Environmental and Climate Change Risk Assessment

Portico Shipping Limited

14th November 2025

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Environmental and Climate Change Risk Assessment

Portico Shipping Limited

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CONTENTS

List of Tables

List of Figures

1. INTRODUCTION

As part of an application for an environmental permit, Operators must assess the risk to the environment and human health from the activities they seek to permit. This Environmental Risk Assessment has been undertaken to support a permit variation application in accordance with the Environment Agency Guidance for undertaking environmental risk assessments.

Environmental risks relevant to the site activities are:

- Emissions to Air;
- Emissions to Water;
- Emissions to Land;
- Odour;
- Noise;
- Litter;
- Pests;
- Vandalism;
- Fire; and
- Spillages and Leakages.

For each of the above environmental criteria the approach to the assessment has followed the following four stage process:

- Identify the risks;
- Assess the risks (assuming those control measures proposed are in place);
- Choose appropriate further measures to control these (if required); and
- Present the assessment.

2. SITE BACKGROUND

2.1 Site Location

The site is located at Portico House, 2 Prospect Road, Portsmouth PO1 4QY, within Portsmouth International Port.

2.2 Site Context

The following sections outline the site context, including the proposed boundary and layout, surrounding site setting and any nearby sensitive receptors.

2.2.1 Site Setting

The surrounding area is predominantly industrial, with residential properties across the A3 highway approximately 125m east of the site at the closest point. The closest water feature is the harbour located immediately to the west of the site boundary.

Table 2.1 outlines the surrounding site setting in greater detail, including features in the immediate vicinity, within 500m and beyond 500m of the proposed site.

Table 2.1 - Site Setting

Direction	Description
North	Immediate Vicinity: Portsmouth Port Terminal Within 500m: Portsmouth Port, HGV Ferry Check-In, The Ship and Castle pub, VIVID housing association, Fountaion Lake Angling Club, M275 Beyond 500m: Residential housing, Stamshaw Lake Angling Club, Stamshaw Park and Playground
East	Immediate Vicinity: M275, A3, Norman House, ML (UK) Ltd Within 500m: Residential housing, Ferry House Lodge, Ruckland Park, The Flying Bull Academy, Buckland Community Centre, The Busy Bobbins Alerations Beyond 500m: Residential housing, Place of Worship (Empower Centre)
South	Immediate Vicinity: H&S Metals, Brett Aggregates and Brett Concrete Within 500m: Industrial Units (Access Self Storage Portsmouth, HMNB Portsmouth Trafalgar Gate Pass) Charles Dickens Birthplace Museum, Morrisons, Pitt St Skatepark Beyond 500m: St John's Cathedral, Cascades Shopping Centre, Commercial Units (Primark, Argos, Evans Cycles), Victoria Park
West	Immediate Vicinity: Portsmouth Harbour Within 500m: Portsmouth Harbour, Fountain Road, Beyond 500m: North West Wall Jetty, Whale Island Boat Station, Navy Command HQ (NW)

2.2.2 Nearby Sensitive Receptors

The nearest residential areas to the site are on Estella Road, located approximately 125m east of the site boundary. Table 2.2 details the identified human receptors relevant to the site:

Table 2.2 - Sensitive Human Receptors

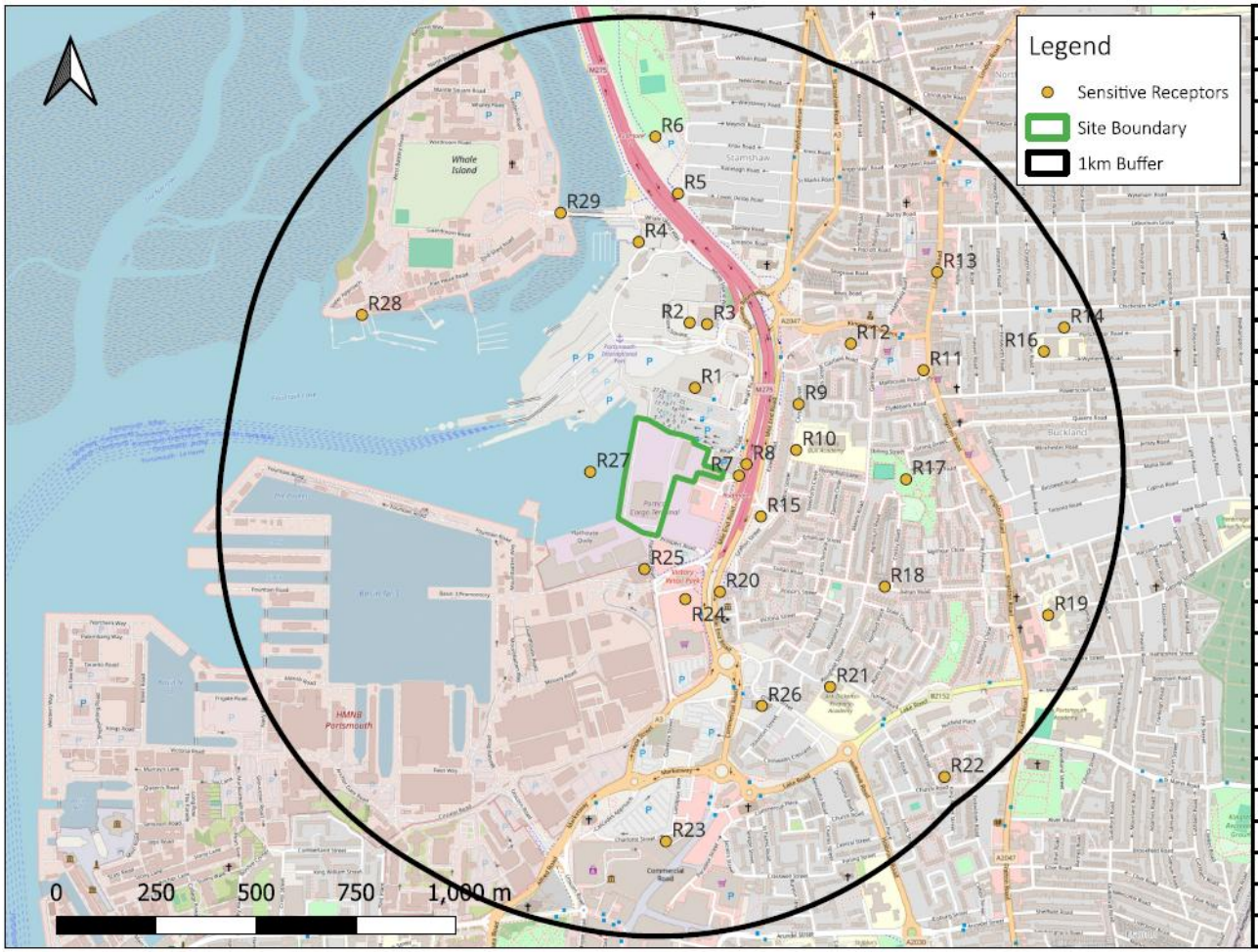
Receptor	Type	Distance
Portsmouth International Port	Commercial	103m North
Ship and Castle Pub	Commercial	280m North
Shurguard Self Storage Portsmouth	Commercial	280m North

Fountain Lake Angling Club	Amenity	495m North
Stamshaw Lake Angling Club	Amenity	660m North
Stamshaw Park and Playground	Amenity	750m North
Stamshaw and Tipner Community Centre	Amenity	920m North
Sea Juicer Fishing Charters	Amenity	800m North
A3 highway	Infrastructure	130m NE
M275 highway	Infrastructure	150m NE
Residential housing (beginning on Centaur St)	Residential	230m+ NE
Buckland Community Centre	Amenity	400m NE
Place of Worship (Al-Noor Mosque)	Amenity	550m NE
Residential Housing	Residential	500m+ NE
New Horizon Primary	School	855m NE
Norman House	Government Building	Adjacent
Shell Petrol Station	Commercial	14m E
Residential Housing beginning on Estella Rd	Residential	125-1000m+ E
The Flying Bull Academy	School	225m E
Ferry House Lodge	Commercial	230m E
Buckland Park	Amenity	370m E
Commercial Premise (H&S Metals)	Commercial	25m SE
Charles Dickens Birthplace Museum	Tourist Attraction	250m SE
Charles Dickens Community Centre	Amenity	700m SE
Manor Infant School	School	990m SE
Brett Aggregates and Brett Concrete	Commercial	20m S
HMNB Portsmouth	Naval base	85m S
Morrisons	Commercial	260m S
All Saints Church	Amenity	493m S
Pitt St Skatepark	Amenity	500m S
Commercial Premises	Commercial	500m+ S
Cascades Shopping Centre	Commercial	790m S
Victoria Park	Amenity	995m S
HMNB Portsmouth	Naval base	Extends up over 1km SW
St John's Cathedral	Amenity	990m SW
Portsmouth Harbour	Dock	Adjacent W
North West Wall Jetty	Landmark	1000m W
Whale Island Boat Station	Amenity	710m NW
YMCA Little Whale Nursery	School	660m NW
HMS Excellent Main Gate	Government Building	560m NW

Figure 2.1 shows the sensitive human receptors identified as relevant to the site.

The nearest designated ecological receptor is an area of Portsmouth Harbour, approximately 536m NW, designated as an SPA, Ramsar and SSSI. **Figure 2.2** shows the sensitive ecological receptors identified as relevant to the site.

Due to the proximity of the site to human and ecological receptors, the site could be considered to be moderately sensitive in relation to potential emissions, such as odour. However, numerous operational measures for the control and mitigation of emissions have been applied to site to ensure that all potential releases are prevented, therefore reducing this risk.



ID	Name
R1	Portsmouth International Port
R2	Ship and Castle Pub
R3	Shurguard Self Storage Portsmouth
R4	Fountain Lake Angling Club
R5	Stamshaw Lake Angling Club
R6	Stamshaw Park and Playground
R7	A3 Highway
R8	M275 Highway
R9	Residential Properties
R10	The Flying Bull Academy
R11	Place of Worship (Al-Noor Mosque)
R12	Commercial Units
R13	Commercial Units
R14	Residential Housing
R15	Ferry House Lodge
R16	New Horizons Primary
R17	Buckland Park
R18	Residential Housing
R19	Manor Infant and Nursery School
R20	Charles Dickens Birthplace Museum
R21	Ark Dickens Primary Academy
R22	Residential Housing
R23	Cascades Shopping Centre
R24	Victoria Retail Park
R25	HMNB Portsmouth
R26	Place of Worship (All Saints Porsmouth)
R27	Portsmouth Harbour
R28	Whale Island Boat Station
R29	HMS Excellent Main Gate

Project Number: SOL_24_P049_POR Map Title: Sensitive Human Receptors within 1km Date: 11/09/2025 Drawn by: RM Checked by: EH	Site Address: Portico Shipping Limited Portico House 2 Prospect Road Portsmouth PO1 4QY	1. Do not scale off this drawing 2. All dimensions to be confirmed on site 3. This drawing is copyright of Sol Environment Ltd 4. This drawing is to be read in conjunction with relevant consultant drawings and specifications 5. QMS Reference: QMS_7.5.39_TEM - Template - GIS Drawing - Horizontal v1

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Figure 2.1 - Sensitive Human Receptors within 1km

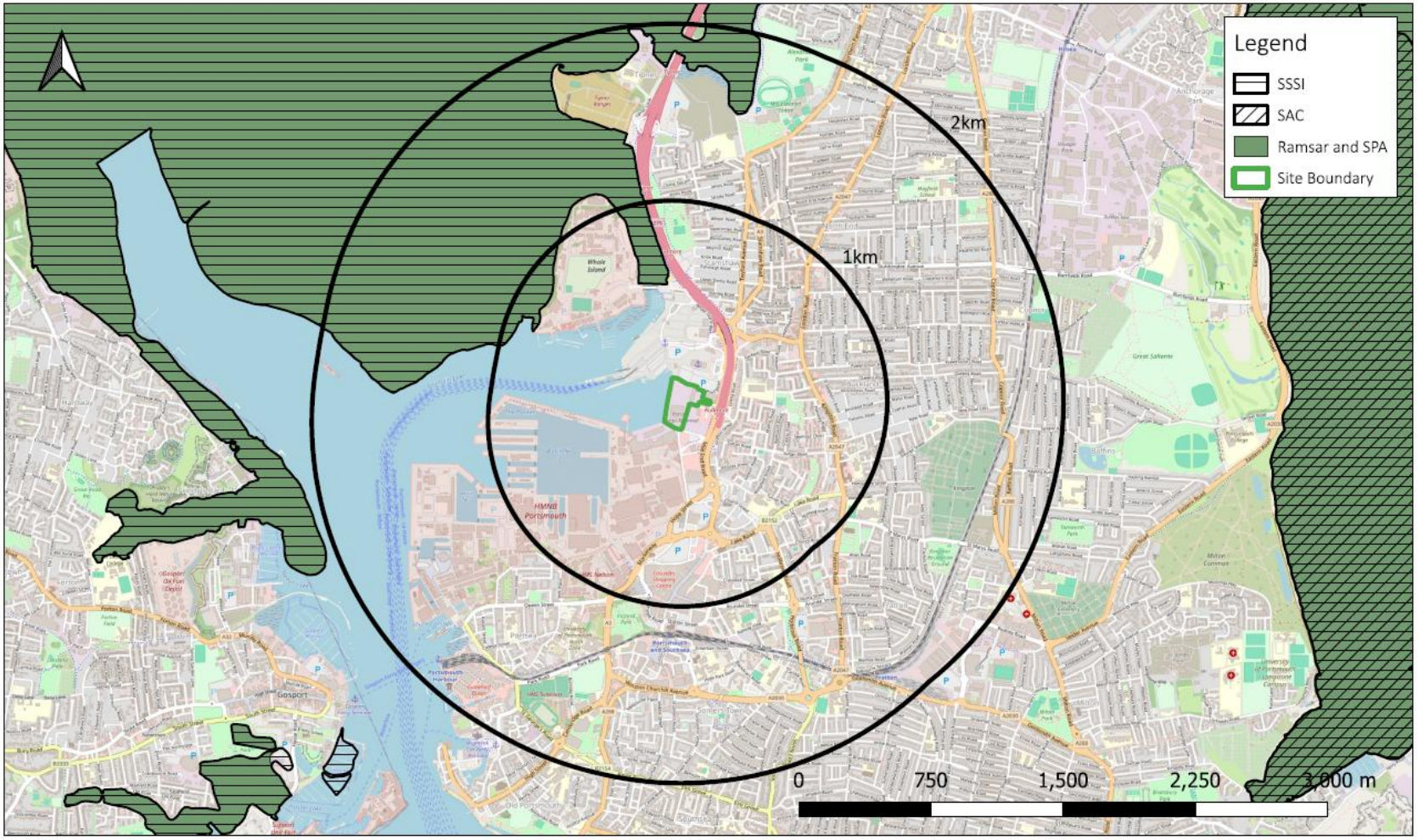

Figure 2.2 - Sensitive Ecological Receptors within 2km

2.2.3 Wind Direction

The estimated wind direction for the proposed site comes from a predominantly westerly direction, based on historic wind direction recordings taken from Southampton Airport located approximately 24.3km northeast of the site.

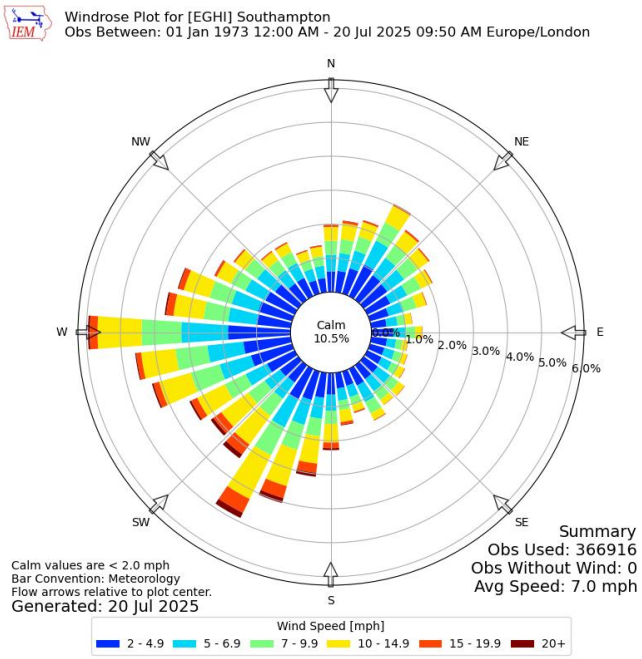

Figure 2.3 - Wind Rose for Southampton Airport

2.2.4 Flood Risk

The site is located within Flood Zone 3, meaning the site has a high probability (3.3%) of flooding from rivers and the sea each year under projected modelling. Under current day, there is a 1% probability of flooding per year.

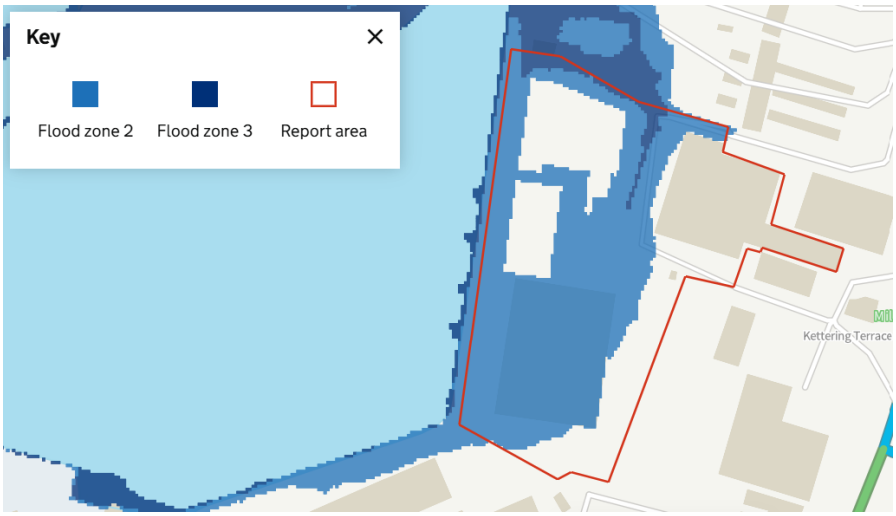

Figure 2.4 - Flood Zone

3. ENVIRONMENTAL RISK ASSESSMENT

Table 3.1 - Environmental Risk Assessment

Hazard	Receptor	Pathway	Risk Management Techniques	Probability of Exposure	Consequence	Overall Risk (following Mitigation)
Point Source / Emissions to Air	Atmosphere	Airborne	• There are no point source emissions to air from the site.	Negligible	Air Pollution	**VERY LOW** due to the nature of waste processing/storage activities on site
Emissions to Water	Groundwater / Geology / Surface Water	Waterborne	• There will be no direct process emissions to controlled waters arising from the site. • All activities will be carried out on impermeable hardstanding with sealed drainage to prevent potentially contaminated runoff to soil, surface water or groundwater. • All uncontaminated surface water run-off from the site will be directed to the fully enclosed drainage system comprised of penstock valves and an interceptor located beneath the Albert Johnson storage area. The drainage design incorporates collection chambers and interceptors (active protection measures) to ensure that any particulate, solid contaminants and trace hydrocarbon materials are contained and captured on site. • Surface water coming from Shed 14 is on a downward western sloped gradient which allows for any surface water to drain toward drains in the west that ultimately connect to the Albert Johnson Quay interceptor. • Due to the gradient of the external waste storage areas, all run-off will be directed to the drainage system. • During periods when waste is present in the external storage areas, the drainage system penstock valves will be closed, preventing any potentially contaminated surface water run-off from discharge. During this time, all potentially	**LOW:** all runoff is controlled on site, therefore the probability of exposure is low.	Contamination	**VERY LOW** due to the proposed management techniques and drainage arrangements

			contaminated surface water run-off will be contained onsite and then tankered offsite for disposal. • In the event of a fire, all firewater will be contained as above, in the drainage system through the use of penstock valves.			
Emissions to Land	Groundwater / Geology	Spills / Leaks	• There will be no emissions to land arising from the proposed facility. • All operational and storage areas are covered by impermeable hardstanding. • Spill kits will be strategically located around site. • Minor spills will be cleaned up immediately, using spill kits. Resultant materials to be placed in container for off-site disposal to appropriate facility, if necessary. • Immediate action to be taken in event of any major spills. Spillage to be cleared immediately and placed in containers for offsite disposal. EA to be informed	LOW: spills / leaks could potentially contaminate the ground / groundwater underneath the site.	Contamination	**LOW** due to the proposed risk management techniques
Noise	Local Residents	Airborne	• The site is within a predominantly industrial area within Portsmouth Harbour and is not considered unduly sensitive in regards to noise. • There is no additional site equipment required for the storage of wastes onsite. The existing operations will continue, simply with waste storage rather than material storage on occasion. As such there will be no changes to the existing noise climate of the current active portside facility. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event that complaints are received, they will be investigated fully in line with the sites EMS system. measures described in the integrated management system will be put in place.	LOW: due to the nature of the activities, noise emissions from the site are inevitable and could cause offsite receptor impacts.	Nuisance	**LOW** due to the proposed risk management techniques
Odour	Local Residents	Airborne	• The waste materials stored on site externally are devoid of food waste and organic fines and therefore has very low odour potential.	LOW: the occurrence of odour emissions from the site is possible.	Nuisance	**VERY LOW** due to the proposed risk management techniques

			• There is no potential for odour from the external storage of baled waste as the bales will be sufficiently wrapped. • Soil waste will be stored internally and due to the design of the building structure, there is no potential for offsite odour emissions and impacts to arise from the site. • No malodorous waste will be accepted onto site and therefore the potential for offsite odour impacts is considered negligible. • The site has a dedicated Odour Management Plan			
Dust	Local Residents	Airborne	• Vehicle speeds will not exceed 10mph on site which is a recognised method of controlling dust. • All machinery will be regularly maintained, inspected and kept clean to avoid a build-up of material, which may lead to dust emissions. • All incoming / departing loads will be appropriately sheeted or tipped in designated areas. • Site drainage, containment systems and associated infrastructure will be regularly cleared and maintained as required to ensure they are working correctly. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures. • No inherently dusty material is accepted onto site, therefore the potential for dust emissions is very low. • All soil waste will be stored internally in a designated warehouse. • All soil will arrive on site in construction bags, and will be stored and transferred offsite in these same bags. There will be no bulk tipping of **loose soil on site at any time.** • RDF waste stored externally is triple wrapped and baled to prevent dust emissions.	LOW: the occurrence of dust emissions migrating offsite is low.	Nuisance	**LOW** due to the proposed risk management techniques

			• Waste wood chip stored externally will be covered where required to prevent dust emissions. • Mobile dust suppression is present onsite and will be utilised during unloading and loading activities where required; • The site has a dedicated Dust Management Plan to manage any residual risks of dust			
Litter	Local Residents	Airborne	• Baled RRF which will be sufficiently wrapped to prevent litter issues . • All incoming and exporting waste vehicles will be covered. • The site access and site services shall be swept as necessary. • The site shall be inspected daily by the site manager and any litter or accumulated debris shall be dealt with immediately. • The site will have robust housekeeping measures in place. • The site has a dedicated Dust Management Plan which also addresses litter.	LOW: the occurrence of litter on site is unlikely therefore the probability of exposure is very low.	Nuisance	**LOW** due to the proposed risk management techniques
Pests	Local Residents	Airborne and migration	• The site will employ commercially available products and services to control pests if required. • The site is inspected weekly for the presence of pests which is recorded in the daily log should any activity be revealed.	LOW: the occurrence of pests on site is highly unlikely.	Nuisance	**VERY LOW** due to the proposed risk management techniques
Vandalism	Operator	The site could be subject to intentional vandalism and damage by intruders / trespassers who could cause damage or harm to the site or cause fires.	• The site has CCTV monitoring and is manned 24/7. • The site is well lit and secured by a perimeter fence. • Fencing is maintained and repaired to ensure its continued integrity. If damage is sustained, repair will be made within the same working day. If this is not possible, suitable measures will be taken to prevent unauthorised access to the site and permanent repairs will be affected as soon as is practicable. • All visitors to the site are required to register in the visitor's book and sign out again on exit,	LOW: the occurrence of vandalism taking place on site is highly unlikely.	Nuisance, Damage or Fire	**VERY LOW** due to the proposed risk management techniques

			thereby minimising the risk of unauthorised visitors on the site.			

Fire on site	Operator / Residential Properties	Windborne	• Arson by intruders is controlled via CCTV monitoring and site being manned 24/7.
			• The site is well lit and secured by a perimeter fence.
			• Fire detection and suppression systems are implemented in all areas storing waste, in line with the EA's Fire Prevention Plan Guidance 2021:
			  • Storage areas are monitored 24/7 by cameras.
			  • Manual fire suppression is readily available throughout the site including fire extinguishers and a TUG boat.
			• The site will have a regular inspection and maintenance programme which will identify any electrical or mechanical machinery faults which could result in a machinery fire.
			• Machinery will be regularly cleaned to remove any dust, etc.
			• All relevant equipment on site will be equipped with dedicated fire suppression.
			• A number of fire extinguishers will be placed at strategic locations around the plant.
			• The risk of damaged or exposed electrical cables will be controlled via the regular inspection and maintenance programme.
			• Staff will be appropriately trained on the necessary actions to take on discovery of a fire
			• Staff and visitors will only be permitted to smoke within the designated smoking area.
			• Smoking shelters are provided around the site. All shelters are located a minimum of 6m from any combustible waste. No smoking outside of the designated shelter is permitted on site.
			• The site has a dedicated Fire Prevention Plan.
				LOW: the occurrence of a fire taking place on site is highly unlikely.	Fire	**VERY LOW** due to the proposed risk management techniques

Non-permitted wastes	Operator / Residential Properties	If incorrect waste is accepted on site	The following methods will be implemented to ensure that non-permitted wastes do not compromise the safe operation of the site:	LOW: off-site receptor impacts.	Nuisance / Adverse Emissions	**VERY LOW** due to the proposed risk

		it could result in adverse emissions	• All waste will be subjected to 'pre-acceptance' in accordance to established waste acceptance procedures. • Any non-conforming waste will be removed prior to acceptance in accordance with established waste acceptance procedures. • Records of incidents involving incompatible waste will be kept on site together with a summary of the remedial action taken.			management techniques
Climate Change Factors including: Rising River Levels and Site Flooding Increased temperature / fire risk Extreme Cold Weather Increase odour / vermin	Controlled Waters	Site is located in a Flood Zone 3 and is therefore at a high risk of flooding. Increased rainfall and flash flood runoff due to climate change have the potential to impact the site causing flooding and potential contamination of surrounding open water features.	• The site is considered to be at high risk of climate change factors due to the site being within a Flood Zone 3. • The sites EMS will remain responsive and adaptive to the evolving risks posed by climate change and will prioritise mitigation measures should there be increased risks to the site or surrounding area. • Given the nature of the wastes on site and the mitigation measures in place, the risk of odour, fire and dust as result of Climate Change is considered negligible.	MEDIUM: The control of runoff during a flood event is difficult. Any water that enters buildings and waste storage areas has the potential to mobilise waste and/or contaminate the water. Safe access of the site personnel is considered paramount.	Controlled Water Personnel	LOW due to the proposed risk management techniques