



Recycling and recovery UK

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**Mannings Heath**

**Transfer Station**

**1.3 Environmental Risk Assessment**

**June 2025**

## DOCUMENT DETAILS

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## DOCUMENT REVIEW HISTORY

Date	Description	Summary of Changes
May 2012	Version 1.0	Original Document.
July 2013	Version 2.0	Switch to generic risk assessment for standard rules set number SR2008No7 v4.0
February 2019	Version 3.0	Switch to SUEZ template - Combined Environmental Risk Assessment & Accident Management Plan
November 2022	Version 4.0	Review and transfer to new SUEZ template
June 2025	Version 5.0	Review and transfer to new SUEZ template to support permit variation application.

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## CONTENTS

1	INTRODUCTION .....	1
2	RISK ASSESSMENT METHODOLOGY .....	1
3	SOURCE OF RISK .....	2
4	SITE SETTING AND RECEPTORS .....	2
5	RISK ASSESSMENT AND MANAGEMENT MEASURES .....	4
6	CONCLUSION .....	18

## TABLES

Table 1	Sensitive Receptors
Table 2	Odour Risk Assessment
Table 3	Noise Risk Assessment
Table 4	Fugitive Emissions Risk Assessment
Table 5	Summary of Environmental Risk

## APPENDICES

Appendix A	Risk Assessment Definitions and Risk Estimation Matrix
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## 1 INTRODUCTION

- 1.1.1 This Environmental Risk Assessment (ERA) has been prepared to support an application for an environmental permit (permit) at Mannings Heath 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 is permitted as a Transfer Station (TS) with an annual waste acceptance limit of 75,000 tonnes. The activities at the site will be limited to handling, storage and transfer of hazardous and non-hazardous waste.
- 3.1.2 The waste types accepted at the site comprise non-hazardous household, commercial and industrial wastes, mainly comprising waste, dry mixed recyclables (DMR), cardboard, wood, glass and metal. Hazardous waste streams accepted at the site from HCI sources include small and large WEEE, vapes and e-liquids, fluorescent tubes, fridges and batteries. The site also accepts varied single stream hazardous and non-hazardous collected from I&C customers with sources including but not limited to garages, marinas and workshops.
- 3.1.3 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 Mannings Heath, Parkstone, Poole, Dorset, BH12 4NH; National Grid Reference (NGR) SZ 03906 94146. The site location and permit boundary are presented in site drawings (document reference 1.1).
- 4.1.2 The site is located approximately 2.5km north of Parkstone and 5km northeast of the centre of Poole. Access to the site is achieved via Mannings Heath Road, located to the east of the site. The area immediately surrounding the site is predominantly industrial in nature. The closest residential receptor is located approximately 270m southeast of the site boundary.
- 4.1.3 A Nature and Heritage Conservation Screen (Reference Number EPR/EB3708UG/P001) 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 within the Dorset Heathlands, there is one Special Area of Conservation (SAC), one Special Protection Area (SPA) and one Ramsar site. Cranford Heath and Bourne Valley are also within the 1km search boundary and are both recognised as a Site of Special Scientific Interest (SSSI). No other protected species or habitats were found during the screening.

#### **4.2 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
0	Groundwater	Water Body	<50	-
1	Ringwood Road Residential Area	Residential	270	SE
2	Industrial Units	Industrial / Commercial	270	N
3	Trinidad Village Extra Care Scheme - Care Home	Residential	360	S
4	Tower Retail Park	Commercial	420	W
5	The Aldbury Dementia Home	Residential / Medical	430	NE
6	Tower Park Leisure Complex	Recreational	460	W
7	Aniwell Veterinary Clinic	Commercial	490	E
8	Deciduous Woodland	Deciduous Woodland	500	E
9	Alderney Hospital	Medical	510	NE
10	Deciduous Woodland	Deciduous Woodland	560	SW
11	Alderney Community Association - Community Centre	Recreational	590	SE
12	Verity Crescent Residential Area	Residential	630	W
13	Deciduous Woodland	Deciduous Woodland	630	SE
14	Trinidad Community Multiuse Play Area	Recreational	630	SE
15	Bedford Road Residential Area	Residential	640	NE
16	Deciduous Woodland	Deciduous Woodland	640	W
17	Poole Trade Park	Industrial / Commercial	650	SW
18	Halford Road Rebound Wall	Recreational	660	SE
19	Mannings Heath Retail Park	Commercial	680	SW
20	Sherborn Crescent Residential Area	Residential	740	NW
21	Wessex Trade Centre	Commercial	740	S

No.	Receptor	Category	Distance (m)	Direction from site
22	Rosemary Medical Centre	Medical	750	S
23	Bedford Road Playground	Recreational	760	NE
24	Haymoor Bottom Heathlands	Recreational	820	W
25	Our Lady of Fatima Church	Place of Worship	850	SE
26	Newton Business Park	Industrial / Commercial	880	S
27	Dorset Heathlands	SPA, SAC, SSSI, Ramsar	900	N
28	Bourne Valley Park	Recreational	910	E
29	Cranford Heath Nature Reserve	SAC	930	N
30	Winchelsea School	Educational	940	E
31	St. Aldhelm's Academy	Educational	940	SE
32	Sherborn Crescent Play Area	Recreational	950	W
33	Bourne Valley Nature Reserve	SSSI	950	NE
34	Rossmore Library	Recreational	950	SE
35	Dorset Stour Catchment	Watercourse	430	SE

## 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 1 to 34	Air	<p>Putrescible waste accepted on site is limited to small amounts within general waste deposits, which are stored in the Transfer station building. The building is fitted with roller shutter doors which will be kept closed during non-operational hours. 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.</p> <p>Storage of mixed municipal waste will be limited to 48 hours (72 hours over a weekend or bank holiday).</p> <p>The permitted waste types accepted at the site are considered to contain limited putrescible waste by nature and therefore unlikely to generate a</p>	<b>Low</b> – the management procedures should prevent emissions of odour.	<b>Medium/Low</b> - Nuisance	<b>Low</b> – The management procedures employed will reduce the likelihood of impact.



			<p>significant amount of odour. However, any odorous wastes causing an immediate amenity risk in respect of odour that are identified on site will be removed as soon as practicable.</p> <p>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 malodorous and take appropriate remedial action.</p> <p>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.</p> <p>All complaints received associated with odour will be recorded and investigated in line with company procedures.</p>			
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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 1 to 34	Noise through the air and vibration through the ground	<p>H&amp;S Legislation is in place to ensure SUEZ protects its employees from the effects of noise.</p> <p>The waste that is delivered to the site will be overseen by site staff to ensure it takes place in a controlled manner.</p> <p>All plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure.</p> <p>Mobile plant on site will be fitted with “white noise” reversing beacons which minimise the intrusive nature of the safety measure.</p>	<b>Low</b> – operations occur during the daytime as stipulated in the Planning Permission.	<b>Medium/Low</b> – Nuisance	<b>Low</b> – The management procedures employed will reduce the likelihood of impact.

			<p>The majority of vehicles delivering waste to the site perform a single reversing manoeuvre whilst on site.</p> <p>A maximum speed limit of 5mph 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.</p> <p>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.</p> <p>All complaints received associated with noise will be recorded and investigated in line with company procedures.</p>			
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Noise and vibration from mechanical waste treatment	Receptors 1 to 34	Noise through the air and vibration through the ground	<p>No mechanical treatment of waste is currently undertaken on the site, however the permit allow for the treatment of waste by baling and compaction.</p> <p>If undertaken in the future, all treatment would be undertaken within the transfer station building to prevent excessive noise beyond the permit boundary. The building is fitted with roller shutter doors which can be closed to further prevent noisy emissions. Pedestrian doors are also closed when not in direct use.</p> <p>All plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure.</p> <p>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.</p> <p>All complaints received associated with noise will be recorded and investigated in line with company procedures.</p>	<b>Low</b> – operations occur during the daytime as stipulated in the Planning Permission.	<b>Medium/Low</b> – Nuisance	<b>Low</b> – The management procedures employed will reduce the likelihood of impact.
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**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
<b>To Air</b>						
Dust and particulates during waste deposit, storage and loading operations.	Receptors 1 to 34	Air transport and deposition	<p>Permitted waste types not likely to give rise to significant amounts of dust.</p> <p>Waste that is accepted at the site will be stored within a building, containers or bays.</p> <p>Waste received the hazardous waste storage area with the potential to generate dust is received in sealed container which must remain sealed until dispatched from site.</p> <p>The building benefits from roller shutter doors which will be kept closed during non-operational hours. In addition, pedestrian</p>	<b>Low</b> – the management actions should prevent emissions of dust	<b>Medium / Low</b> – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	<b>Low</b>

			<p>doors are also closed when not in direct use. This will minimise the risk of dust to impact receptors beyond the site boundary.</p> <p>The delivery and loading of waste will be undertaken in a controlled manner to keep dust generation to a minimum.</p> <p>A maximum speed limit of 5mph is set for vehicles operating on site.</p> <p>All delivery vehicles are required to be sheeted or netted where possible if deemed necessary.</p> <p>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.</p> <p>Sprinklers are installed around the wood bay to dampen down wood during dry conditions or if a load is considered to be of particular risk.</p> <p>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.</p> <p>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</p>			
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			source of any dust/particulates and take appropriate remedial action.			
Dust and particulates during mechanical waste treatment	Receptors 1 to 34	Air transport and deposition	<p>No mechanical treatment of waste is currently undertaken on the site, however the permit allow for the treatment of waste by baling and compaction.</p> <p>If undertaken in the future, all treatment would be undertaken within the transfer station building to prevent dust beyond the permit boundary. The building is fitted with roller shutter doors which can be closed to further prevent noisy emissions. Pedestrian doors are also closed when not in direct use.</p> <p>All plant will be regularly and effectively maintained to prevent noise/vibration increases indicative of potential mechanical failure</p> <p>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.</p> <p>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.</p>	<b>Low</b> – the management actions should prevent emissions of dust	<b>Medium / Low</b> – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property.	<b>Low</b>

To Water						
Contaminated rainwater from contact with wastes	Receptors, 0, 27, 29, 33 & 35	Run off of contaminated water	<p>Putrescible waste accepted on site is limited to small amounts within general waste deposits, which will be stored in the transfer station building, preventing contact with rainwater. Sealed containers / foul drainage used for other wastes which could cause contaminated run-off.</p> <p>The site is provided with impermeable concrete surfaces to prevent the transmission of potentially contaminated liquids into groundwater beneath the site.</p> <p>Waste stored in containers in the hazardous waste storage area is provided with appropriate bunding (e.g. stored on bund trays or in bunded containers) to prevent any uncontained spillage. Spill kits will be available in close proximity to liquid wastes to ensure spillages can be managed quickly. Gullies located in the hazardous waste storage area are sealed.</p> <p>Bunds will be inspected daily to prevent the build-up of rainwater which might affect capacity.</p> <p>Water runoff from the external bays where loose waste is stored, are collected via gullies and discharge to the foul sewer via an interceptor.</p>	<b>Low</b> – The engineered systems and infrastructure are designed to prevent any discharge of contaminated rainwater run off	<b>Medium</b> – contamination of local water bodies and/or groundwater	<b>Low</b> - due to the design of the site
Storage of Hazardous wastes, chemicals, oil, fuel or hydraulic fluid						



			<p>Interceptors are cleaned at suitable intervals to maintain their effectiveness.</p> <p>Fuel storage will be provided and storage will be in line with latest legislation.</p> <p>All deliveries of fuel will be supervised to ensure no spillages occur.</p> <p>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 with drain mats to prevent discharge in the event of an incident.</p> <p>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.</p> <p>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&amp;M manuals and manufacturers recommendations. If damage or other problems are identified they are rectified as soon as possible.</p>			
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Pests						
<p>Scavenging birds or animals attracted to site and carrying waste off site.</p> <p>Flies and vermin breeding in waste stockpiles.</p>	<p>Receptors 0 to 35</p>	<p>Air – waste dropped by birds.</p> <p>Land – waste removed from site by scavenging animals.</p>	<p>Putrescible waste accepted on site is limited to small amounts within general waste deposits and will be stored in the transfer station building. The building is fitted with roller shutter doors which will be kept closed during non-operational hours. In addition, pedestrian doors are also closed when not in direct use. This will minimise the potential for attracting vermin.</p> <p>Putrescible wastes will have prompt turnaround times, limited to 48 hours (72 hours over a bank holiday). Tight controls of the waste levels will prevent long residency time at the site which will minimise the possibility of attracting vermin.</p> <p>Vehicles will be sheeted/netted if necessary when entering/leaving the site to minimise the risk of pests.</p> <p>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.</p> <p>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.</p>	<p><b>Low</b> – The management actions should reduce the risk</p>	<p><b>Medium</b> - Nuisance, property damage and risk of vermin spread infections.</p>	<p><b>Low</b> – the management procedures in place will reduce the likelihood of impact.</p>

			<p>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.</p> <p>A pest control contractor attends 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.</p>			
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Mud/Litter						
Litter, debris and mud on the public highway.	Receptors 1 to 34	Debris, mud and litter tracked onto local highways by vehicles leaving the site.	<p>No particular mud issues associated with the site due to the impermeable surface of the site and local highways.</p> <p>Vehicles will be sheeted/netted if necessary when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways.</p> <p>IMS procedures require that all haulage 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.</p> <p>A street sweeping vehicle will be contracted in to attend to any specific instances of mud/debris being tracked onto local highways and site staff will regularly undertake litter picking as required.</p> <p>The nature of the waste accepted at site is unlikely to generate significant litter.</p> <p>Materials will be stored in a building, bays or containers if necessary to prevent escape of litter.</p> <p>IMS procedures require site staff to assess litter levels on an ongoing basis. Site staff will regularly undertake litter picking as required.</p>	<b>Low</b> – the management actions should prevent materials being tracked/dropped onto local highways	<b>Medium</b> - Nuisance and potential health and safety hazard caused by waste on the highway.	<b>Low</b> – The management procedures in place will reduce the likelihood of impact.

## 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

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## 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