Recycling and recovery UK

Document Details

Document title	Hallenbeagle Transfer Station and Material Recycling Facility Environmental Risk Assessment
Version	1.0
Date	October 2023
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Reviewed by	Andrew Jones – Environment & Industrial Risk Manager Christine Roos – Production Operations Manager
Approved by	Craig Mouatt – Processing Contract Manager
Distribution	SUEZ - Site Copy SUEZ - EIR Department Environment Agency

Document Review History

Date	Description	Summary of Changes
October 2023	Version 1.0	Original Document to support environmental permit application for a Refuse Transfer Station, Material Recycling Facility and a covered bale storage area.

Contents

Figures

Appendices

1. Introduction

1.1 This Environmental Risk Assessment (ERA) has been prepared to support an application for an environmental permit (permit) at Hallenbeagle Transfer Station and Material Recycling Facility (the site).

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

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 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.

2.2 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)

2.3 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.

2.4 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.

2.5 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.

2.6 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.

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

3 Source of Risk

3.1 The site will be permitted as a Refuse Transfer Station (RTS), Clinical Waste Transfer Station (CWTS) and a Material Recycling Facility (MRF) with a combined annual waste acceptance limit of 140,000 tonnes. The maximum combined annual tonnage limit will be 100,000 tonnes at the RTS and CWTS and 40,000 tonnes at the MRF.

3.2 The RTS will provide a facility for the storage and 'bulking up' of household residual waste (general waste), food waste, bulky waste, street sweepings and fly tipped waste collected by Waste Collection Authorities (WCAs), plus residual waste from SUEZ's network of Household Waste and Recycling Centres (HWRCs). The RTS will also accept waste from third party trade customers.

3.3 Non-hazardous and inert waste will be treated as part of the RTS. Treatment activities within the RTS will consist of manual sorting and separation. Street Sweeping will also naturally dewater. To allow flexibility treatment within the RTS could also consist of screening, baling, shredding or compaction of non-hazardous waste for disposal or recovery.

3.4 The Clinical Waste Transfer Station will provide a facility for the storage and 'bulking up' of offensive healthcare and clinical waste. There will be no physical treatment of waste as part of this activity.

3.5 The MRF will provide a facility for the physical treatment of recyclable materials for onward transport to re-processing facilities. Recyclable materials will derive from kerbside collections, third party trade customers and SUEZ's network of HWRCs and Transfer Stations. The treatment includes manual and mechanical sorting/separation, screening, baling, shredding, compaction or 'bulking up' of waste.

3.6 In addition, there is a covered bale storage area to store waste bales and loose recyclable materials from the MRF.

3.7 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 at Cornwall Business Park, Hallenbeagle, Scorrier, Redruth, TR16 5EN at National Grid Reference (NGR) SW 72700 44778. The site location and permit boundary are presented in Figure 1 and 2 respectively.

4.1.2 The site is situated approximately 3.5km to the north east of Redruth town centre. Access to the site is from one of the Business Park roads which connects to the A30 via an overbridge and short section of road which serves some of the businesses at Scorrier. The Business Park Road forms the eastern boundary of the site. The main line railway forms the western boundary to the site, with the A30 dual carriageway just beyond this. The closest residential receptor is located approximately 25m north off Hallenbeagle Bridge Road.

4.1.3 A Nature and Heritage Conservation Screen (Reference Number EPR/LB3906HB/A001) was requested from the Environment Agency. This screen determines the presence of any sites of nature and heritage conservation, or protected species or habitats that may be impacted by the proposal. The results of the screen indicate that there are no sites of nature and heritage conservation, or protected species or habitats within the relevant screening distances.

4.1 Receptors

4.2.1 The nearest sensitive receptors to the site are identified in Figure 3. 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	Cormac Solutions Depot	Commercial/Industrial	15	East
2	Cornwall Business Park West	Commercial/Industrial	25	South West
3	Cornwall Business Park	Commercial/Industrial	315	South West
4	Commercial units in Wheal Rose	Commercial/Industrial	175	West
5	Radnor Industrial Park	Commercial/Industrial	740	South West
6	Roddas's Cornish Clotted Cream Creamery	Commercial/Industrial	600	South West
7	Businesses at the old saw mills	Commercial	530	South West
8	Logan Electronics	Commercial	85	South

9	The Fuel Depot	Commercial	100	North West
10	Conway Bailey Transport	Commercial	340	North West
11	Residential property off Hallenbeagle Bridge Road	Residential	25	North
12	Caravan Park off Sawmills Lane	Residential	75	North East
13	Hallenbeagle Farm	Residential/Agricultural	140	South East
14	Residential properties off Sawmills Lane	Residential	180	South West
15	Residential properties east of Sawmills Lane	Residential	325	South East
16	Residential properties west of Sawmills Lane	Residential	485	South West
17	Residential properties in Scorrier	Residential	525	South West
18	Killifreth Farm	Residential/Agricultural	760	South East
19	Kirbartley Farm	Residential/Agricultural	400	South East
20	Pitslewren Farm	Residential/Agricultural	900	South East
21	Primrose Farm	Residential/Agricultural	600	East
22	Part Pitslewren Farm	Residential	845	South East

23	Residential properties in Wheal Rose	Residential	600	South West
24	Boscawen Farm	Residential/Agricultural	540	North East
25	Glencoe Farm	Residential/Agricultural	540	North West
26	Residential properties south of Blackwater	Residential	665	North West
27	Green Acres Farm	Residential/Agricultural	780	North
28	Boscawen Cottage	Residential	675	North East
29	Fays Touring Park	Recreational	660	South East
30	Blackwater Bypass (A30)	Public Highway	100	West
31	Railway Line	Railway Infrastructure	15	West
32	Central Cornwall Allotments	Allotments	975	East
33	Deciduous Woodland	Priority Habitat	370	East
34	Deciduous Woodland	Priority Habitat	350	South West
35	Deciduous Woodland	Priority Habitat	765	East
36	Deciduous Woodland	Priority Habitat	800	South East

37	Deciduous Woodland	Priority Habitat	485	South East
38	Deciduous Woodland	Priority Habitat	490	South East
39	Deciduous Woodland	Priority Habitat	551	South East
40	Deciduous Woodland (Unity Wood)	Priority Habitat	870	South East
41	Deciduous Woodland	Priority Habitat	525	South West
42	Deciduous Woodland	Priority Habitat	600	South West
43	Deciduous Woodland	Priority Habitat	605	South West
44	Deciduous Woodland	Priority Habitat	670	South West
45	Deciduous Woodland	Priority Habitat	720	South East
46	Groundwater (Secondary A)	Groundwater	-	Beneath Site

5 Risk Assessment and Management Measures

5.1 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 1 to 31	Air	Potentially odorous wastes (including mixed municipal waste, food waste, green waste and street sweepings) that is accepted at the site will be stored, processed and loaded in the main building. This building will be fitted with roller shutter doors which will be kept closed when not in use (i.e., arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. This will minimise the potential for any odour generated on site to impact receptors beyond the site boundary.	**Low –** the management procedures should prevent emissions of odour.	**Medium/Low** - Nuisance	**Low** – The management procedures employed will reduce the likelihood of impact.

			Storage of food waste will be limited to 48 hours (72 hours over a weekend or bank holiday). It is anticipated that at the end of the day one vehicle load of food waste will remain on site. Storage of mixed municipal waste will be limited to 48 hours (72 hours over a weekend or bank holiday). It is anticipated that at the end of the day one vehicle load of mixed municipal waste will remain on site. Storage of road sweeping will be limited to 2 weeks. Storage of green waste is limited at the site but if stored it will be for a maximum of 48 hours (72 hours over a weekend or bank holiday). Any odorous wastes causing an immediate amenity risk in respect of odour that are identified on site will be removed as soon as practicable. IMS site inspection checklist or Vision App includes a daily requirement for site staff to qualitatively assess odour; if perceived to be excessive, measures will be taken to identify the source of any malodourous and take appropriate remedial action. Areas of site used to store waste that may contain odorous material will be cleaned at the discretion of the site manager as and when this is required. All complaints received associated with odour will be recorded and investigated in line with company procedures.			

			Odour will be managed in accordance with the Odour Management Plan (Document Reference 2.1).			
Odour from the storage of waste on site during contingencies such as mechanical breakdown	Receptors 1 to 31	Air	Storage of food waste will be limited to 48 hours (72 hours over a weekend or bank holiday). It is anticipated that at the end of the day one vehicle load of food waste will remain on site. Storage of mixed municipal waste will be limited to 48 hours (72 hours over a weekend or bank holiday). It is anticipated that at the end of the day one vehicle load of mixed municipal waste will remain on site. Storage of road sweeping will be limited to 2 weeks. Storage of green waste is limited at the site but if stored it will be for a maximum of 48hours (72 hours over a weekend or bank holiday). Any odorous wastes causing an immediate amenity risk in respect of odour that are identified on site will be removed as soon as practicable. Potentially odorous wastes (including mixed municipal waste, food waste, green waste and street sweepings) that is accepted at the site will be stored, processed and loaded in the main building. This building will be fitted with roller shutter doors which will be kept closed when not in use (i.e., arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in	**Low –** the management procedures should prevent emissions of odour.	**Medium/Low** - Nuisance	**Low** – The management procedures employed will reduce the likelihood of impact.

			direct use. This will minimise the potential for any odour generated on site to impact receptors beyond the site boundary. Odour only likely to arise if waste is stored on site for extended periods of time. The waste storage will be managed to minimise retention time onsite. IMS site inspection checklist or Vision App includes a daily requirement for site staff to qualitatively assess odour; if perceived to be excessive, measures will be taken to identify the source of any malodourous and take appropriate remedial action. Odour will be managed in accordance with the Odour Management Plan (Document Reference 2.1).			
Odour from the storage of Hazardous Clinical Waste and offensive Waste	Receptors 1 to 31	Air	Hazardous Clinical wastes will be stored in sealed containers, while offensive waste will be stored in bags within a bay inside the main building. This building will be fitted with roller shutter doors which will be kept closed when not in use (i.e., arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. This will minimise the potential for any odour generated on site to impact receptors beyond the site boundary.	**Low –** the management procedures should prevent emissions of odour.	**Medium/Low** - Nuisance	**Low** – The management procedures employed will reduce the likelihood of impact.

			IMS site inspection checklist or Vision App includes a daily requirement for site staff to qualitatively assess odour; if perceived to be excessive, measures will be taken to identify the source of any malodourous and take appropriate remedial action. Odour will be managed in accordance with the Odour Management Plan (Document Reference 2.1).			

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 1 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 plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure. Mobile plant on site will be fitted with “white noise” reversing beacons which minimise the intrusive nature of the safety measure. The majority of vehicles delivering waste to the site perform a single reversing manoeuvre whilst on site.	**Low** – operations occur during the day time as stipulated in the Planning Permission.	**Medium/Low** – Nuisance	**Low** – The management procedures employed will reduce the likelihood of impact.

			A maximum speed limit of 10mph is set for vehicles operating onsite. This will minimise the generation of excessive noise arising from higher vehicle speeds. Clear signage will be established across the site to reinforce the vehicle speed limit. IMS site inspection checklist or Vision App includes 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. Please refer to the Noise Management Plan (Document reference 2.3).			

Noise and vibration caused by the operation of fixed plant and machinery	Receptors 1 to 29	Noise through the air and vibration through the ground	Waste that is accepted at the site will be stored, processed and loaded within the main building. Only specific waste types such as gas cylinders or textiles will be stored outside and will be stored within appropriate containment. The building will be fitted with roller shutter doors which will be kept closed when not in use (i.e. arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. As such, any noise arising from the waste operation will be effectively attenuated by the walls and roof of the building. 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 includes 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.	**Low** – operations occur during the day time as stipulated in the Planning Permission.	**Medium/Low** - Nuisance	**Low** – The management procedures employed will reduce the likelihood of impact.

			Noise will be managed in accordance with the Noise Management Plan (Document Reference 2.3).			

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 during waste handling and treatment operations.	Receptors 1 to 45	Air transport and deposition	Permitted waste types not likely to give rise to significant amounts of dust Waste that is accepted at the site will be stored, processed and loaded within the main building. Only specific waste types such as gas cylinders or textiles will be stored outside and will be stored within appropriate containment The building will benefit from roller shutter doors which will be kept closed when not in use (i.e. arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast	**Low** – the management actions should prevent emissions of dust	**Low –** human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	**Negligible**

Dust and particulates from the storage of waste.			acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. This will minimise the risk of dust to impact receptors beyond the site boundary. Bulk vehicles are loaded within the main building meaning any dust produced during the loading process is contained. The RTS building is fitted with atomising misting system to mitigate any dust emissions that may be generated. Periodic maintenance/cleaning of hard surfaced areas to ensure they remain reasonably free of dust generating materials. Dampening down of surfaces with water from hose pipes during dry conditions. A maximum speed limit of 10mph is set for vehicles operating on site. All delivery vehicles are required to be sheeted or netted where possible if deemed necessary. 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 includes 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 on site will be managed in accordance with the Dust Management Plan (Document reference 2.2).			
Clinical Wastes – Releases of particulate matter (dust) and infectious micro-organisms	Receptors 1 to 45	Air transport and deposition	Hazardous Clinical wastes will be stored in sealed containers, while offensive waste will be stored in bags within a bay inside the main building. The building will benefit from roller shutter doors which will be kept closed when not in use (i.e. arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. This will minimise the risk of dust to impact receptors beyond the site boundary. Dust on site will be managed in accordance with the Dust Management Plan (Document reference 2.2).	**Low –** the management actions should prevent emissions of dust	**Medium –** Harm to human health, respiratory irritation and illness	**Low**
Dust and particulates from the unloading, storage and	Receptors 1 to 45	Air transport and deposition	The asbestos to be accepted at the site will be bonded asbestos which will be contained within bags in accordance with health and safety requirements. The bags of asbestos will then be stored in an enclosed, and clearly labelled	**Low –** waste asbestos will be bagged in accordance with health and safety	**Medium/High –** Nuisance and potential respiratory	**Medium –** the management procedures employed will

transfer of asbestos waste			container. The container must be kept closed at all times other than when the waste is being loaded into it. The loading/unloading of asbestos will be undertaken in a controlled manner. Asbestos will only be handled by members of staff that have received the appropriate training. IMS site inspection checklist or Vision App includes a requirement for site staff to undertake visual inspections of the status of the storage containers to ensure continuing integrity and fitness for purpose. If damage or other problems are identified they are rectified as soon as possible.	requirements and stored in an enclosed container which will minimise the probability of exposure.	health risk to public and staff	reduce the likelihood of impact.
To Water						
Contaminated rainwater from contact with wastes Storage of oil, fuel or hydraulic fluid	Receptor 46	Run off of contaminated water	Waste that is accepted on site will be stored in the main building to minimise contact with rainwater. Any waste that is stored outside (Gas cylinder and textiles) will be stored within appropriate containers to minimise contact with rainwater The site is provided with impermeable concrete surfaces to prevent the transmission of potentially contaminated liquids into groundwater beneath the site.	**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

			Furthermore, the site benefits from a surface water and a foul and sealed water drainage system. The main building along with the bale storage area benefit from a sealed drainage system. Any water within the building and storage area will drain to two underground tanks located within the site yard area. The vehicle wash bay will also drain to these tanks. Water collected within the sealed drainage system will be pumped out and tankered off site for suitable disposal. A Surface water drainage system serves the site. Surface water flows into 3 ground infiltration features. The system is equipped with penstock valves to allow any contamination to be contained in the event of an incident. There are 2 separate foul drainage systems at the site that take domestic effluent from the weighbridge offices and main office building. Both systems will be processed by a waste water treatment plant. One of the system will drain to a standard drainage field while the other into a foul soakaway. Fuel storage will be provided and storage will be in line with latest legislation. All deliveries of fuel will be supervised to ensure no spillages occur.			

			Emergency spillage procedures are in place to ensure any oil, hydraulic fluids etc. are dealt with before they enter the drainage system. A supply of absorbent granules will be stored on site. The drainage system will be sealed off to prevent discharge in the event of an incident. The impermeable surface and drainage system will be inspected as required by the site IMS. The results of the inspections are recorded. Any remedial actions required are recorded in the site diary. IMS site inspection checklist or Vision App includes a requirement for site staff to undertake visual inspections of the status of the drainage. Drainage shall be maintained in accordance with the O&M manuals and manufacturers recommendations. 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 1 to 45	Air – waste dropped by birds. Land – waste removed from site by	Wastes potentially attracting pests (including mixed municipal waste, food waste, green waste and street sweepings) that is accepted at the site will be stored, processed and loaded in the main building. This building will be fitted with roller shutter doors which will be kept closed when not in use (i.e., arrival or departure of vehicles) and during non-operational hours. The main entrance and exit	**Low –** The management actions should reduce the risk	**Medium** - Nuisance, property damage and risk of vermin spread infections.	**Low** – the management procedures in place will reduce the likelihood of impact.

Flies and vermin breeding in waste stockpiles.		scavenging animals.	doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. This will minimise the risk of pests to be attracted to the site. Tight controls of the waste levels will prevent long residency time at the site which will minimise the possibility of attracting vermin. Storage of food waste will be limited to 48 hours (72 hours over a weekend or bank holiday). It is anticipated that at the end of the day one vehicle load of food waste will remain on site. Storage of mixed municipal waste will be limited to 48 hours (72 hours over a weekend or bank holiday). It is anticipated that at the end of the day one vehicle load of mixed municipal waste will remain on site. Storage of road sweeping will be limited to 2 weeks. Storage of green waste is limited at the site but if stored it will be for a maximum of 48 hours (72 hours over a weekend or bank holiday).			

			Vehicles will be sheeted/netted if necessary when entering/leaving the site to minimise the risk of pests. Waste acceptance procedure include a requirement for incoming waste to be checked for fly infestation either at the weighbridge or as the load is tipped. Any wastes found to contain flies on entry to the site will either be treated appropriately with the fly spray or 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 (to be determined) by the contractor 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. Pests on site will be managed in accordance with the Pest Management Plan (Document reference 2.4).			
Mud/Litter						

Litter, debris and mud on the public highway.	Receptors 30	Debris, mud and litter tracked onto local highways by vehicles leaving the site.	No particular mud issues associated with the site due to the impermeable surface of the site and local highways. Waste that is accepted at the site will be stored, processed and loaded within the main building. Only specific waste types such as gas cylinders or textiles will be stored outside and will be stored within appropriate containment. The building will be fitted with roller shutter doors which will be kept closed when not in use (i.e. arrival or departure of vehicles) and during non-operational hours. The main entrance and exit doors for the delivery of materials will be fitted with fast acting roller shutter doors to keep opening time to very short duration. In addition, pedestrian doors are also closed when not in direct use. This will minimise the risk of wind-blown litter. Vehicles will be sheeted/netted if necessary when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways. 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. A street sweeping vehicle will be contracted in to attend to any specific instances of mud/debris being tracked onto local	**Low** – the management actions should prevent materials being tracked/dropped onto local highways	**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.

			highways and site staff will regularly undertake litter picking as required.			

6 Conclusion

6.1 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.

6.2 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.

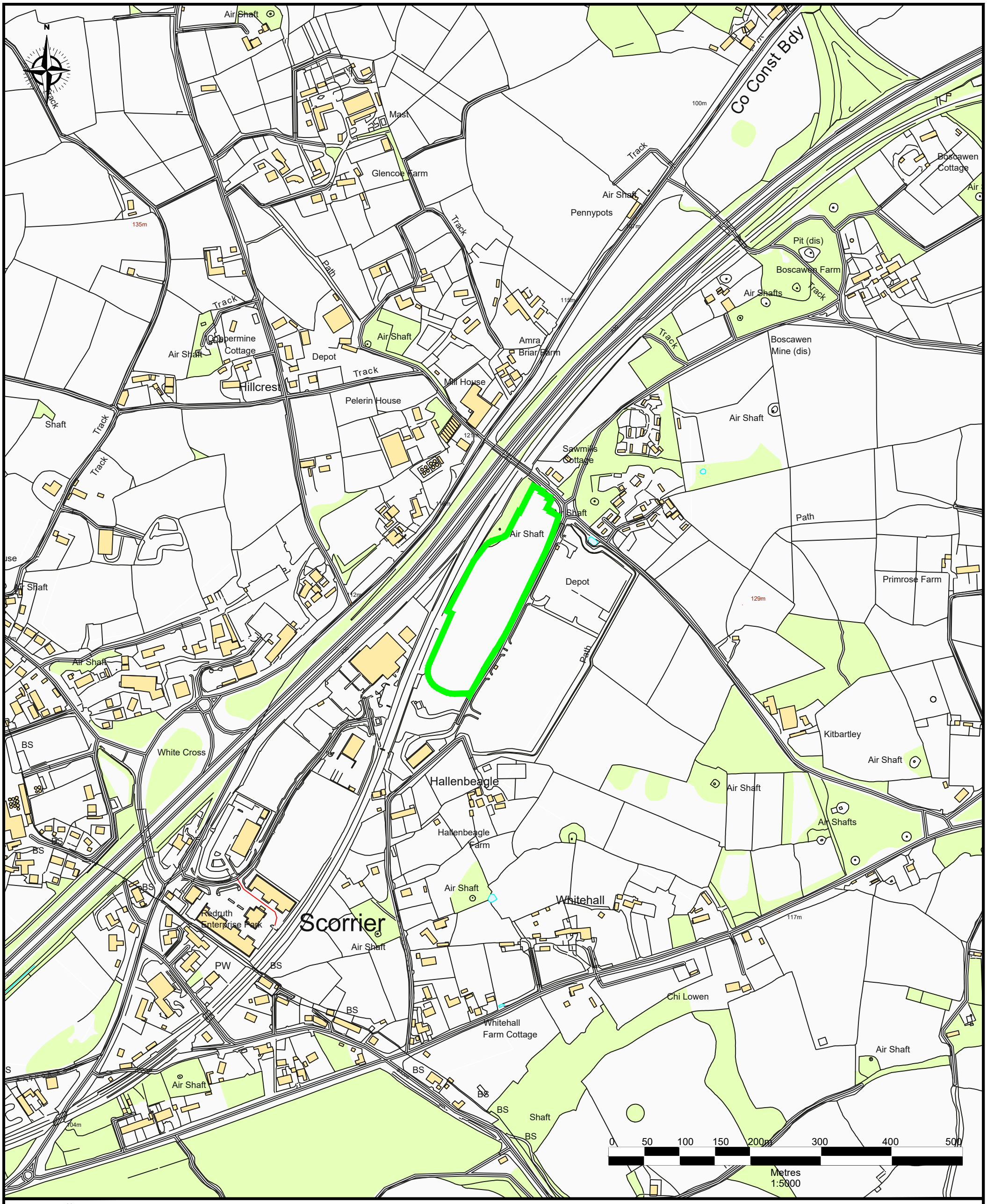
Table 5 - Summary of Environmental Risk

Hazard	Overall Risk	Detailed Management Plan Required?
Odour	Low	Yes - Requested by EA during pre-application discussions
Noise	Low	Yes - Requested by EA during pre-application discussions
Pests	Low	Yes - Requested by EA during pre-application discussions
Dust	Low	Yes - Requested by EA during pre-application discussions
Mud/Litter	Low	No

Figures

Figure 1

Hallenbeagle TS and MRF - Site Location Plan



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.

Hallenbeagle TS and MRF permit boundary

suez

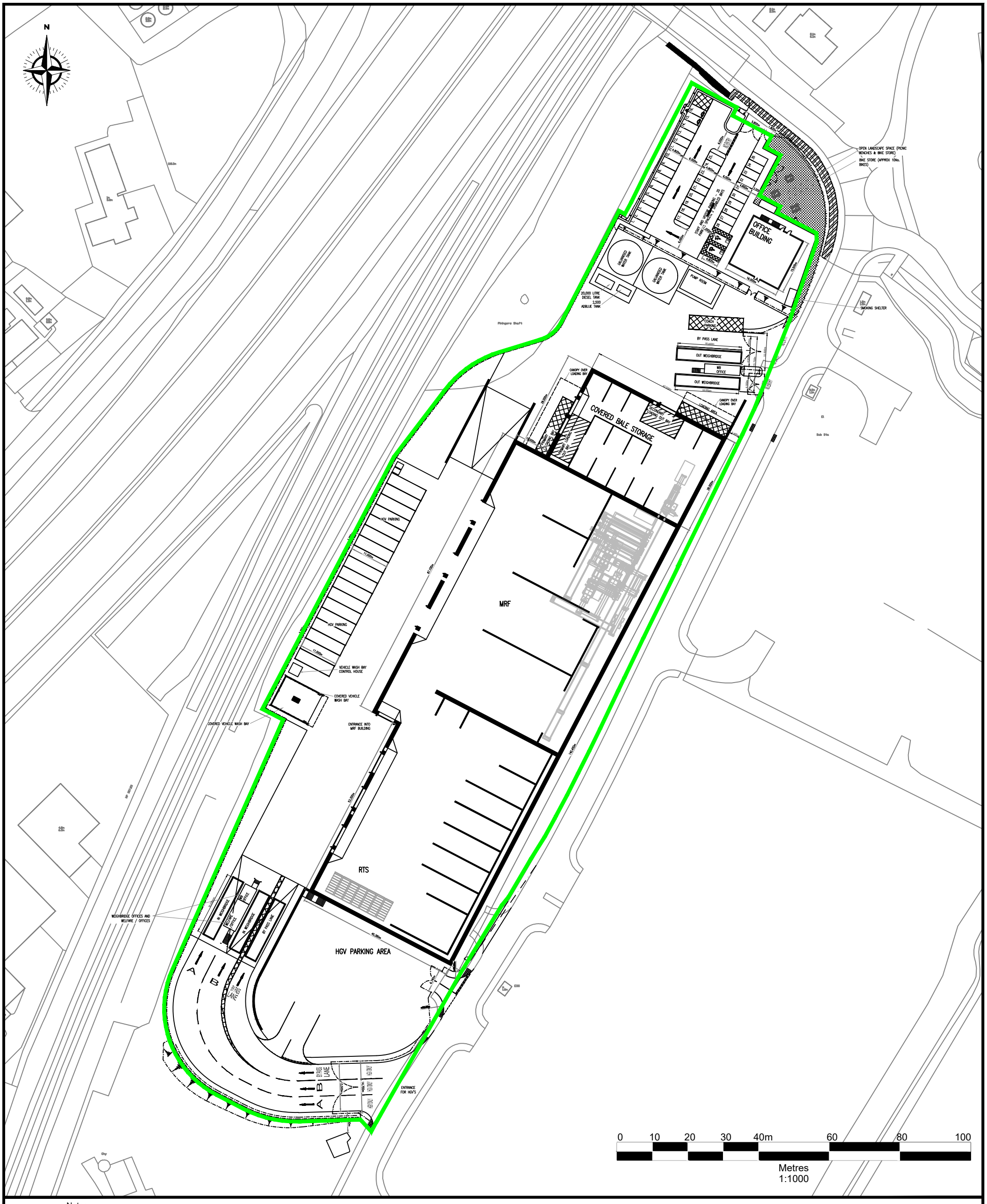
Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bisset@sita.co.uk

Site	Hallenbeagle Transfer Station and Material Recycling Facility
Title	Site Location Plan
Scale	1:5000 @ A3
Date	November 2023
Drawing Ref	Hbg-LOC-1123-01
Drawn by	JA
Checked by	GGD

Rev	subject	date

Figure 2

Hallenbeagle TS and MRF - Site permit boundary



Notes

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Hallenbeagle TS and MRF permit boundary

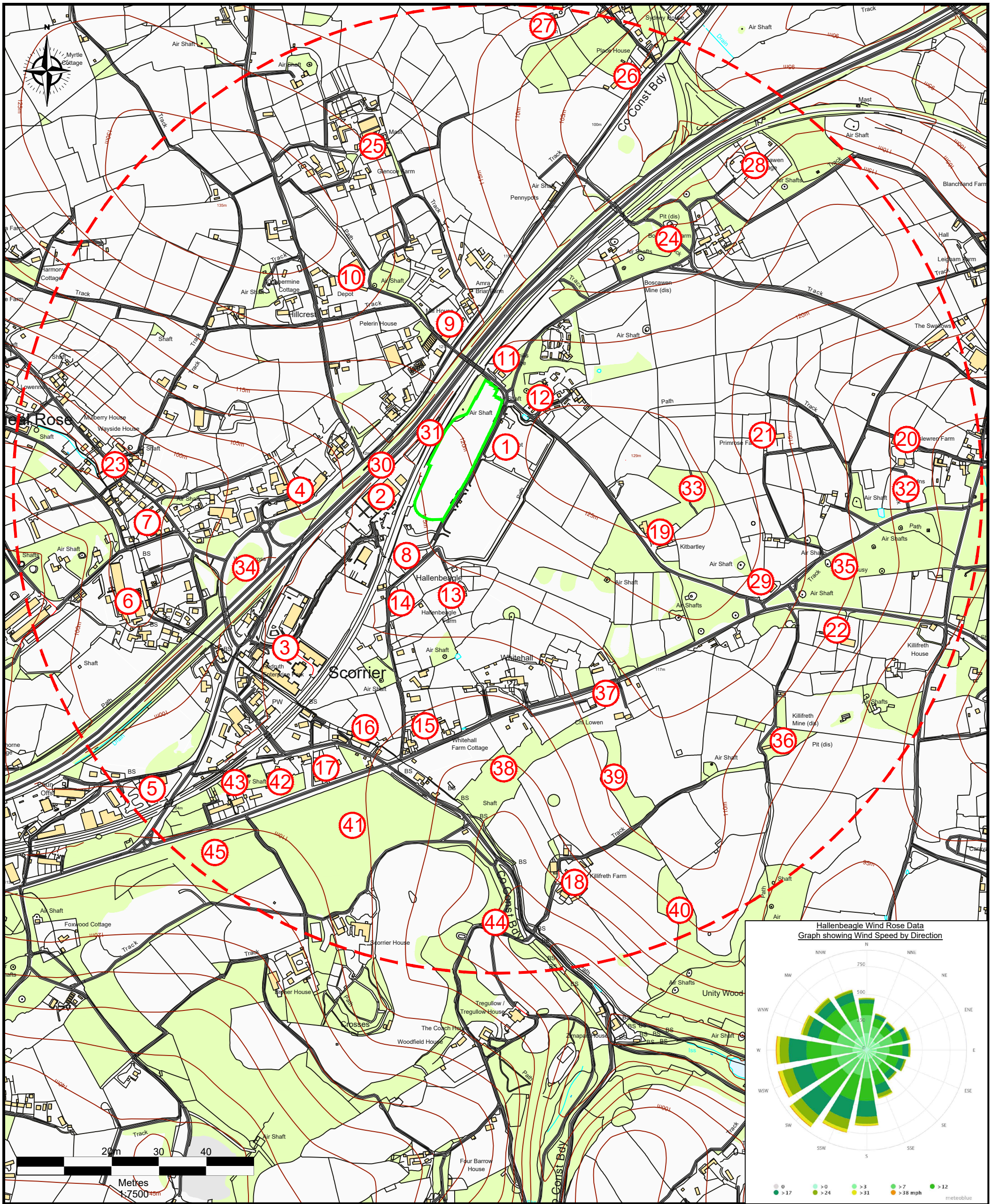
Darwen Resource Recovey Park, Lower Eccleshill Road, Darwen, BB3 0RP
Tel:(01254)819700, Fax:(01254)819749, Email: richard.bissel@sita.co.uk

Site	Hallenbeagle Transfer Station and Material Recycling Facility
Title	Permit Boundary Plan
Scale	1:1000 @ A3
Date	November 2023
Drawing Ref	Hbg-PER-1123-01
Drawn by	JA
Checked by	GGD

Rev	subject	date

Figure 3

Hallenbeagle TS and MRF - Receptors location



Hallenbeagle 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.

Hallenbeagle TS and MRF permit boundary

1km Offset

① Receptors

suez

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

Site	Hallenbeagle Transfer Station and Material Recycling Facility
Title	Receptor Plan
Scale	1:7,500 @ A3
Date	November 2023
Drawing Ref	Hbg-REC-1123-01
Drawn by	JA
Checked by	GGD

Rev	subject	date

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