



Recycling and recovery UK

Lee Mill Transfer Station

1.3 Environmental Risk Assessment

October 2025

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DOCUMENT DETAILS

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Date	Description	Summary of Changes
February 2025	Version 1.0	Original document produced as part of permit variation application
October 2025	Version 1.1	Updated to add textiles following EA request for information

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Appendix A Risk Assessment Definitions and Risk Estimation Matrix

1 INTRODUCTION

- 1.1.1 This Environmental Risk Assessment (ERA) has been prepared to support an application for an environmental permit (permit) at Lee Mill Transfer Station (the site).
- 1.1.2 Further details of the site operations are contained in the Operations 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.
- 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 operates as a household, commercial and industrial transfer station and confidential data destruction centre.
- 3.1.2 The main waste to be accepted at the transfer station will include paper, cardboard, plastic films, textiles, metals and WEEE (including large appliances, small WEEE and components). Wastes such as cardboard, film and cans may be received baled. Hazardous waste accepted at site is limited to WEEE and batteries.
- 3.1.3 The permit allows for the treatment of non-hazardous waste and WEEE. Primarily, confidential paper waste will be treated by shredding. Textile may also be treated by shredding. Manual sorting may be undertaken to remove non-conforming items prior to shredding.
- 3.1.4 WEEE may be treated through dismantling to remove hard drives and other digital storage devices, and batteries. Hard drives and other digital storage devices may be received separately or removed from devices before treatment via a small standalone shredder. Batteries will be removed from devices prior to the devices being shredded.
- 3.1.5 The maximum permitted annual tonnage of waste accepted at the site shall not exceed 25,000 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 Lee Mill facility is located at Strashleigh View on Lee Mill Industrial Estate, Ivybridge, Devon (NGR SX 61365 55780). As well as operating as a transfer station with treatment, the site operates as an Industrial and Commercial (I&C) depot, with the transfer station building shared for vehicle maintenance.
- 4.1.2 The site is approximately 13km east of the centre of Plymouth, Devon. The site is adjacent to the A38 Devon Expressway on its southern boundary, with the wider industrial estate on the remaining three sides. The land use surrounding the industrial estate is predominantly agricultural including some farmhouses, with the town of Ivybridge sitting approximately 650m east of the permit boundary. The nearest residential receptors are properties on Cadleigh Park road, approximately 150m east of the site boundary.
- 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 a number of Ancient & Semi-Natural Woodlands, including Paradise Coppice 600m to the southeast, and Heaviland Wood 700m southeast. There are no designated SSSIs, Ramsar sites or European Sites within 1km. The nearest designated habitat is the Somerset Levels & Moors SPA and Ramsar, which contains the Curry and Hay Moors SSSI, located over 2.6km east of the permit boundary.

4.2 Receptors

4.2.1 The nearest sensitive receptors to the site are identified in Figure 2. 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
1	Secondary A (Bedrock) and Secondary Undifferentiated (Superficial drift) Aquifer	Groundwater	0	N/A
2	Streams draining to Heaviland Woods lake	Surface water	450	East
3	Tributary to River Yealm	Surface water	500	West
4	Public Footpath	Public Right of Way	0	East (adjacent)
5	Lee Mill industrial Estate	Industrial/ Commercial	0 - 1000	North/ East/ West
6	Properties on Cadleigh Park	Residential	150	East
7	Churchlands Farm	Residential	180	South
8	Public House (The Hunting Lodge)	Commercial	210	East
9	Property on Cadleigh Lane	Residential	290	Northeast
10	West Park/ West Park Lodge/ properties on Hunsdon Road	Residential	310	Southeast
11	St Austin's Priory Roman Catholic Parish Church	Public Building	430	Northeast
12	Hunsdon Farm and surrounding properties	Residential/ Listed Building	450	Southeast
13	Properties on Beech Road	Residential/ Listed Building	450	Northwest
14	Paramount Farm	Residential	500	Northeast
15	Garden Centre (Endsleigh)	Commercial	600	East
16	Three Corners and surrounding properties	Residential	630	Southeast
17	Properties in Ivybridge	Residential	630 - 1000	East/ Northeast
18	Cadleigh Farm	Residential	680	North
19	Strashleigh	Residential/ Listed Building	730	Southwest
20	Lee Mill Allotments	Public Space	740	Northwest
21	Lee Mill Hospital	Public Building	750	Northwest

No.	Receptor	Category	Distance (m)	Direction from site
22	Sewage Works	Industrial	860	West
23	Cadleigh Lodge	Residential	1000	North
24	West Park	Woodpasture and Parkland/ Deciduous Woodland	300	Southeast
25	Woodland in Lower Cadleigh	Deciduous Woodland	370	Northeast
26	Paradise Coppice	Ancient Woodland/ Deciduous Woodland	610	East/ Southeast
27	Woodland on Beech Road	Deciduous Woodland	660	Northwest
28	Great Wood	Deciduous Woodland	880	South/ Southeast
29	Fursdon Wood	Ancient Woodland/ Deciduous Woodland	1000	South

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	Receptors 4 to 23	Air	The site predominately accepts paper and cardboard, which is stored inside a building, and WEEE, which have a low potential for odour impact. Under normal operations, the majority of waste types waste are stored for no longer than one week, with the exception of WEEE and batteries which are stored for up to 3 months. Waste acceptance checks are carried out to ensure particularly odorous wastes are not accepted, and regular checks are made of the facility and waste stockpiles to ensure that odour emissions are not occurring. If particularly 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 - Nuisance	Low – The management procedures employed will reduce the likelihood of impact.

			Regular housekeeping is undertaken at the site to prevent build-up of materials and residues which may give rise to odour. 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 4 to 23	Air	As Above. Waste awaiting shredding includes paper and cardboard and WEEE, only, which have a very low potential to produce odour.	Low – the management procedures should prevent emissions of odour.	Medium/Low - Nuisance	Low – The management procedures employed will reduce the likelihood of impact.
Odour arising from the treatment of waste	Receptors 4 - 23	Air	Wastes to be treated by shredding have a low potential to cause odour (paper and WEEE). Wastes will be stored in the transfer station building prior to and following treatment by shredding. Waste acceptance procedures will be in place to prevent any malodorous waste being accepted at the site. 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. If odour is detected, measures will be taken to identify the source of any malodorous material and take appropriate remedial action.	Low – the management procedures should prevent emissions of odour	Medium/Low – Odour annoyance	Low – the management procedures employed will reduce the likelihood of impact



			All complaints received associated with odour will be recorded and investigated in line with company procedures.			
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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 4 to 29	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	Medium/Low – The management actions should minimise the risk of excessive noise emissions.	Medium/Low - Noise Nuisance	Medium/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. Plant onsite is fitted with 'white noise' reversing beacons which minimise the intrusive nature of the safety measure. 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 4 to 29	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. The treatment plant is located within the enclosed transfer station building, providing an effective barrier and preventing noise nuisance beyond the permit boundary. The building is fitted with	Medium/Low – The management actions should minimise the risk of excessive noise emissions.	Medium/Low - Noise Nuisance	Medium/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?
			roller shutter doors which can be closed during operation to prevent noise from escaping. All plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure. 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 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 4 to 29	Air transport and deposition	Permitted waste types do not include dusts or powders. Any activities causing particulates emissions from the facility will be immediately suspended until climatic conditions improve and/or appropriate dust suppression measures are implemented. Maintenance/cleaning of hard surfaced areas to ensure they remain free of dust generating materials. Dampening down of surfaces with water during dry conditions. A maximum speed limit of 10mph is set for vehicles operating onsite. All delivery vehicles are required to be sheeted or netted where possible. Further dust suppression measures will be identified and implemented if there is any risk identified of dust emanating	Low – The management actions should minimise the risk of excessive noise emissions.	Medium/Low	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?
			past the site boundary, with attention to meteorological conditions which may exacerbate potential dust issues. IMS site inspection check sheets 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.			
Dust and particulates from physical waste treatment processes	Receptors 4 to 29	Air transport and deposition	Mechanical treatment of waste is undertaken within the enclosed waste transfer station building to prevent fugitive emissions beyond the permit boundary. The building is fitted with roller shutter doors which can be closed during treatment to prevent the escape of particulates beyond the permit boundary. The shredder mechanism is enclosed, preventing fugitive emissions of dust and particulate during the treatment process. Any activities causing particulates emissions from the facility will be immediately suspended until climatic conditions improve and/or appropriate dust suppression measures are implemented. Further dust suppression measures will be identified and implemented if there is any risk identified of dust emanating	Medium/ Low – the management actions should prevent emissions of dust	Low – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	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?
			past the site boundary, with attention to meteorological conditions which may exacerbate potential dust issues. IMS site inspection check sheets 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 3	Run off of contaminated water	Wastes with the potential to create harmful discharges from contact with rainwater will be stored within the transfer station building or in containers.	Low – The engineered systems and infrastructure are designed to prevent any discharge of contaminated rainwater run off	Medium – contamination of local water bodies and/or groundwater	Low - due to the design of the site
Storage of oil, fuel or hydraulic fluid			The site is provided with impermeable concrete surfaces to prevent the transmission of potentially contaminated liquids into groundwater beneath the site. All oil storage on site takes place in accordance with relevant legislation and in suitably banded containers. Emergency spillage procedures are in place to ensure any oil, hydraulic fluids etc are dealt with before they enter the			

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?
			drainage system. A supply of spill kits will be located around the site. The site's drainage system includes a regularly maintained oil interceptor and bypass separator. The interceptor, separator and drainage system are cleaned at suitable intervals to maintain their effectiveness. 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 check sheets 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	Receptors 4 to 29	Air – waste dropped by birds. Land – waste removed from site	Waste accepted on site does not include food waste, and therefore has a low potential to attract pests. Waste acceptance procedure includes a requirement for incoming	Low – The management actions should reduce the risk	Medium - Nuisance, property damage and risk of	Low – the management procedures in place will reduce

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?
and carrying waste off site. Flies and vermin breeding in waste stockpiles.		by scavenging animals.	waste to be checked for fly infestation either at initial inspection or as the load is tipped. Any wastes found to contain flies or other pests on entry to the site will be rejected from the site. 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. A pest control contractor will be appointed to attend the site at regular intervals in accordance with IMS procedures. Additionally, the pest control contractor will be called to site to deal with any vermin/pest related problems that may arise between scheduled visits.		vermin spread infections.	the likelihood of impact.
Mud/Litter						
Litter, debris and mud on the public highway.	Receptors 2-29	Debris, mud and litter tracked onto local highways by vehicles leaving the site.	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. Vehicles will be sheeted/netted if necessary when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways if necessary	Low – the management actions should prevent materials being tracked/dropped	Medium - Nuisance and potential health and safety hazard caused by waste on the highway.	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?
			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.	onto local highways		

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.

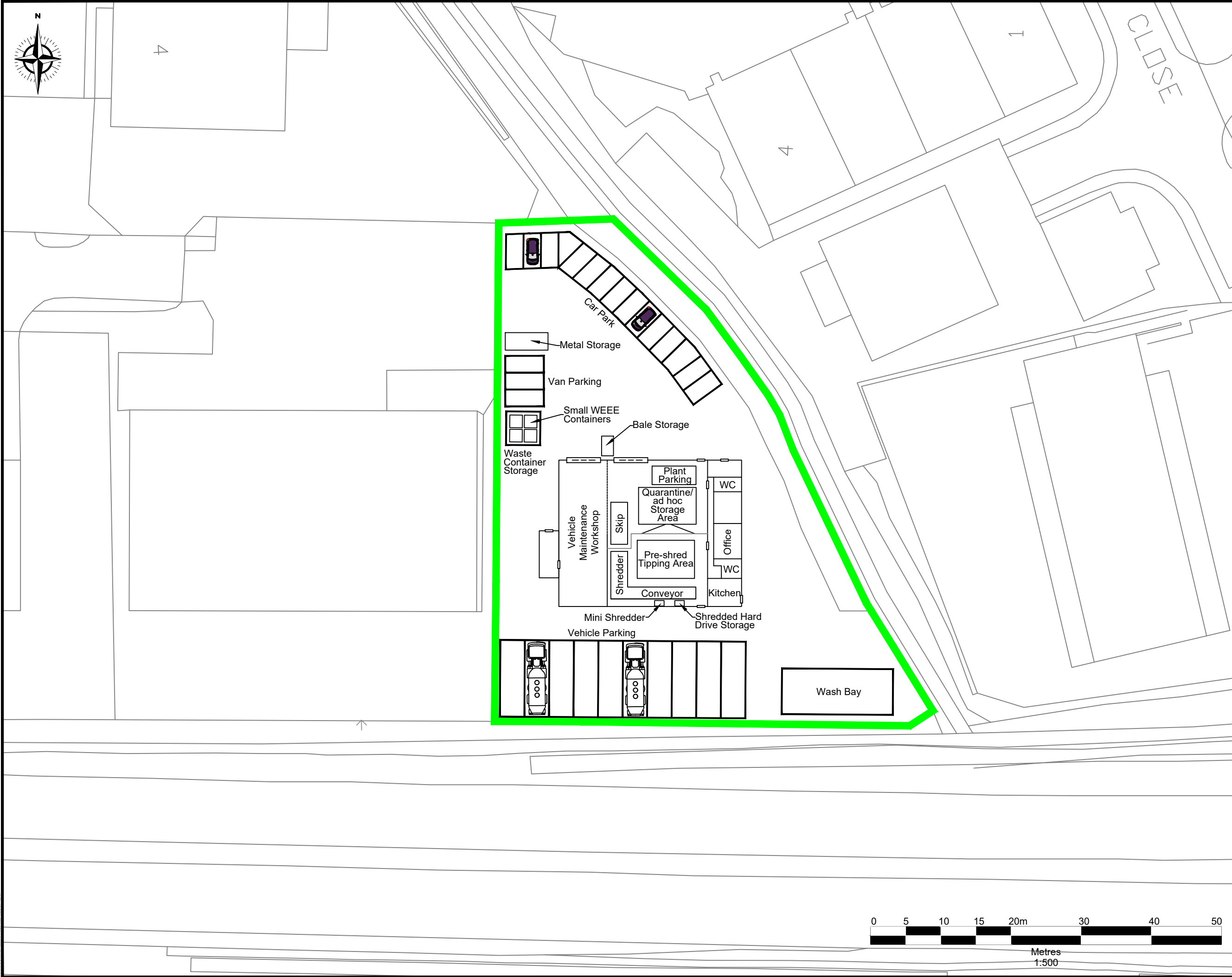
Table 5 - Summary of Environmental Risk

Hazard	Overall Risk	Detailed Management Plan Required?
Odour	Low	No
Noise	Low	No
Pests	Low	No
Dust	Low	No
Mud/Litter	Low	No



FIGURES

Figure 1
Site Layout Plan



Notes

1. Reproduced from the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office, Crown Copyright and Database Rights 2024
Ordnance Survey 0100031673/100004910.

Site Boundary

Rev	subject	date



Darwen Resource Recovery Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel: (01254) 819700, Fax: (01254) 819749, Email: richard.bisset@suez.com

Site	
Lee Mill Transfer Station	
Title	
Site Layout Plan	
Scale	
1:500@A3	
Date	
October 2024	
Drawing Ref	Drawn by
Lml-LAY-1024-01	JA
	Checked by
	KH

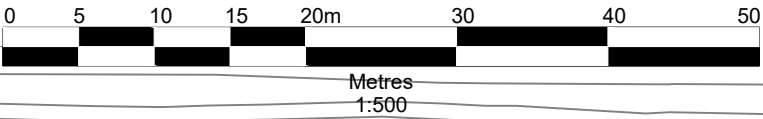
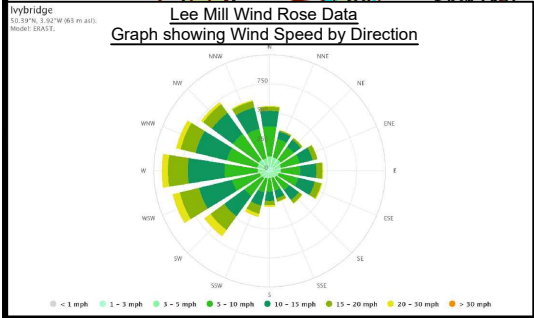
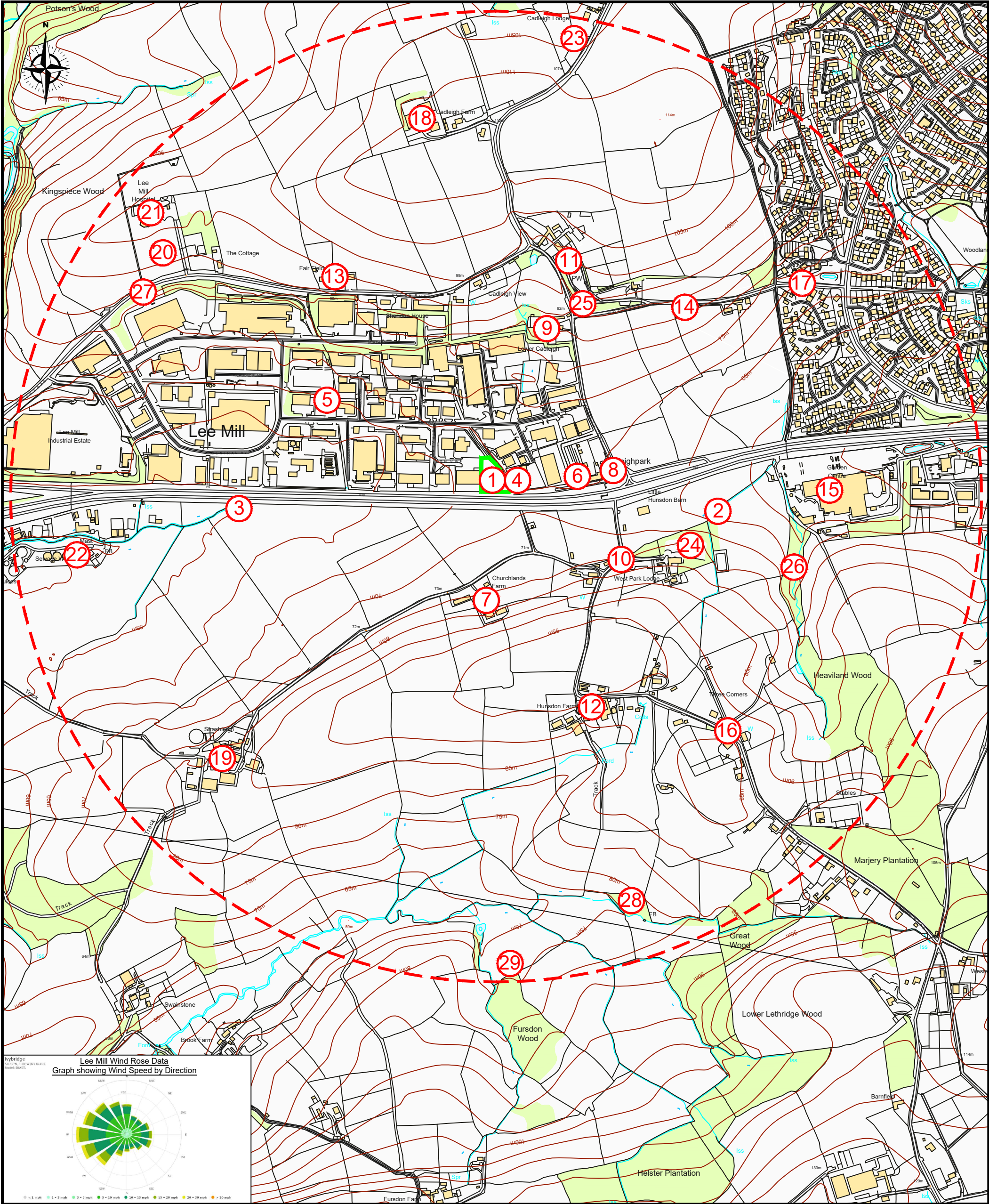




Figure 2
Receptor Location Plan



Notes 1. Reproduced from the Ordnance Survey Map with the permission of the Controller of His Majesty's Stationary Office, Crown Copyright and Database Rights 2024 Ordnance Survey 0100031673/100004910.		Permit Boundary 1km Offset ① Receptors		0100200300400 Metres 1:7500			
suez Darwen Resource Recovery Park, Lower Eccleshill Road, Darwen, BB3 0RP Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@suez.com	Site	Scale	1:7500 @ A3	Drawn by	Rev	subject	date
		Date	October 2024	JA			
	Title	Drawing Ref	Lml-REC-1024-01		Checked by		
				KH			



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