash powder	Other	Small amounts 1 cup per load
Lithium Ion Battery	Lithium Ion Battery	Other	<10 tonnes at any one time
Sodium Hydroxide Pearl (Caustic)	Sodium Hydroxide Pearl (Caustic)	Other	
White Diesel	White Diesel	Liquid	1000L max storage tank
Sulphuric Acid (Battery Acid) maximum 20% concentration	Sulphuric Acid (Battery Acid) maximum 20% concentration	Liquid	30,000 l tank plus 7 x 1-2 tonnes storage sumps/IBC's
Lead	Lead	Other	100 tonnes approx. produced daily
Lead Acid Battery	Lead Acid Battery	Other	500-600 tonnes per week

3. Stage 2: Relevant Hazardous Substances

Those substances that are considered to be 'relevant hazardous substances' in the context of this Site and need to be considered further are summarised in Table 2. In essence, most of the hazardous substances used on site are stocked in very low quantities and post no credible risk of impacting soil and groundwater given their nature, quantity stocked and storage locations *i.e.* in specific storage bins.

Table 2: Relevant Hazardous Substances

Relevant Hazardous Substance	Physical State	Storage Quantity
Hydraulic Oil	Liquid	205 litre drum, stored on appropriate secondary containment. Up to 4 drums maybe stored at any one time
White Diesel	Liquid	1000l double bunded storage tank
Sulphuric Acid	Liquid	30,000l stainless steel tank. Area containing the stainless steel tank is bunded.
Lead Acid Battery	Solid, enclosing liquid acid interior.	500 – 600 tonnes per week, stored inside, in reception area.

Notes:

1.Lead acid batteries are received by ENVA. Going forward these will be considered in terms of the presence of sulphuric acid as also detailed in the Table.

2. A lead sludge is also currently produced within the battery breaking operation, again this is further considered in terms of the presence of sulphuric acid. Within the proposed new operations, the production of lead sludge will be replaced by a >92% dry solid lead material which is not considered to be relevant in terms of contaminating soil and groundwater. Thus, this will reduce the overall potential for soil and groundwater contamination to occur.

3. It is not considered that SARS metals stores has any relevant hazardous substances based on communication with that company. Thus, further consideration of the SARS Metals site has not been undertaken.

It should be noted that no relevant hazardous materials are stocked outside of buildings.

4. Stage 3 Site specific pollution possibility

In general, the site is well maintained, and appropriate measures have been taken to manage the potential for release of individual relevant hazardous substances. For example:

- There is an ongoing maintenance operation to ensure leaks and damage rectified, for instance, the oil water separator is serviced annually by a competent contractor, there are weekly visual checks of the site surface to determine if any repair is required.
- Secondary containment is provided and is checked regularly to ensure it is in good condition.
- Site operations are undertaken on an impermeable surface, to which an acid-resistant coating has been applied, this was fully renovated in May/June 2024.
- There is no drainage present within areas that deal with the waste materials.
- Although not specifically required an oil water interceptor is utilised on site. It is understood that all external surface water drainage passes through the oil-water interceptor prior to entering foul sewer. The oil-water interceptor is understood to be and is maintained annually.
- A Penstock Valve was also installed in 2021 by request of the EA to the previous occupier of the site. This replaced a previous spill prevention equipment that was judged to be inadequate.
- An accident management plan is in place.

It should be remembered that all hazardous substances are contained within the built structures on site.

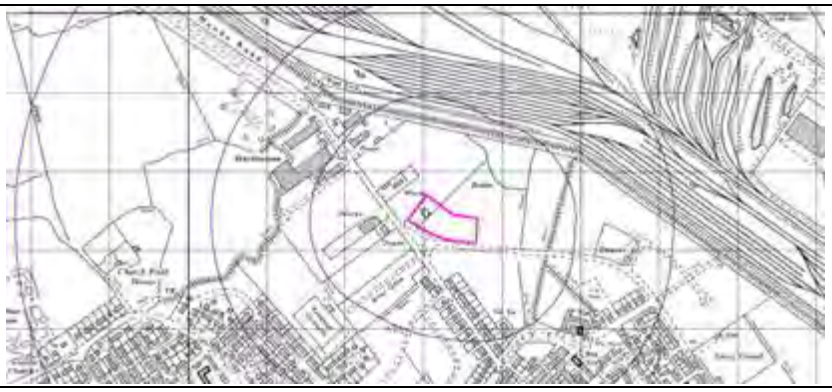
Thus, whilst considered unlikely from general operations circumstances could at some point exist that could lead to the release of the relevant hazardous substances. For instance, there is the possibility that accidental release could occur e.g. from unforeseen vessel rupture, fire or accident. It is understood that there was recently a fire on site that started as a result of the self-ignition of a battery. No release of relevant hazardous substances came about. However, the quantities of materials shown in Table 2 are considered significant particularly the white diesel and sulphuric acid. Thus, although the overall potential for release is considered low further assessment work is required.

5. Stage 4 Site history

The site history has already been summarised in the Site Condition Report (see also extracts from historic mapping below). The site was developed from approximately 1975 and is noted to have been used as a depot and warehouses. Prior to 1975 the site was undeveloped. As such, any impacts to soils or groundwater on the site will have occurred more recently or occurred from sources of contamination off-site e.g. the presence of potentially contaminated materials that could migrate in groundwater.

While we have little real detail on any relevant hazardous substances that could have been used in the period from 1974 – to when ENVA occupied the site it is conceivable that fuels and oils would have been used when the site was described as a depot and works (1982, 2:500 scale mapping).

Table 3: Historical map extracts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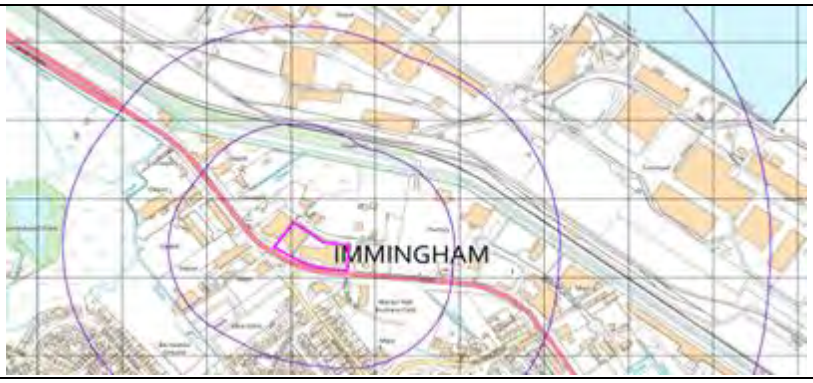
2025 1:10,000

ENVA took over operation of the site in 2021. Prior to this time the site had been used for similar purposes through the previous operator of the Site, SAR Metals, since the site was first permitted in 2009 (15/01/09). It is understood that similar relevant hazardous substances would have been present on the site since that time, ENVA having since taken on the operation of the site.

SAR Metals are understood to have maintained the permit in line with the EA's requirements and responded appropriately to requests by the EA for environmental improvements.

For instance, it is understood that SAR Metals complied with improvement conditions stated on an earlier version of the permit (V11, 27/01/21), see below.

IC6	The operator shall submit to the Environment Agency for written approval a review of the surface water drainage system located outside the buildings, including all yard areas where waste is stored. The review shall identify works necessary to provide a sealed drainage infrastructure in line with our guidance SGN 5.06 and propose timescales for the works to be undertaken. The operator shall undertake the works outlined in the review within the timescale agreed with the Environment Agency.	3 months after permit issue or as otherwise agreed by the Environment Agency.
IC7	The operator shall submit to the Environment Agency for written approval a review of the acid tank bunding and its acid resistant coating. The review shall identify works necessary to provide effective containment infrastructure in line with our guidance SGN 5.06 and propose timescales for the works to be undertaken. The operator shall undertake the works outlined in the review within the timescale agreed with the Environment Agency.	Complete 23/07/20

Permit number
EPR/CP3294LE

17

Table S1.3 Improvement programme requirements

Reference	Requirement	Date
IC8	The operator shall submit a written report to the Environment Agency for approval which demonstrates that impermeable surfacing and a sealed drainage system is in place for the new area of land where waste is to be handled. The report must demonstrate compliance with our guidance SGN 5.06.	29/12/2020 or as otherwise agreed by the Environment Agency.

However, there is the potential that prior to improvements being made some impacts to soils and groundwater could have theoretically occurred through SAR Metals operations although this is likely to be a Low Risk.

It is noted that there has been one recorded pollution incident noted to have occurred on site within the Envirocheck report recently obtained. This is recorded as a minor incident although unfortunately the records do not indicate the pollutant or the cause. The incident was dated 25th May 1993. As such it's not clear whether this occurred with what would now be considered a relevant hazardous substance.

It should be noted that ENVA's proposals include the use of an additional area of land to the northwest of the current permitted operation undertaken by ENVA. This area currently remains in the control of SAR Metals. We understand that this area is also controlled by a permit and that SARS metals are looking to surrender that permit as they exit that area. We have little detail on the current status of the surrender and whether the EA has any concerns over the potential for soil and groundwater contamination on that area. The operations undertaken by SAR Metals include catalytic convertor treatment to recover metals. SAR Metals have indicated that there are no relevant hazardous substances contained on their site only general cleaning materials and maintenance items along with some spray paints that are stocked in volumes that would not pose a credible risk to soil and groundwater. They have indicated that they do not stock oils and fuels on site. SAR Metals have also indicated that they have no records of any pollution incidents within the last 5 years. As there are understood to be no credible risks from relevant hazardous substances to soil and groundwater from this area it has not generally been considered further.

5.1 Surrounding land uses

The wider areas around the site are utilised for a range of land uses both currently and historically ranging from residential to industrial. A summary of these land uses is provided below, based on available 1;10,000 scale historic mapping.

The earliest available mapping (1887) indicates that the area surrounding the site was used as agricultural land.

This generally remained the same until sometime before 1932. The 1932 mapping indicates that the village of Immingham had been constructed to the south of the site. To the north was an extensive number of railway lines to supply the dock at Immingham that had also been constructed by this time. Manby Road had been constructed close to the western boundary of the site. This layout generally remains unchanged until 1968 although the village of Immingham increases in size. To the north of the site are constructed some warehouses and a depot. Approximately 1km to the northeast of the site a tank farm is shown within Immingham Dock. Further similar development continues around the site until the general alignment of the site and its surroundings occurs in approximately 1975.

By 1985 the railway lines to the northeast had declined in number. There was further development to the east of the site with additional warehouses and a 'works'.

By 2000 much of the rail infrastructure to the northeast had been dismantled and there was development of the railway land being undertaken. This development has continued until the present day.

The Envirocheck Report indicates that there are 2 recorded landfill sites within 1,000m of the site, the nearest being recorded approximately 500m to the north east. Both of these landfills are historic and are understood to be closed although there is no recorded date of closure for the landfill furthest from site. Both sites are recorded to have accepted inert, household, commercial and industrial wastes.

Given the site's history widespread land contamination is not considered to be a significant risk but it is plausible that oils and fuels could have been used on and around the site. There is the potential that use of the land to the north for railway infrastructure, landfill and as a docks could enable contamination events to occur that could impact the site through groundwater migration if the site is in hydraulic continuity with these areas.

5.2 Site Investigation Works

Recently ENVA had site investigation works undertaken on both the current ENVA facility and that land to the northwest that they wish to move into (SARS Metals). The results of the site investigations were presented in two reports:

- Phase II Geo-environmental condition report, ENVA facility, Immingham, ref: GML 24156/1/0, dated April 2025
- Phase II Geo-environmental condition report, SARS Metals. Immingham, ref: GML 24156/SAR/1/0, dated April 2025

These reports have been provided as part of the information pack.

Both these reports undertook ground investigation using borehole drilling (13 No. boreholes over both sites) to investigate shallow soils and groundwater underlying both areas. Representative samples of shallow soils and shallow groundwater were analysed for a range of potential contaminants. No significant ground or groundwater contamination was identified within these investigations based on a continued use of the site for industrial use. No remedial actions were considered necessary.

Further details from the site investigations will be discussed in the following section.

6. Stage 5: Environmental setting

The site is in Immingham approximately 0.5km northeast of the centre. The site is topographically flat and comprises several portal frame warehouse type buildings with associated hardstanding for parking and unloading and access. Within the buildings where operational activities are undertaken the ground cover comprises an impermeable surface which is understood to be acid resistant. This surface is generally maintained well. The access points are bunded to prevent emissions. Those relevant hazardous substances identified are contained in tanks (see photos below) that are bunded and are in generally in good condition with limited evidence of leaks or failures. Battery breaking occurs in an acid-resistant shallow pit (see photos). This feature will become defunct on the arrival of new machinery when battery breaking will be undertaken within specialist plant.

Photo 1 General location of the acid tank

Photo 2: Detail of acid tank

Photo 3: Lead sludge tank. This will not be used in the future process as battery breaking will become automated

Photo 4: Battery-breaking pit adjacent the lead sludge tank. Going forward this operation will stop when the new plant is installed

Photo 5: General view of internal impermeable surface

The geology, hydrogeology and hydrology have generally been discussed in the Site Condition Report. Additional notes from the site investigation undertaken by Geo-matters are provided below.

6.1 Geology

Made ground was encountered across the site during the recent site works. This was encountered in total thicknesses up to 1.30m depth and generally comprised concrete and asphalt underlain by sub-base and other fill materials.

The Made Ground was underlain by natural soils comprising soft clay with occasional peaty lenses or clayey sand overlying stiff gravelly clay. These natural soils are considered to be the Tidal Flat deposits, unproductive strata.

No visual / olfactory evidence of significant contamination was noted during our recent works.

6.2 Hydrogeology

Groundwater seepages were observed during the ground investigation and most likely comprise perched groundwater.

Groundwater level information is not available from the current ground investigation data and it is recommended that an understanding of shallow groundwater flow direction is obtained. Groundwater flows in the Made Ground may have no fixed flow direction and may be subject to changes depending on local conditions.

6.3 Hydrology

No surface waters are present on or immediately adjacent the site. Although in an area prone to flooding based on information provided in the Envirocheck Report the site is not known to have flooded whilst ENVA have been operating the site.

6.4 Land and Groundwater Quality

6.4.1 Soils

The recent investigation collected a number of representative soil samples from across both the current ENVA operated area and that area occupied by SARS metals. These have been summarised in Table 4 and Table 5. No visual or olfactory evidence of contamination was noted during the investigation.

6.4.2 Groundwater

The recent investigation collected a number of representative groundwater samples from across both the current ENVA operated area and that area occupied by SARS metals from boreholes installed with relevant water monitoring equipment. These have been summarised in Table 4 and Table 5. It is understood that hydrocarbon odours were noted in water samples recovered from both the SARS metals and ENVA areas.

It is recommended that further analysis of a range of potential contaminants are subsequently analysed from the waters on site to determine baseline, particularly lead, arsenic and cadmium which were not undertaken in the initial analyses to fully understand site condition.

Table 4: Summary of soil and groundwater chemical analysis results from the existing ENVA occupied site

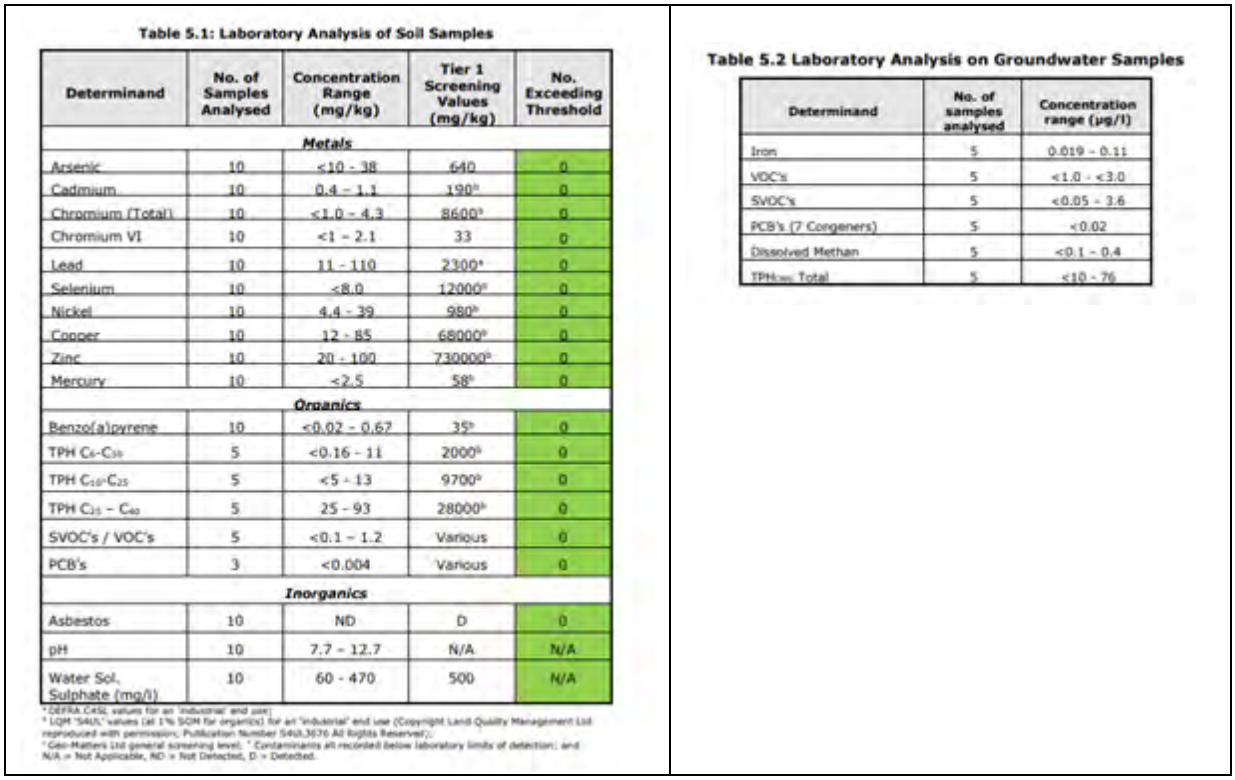

Table 5.1: Laboratory Analysis of Soil Samples

Determinand	No. of Samples Analysed	Concentration Range (mg/kg)	Tier 1 Screening Values (mg/kg)	No. Exceeding Threshold
Metals				
Arsenic	10	<10 - 38	640	0
Cadmium	10	0.4 - 1.1	190[b]	0
Chromium (Total)	10	<1.0 - 4.3	8600[b]	0
Chromium VI	10	<1 - 2.1	33	0
Lead	10	11 - 110	2300[a]	0
Selenium	10	<8.0	12000[b]	0
Nickel	10	4.4 - 39	980[b]	0
Copper	10	12 - 85	68000[b]	0
Zinc	10	20 - 100	730000[b]	0
Mercury	10	<2.5	58[b]	0
Organics				
Benzo(a)pyrene	10	<0.02 - 0.67	35[b]	0
TPH C_6-C_{10}	5	<0.16 - 11	2000[b]	0
TPH C_{10}-C_{25}	5	<5 - 13	9700[b]	0
TPH C_{25} - C_{40}	5	25 - 93	28000[b]	0
SVOC's / VOC's	5	<0.1 - 1.2	Various	0
PCB's	3	<0.004	Various	0
Inorganics				
Asbestos	10	ND	D	0
pH	10	7.7 - 12.7	N/A	N/A
Water Sol. Sulphate (mg/l)	10	60 - 470	500	N/A

[a] DEFRA C4SL values for an 'industrial' end use;
[b] LQM 'S4UL' values (at 1% SOM for organics) for an 'industrial' end use (Copyright Land Quality Management Ltd reproduced with permission; Publication Number S4UL3676 All Rights Reserved);
[c] Geo-Matters Ltd general screening level; * Contaminants all recorded below laboratory limits of detection; and
N/A = Not Applicable, ND = Not Detected, D = Detected.

Table 5.2 Laboratory Analysis on Groundwater Samples

Determinand	No. of samples analysed	Concentration range (µg/l)
Iron	5	0.019 - 0.11
VOC's	5	<1.0 - <3.0
SVOC's	5	<0.05 - 3.6
PCB's (7 Congeners)	5	<0.02
Dissolved Methan	5	<0.1 - 0.4
TPH$_{CWG}$ Total	5	<10 - 76

Table 5: Summary of soil and groundwater chemical analysis results from the existing from the current SARS Metals facility area

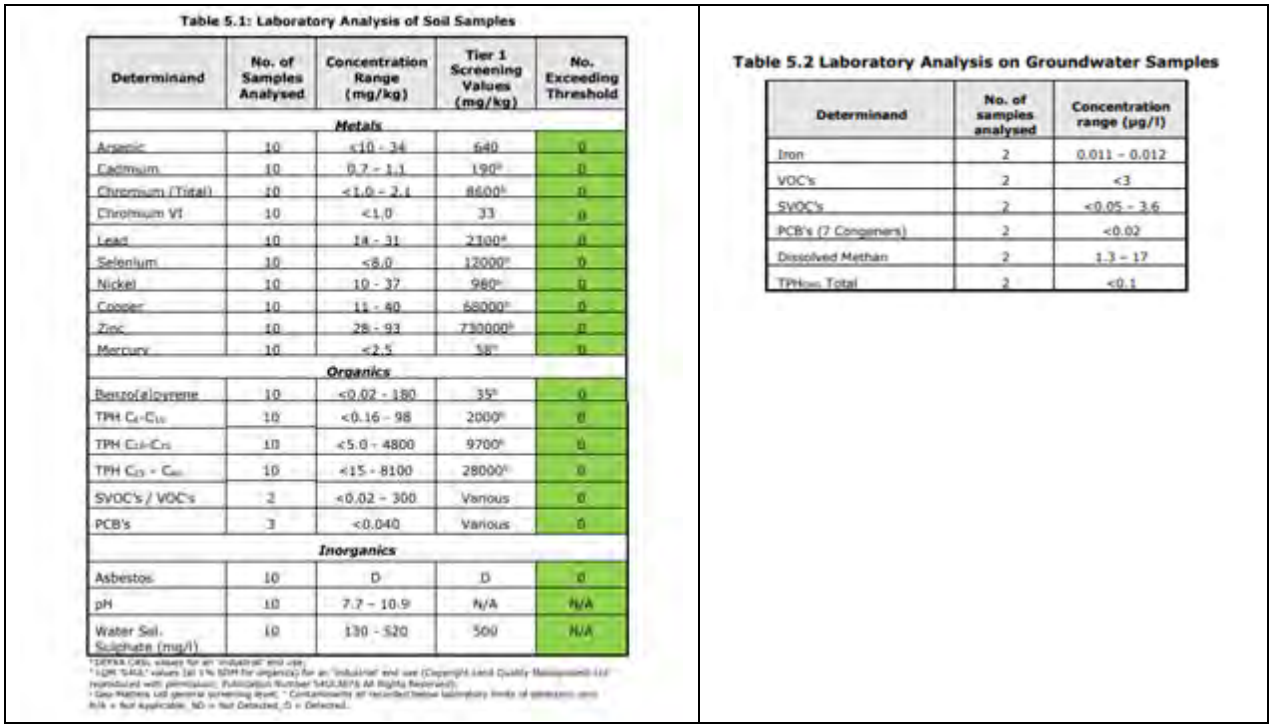

Table 5.1: Laboratory Analysis of Soil Samples

Determinand	No. of Samples Analysed	Concentration Range (mg/kg)	Tier 1 Screening Values (mg/kg)	No. Exceeding Threshold
Metals				
Arsenic	10	<10 - 34	640	0
Cadmium	10	0.7 - 1.1	190[b]	0
Chromium (Total)	10	<1.0 - 2.1	8600[b]	0
Chromium VI	10	<1.0	33	0
Lead	10	14 - 31	2300[a]	0
Selenium	10	<8.0	12000[b]	0
Nickel	10	10 - 37	980[b]	0
Copper	10	11 - 60	68000[b]	0
Zinc	10	28 - 93	730000[b]	0
Mercury	10	<2.5	58[b]	0
Organics				
Benzo[a]pyrene	10	<0.02 - 180	35[b]	0
TPH C_6-C_{10}	10	<0.16 - 98	2000[b]	0
TPH C_{10}-C_{25}	10	<5.0 - 4800	9700[b]	0
TPH C_{25} - C_{40}	10	<15 - 8100	28000[b]	0
SVOC's / VOC's	2	<0.02 - 300	Various	0
PCB's	3	<0.040	Various	0
Inorganics				
Asbestos	10	D	D	0
pH	10	7.7 - 10.9	N/A	N/A
Water Sol. Sulphate (mg/l)	10	130 - 520	500	N/A

Table 5.2 Laboratory Analysis on Groundwater Samples

Determinand	No. of samples analysed	Concentration range (µg/l)
Iron	2	0.011 - 0.012
VOC's	2	<3
SVOC's	2	<0.05 - 3.6
PCB's (7 Congeners)	2	<0.02
Dissolved Methan	2	1.3 - 17
TPH$_{CWG}$ Total	2	<0.1

6.4.3 Man Made Pathways

As noted previously all the relevant hazardous substances are stored on an impermeable surface to which it is understood an acid-resistant coating has been applied. This coating was recently renovated in 2024. There is no site drainage in the areas where relevant hazardous substances are contained. The impermeable surface in the

areas where hazardous substances are stored appears in good condition and is maintained, it was fully improved in 2024 as noted above. Storage arrangements for the relevant hazardous substances also include appropriate bunding. As such, it's unlikely that a source-pathway-receptor linkage exists through general operation of the site. If there was substantive failure of the containment systems, then a risk may be plausible. Although its highly likely that the overall storage capacity of the site to manage fire water risk (148,000 litres, to be constructed by September 2025 current ENVA facility) would likely contain any accidental spillage.

6.4.4 Surrounding land uses

The site is located on an industrial estate and there are residential, commercial and industrial landuses in the vicinity of the site. There is the potential that surrounding land uses may enable the release of relevant hazardous substances although this is considered a low risk.

7. Stage 6: Site characterisation

A conceptual site model for the site is provided in the statements below.

1. The site comprises a generally topographically flat site.
2. It is in an area of industrial and commercial land-uses in the wider context that also includes residential use of land.
3. The underlying shallow geology is comprised of Made Ground underlain by Tidal Flat deposits. Generally described as clays. The Tidal Flat deposits are considered to be unproductive and will provide a barrier to the vertical movement of any shallow contaminants.
4. There are no surface water receptors in the vicinity of the site.
5. Relevant hazardous substances are maintained on an impermeable surface that is well maintained and is understood to be coated to maintain acid resistance. There are no recorded instances of pollution incidents on site since 1993, although there are no records as to what happened in the 1993 incident.
6. There is no drainage located in areas where the hazardous substances are stored. Surface water drainage is protected through an oil-water interceptor and a penstock valve.
7. Recent ground investigation has demonstrated that the concentrations of potential contaminants in soils does not exceed the relevant industry standard assessment criteria for an industrial land use.
8. Geo-Matters recent investigation also indicated that there appears to be a low risk to groundwater based on the analysis of a range of potential contaminants recovered from boreholes installed with water monitoring equipment.
9. Geo-Matters did not identify any plausible pollutant linkages in their assessment on either the site occupied by ENVA or SARS Metals. Geo-Matters consider the risks associated with contamination to be **LOW**.
10. Based on this assessment Geo-Matters have concluded that the site is suitable for use and requires no remediation.

7.1 Potential Pollutant Linkages

As noted above Geo-Matters did not consider there to be any plausible pollutant linkages on site. However, the potential for accidental release of relevant hazardous substances needs to be considered, see Table 6.

Table 6: Potential Pollutant Linkages

Source	Pathway	Receptor	Qualitative Risk Assessment	Action, Comments
Accidental release of Relevant Hazardous Substances e.g. failure of a tank.	Lateral and vertical migration	Shallow soils Perched groundwater	LOW	Storage facilities are bunded. Site is covered by well maintained impermeable surface. Fire water storage capacity would form immediate barrier to release.
	Lateral migration	Surface water drainage. Storm water overflow.	LOW	No drainage present in areas of hazardous substance storage. Oil water interceptor and penstock valve present that would protect surface waters.

Notes:

1. Fire Water storage capacity recently being improved to give a total capacity volume of 148,000 litres.

2. It should be noted that the number of relevant hazardous substances will reduce following the deployment of new equipment to the site. This will reduce further the likelihood of accidental release.

8. Stage 7: Site investigation

As discussed, both the ENVA and SARS Metals areas have already been investigated. The results of this investigation have been discussed previously. This investigation determined that both areas were suitable for their intended use, and no remediation of the areas was required.

However, as some potential contaminants were not quantified in that investigation (e.g. a range of metals in groundwater such as lead and arsenic) it is recommended that further sampling of groundwater is undertaken to fully determine the presence of potential contaminants. Further work would also allow the direction of shallow groundwater flow to be established. This will enable the condition of the site to be fully understood.

It is recommended that if any groundworks are undertaken on the either of the areas during the alterations to the facility that further sampling and analysis of the soils and groundwater is undertaken to further understand baseline condition. Although considered unlikely should any gross contamination of the soils and groundwater be determined then further assessment should be undertaken and remediation may be required.

It is recommended that the site condition information is reviewed when the area occupied by SARS Metals is vacated.