PORTICO Odour Management Plan

Portico Shipping Limited

14th November 2025

Project No.: SOL_24_P049_POR

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Author	Charlie Holmes, Rhys Morgan
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Odour Management Plan

Portico Shipping Limited

Emily Hingston
Client & Project Manager

Charlie Holmes
Sustainability Consultant

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1. INTRODUCTION

This document has been prepared by Sol Environment Ltd on Portico Shipping Limited ("PSL" hereafter) for the operation of a waste transfer facility at Portico House, Portsmouth PO1 4QY.

The document provides a structured framework and approach in effectively managing potential odour releases associated with the operations at the site.

This Odour Management Plan document (referred hereafter as the 'OMP') has been produced in accordance with the following documents:

- Environment Agency's Technical Horizontal Guidance Note '*H4: Odour Management: How to comply with your permit*'; and
- General monitoring procedures detailed in Environment Agency guidance document Internal Guidance for the *Regulation of Odour at Waste Management Facilities*.

The purpose of this document is to outline the management control measures that have been established to prevent and control odour emissions and associated impacts from the site.

1.1 Structure of Odour Management Plan

The OMP has been structured in accordance with the EA *H4 Odour Management Plan Guidance*.

This OMP has been developed to clearly define which measures will be implemented on site and which are not, and to what extent odour is controlled and/or prevented. The potential measures considered are in-line with the *EA H4 Odour Management Plan Guidance* and include the following;

- Receipt and Management of Odorous Materials;
- Transfer of Chemicals to Air;
- Containment of Contaminated Air;
- End of Pipe Treatment;
- Engaging your Neighbours;
- Response to Complaints;
- Ceasing or Reducing Operations; and
- Accident Management Plan.

The OMP considers the following aspects of the facility:

- Activities that have the potential to produce odour and sources of release;
- Actions to mitigate the effect of odour release (during normal and abnormal operations);
- Details of the sites monitoring regime;
- Details of responsible persons at the installation; and
- Potential outcomes of each failure scenario in respect to odour impact.

1.2 Status of the OMP

The OMP is a “live” document and will form part of the key environmental management document for the facility. All monitoring procedures, responsibilities and compliance actions will be updated as and when required.

Any revisions in the OMP or associated Appendices will be updated and inserted accordingly.

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 Boundary

The site boundary plan can be found below in **Figure 2.1.**

2.3 Site Context

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

2.3.1 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)

2.3.2 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

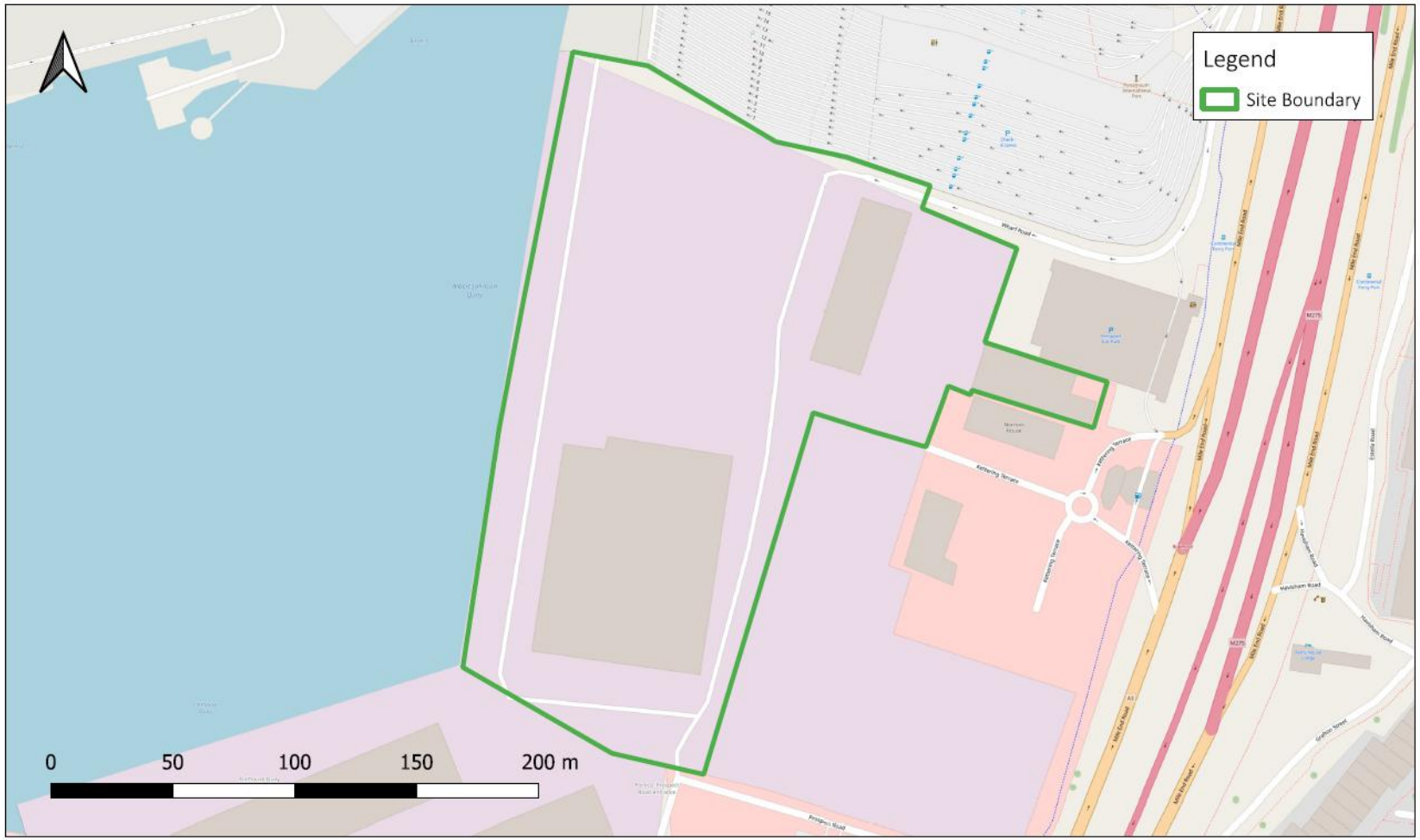
Receptor	Type	Distance
Portsmouth International Port	Commercial	103m North
Ship and Castle Pub	Commercial	280m North
Shurguard Self Storage Portsmouth	Commercial	280m North
Fountain Lake Angling Club	Amenity	495m North
Stamshaw Lake Angling Club	Amenity	660m North
Stamshaw Park and Playground	Amenity	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 2.2 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 2.3 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.



Project Number: SOL_24_P049_POR Map Title: Site Boundary 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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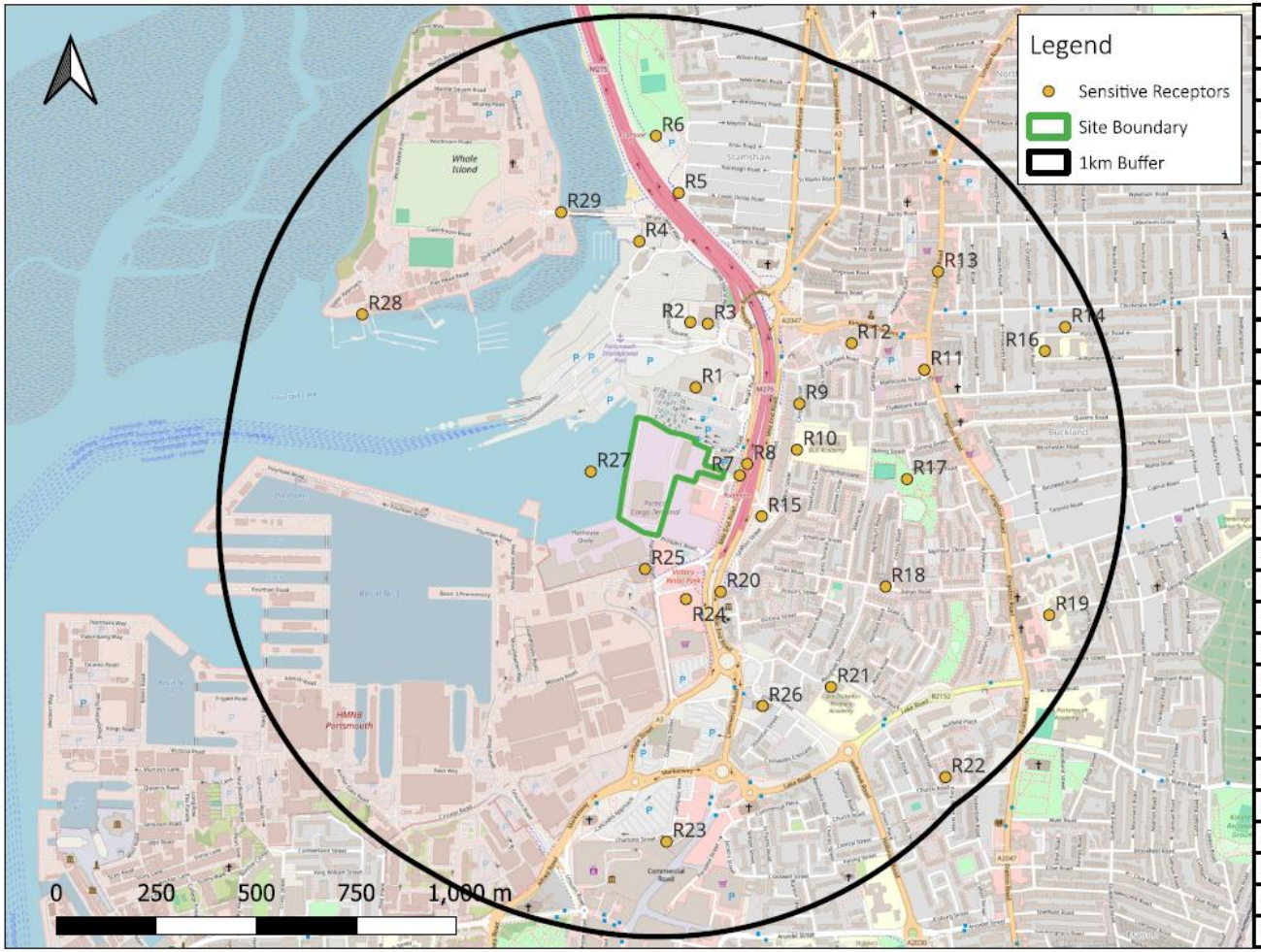
a: Unit 5.3 The Paintworks, Bath Road, Bristol, BS4 3EH
w: www.sol-environment.co.uk
e: enquiries@sol-environment.co.uk
t: 01684 572727

Figure 2.1 - Site Boundary



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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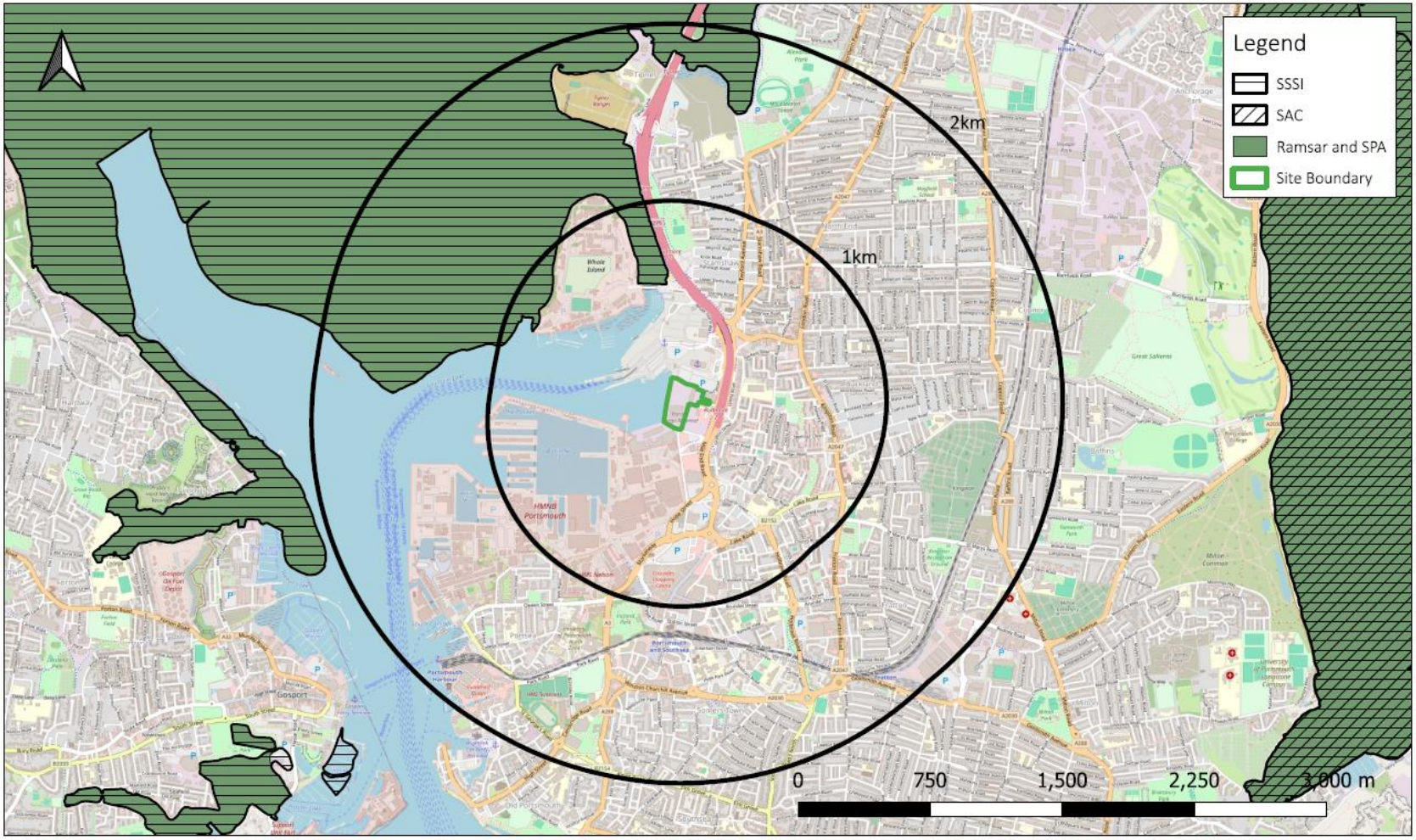
Figure 2.2 - Sensitive Human Receptors within 1km



Project Number: SOL_24_P049_POR Map Title: Sensitive Ecological Receptors within 2km 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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e: enquiries@sol-environment.co.uk
t: 01684 572727

Figure 2.3 - Sensitive Ecological Receptors within 2km

2.3.3 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.

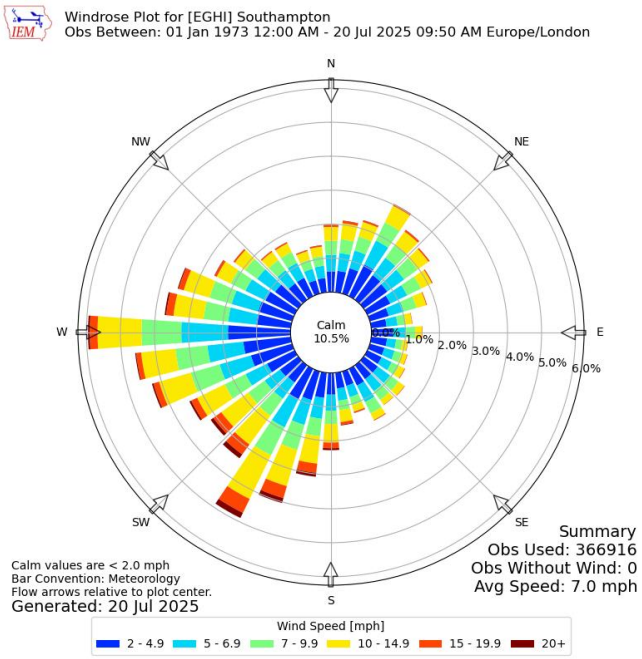

Figure 2.4 - Wind Rose for Southampton Airport

3. ODOUR SOURCES

3.1 Process Description

PSL propose to accept and store approximately 190,000 tonnes per annum of non-hazardous waste for onward transport. Wastes accepted will include baled RDF, wood chip, shredded tyre and soils.

Waste will be subject to stringent pre-acceptance, acceptance and rejection procedures. External storage will either take place within piles separated by a 6m separation distance or within designated bays. Designated bays for the external storage of waste will be constructed periodically when a waste shipment is due in. The layout of the bays will be flexible to allow optimisation based on volumes and types for each shipment but will always be located within the Albert Johnson Quay Area.

Wastes are delivered to site in covered vehicle and directed to the designated area for unloading under supervision by a trained operative.

Non-hazardous soil waste is delivered directly into Shed 14 in construction bags ranging from 0.6 to 4 tonnes and all other waste is delivered directly into bays in the Albert Johnson Quay storage area.

Soil waste will be stored in Shed 14 to a total quantity of 3,000 – 4,000 tonnes at any given time. All other wastes will be stored externally in concrete bays in the Albert Johnson Quay storage area to a total quantity of 6,000 tonnes at any given time.

Wastes are stored for typically 3 weeks, up to a maximum of 3 months in abnormal circumstances (such as delay in collection shipment). Waste is monitored regularly for signs of odour release. Waste shall only be moved in the event of a fire, fire prevention or as part of the onward transportation activities.

Waste materials are removed from the warehouse and quayside by bulk tipper and a loading shovel and transported to the dockside where containers are loaded into vessels for onwards transportation.

A simplified process diagram is provided in Figure 2.2 below.

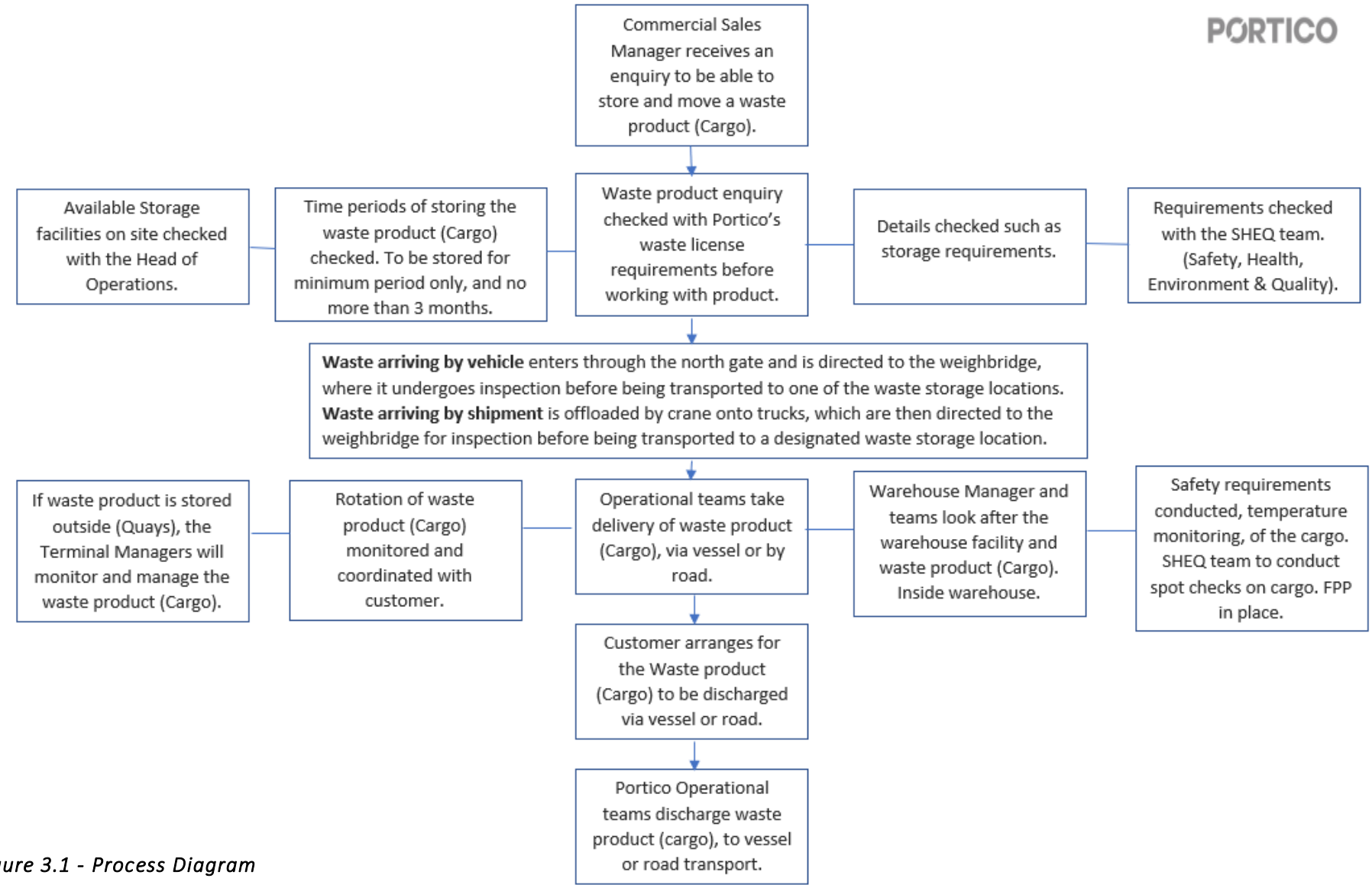

Figure 3.1 - Process Diagram

3.2 On-site Odour Sources

3.2.1 Source Materials

The site will process a maximum of 190,000 tonnes per annum of baled RDF, shredded tyre, wood chip and non-hazardous soil waste.

These materials are inherently low in odour potential and do not typically give rise to odorous emissions. However, it is acknowledged that handling and storage of any wastes has the potential to cause odorous emissions. As such, the site operates with a hierarchy of odour control and abatement measures to ensure that the potential for odour impacts is minimised.

Principal odour control measures include stringent acceptance and rejection procedures and minimising storage times.

The table below details potentially odorous waste materials accepted onsite.

Table 3.1 - Source Materials

Waste Type	EWC Code	Odour Potential	Quantities and Storage Times
RDF Bales	19 12 10	Moderate RDF waste has been processed to remove all biodegradable and organic fractions as such has a reduced odour potential. Storage within triple wrapped bales further reduces potential for odour release.	50,000 tonnes per annum Stored externally for 3 weeks and no longer than 3 months Maximum pile size no larger than 450m^3
Wood	17 02 01	Low to Moderate Variable odour potential dependant on source and form of storage. Waste not stored long enough to biodegrade minimising odour potential	20,000 tonnes per annum Stored externally for 3 weeks and no longer than 3 months Maximum pile size no larger than 450m^3
Shredded Tyre	19 12 04	Low Shredded tyre is not typically deemed to be odorous.	60,000 tonnes per annum Stored externally for 3 weeks and no longer than 3 months Maximum pile size no larger than 450m^3
Non-hazardous Soil	17 05 04	Low odour potential as typically inert material. Some potential for organics to be present. All soil will be received, stored and transferred in construction bags	60,000 tonnes per annum Stored internally for 3 weeks and no longer than 3 months No maximum pile size

3.2.2 Releases

Potential odour releases onsite are limited to:

- Exposed wastes during transfer;
- External stockpiles (for example during hot weather);
- Damaged bales;
- Opening doors from Shed 14 during delivery or collection.

3.3 Off-site Odour Sources

The site is located within Portsmouth harbour, surrounded by industrial and commercial units with little potential to generate odour.

4. CONTROL MEASURES

The site has a number of measures in place to control odour, all of these are considered in relation with the operations that are undertaken on site on a daily basis.

The site has aligned its environmental management system and operational procedures in accordance with the site environmental permit.

Site working plan procedures ensure that good operational practices are employed. Effective management and control minimises odour generation.

The following sections detail management techniques, procedures, and odour control measures to minimise the potential for odour generation.

4.1 Responsibility for Implementation of the Odour Management Plan

Responsibility for the implementation of this Odour Management Plan falls to the competent Site Operations Manager. The Site Operations Manager is responsible for ensuring all staff are trained in the contents of this management plan and that operational procedures align with the objectives of this management plan.

All site activities will be performed by competent and trained individuals who are both suitably qualified and experienced.

All personnel employed on site will be suitably trained and experienced at operating all equipment associated with their particular role; especially with regard to the acceptance and handling (and associated rejection) procedures in the event that odorous materials are received on site.

On occasions where these competent and experienced personnel are off work or unable to perform their role, the most suitable replacement will be sourced from the available workforce and any relevant training will be administered before they perform the task.

4.2 Receipt and Management of Potentially Odorous Materials

Due to the nature of the waste types accepted, there is little potential for excessive offsite odour emissions and impacts to arise from the site. Nevertheless a hierarchy of odour control measures will be implanted to ensure this is the case.

The primary odour control measure on site will be the strict adherence to the waste acceptance and reception procedures. This includes only accepting baled RDF, shredded tyre, wood chip and soil waste and unloading and storing wastes in designated storage locations unless being imminently exported. All waste soil will be received in construction bags, further minimising the potential for odour from an organic material present.

The below waste reception regime will result in a significant reduction in the likely odour potential of waste received at the facility.

Pre-acceptance of Waste

These checks will be carried out before any decision is made to accept a waste and are the responsibility of the Operations Manager.

The initial stage, a pre-acceptance procedure, involves the provision of information and representative photographs and samples. Information gathered during the pre-acceptance phase will be used to determine the suitability of the waste for the facility before arrangements are in place to accept the waste.

At this waste pre-acceptance stage, the Operations Manager will ensure that information is obtained in writing to confirm:

- The type of process producing the waste;
- The specific process from which the waste derives;
- The quantity of waste;
- The form the waste takes (solid, liquid, sludge etc.);
- Hazards associated with the waste; and
- Description of the waste including odorous characteristics.

The Operations Manager will assess the suitability of the waste for acceptance onsite based on the information gathered. At the initial assessment of new waste streams, waste which is considered too malodorous by the Site Management, will not be accepted at the site.

Acceptance of Waste

The EMS details the sites acceptance procedures to ensure that no excessively malodourous waste is accepted on site.

A check shall be made that the waste type and source has been Pre-Accepted. The vehicle will be then directed from the weighbridge to Shed 14 warehouse or to the external Albert Johnson Quay storage area, depending on waste type, where it will be unloaded into the respective bays and undergo visual inspection.

Where waste has not been Pre-Accepted the Site Manager shall be contacted and the waste assessed on specification. Any non-conforming material will be segregated, covered and sent back to the supplier as soon as possible in accordance with the sites waste rejection procedure.

Waste Rejection

All wastes will have undergone an assessment for suitability during the pre-acceptance stage, which includes an assessment on the potential for the waste to cause odour. Agreements with waste suppliers will clearly set out that loads that are very malodourous and likely to cause odour at the site boundary will not be accepted.

If a malodourous load arrives on site, the Operations Manager will be informed immediately. The Operations Manager will assess the load and decide if it should be rejected. The criteria for rejection is whether the load is if waste is considered to be malodourous or does not meet the specific waste specifications as permitted.

If the load is rejected it will be immediately returned within the delivery vehicle and the Operations Manager will notify the supplier that the load is un-acceptable and that any further non-conforming loads will result in the waste not being accepted on the site. A rejected load form will be completed by the Operations Manager and a note made in the site diary.

Waste Reception and Storage

Waste will be delivered to site in covered vehicles to prevent odorous emission on transport to site.

All vehicles will enter the site and report to the weighbridge located at the centre of the site to the adjacent south of Shed 9, to weigh and record the delivered waste material in accordance to the sites procedures.

All incoming and outgoing delivery vehicles will be recorded via the weighbridge.

All baled RDF, wood chips and shredded tyre waste will be delivered directly to the quayside storage location and unloaded by a bulk tipper and loading shovel into the respective bays / piles.

All non-hazardous soil waste will be delivered directly into Shed 14 warehouse in construction bags ranging from 0.6 - 4 tonnes in size. The waste will remain in these bags whilst onsite so no loose, bulk tipping will occur.

Waste will typically remain on site for no longer than 3 weeks. However, in exceptional circumstances where further transport is delayed, waste can be stored on site for up to a maximum of 3 months.

Waste will be unloaded directly into the warehouse building or into concrete bays or piles on the Albert Johnson Quay storage area. There will strictly be no tipping of waste to be carried out outside of the warehouse building, unless directly into the quayside storage bays.

The below waste reception and storage regime will result in a significant reduction in the likely odour potential of waste received at the facility:

- All waste will be subject to pre-acceptance and acceptance procedures;
- Unloading to take place only in designated areas with minimisation of drop heights;
- Waste will be subject to random spot checks by site staff to ensure odorous materials are covered or contained appropriately;
- Materials with higher odour potential can be stored within an enclosed building;
- Good housekeeping measures to ensure yard areas and drainage gullies are clear of detritus;
- Covering of external feedstocks;
- Minimisation of handling times during waste unloading and loading;
- Storage of RDF within triple wrapped bales.

Site Management

General management of the site including good housekeeping measures ensure all wastes are stored appropriately, including a twice daily formal site inspection. Clearance of drainage gullies and interceptors is regularly undertaken to prevent build-up of potentially odorous detritus.

4.3 Transfer of Odour Chemicals to Air

It is acknowledged that due to the external storage of loose wastes there is potential for the transfer of odorous chemicals to air. Any potential emissions will be mitigated through the below measures.

Wastes stored externally will be closely monitored by trained staff for signs of odour. Stockpiles will be covered where necessary to reduce the rate of evaporation, prevent rain ingress, prevent scape of odorous air and prevent heating through exposure to sunlight. This will be determined by the site manager.

Externally stored RDF bales are triple wrapped and subject to daily inspection to ensure no damage and therefore potential odour release to air.

Storage of waste soils is within an enclosed building with all waste stored in construction bags.

4.4 Containment of Contaminated Air

A number of containment measures are in place onsite as follows:

- RDF bales are triple wrapped to ensure containment of potentially odorous emissions;
- Stockpiles are covered to provide containment where deemed necessary;
- Waste soils are stored internally within an enclosed building (Shed 14) in construction bags ranging from 0.6 to 4 tonnes; and
- Site inspections are undertaken daily to ensure containment measures are effective and undamaged.

4.5 End of Pipe Treatment

Due to the periodic and predominantly external nature of the waste storage onsite there is no abatement proposed which incorporates treatment of odorous air. This is considered proportionate to the risk of odour emissions from the site.

4.6 Transport and Dispersion

Transport of potential odour sources around site, i.e. wastes, will be kept to a minimum, with double handling avoided and transfer times kept as low as reasonably practicable. The site will monitor meteorological conditions, including wind speed and direction to enable appropriate planning of transfer and loading activities.

4.7 Engaging your Neighbours

If an action is being considered that has the potential to cause temporary odour impacts (however small) outside of the normal operational procedures, then the EA will be informed in advance. Neighbours who may be affected (see Table 2.2) will be contacted to advise them of the operation being undertaken, and that any increase in odour will be of a temporary nature.

In addition, the site will engage with the local community as often as possible in order to alleviate against negative site perception. The site management shall operate a publicly accessible website, whereby contact information is published such that the public remain informed and are provided with a means of contacting the site if necessary.

In the event of a complaint received from the public, PSL will operate in accordance with the dedicated odour complaints procedure (See Section 4.8 below).

4.8 Response to Complaints

Receipt of an odour complaint during normal operations is treated as an exceedance of control levels. The primary response will be as detailed in accordance with the site's complaints procedure.

An Odour Complaint Report Form will be completed as soon as the complaint is received. A copy of the form is provided within Appendix B.

An investigation shall be initiated into the cause of the complaint, this will involve as necessary:

- An olfactory survey following the procedure detailed in Section 5.3. The results of the survey will be recorded on the Odour Reporting Form provided within Appendix A;
- An examination of the site activities at the time of the complaint;
- An examination of the meteorological conditions at the time of the complaint; and
- A review of the effectiveness of operational and odour control procedures.

If the complaint is validated it will be treated as an exceedance of the control level. The outcome of the investigation will determine the corrective actions to be implemented (see Section 5).

4.9 Ceasing or Reducing Operations

If the investigations carried out as a result of the complaint suggest that the activities on site need to cease, no more waste products will be accepted on site until appropriate measures can be put in place to mitigate odour impacts. This is deemed an unlikely event given the control measures in place to mitigate and prevent potential odour emissions.

4.10 Accident Management Plan

The site maintains an Accident Management Plan (AMP) as required by the Environmental Permitting Regulations.

The AMP sets out the actions to be taken and measures required to prevent incidents and where an incident occurs the appropriate mitigation action to be taken.

The plan considers the following scenarios:

- Any spillage / leaks or loss of containment;
- Any vandalism which could cause damage to the site and equipment resulting in spillage of waste;
- Flooding;
- Fire due to equipment malfunction or electrical equipment causing an ignition source;
- Receiving incompatible waste on site;
- Failure of main services;
- Failure of major site equipment; and
- Being unable to receive waste into the site i.e. alternative storage or refusal of loads.

Please refer to Section 6 which provides more information on how the site will address any events which could cause odour emissions from site.

5. MONITORING

The company will employ the following monitoring techniques to ensure that the Key Control Measures (Section 3) are maintained, and effective, operational procedures are followed and that good practices are being implemented:

- Site inspections by the Site Manager or delegated personnel;
- Site audits and inspections by the Environmental Agency;

5.1 Responsible Persons

All site personnel are responsible for immediately reporting odour problems to the Site Manager. Site managers will be responsible for the monitoring and decision making of waste related activities.

5.2 Meteorological Conditions

Meteorological forecasts and conditions shall be monitored to ensure that any potential odour complaints can be fully investigated and that effective monitoring can be carried out. Meteorological data will be recorded as per Table 4.1 below.

Table 5.1 - Meteorological Monitoring

Monitoring Requirements	Frequency
Observed and recorded description of conditions: precipitation, drizzle, rain, sleet, snow, temperature, winds etc.	Recorded daily
Wind speed and direction	Recorded daily
Temperature	Recorded daily

5.3 Olfactory ('Sniff Test') Monitoring

Odour shall be monitored daily at points around the site boundary and observations shall be noted on the daily odour report form provided within **Appendix A.** Surveys shall be carried out in accordance with the monitoring protocol contained within Technical Guidance Note H4.

Four suitable locations downwind of the storage area but internal to the site boundary will be chosen to carry out the sniff test to clarify that the impact is not detectable at the site boundary and able to create an offsite impact.

In the event that odour is detectable at the site boundary, an offsite investigation will be required in the direction of the prevailing wind and closest sensitive receptor. This will also be recorded on the daily odour report form provided within **Appendix A**.

The odour assessor must not be subject to significant odour in the 30 minutes prior to the assessment and shall be compliant with the requirements laid down in the Olfactory Survey procedure (detailed in **Appendix A).** This is to ensure that monitors are not suffering from odour fatigue and will be sensitive to site odours.

If any detectable odour is identified at the site boundary and is judged to be moderate (Odour Intensity Rank 3) then the Managing Director (or Site Manager) will be notified immediately and the olfactory survey will continue to attempt to determine the scope and extent of the odour plume, as follows:

- A suitable location downwind of the site and potentially sensitive receptor at which the odour plume is unlikely to extend will be selected for assessment;
- Survey will continue toward the facility until a site-related odour is perceived; and
- Assessment points perpendicular to the plume axis and equidistant from the site will then be monitored, subject to access requirements.

Monitoring frequencies shall be as detailed in Table 4.2.

Table 5.2 - Monitoring Frequencies

Parameter	Monitoring Technique	Frequency
Meteorology	See Table 4.1	
Odour	Olfactory monitoring	Daily site and perimeter checks. Increased frequency in response to complaints.
	External Olfactory Monitoring	Quarterly site odour monitoring by competent third party
	Complaint monitoring	Continuous
Complaints	Corrective action monitoring	Post-implementation of a corrective action

The following scales will be used:

Table 5.3 - Odour Intensity Scale

Score	Intensity
0	No Odour
1	Very Faint Odour
2	Faint Odour
3	Distinct Odour
4	Strong Odour
5	Very Strong Odour
6	Extremely Strong Odour

Table 5.4 - Hedonic Tone Scale

Score	Intensity
+4	Very Pleasant
+3	Pleasant
+2	Moderately Pleasant
+1	Mildly Pleasant

0	Neutral Odour / No Odour
-1	Mildly Unpleasant
-2	Moderately Unpleasant
-3	Unpleasant
-4	Very Unpleasant

5.4 Internal Odour Monitoring

Odour monitoring is conducted at frequencies detailed in Table 4.2 by a competent person.

Distances and locations of off-site monitoring points will vary in accordance with the meteorological conditions (i.e. depending on the specific wind speed and direction at the time of monitoring).

The main aim of monitoring will be to test if any odours emitted from the site will be causing the nearest receptors nuisance. In scenarios where nuisance is being caused then operations can be suspended until the conditions improve, also the site manager may deem it necessary to find the precise source of the odour and attempt to eliminate it or neutralise it immediately.

5.5 Further Monitoring

If odour becomes a problem on site and / or repeated complaints have been received, odour modelling will take place to establish the source and any corrective action that may be required.

5.6 Records

Daily records shall be maintained and include the following details:

- Results of inspections and olfactory monitoring carried out by site personnel;
- Weather conditions including wind speed and wind direction;
- Operational problems including date, time, duration, prevailing weather conditions and cause of problem;
- Complaints received including address of complainant (if available);
- Details of corrective action taken, and any subsequent changes to operational procedures; and
- An evaluation of the effectiveness of control and abatement techniques used.

If any samples have to be analysed by laboratory-based olfactometry then the following records must be made:

- Date, time and details of emissions point sampled, and why you chose them;
- How you preserved the samples (holding time and conditions);
- Method of sampling (e.g grab sample);
- The laboratory where the results were analysed, and any certification status;
- Any laboratory observations that might affect how you interpret results;
- Process parameters; and
- Weather conditions.

6. COMPLIANCE ACTION PLANS

6.1 Control & Trigger Levels

Control trigger levels are presented below in Table 6.1.

Table 6.1 - Control and Trigger Levels

Parameter	Monitoring Technique	Control Levels
Odour	Routine olfactory monitoring	Odour Intensity ≥3 recorded at any monitoring location (persistent / transient nature noted and considered)
	Complaint monitoring	Receipt of complaint

6.2 Compliance Actions

A recording of Odour Intensity ≥3 during routine olfactory monitoring or the receipt of a complaint will necessitate further investigation into the causes and indicate whether further monitoring is required. Actions to be taken in the event of an exceedance will be dictated by the nature and extent of the exceedance(s) (e.g. by considering the magnitude of exceedance and whether it was event driven or on-going).

6.3 Detection of Moderate Odour During Olfactory Survey

Detection of a moderate odour, (i.e. 'odour easily detected while walking and breathing normally, possibly malodorous), will initiate a more extensive olfactory survey to determine the extent of the odour plume (as described in Section 4.3). An investigation will be initiated into the cause of the odour. This shall involve as necessary:

- A review of the site activities at the time of the olfactory survey;
- A review of the site waste inventory at the time of the olfactory survey;
- A review of the meteorological conditions at the time of the olfactory survey; and
- A review of the effectiveness of process operations and odour control procedures.

6.4 Corrective Actions

The outcome of an investigation will determine the corrective actions to be implemented, they will consider, but not be limited to:

- Alteration to waste reception procedures and odour control measures employed;
- Review of all processes on site; and
- Update of OMP if new procedures are created.

6.5 Reporting

Exceedance of a control level will be investigated (as described above) and recorded. This includes recording the following:

- Nature of the incident;
- Date of occurrence(s);
- Results of the investigation;
- Details of responses/ action plans implemented;
- The event will be marked within the site's incident log; and

The report of any exceedance will be made available to the Environment Agency on a quarterly basis.

7. INCIDENTS AND EMERGENCIES

Consideration has been given to the types of failure or abnormal events that have the potential to result in an odour impact. Abnormal events include the following:

- Fire; and
- Unfavourable environmental conditions.

Failure and abnormal event scenarios are summarised below.

Fire

Fire risk procedures will be adopted onsite. If required following a fire, operations will cease in the affected area until all machinery and infrastructure are restored.

Following a fire, all involved machinery will be inspected, replaced and repairs implemented as necessary. Further waste receipt would be suspended until normal operation is restored.

Unforeseen issues loading waste for export due to poor environmental conditions

The site may experience difficulties at times loading waste onto vessels, particularly during times of poor environmental conditions such as flooding, high river levels or fast flowing waters. In such times, the site will take a proactive approach and not transport waste to the dockside location if heavy rain or unfavourable conditions are forecast that are likely to disrupt operations.

7.1 Abnormal Meteorological Conditions

Although it is accepted that a number of meteorological conditions can exist that promote the generation of odour and may inhibit its effective dispersion (i.e. high temperatures and still conditions) such scenarios are not considered to have the potential to impact the facility and surrounding receptors.

The facility will monitor and record all meteorological conditions and make suitable planning arrangements to ensure that any major maintenance activities are carried out in favourable meteorological conditions to reduce the potential for impact.

APPENDIX A ODOUR REPORTING FORM

ODOUR REPORTING FORM		
Name of Assessor:		
Confirm Compliance with Reference Table 1:		
Survey Timings	Date	
	Start Time	
	Finish	
Weather Conditions (dry, rain, fog, snow etc)		
Wind Direction (e.g., from the SW)		
Wind Strength (none, light, steady, strong, gusting)		
Cloud Cover (%)		
Temperature (°C)		
Precipitation		

Location [1]	Odour Intensity [2]	Odour Extent [3]	Odour Description [4]	Adjacent Receptor Sensitivity [5]

Sketch

Provide a sketch of test and source locations

[1]What site boundary points / sensitive receptor?

[2]Refer to Reference Table 2

[3]Refer to Reference Table 3

[4]Describe the character of the odour (e.g., rotten eggs, musty, earthy, drains etc)

[5]Refer to Reference Table 5

Notes;

If odour intensity is judged as 3 or above at any external location within the site boundary the Site Manager must be immediately notified

The extent of the plume should be investigated as follows:

Four suitable locations downwind of the building but internal to the site boundary will be chosen to clarify that the impact is not detectable at the site boundary and able to create an offsite impact.

In the event that the odour is detectable at the site boundary, an offsite investigation will be required in the direction of the prevailing wind and closest sensitive receptor. Continue toward the site until a faint odour is detectable.

Select further assessment points at right angles to the plume axis and equidistant from the facility to determine extent of plume.

REFERENCE TABLE 1

Requirements for Assessor
Assessor has not been exposed to waste related odours for previous 30 minutes
Assessor has not smoked or consumed strongly flavoured food or drink in previous 30 minutes
Scented toiletries should not be applied immediately before or during assessment.
Vehicle used for assessment should not contain deodoriser and care should be taken concerning odour in windscreen wash.

REFERENCE TABLE 2

Odour Intensity	Description
1	No detectable odour
2	Faint odour (barely detectable, need to stand still and inhale facing into wind.
3	Moderate odour (odour easily detectable while walking and breathing normally, possibly offensive)
4	Strong odour (bearable, but offensive odour – will my clothes hair/smell?)
5	Very strong odour (malodorous)

REFERENCE TABLE 3

Odour Extent	Description
1	Local and transient (only detected briefly when wind drops or blows)
2	Transient as above, but detected away from site boundary
3	Persistent but fairly localised
4	Persistent and pervasive up to 50m from site boundary
5	Persistent and widespread (odour detected > 50m from site boundary

REFERENCE TABLE 4

Receptor Sensitivity	Description
1	Low (e.g., footpath, road)
2	Medium (e.g., industrial, or commercial workplaces)
3	High (e.g., housing, pub/hotel etc)

APPENDIX B ODOUR COMPLAINTS FORM

ODOUR COMPLAINT REPORT FORM	
Time and date of complaint:	
Name and address of complainant:	
Telephone number of complainant:	
Date of odour:	
Time of odour:	
Location of odour, if not at above address:	
Weather conditions (i.e., dry, rain, fog, snow):	
Temperature (very warm, warm, mild, cold or degrees if known):	
Wind strength (none, light, steady, strong, gusting):	
Wind direction (e.g., from NE):	
Complainant's description of odour: What does it smell like?	
Intensity (see Reference Table 1):	
Duration (time):	
Constant or intermittent in this period:	
Does the complainant have any other comments about the odour?	
Are there any other complaints relating to the installation, or to that location? (either previously or relating to the same exposure):	
Any other relevant information:	
Do you accept that odour likely to be from your activities?	
What was happening on site at the time the odour occurred?	
Operating conditions at time the odour occurred (e.g., flow rate, pressure at inlet and pressure at outlet):	
Actions taken:	

Form completed by:	Date:	Signed;

Odour Intensity	Description
1	No detectable odour
2	Faint odour (barely detectable, need to stand still and inhale facing into wind.
3	Moderate odour (odour easily detectable while walking and breathing normally, possibly offensive)
4	Strong odour (bearable, but offensive odour – will my clothes hair/smell?)
5	Very strong odour (malodorous)