Recycling and recovery UK

Sidegate Lane

Battery Recycling Facility

1.3 Environmental Risk Assessment

June 2025

DOCUMENT DETAILS

Document title	Sidegate Lane Battery Recycling Facility Environmental Risk Assessment
Version	3.0
Date	June 2025
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Distribution	SUEZ – Site Copy SUEZ – Environment & Industrial Risk Department Environment Agency

DOCUMENT REVIEW HISTORY

Date	Description	Summary of Changes
March 2021	Version 2.1	Updated following external waste storage containers
December 2023	Version 2.1	Operational review and update
February 2024	Version 2.2	Review and update following EA comments
June 2025	Version 3.0	Updated to new template for permit variation to add battery recycling facility

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APPENDICES

1 INTRODUCTION

1.1.1 Sidegate Lane Battery Recycling Facility (the site) operates under Environmental Permit (permit) reference EPR/XP3092NX. The site is permitted to operate as an Open Windrow Composting (OWC) facility and a Transfer Station (TS) facility, although the OWC is not currently operated. This document is written to support an application to vary the permit to allow the site to operate as a battery recycling facility. The site will retain the ability to operate as a OWC and TS activities, however the site will operate solely as a battery recycling facility. Therefore, this document only considers aspects of the battery recycling facility.

1.1.2 Further details of the site operations are contained in the Operations and Emissions Management Plan (Document Reference 1.2).

1.1.3 This ERA is an assessment of the risks to the environment and human health from odour, noise, and fugitive emissions that may be associated with the site activities. The site also has a separate Accident Prevention and Management Plan (Document reference 1.4) that covers an assessment of reasonably foreseeable accidents on site.

2 RISK ASSESSMENT METHODOLOGY

2.1.1 This assessment follows the methodology set out in 'Risk assessments for your environmental permit' at: https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit.

2.1.2 The ERA methodology for a bespoke permit requires:

- identification of the potential risks associated with the activity (Section 3)
- the receptors that may be at risk (Section 4 and Table 1)
- the possible pathways from the sources of the risk to the receptors (Tables 2 - 5)
- if identified risks are considered too high, control measures are required (Tables 2 - 5)

2.1.3 The aim of the assessment is to identify any significant risks and demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

2.1.4 Environment Agency (EA) guidance requires all receptors that are near the site and that could reasonably be affected by the proposed activities, to be identified and considered as part of the assessment.

2.1.5 For the purposes of this assessment a 1km radius has been adopted in reviewing potential receptors of ecological importance along with receptors such as sites of cultural and natural heritage, residential, commercial, industrial, agricultural and surface water. Additionally, all European sites within 10km and habitats (including SSSIs, Local and National Nature Reserves, Local Wildlife Sites and Ancient Woodlands) within 2km have been identified as sensitive receptors to point-source emissions to air.

2.1.6 The risk is determined by the probability of a hazard occurring and the likely consequences of any impact. The assessment of risk considers the residual risk that remains after implementation of the preventative measures.

2.1.7 Risk assessment definitions and the risk estimation matrix are presented in Appendix A.

3 SOURCE OF RISK

3.1.1 The site will operate as a battery recycling facility. The permit also allows operation of a household, commercial and industrial transfer station and composting facility, however the site will solely operate as a battery recycling facility. This facility will include a lithium-ion battery treatment operation and the storage and transfer only of batteries of various chemistries and fluorescent tubes. This document only considers the risks associated with operation of the site as a battery recycling facility.

3.1.2 The waste types accepted for treatment at the site consist of lithium-ion batteries and lithium-ion battery materials. Lithium-ion battery 'materials' include lithium-ion battery scrap materials sourced from battery manufacturing and pre-shredded lithium-ion batteries from other permitted waste operations. Lithium-ion batteries may also be bulked for transfer only. Small volumes of fluorescent tubes and non lithium-ion battery types are also accepted for storage and transfer only, including Ni-Cd batteries, mercury-containing batteries and alkaline batteries. All waste and treatment outputs are stored in appropriate containers to prevent fugitive emissions from the site.

3.1.3 The lithium-ion battery treatment operation will consist of battery discharge, dismantling, shredding, and separation and sorting into outputs for further recovery. Pre-shredded lithium-ion batteries will be subject to separation and sorting only. The battery treatment plant is served by two local exhaust vent (LEV) dust abatement systems, each creating a point source emission to air.

3.1.4 Externally, the drainage system directs rainfall run-off from the northern area of the site to the sealed surface water lagoon. All surface water run-off from the external impermeable surface in the yard area in front of the site building is directed to the interceptor through gullies and drains. This runoff is collected in a Class 1 Full retention Interceptor and cellular attenuation tank before discharging to soakaway. The system is equipped with a penstock valve to allow any contamination to be contained in the event of an incident.

3.1.5 The maximum permitted annual tonnage of waste accepted at the site shall not exceed 20,000 tonnes.

3.1.6 The potential risk of odour, noise and fugitive emissions from the site activities have been considered in Section 5 and are detailed in Tables 2 to 4.

4 SITE SETTING AND RECEPTORS

4.1 Site Setting

4.1.1 The site is located on Sidegate Lane in Wellingborough, Northamptonshire (NGR SP 91464 70336). The battery treatment operation will be undertaken within the building located in the south area of the site. The yard outside the building is used for the handling and loading of batteries, lithium-ion battery

materials and fluorescent tubes. The yard in the north area of the site is used for the storage of waste in designated containers as well as a covered area for electrochemical discharge of batteries.

4.1.2 The site is located approximate 3.5km northeast of the centre of Wellingborough, North Northamptonshire. The site is adjacent to the closed Sidegate Lane Landfill. The land use surrounding the site predominantly comprises agricultural land, with some sparse industrial buildings. The nearest residential receptor is Ryebury Farm approximately 200m northwest of the site.

4.1.3 The nearest nature and heritage conservation sites have been screened using Defra's Magic Maps tool (https://magic.defra.gov.uk/magicmap.aspx). The screening identified Finedon Top Lodge Quarry SSSI (designated for geological interest) approximately 990m east-southeast of the site.

4.1.4 Upper Nene Valley Gravel Pits SSSI, SAC and Ramsar is located 1,950m southeast of the site.

4.1.5 There are four Local Wildlife Sites within 2km and several fragmented Priority Habitats Inventory areas within 1km of the site.

4.1.6 Records of protected species of fish were identified through a habitats screening report provided by the Environment Agency, including European Eel, Bullhead and Brown/ Sea Trout.

4.2 Receptors

4.2.1 The nearest sensitive receptors to the site are identified in Figure 1. The distance of these receptors to the site boundary and their direction relative to the site is detailed in Table 1 below.

Table 1 – Sensitive Receptors

No.	Receptor	Category	Distance (m)	Direction from site
Receptors within 1km				
1	Secondary A aquifer (Bedrock)	Groundwater	0	N/A
2	Pond and stream flowing south into River Ise	Surface Water	320	West
3	Stream issuing south into River Ise	Surface Water	270	South
4	Finedonhill Farm pond	Surface Water	600	South
5	River Ise	Surface Water	890	Southwest
6	Ryebury Farm	Residential	200	Northwest
7	Sidegate Works	Residential / small industrial	400	Southwest
8	Finedonhill Farm	Residential/ agricultural	570	South
9	Hillside Farm/ Hillside Farm Nurseries	Residential/ agricultural/ commercial	860	Northwest
10	Finedon Allotments	Leisure/agricultural	1,000	North
11	Top Lodge Farm	Residential/ agricultural	1,000	Southeast

No.	Receptor	Category	Distance (m)	Direction from site
12	Sidegate lane landfill	Industrial	10	East
13	Industrial buildings on Sidegate Lane	Industrial	250	Southeast
14	St Modwen Park	Industrial/ commercial	570	Southwest
15	Ise Valley Industrial Estate	Industrial	930	Southwest
16	Priority Habitat Inventory - Deciduous Woodland near Ryebury Hill (A510)	Habitat	100	North
17	Priority Habitat Inventory - Traditional Orchard on Wellingborough Road	Habitat	490	Southwest
18	Priority Habitat Inventory - Deciduous Woodland on Sidegate Lane	Habitat	480	Southeast
19	Priority Habitat Inventory - Deciduous Woodland near Top Lodge Farm	Habitat	750	East
20	Protected Species near River Ise - European Eel *Anguilla anguilla,* Bullhead *Cottus gobio and* Brown/Sea Trout *Salmo trutta*	Habitat	860	Southwest
21	Finedon Top Lodge Quarry	SSSI (Geological) and Local Wildlife Site	990	Southeast
Receptors within 10km (emissions to air only)				
22	Finedon Quarry and Disused Railway	Local Wildlife Site	1,300	Northwest
23	White Lodge Quarry	Local Wildlife Site	1,750	East
24	Upper Nene Valley Gravel Pits	Special Protection Area, Ramsar, SSSI	1,980	Southeast
25	Irthlingborough Grange Gravel Pits	Local Wildlife Site	1,950	Southeast

4.3 Sensitive Habitats and Protected Species

Habitats and Species within 1km

4.3.1 A habitats screening report was provided by the Environment Agency during pre-application discussions on 16th May 2025, which identified sensitive habitats and protected species within 1km of the site.

4.3.2 The screening identified that the only SSSI or European site within 1km of the site is Finedon Top Lodge Quarry SSSI and Local Wildlife Site (LWS) (receptor 21).

4.3.3 According to Natural England, the Finedon Top Lodge Quarry is designated as a SSSI for its geological interest only. The screening also identifies the quarry as a LWS. LWS's are sites identified and selected using local criteria and ecological surveys.

4.3.4 There are also a number of fractured Priority Habitat Inventory habitats within 1km of the site, including Deciduous Woodland and Traditional Orchards, which are designated as habitats of principal importance under Natural Environment and Rural Communities Act (2006) Section 41.

4.3.5 Records of priority species of fish were also identified through a habitats screening report provided by the Environment Agency, including the following:

- **Bullhead *Cottus gobio*** – designated as a Habitats Directive Annex 2 - Non-priority species.
- **Brown/ Sea Trout *Salmo trutta* –** designated on the Scottish Biodiversity List, the Biodiversity Lists - England - NERC S.41, Biodiversity Lists - Wales NERC S.42, Northern Ireland Priority Species and Biodiversity Action Plan UK list of priority species.
- **European Eel *Anguilla anguilla*** - designated on the Scottish Rural Development Programme, Scottish Biodiversity List, RSPB Priority Species, Biodiversity Lists - England - NERC S.41, Biodiversity Lists - Wales NERC S.42, Northern Ireland Priority Species, Biodiversity Action Plan UK list of priority species and OSPAR.

4.3.6 A search of the NBN Atlas database shows records of these species appear to be located near the River Ise (receptor 5).

4.3.7 Section 5 describes the measures the site will operate to prevent harmful emissions escaping the permit boundary that could affect the sensitive habitats within 1km.

Other Receptors within 10km

4.3.8 A habitats screening report was provided by the Environment Agency on 6th June 2025, which identified sensitive habitats and protected species that may be impacted by channelled emissions to air. The screening identified SSSIs and Local Wildlife Sites within 2km and European sites within 10km.

4.3.9 Upper Nene Valley Gravel Pits (Receptor 24) Special Protection Area (SAC), Ramsar and SSSI is the only European site located within 10km of the site. It also contains Irthlingborough Grange Gravel Pits LWS (25). The site is recognised for its nationally important breeding and wintering bird populations, diverse habitats, and rare wet floodplain woodland.

4.3.10 Finedon Quarry and Disused Railway LWS (receptor 22) and White Lodge Quarry LWS (receptor 23) are also located within 2km of the site.

4.3.11 The Air Emissions Risk Assessment provided with the permit variation application demonstrates that emissions to air from the site are unlikely to adversely affect the identified proximal sensitive habitats.

5 RISK ASSESSMENT AND MANAGEMENT MEASURES

5.1.1 The risk assessment and management measures are detailed in Tables 2 to 4 below. This assessment considers potential risks associated with:

- Odour
- Noise
- Fugitive emissions, specifically
    - To air – including dust and particulates
    - To water – including contaminated surface water run-off
    - Pests
    - Mud and litter

Table 2 – Odour Risk Assessment

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
What is the agent or process with the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard come into contact with the receptor?	What measures are taken to reduce the risk? If it occurs who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Odour from storage of waste and treatment outputs	Receptors 5 to 21	Air	No putrescible waste is accepted on the site, therefore there is a very low potential for odours from waste storage. It is unlikely that odour will be generated as part of the process. In any case the treatment operation is undertaken within the site's building. Lithium-ion batteries and lithium-ion battery materials will be stored in ISO containers. Batteries of other chemistries and fluorescent tubes will be stored in dedicated sealed containers. Waste acceptance checks are carried out to ensure odorous wastes are not accepted. In the unlikely event odorous wastes are identified at any stage, they will be prioritised for removal from site as soon as practicable.	**Low –** the management procedures should prevent emissions of odour.	**Medium/Low** - Odour nuisance. Odour can disrupt wildlife.	**Low** – The management procedures employed will reduce the likelihood of impact.

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			Odour checks will be undertaken by site management in accordance with the daily and weekly checklist. The records of the daily and weekly checks are kept on site.			
Odour from the storage of waste on site during contingencies such as mechanical breakdown	Receptors 5 to 21	Air	As Above. Waste awaiting treatment includes lithium-ion batteries and lithium-ion battery materials, which have a negligible potential to produce odour in storage.	**Low –** the management procedures should prevent emissions of odour.	**Medium/Low** – Odour nuisance. Odour can disrupt wildlife.	**Low** – The management procedures employed will reduce the likelihood of impact.
Odour arising from the treatment of waste	Receptors 5 to 21	Air	Only Lithium-ion batteries and lithium-ion battery materials will be treated on site. Batteries will be treated inside the site building only, limiting the risk of emissions of odour beyond the site boundary. Odour checks will be undertaken by site management in accordance with the daily and weekly checklist. The records of the daily and weekly checks are kept on site. All complaints received associated with odour will be recorded and investigated in line with company procedures.	**Low** – the management procedures should prevent emissions of odour	**Medium/Low –** Odour nuisance. Odour can disrupt wildlife.	**Low –** the management procedures employed will reduce the likelihood of impact

Table 3 – Noise Risk Assessment

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
What is the agent or process with the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard come into contact with the receptor?	What measures are taken to reduce the risk? If it occurs who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
Noise and vibration from site mobile plant and vehicles delivering waste to the site	Receptors 6 to 21	Noise through the air and vibration through the ground	H&S Legislation is in place to ensure SUEZ protects its employees from the effects of noise. All noise generating activities will be confined to the operational hours that are specified within the planning permission with the exception of emergency repairs. The delivery and loading of waste will take place in a controlled manner to keep noise/vibration to a minimum. All plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure. A maximum speed limit of 10mph is set for vehicles operating onsite. This will minimise the generation of excessive noise arising	**Low** – The management actions should minimise the risk of excessive noise emissions.	**Medium/Low** - Noise Nuisance. Noise may also disturb local wildlife.	**Low -** the nature of the activity and the management procedures reduce the likelihood of noise impact

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			from higher vehicle speeds. Clear signage will be established across the site to reinforce the vehicle speed limit. Mobile plant onsite is fitted with 'white noise' reversing beacons which minimise the intrusive nature of the safety measure. Integrated Management System (IMS) site inspection check sheets include a daily requirement for site staff to qualitatively assess noise; if perceived to be excessive, measures will be taken to identify the source of any noise and take appropriate remedial action. All complaints received associated with noise will be recorded and investigated in line with company procedures.			
Noise and vibration from physical waste treatment processes	Receptors 6 to 21	Noise through the air and vibration through the ground	H&S Legislation is in place to ensure SUEZ protects its employees from the effects of noise. All noise generating activities will be confined to the operational hours that are stipulated within the planning permission with the exception of emergency repairs. Lithium-ion batteries and lithium-ion battery materials accepted at the site will be treated within the enclosed building, providing an effective barrier and preventing noise nuisance beyond the permit	**Low** – The management actions should minimise the risk of excessive noise emissions.	**Medium/Low** - Noise Nuisance. Noise may also disturb local wildlife.	**Low -** the nature of the activity and the management procedures reduce the likelihood of noise impact

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			boundary. The building is fitted with roller shutter doors which are closed during operation to prevent noise from escaping. All waste treatment fixed plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure. IMS site inspection checklist or Vision App include a daily requirement for site staff to qualitatively assess noise; if perceived to be excessive, measures will be taken to identify the noise and take appropriate remedial action. All complaints received associated with noise will be recorded and investigated in line with company procedures.			

Table 4 – Fugitive Emissions Risk Assessment

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
What is the agent or process with the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard come into contact with the receptor?	What measures are taken to reduce the risk? If it occurs who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence
To Air						
Dust and particulates from waste during deposit, storage and loading operations	Receptors 2 to 21	Air transport and deposition	Waste types accepted at the site include lithium-ion batteries, lithium-ion battery materials and batteries of different chemistries. Waste outputs stored on site will include 0 - 250µm black mass, 250 - 500µm black mass and 0.5 – 3mm Cu-Al residues, plastics, and case metal and plastics. Storage, reception and loading of lithium-ion batteries, materials and casing has a negligible risk of producing dust. Pre-shredded lithium-ion battery materials will be received and handled in sealed FIBCs, which will be stored in ISO containers, preventing the escape of dusty materials. FIBCs will remain closed until the point of treatment.	**Low** – The management actions should minimise the risk of excessive noise emissions.	**Medium/Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property. Potential smothering of habitats.	**Low -** the nature of the activity and the management procedures reduce the likelihood of noise impact

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			0 - 250µm and 250 - 500µm black mass, and 0.5 – 3mm Cu-Al residues is deposited directly into UN approved packaging from the treatment process, which are sealed once full. Batteries, battery materials and treatment outputs are stored in enclosed ISO containers. Maintenance and cleaning of hard surfaced areas ensures they remain free of dust generating materials. If necessary, surfaces are dampened down with water during dry conditions to prevent dusty emissions. A maximum speed limit of 10mph is set for vehicles operating onsite. Further dust suppression measures will be identified and implemented if there is any risk identified of dust emanating past the site boundary, with attention to meteorological conditions which may exacerbate potential dust issues. IMS site inspection checklist or Vision App include a daily requirement for site staff to qualitatively assess dust; if perceived to be excessive measures will be taken to identify the source of any dust/particulates and take appropriate remedial action.			

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Dust and particulates from physical waste treatment processes	Receptors 2 to 25	Air transport and deposition	Lithium-ion batteries and lithium-ion battery materials are treated within the enclosed building to prevent fugitive emissions beyond the permit boundary. The building is fitted with roller shutter doors which are closed during treatment to prevent the escape of particulates beyond the permit boundary. The treatment process is fitted with a dust management system comprising two local exhaust ventilation (LEV) systems which negatively extracts air from the process. Negative extraction prevents dust escaping the process during loading of inputs (into to both the shredder and of pre-shredded material to the sorting plant), processing and discharge of outputs. The first LEV serves the shredder. Dust abatement is provided by baghouse filter and collection unit in addition to carbon filters, which are situated outside of the building. The second LEV system serves the sorting plant and utilises a baghouse filter situated inside the building, the contents of which are captured for further treatment to collect valuable outputs. An air quality assessment is included in the application demonstrating the point source	**Medium/ Low** – the management actions should prevent emissions of dust	**Medium/ Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property. Potential smothering of habitats.	**Medium/ Low** - the management procedures employed reduced the likelihood of impact.

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			emissions will not cause harm to human health or the environment. Regular maintenance of equipment and replacement filters to be installed by competent operatives. Any activities causing particulates emissions from the facility will be immediately suspended until climatic conditions improve and/or appropriate dust suppression measures are implemented. IMS site inspection checklist or Vision App include a daily requirement for site staff to qualitatively assess dust; if perceived to be excessive measures will be taken to identify the source of any dust/particulates and take appropriate remedial action.			
To Water						
Contaminated rainwater from contact with wastes	Receptor 1 to 5	Run off of contaminated water	Wastes with the potential to create harmful discharges from contact with rainwater will be stored within site building or in enclosed ISO containers.	**Low** – The engineered systems and infrastructure are	**Medium –** contamination of local water bodies and/or groundwater.	**Low -** due to the design of the site

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Storage of salt solution for electrochemical discharge Storage of oil, fuel or hydraulic fluid			Open IBCs containing salt solution are stored undercover to prevent the ingress of rainwater, and on bunded pallets to contain any leak or spillages. The site is provided with impermeable concrete surfaces to prevent the transmission of potentially contaminated liquids into groundwater beneath the site. A fuel tank will be retained on site but is not planned to be used, as mobile plant will be electric. Any storage of fuel within the site's diesel tank takes place in accordance with relevant legislation and in suitably bunded container. Small amount of oil and hydraulic fluid are stored within the site building for maintenance of site plant. Emergency spillage procedures are in place to ensure any potential pollutants are dealt with before they enter the drainage system. A supply of spill kits will be located strategically around the site. The drainage system directs run-off from the northern area of the site to the sealed surface water lagoon. The lagoon is monitored daily to ensure content level, removal of debris and integrity of the surrounding fence. All surface water run-off from the external impermeable surface in the yard area in front of the site building is	designed to prevent any discharge of contaminated rainwater run off	Contamination of habitats for protected species.	

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			directed to soakaway through gullies and drains via an interceptor. The system is equipped with a penstock valve to allow any contamination to be contained in the event of an incident. The hardstanding and drainage system are inspected as required by the sites IMS. The results of inspections are recorded. Any remedial actions required are recorded in the site diary. Weekly checklist or Vision App include a requirement for site staff to undertake visual inspections of the status of the drainage. The drainage is emptied and cleaned at least twice a year; if damage or other problems are identified they are rectified as soon as possible.			
Pests						
Scavenging birds or animals attracted to site and carrying waste off site.	Receptors 2 to 21	Air – waste dropped by birds. Land – waste removed from site by scavenging animals.	Waste accepted on site does not include putrescible waste and therefore has a very low potential to attract pests. Waste acceptance procedure includes check for any pest infestation. In the unlikely event wastes are found to contain flies or other pests, they will be rejected from the site.	**Low –** The management actions should reduce the risk	**Medium** - Nuisance, property damage and risk of vermin spread infections. Predation of protected species and species	**Low** – the management procedures in place will reduce the likelihood of impact.

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
Flies and vermin breeding in waste.			Operators will be required to only eat in the dedicated canteen area and food waste will be kept in enclosed waste bins. Routine inspections are undertaken as required by our IMS and appropriate action will be taken in the event that the inspections indicate the presence of any pests or vermin. In addition to continuous monitoring by site staff, a specialist contractor may attend to any specific incidence of pests on request to ensure eradication. If deemed necessary due to the detection of pests, regular pest control visits will be carried out to monitor pest levels and to ensure that activity does not cause issues.		occupying sensitive habitats.	
Mud/Litter						
Litter, debris and mud on the public highway.	Receptors 2 to 21	Debris, mud and litter tracked onto local highways by vehicles leaving the site.	Lithium-ion batteries have a very low potential to generate litter. However pre-shredded lithium-ion battery materials and treatment outputs such as light plastics have the potential to be windblown. Treatment is undertaken within an enclosed building. Pre-shredded lithium-ion battery material is fed directly onto the sorting plant conveyor which is served by the LEV system	**Low** – the management actions should prevent materials being windblown/ tracked/dropped	**Medium** - Nuisance and potential health and safety hazard caused by waste on the highway. Litter may harm protected species and species	**Low** – The management procedures in place will reduce the likelihood of impact.

What do you do that can harm and what could be harmed			Managing the Risk	Assessing the Risk		
Hazard	**Receptor**	**Pathway**	**Risk Management**	**Probability of Exposure**	**Consequence**	**What is the overall risk?**
			which negatively extracts air from the process, preventing the escape of any light materials. Light plastics from the process are compacted by a briquetter and collected directly into flexible intermediate bulk containers (FIBCs), which are sealed when full. Sealed FIBCs are stored in enclosed ISO containers preventing the occurrence of litter. The site benefits from a hardstanding surface and therefore it is unlikely that any vehicle will track over any mud while they are on site. FIBCs (and containers containing waste and treatment outputs) are lifted directly into collection vehicles and dispatched from site. The containers remain sealed minimising the risk of the escape of litter. IMS procedures require that all vehicles leaving the site are inspected for cleanliness, any vehicles not reaching the required standard will be manually cleaned before leaving site to prevent material being tracked onto local highways. Remedial arrangements will be employed in response to any specific instances of significant mud/debris/ being tracked onto local highways. Site staff will regularly undertake litter picking as required.	into local environment	occupying sensitive habitats.	

6 CONCLUSION

6.1.1 The risk assessments in Tables 2 to 4 identify appropriate mitigation measures to control the potential environmental risks from the proposed activities. All identified risk mitigation measures will be incorporated within the management system for the site.

6.1.2 The environmental risk assessment indicates that provided the risk mitigation measures identified in the tables above are implemented, the overall environmental risks can be summarised in Table 5 below.

Table 5 - Summary of Environmental Risk

Hazard	Overall Risk	Detailed Management Plan Required?
Odour	Low	No
Noise	Low	No
Pests	Low	No
Dust	Medium/ Low	Yes – Air Emissions Risk Assessment completed
Mud/Litter	Low	No

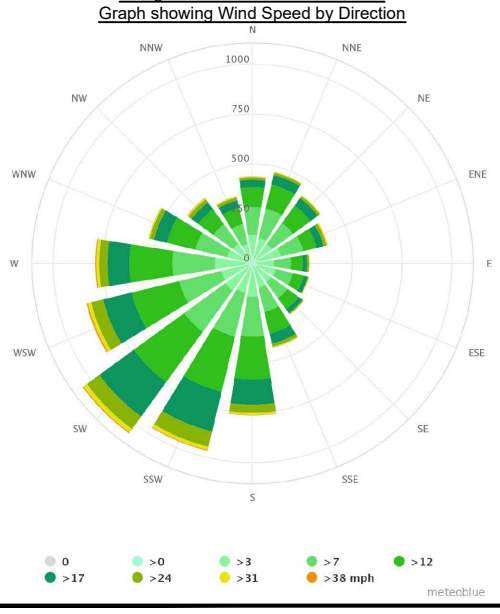
FIGURES

Figure 1

Receptor Location Plan

FINEDON CP

Sidegate Lane TS Wind Rose Data
Graph showing Wind Speed by Direction



Notes

1. Reproduced from the Ordnance Survey Map with the permission of the Controller of Her Majesty's Stationary Office, Crown Copyright, Licence Number 100004910.

Site Boundary
1km Offset
5 Receptors

Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

Site	Sidegate Lane Battery Recycling Facility
Title	Receptor Plan
Scale	1:8,000 @ A3
Date	June 2025
Drawing Ref	Sgl-LITH-REC-0625-01
Drawn by	JA
Checked by	KH

Rev	subject	date

APPENDICES

Appendix A

Risk Assessment Definitions and Risk Estimation Matrix

RISK ASSESSMENT DEFINITIONS

Hazard: A property or situation that in particular circumstances could lead to harm.

Probability: The chance that a hazard will evolve and that the hazard will follow a pathway to a receptor:

Probability	Definition
High (H)	Will definitely occur
High/Medium (H/M)	High possibility of occurrence
Medium (M)	Likely to occur
Medium/Low (M/L)	Low possibility of occurrence
Low (L)	Very unlikely to occur

Consequence: The adverse effects or impacts of a hazard being realised upon a receptor:

Consequence	Definition
High (H)	Possible irreparable damage to environmental resources and or human life
High/Medium (H/M)	Possible irreparable damage to environmental resources
Medium (M)	Possible damage to environmental resources which are limited within a regional context
Medium/Low (M/L)	Possible effects might be transient damage to environmental resources which are common place on a regional basis and alternative resources are readily available
Low (L)	The effects are negligible or might cause very slight temporary deterioration in the current environmental resource quality.

Risk: A combination of the probability, or frequency of occurrence of a defined hazard and the consequence and magnitude of impact. The general High (H), High/Medium (H/M), Medium (M), Medium/Low(M/L) and Low (L) ratings listed in the risk assessment tables are for use as a guide only based on:

Matrix for the Estimation of the Risk					
	Consequence				
Probability of the Risk	**High**	**High/Medium**	**Medium**	**Medium/Low**	**Low**
High	High	High	High/Medium	Medium	Medium
High/Medium	High	High/Medium	Medium	Medium	Medium
Medium	High/Medium	Medium	Medium	Medium	Medium/Low
Medium/Low	Medium	Medium	Medium	Medium/Low	Low
Low	Low	Low	Low	Low	Negligible