Bath & North East Somerset Council

Improving People's Lives

Odour Management Plan

Bath Recycling Centre

19th Decemeber 2024

Project No.: SOL_23_P113_SRA

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19th Decemeber 2024

Odour Management Plan

Bath Recycling Centre

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Acronyms and Abbreviations

Name	Description
B&NES	Bath and North East Somerset Council
OMP	Odour Management Plan

1. INTRODUCTION

This document has been prepared by Sol Environment Ltd on the behalf of Bath and North East Somerset Council ("B&NES" hereafter) in support of its Environmental Permit Variation relating to their site at Locksbrook Road, Bath, BA1 3EL.

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 Odour Management Plan

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 Annexes will be updated and inserted accordingly.

2. SITE DETAILS

2.1 Site Location

The site is located at the former Bath Street Cleansing Depot on Locksbrook Road, Bath, BA1 3EL.

2.2 Infrastructure and Design

2.2.1 Site Installation Boundary

The proposed installation boundary of the site can be seen below in **Figure 2.1.**

2.2.2 Site Layout and Design

The proposed site area covers approximately 0.26ha and consists of a mixture of visitor car parking and designated waste storage areas. The site layout plan can be seen below in **Figure 2.2.**

2.2.3 Drainage

The site utilises a sealed drainage system that covers both operational and non-operational areas of the site.

The proposed drainage system splits the site into three distinct catchments:

- Catchment A incorporates the western portion of the site where there will be clean runoff areas. Rainwater within these areas will be collected by new drainage channels which will discharge into the existing surface water sewer underneath Locksbrook Road to the north of the site.
- Catchment B incorporates the western portion of the site where street cleaning vehicles will be cleaned and black sack tipping and weeding waste bays are located. The runoff within this catchment area may be contaminated and will be collected by foul gullies and discharged to the foul water sewer beneath Locksbrook Road.
- Catchment C is the eastern half of the site where surface water will be collected by new rainwater gullies and permeable paving systems before discharging eastwards. The final point of discharge for the proposed surface water system will be to the existing Wessex Water sewer to the east of the development. The sewer lies in land owned by B&NES.

Runoff from site will be intercepted by 2 interceptors on site, one for foul and one for surface water. In the event of a fire, a penstock valve can be operated to isolate the drainage system and prevent potentially contaminated firewater from leaving the site.

A copy of the drainage plan can be found in Annex B of the application and below In **Figure 2.3.**

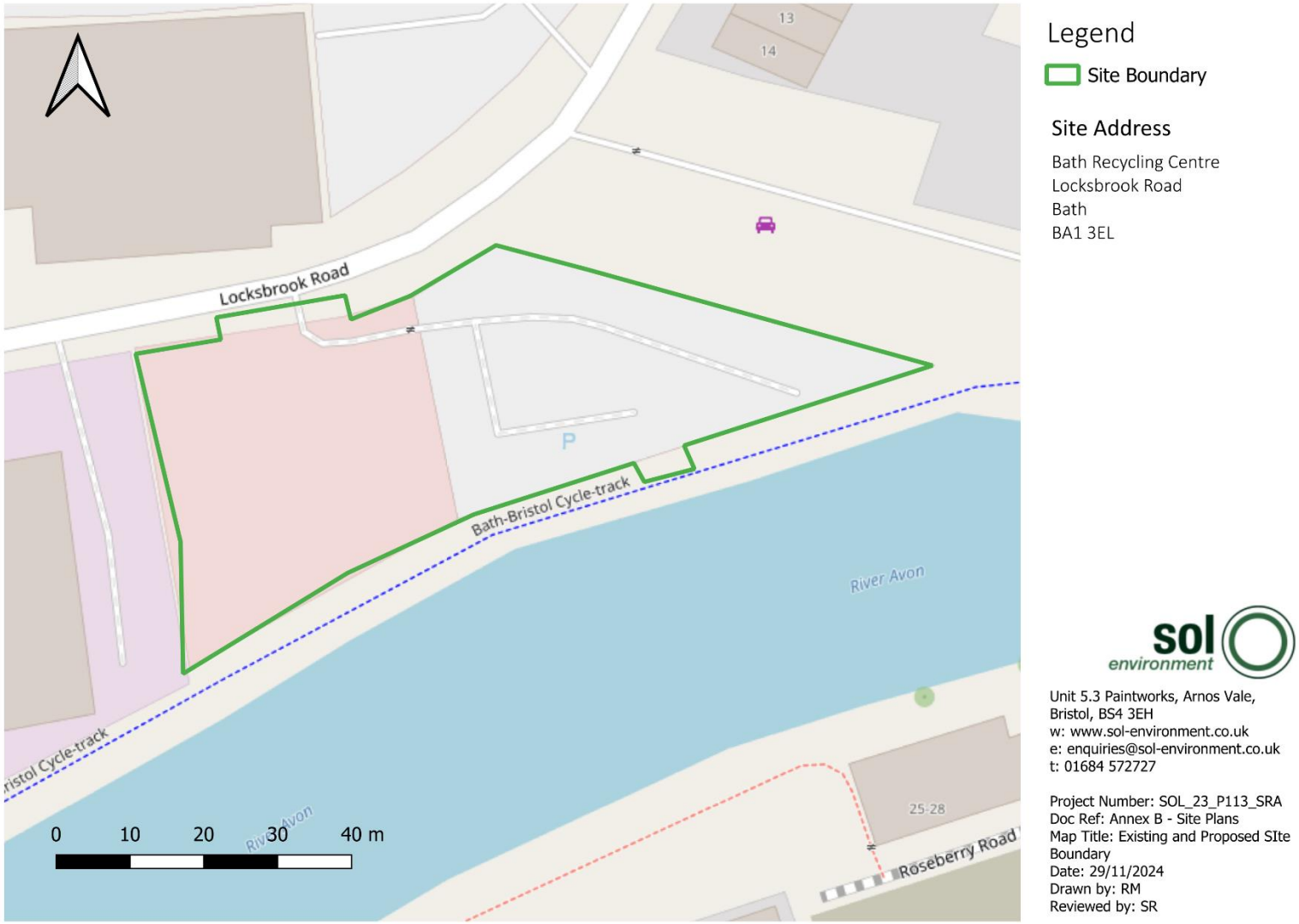

Figure 2.1 - Site Installation Boundary

Figure 2.2 – Proposed Site Layout

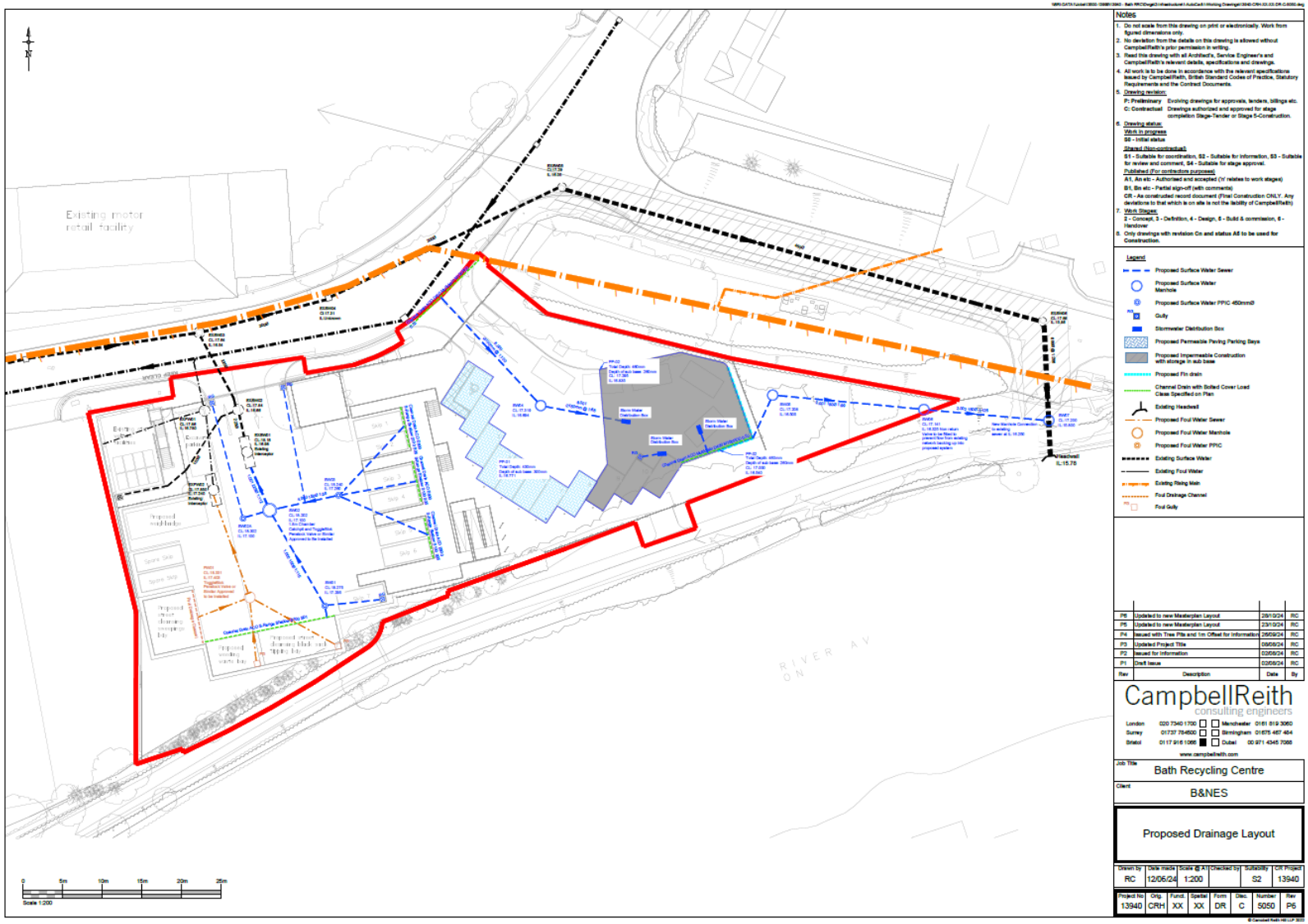

Figure 2.3 - Site Drainage Plan

2.3 Site Context

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

2.3.1 Site Setting

The site is located in a mixed-use landscape, comprising of a blend of commercial, residential and recreational assets, as well as prominent ecological features. **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 – Surrounding Site Setting

Direction	Description
North	Immediate Vicinity: Locksbrook Road, Bath Volkswagen Within 500m: Residential areas (closest being Shaftesbury Ave) Offices and Local Businesses (e.g. SRA Architects, Bath Electrical Solutions), Locksbrook Cemetery Beyond 500m: Residential areas (closest being Audley Close)
East	Immediate Vicinity: Car Parking, Residential Housing (Locksbrook Road) Within 500m: Kelson's Field/Playground, River Avon, Commercial Units including PureGym Bath and Bath Auto Service, The Brook Student Accommodation, EON Bath Energy Centre Beyond 500m: Riverside Park, Residential Apartments (Frederick House, Leopold House)
South	Immediate Vicinity: Bristol and Bath Railway Path, River Avon Within 500m: Unite Students Accommodation, Mocca Cleaning Services, A36, Residential areas (closest being Vernon Park), Twerton Cemetery, Oldfield Park Railway Station, Railway Line, Linear Park Beyond 500m: Bricksfield Park, Dartmouth Avenue University of Bath, Residential housing (cloest being Ringwood Rd), Local amenities
West	Immediate Vicinity: Locksbrook Road, Horstman Defence Systems Within 500m: Bath Spa University Locksbrook Campus, Bath Veterinary Group, Halfords Auto Centre, Weston Cut Canal, Bristol and Bath Railway Path, Residential Housing, Keneth Copeland Ministries, Commercial properties Beyond 500m: Residential housing (closest being Locksbrook Road), Locksbrook Inn, Weston Cut Canal, Commercial units

2.3.2 Nearby Sensitive Receptors

The nearest residential areas to the site are on Locksbrook Road, located approximately 40m northeast of the site boundary.

Due to the proximity of the nearest residents, the site could be considered to be moderately sensitive in relation to potential emissions such as odour and/or dust. 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.

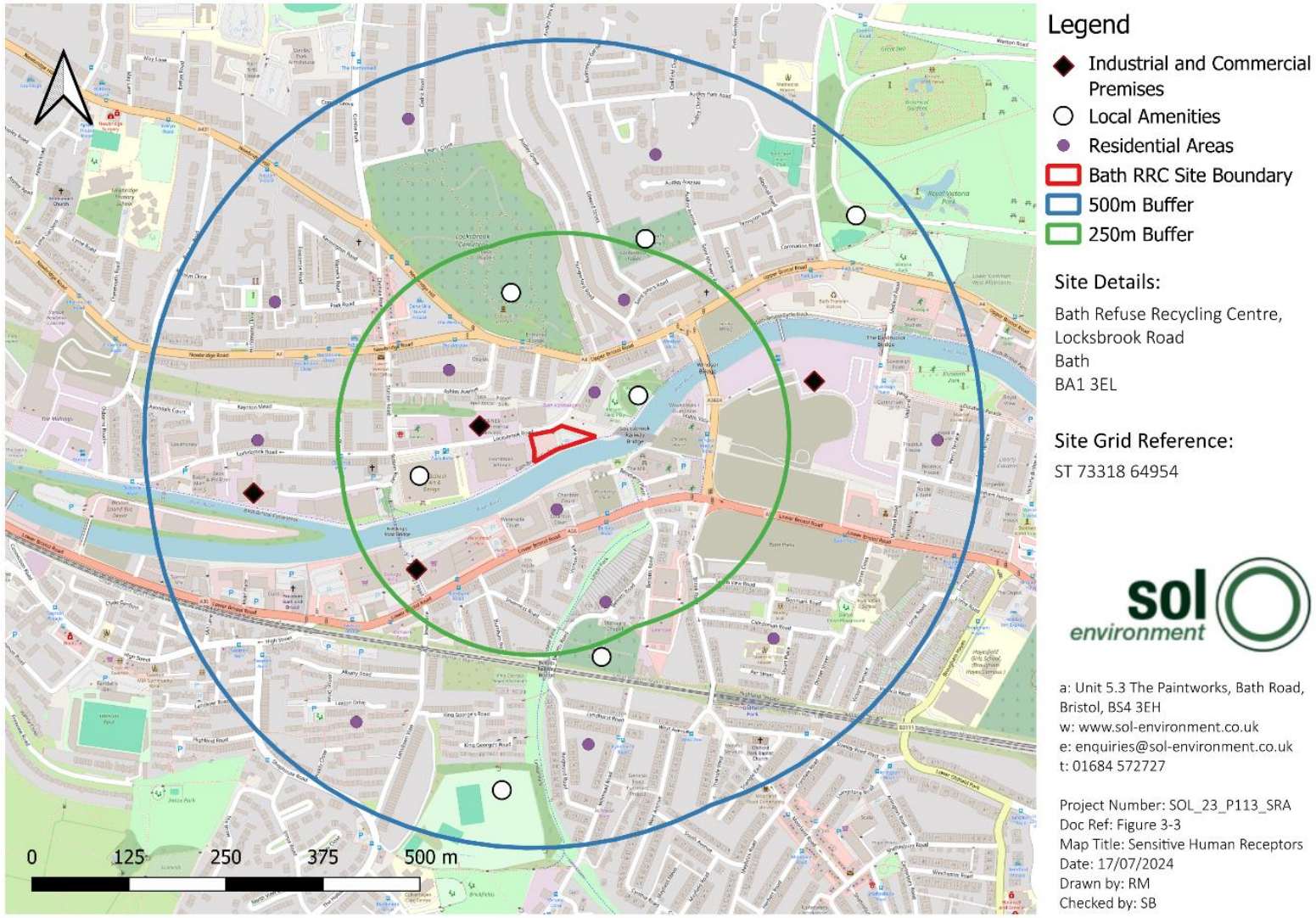

Figure 2.4 - Sensitive Human Receptors

The nearest ecological receptor to the site is Carrs Woodland Local Nature Reserve (LNR), located approximately 930m west of the site.

Table 2-2 – Designated Sites with 2km of the Site

Designated Site	Designation Status	Distance from Site
Cotswolds	AONB	1390m northwest
Carrs Woodland	LNR	930m west
Twerton Roundhill	LNR	1670m southwest
Newton St. Loe	SSSI	1930m northwest

Please refer to **Figure 2.5** below which shows the locations of nearest designated ecological receptors. The red line boundary at the centre of the buffer denotes the site boundary, The LNRs and SSSIs are labelled, and the Cotswolds AONB resides within the red dotted area to the north of the site.

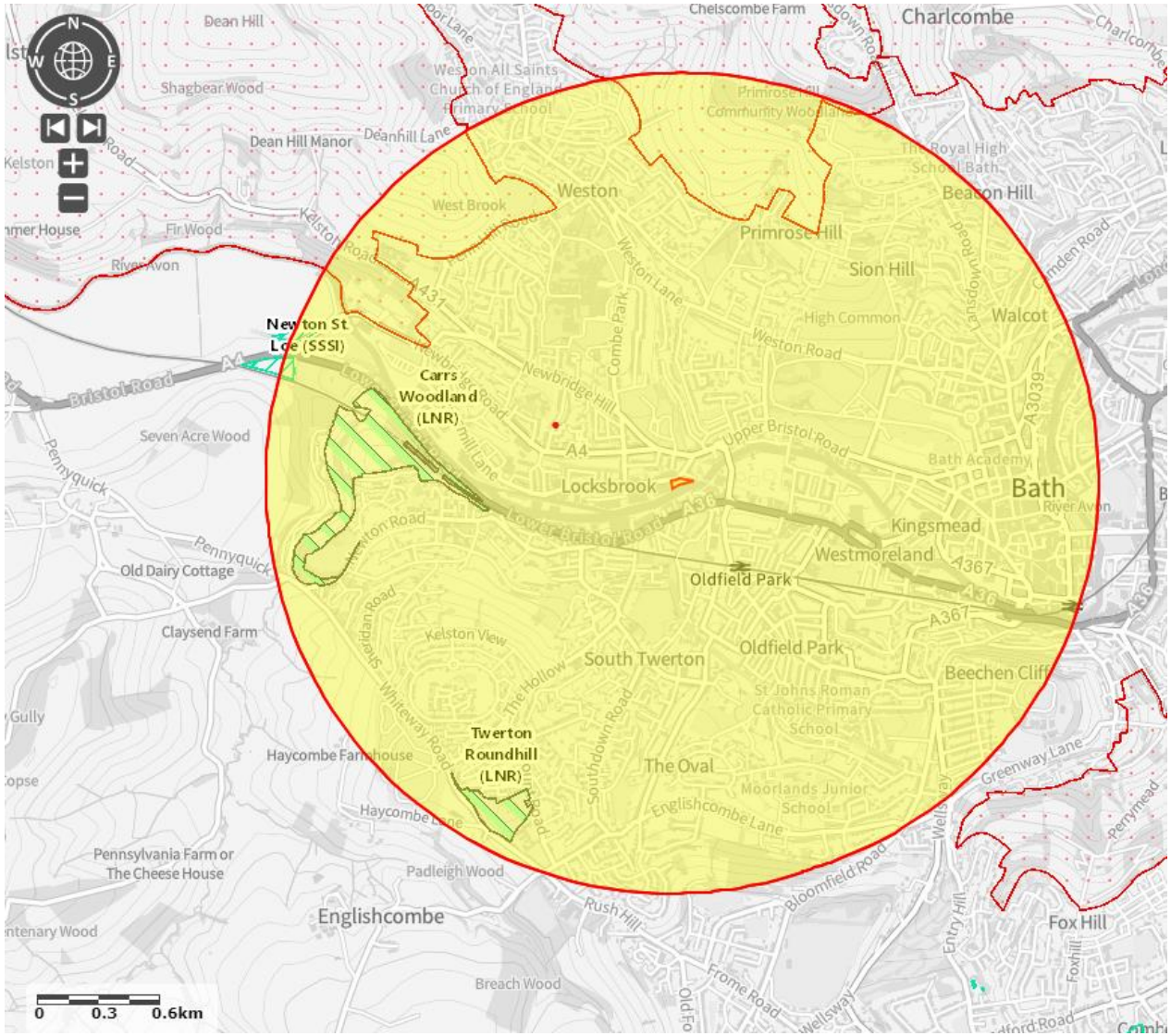

Figure 2.5 – Sensitive Ecological Receptors within 2km of the Site.

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 the former RAF Colerne airfield located 9.13 km northeast of the site.

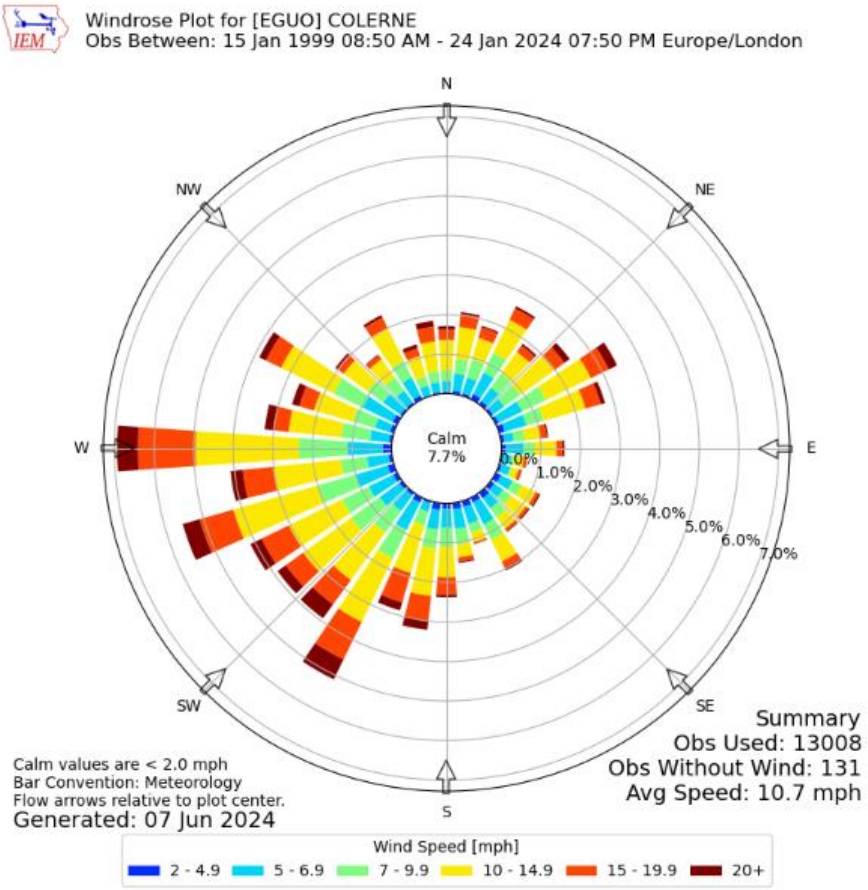

Figure 2.6 – Wind Rose for former RAF Colerne

2.3.4 Flood Risk

The site is located within flood zone 3, meaning there is a high probability of flooding from the nearby River Avon The extent of flooding from rivers is shown in **Figure 2.7** below.

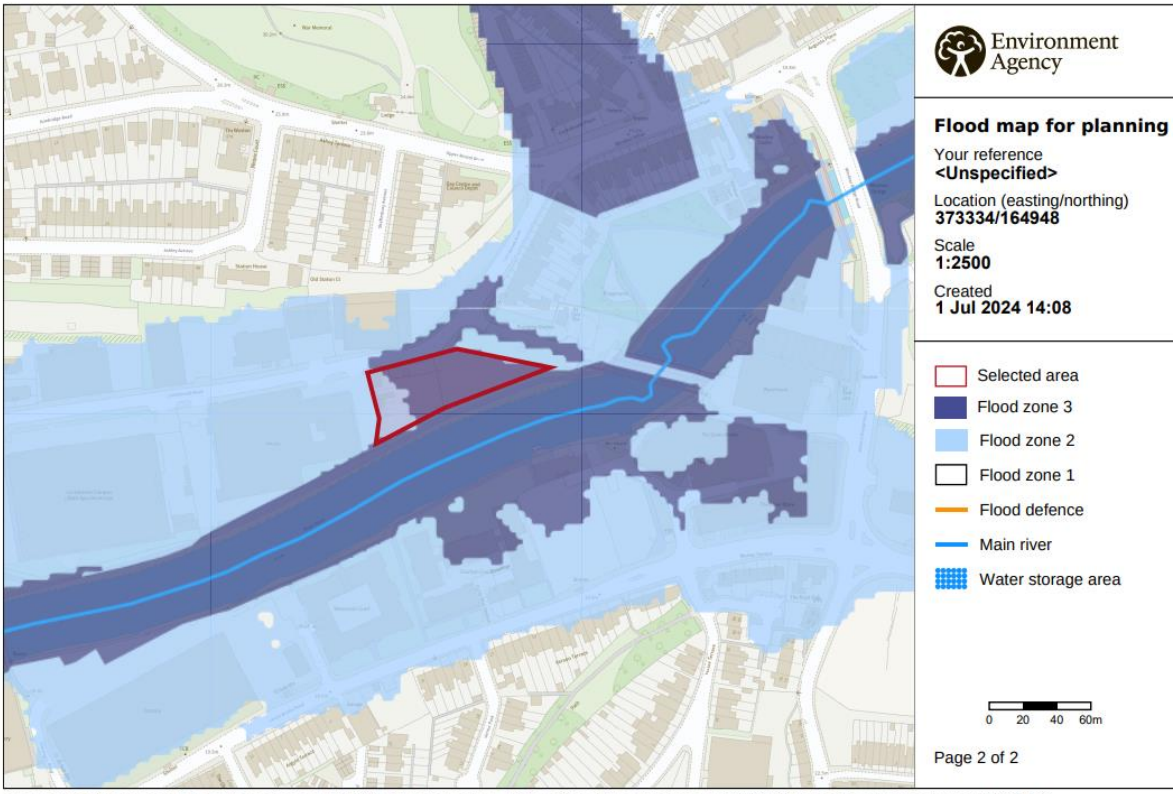

Figure 2.7 – Flood Risk of the Proposed Site

3. PROCESS DESCRIPTION

A summary description of each of the processes is provided below:

- *Waste Reception*: All waste deposits must be booked in prior to arrival on site, and booking is completed by the local resident at a time available to them. Booking slots are available at 15-minute intervals. The waste will arrive on site by private vehicle, and all vehicles must be parked in one of the 15 designated parking bays on the easterly portion of the site. The car parking area will be regularly inspected for signs of litter and cleaned as appropriate. There is micro-netting covering the perimeter fencing to prevent the escape of dropped litter offsite.
- *Waste Deposition*: Visitors to the site will transport the waste from their vehicles by hand to the waste storage containers. The waste storage containers are accessed via a raised metal platform, and waste is dropped from the platform directly into the designated containers. All containers are signposted to describe the exact waste type that can be deposited within it and site operatives are available at all times during opening hours to assist visitors in the correct location for any given waste type. These measures seek to prevent the cross-contamination of waste types and to aid in maximal segregation of waste types.

  Most waste stored on site will be stored in the seven 40-yard containers on site. These containers will hold the following wastes:

  - Residual household waste;
  - Cardboard (including items too large for kerbside collection);
  - Soft furnishings;
  - Bulky Waste;
  - Garden Waste;
  - Wood; and
  - Scrap metal and large electrical items, not including fridges, freezers, TVs or computer monitors.

  The remaining waste stored on site will include street cleansing black bags, weeding waste and street cleansing sweepings. These waste types will be collected and deposited by B&NES – there will be no public access to these waste bays. The bays sizes for each of these wastes are as follows:

  - Black bag bay – 9.9m L x 4.2m W x 2.0m H = 83.16m^3;
  - Weeding Waste bay – 6.2m L x 4.2m W x 2.0m H = 52.08m^3;
  - Street cleansing sweepings bay – 7.0m L x 6.6m W x 2.0m H = 92.40m^3.

- *Waste Transportation*: Waste is collected and transported offsite within a maximum of 72 hours for combustible wastes and up to 7 days for non-combustible waste such as metal. Waste being transported will be sheeted to prevent escape of waste material or potential fugitive emissions such as dust or odour escaping during onwards transportation. Waste collected is sent off for a variety of recovery or disposal purposes.

4. ODOUR SOURCES

The following sections detail the identified odour sources arising from both on-site sources and off-site sources.

4.1 On-site Odour Sources

4.1.1 Source Materials

The site has been designed to accept, store and transfer a maximum of 12,000 tonnes per annum of non-hazardous waste from industrial, commercial and household sources.

The majority of these waste inputs have a low potential for odour releases given they are largely non-biodegradable wastes such as waste metals, dry recyclables and large bulky items.

Some waste does have potential to be malodourous, namely, any biodegradable waste stored on site such as contents of black bag waste collected by Council-owned vehicles or deposited by the public and organic garden waste stored in containers.

To avoid any significant odour impacts, combustible / biodegradable waste will be stored for up to 72 hours and non-combustible waste such as scrap metal will be stored for up to one week.

The Odour Impact Assessment, conducted by Entran Limited and supplied as supplementary information to this management plan determines that potential odour impacts from this site are likely to be insignificant.

The table below details all potentially odorous materials accepting on site:

Table 4-1 - Source Materials

Waste Type	EWC Code	Odour Potential	Quantities and Storage Time
End of life tyres and brake pads	16 01 03 16 01 12	Very low	Up to one 40-yard container stored for up to 72 hours
Waste electrical and electronic equipment	16 02 14 16 02 16	Very low	Minimal quantities stored for up to 72 hours
Construction and Demolition Wastes, such a concrete, bricks, tiles, ceramics and soils	17 01 01 17 01 02 17 01 03 17 01 07 17 05 04	Very low as inert materials	Up to one 40-yard container stored for up to 72 hours
Construction and demolition waste such as wood, glass, plastic and metals, as well as mixed wastes	17 02 01 17 02 02 17 02 03 17 04 01 17 04 02 17 04 03 17 04 04 17 04 05 17 04 07 17 04 11 17 09 04	Very low	Up to one 40-yard container stored for up to 72 hours

Wastes from waste management facilities, including paper, cardboard, metals, plastics and rubber, glass, wood and textiles	19 12 01 19 12 02 19 12 03 19 12 04 19 12 05 19 12 07 19 12 08	Low if waste is clean and uncontaminated. Medium if soiled	Up to one 40-yard container stored for up to 72 hours
Municipal waste from household and similar commercial, industrial and institutional wastes), including packaging	15 01 01 15 01 02 15 01 03 15 01 04 15 01 05 15 01 07 15 01 09 15 02 03 20 01 01 20 01 02 20 01 08 20 01 10 20 01 11 20 01 36 20 01 38 20 01 39 20 01 40 20 01 41 08 03 18 02 01 04 02 01 10 02 01 99	Moderate	Up to one 40-yard container stored for up to 72 hours
Biodegradable and garden/parks waste	20 02 01 20 02 02 20 02 03 02 01 03	Moderate – green waste as a moderate potential for odour due to its biodegradability	Weeding waste bay = 52.08m^3 Up to one 40-yard container stored for up to 72 hours
Other municipal wastes, such as black bag waste	20 03 01 20 03 02 20 03 03 20 03 07	Moderate – mixed municipal waste, waste from markets and street cleaning residues have moderate potential for odour due to its biodegradability.	Street cleansing waste bay = 92.4m^3 Up to one 40-yard container stored for up to 72 hours

4.1.2 Releases

There are no significant odour releases to arise from the normal operating procedures on site. The site does not actively accept odorous material on site and stores waste for minimal time, thus reducing the potential for odorous release.

4.2 Off-site Odour Sources

There are no identified off-site sources of odour relevant to the site on Locksbrook Road.

5. CONTROL MEASURES

The site has several 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.

Environmental Management System procedures ensure that good operational practices are employed. Effective management and control of the process minimises odour generation.

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

5.1 Responsibility for Implementation of 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.

5.2 Receipt and Management of Potentially Odorous Materials

Due to the nature of the site's activities, there is little potential for excessive odour emissions and impacts to arise from the site.

The primary odour control measure on site will be the strict adherence to site's EMS and accepting only waste that is outlined in the permit. Following these measures will help to eliminate odorous materials entering site that could cause potential issues, especially if left in storage for any lengthy period of time.

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

- All waste entering site will be via privately owned vehicles or council-operated vehicles;
- All waste is to be deposited on site within the designated containers or bays; and
- Waste will be subject to random spot checks by site staff to ensure no odorous materials are deposited on site.

5.3 Transfer of Odours to Air

There will be minimal opportunities for odours to transfer to air as a result of the short storage times and relatively low quantities of any given waste type. All wastes stored on site will be in semi-enclosed storage areas, either in containers or waste bays, reducing the impact of wind or direct sunlight on transferring odours to air.

5.4 Containment of Contaminated Air

There is no containment of contaminated air proposed for the site as odour is not considered to pose a significant risk.

5.5 End of Pipe Treatment

There is no end-of-pipe treatment associated with the site.

5.6 Transport and Dispersion

No transport or dispersion of odour will be undertaken on site due to the minimal odour impacts arising from on-site operations.

5.7 Engaging your Neighbour

If an action is being considered that has the potential to cause temporary odour impacts outside of the normal operational procedures, then the local Environment Agency area team will be informed in advance. Neighbours who may be affected as identified in Section 2.3.2 will be contacted to advise them of the operation being undertaken, and that any increase in odour will be of a temporary nature.

As part of the permit variation application and planning development, several public engagement opportunities have been conducted to help alleviate any negative site perception by the local community and provide B&NES with the opportunity to address concerns. The Council continually welcome feedback from its users and members of the public. The site management shall operate a publicly accessible website, where the public are provided with a means of contacting the site if necessary.

In the event of a complaint received from the public, B&NES will operate in accordance with the complaints procedure (see Section 5.8 below).

5.8 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.

A Complaint Report Form will be completed as soon as the complaint is received.

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 6.2. The results of the survey will be recorded electronically, a list of information that is recorded electronically is provided within Appendix A at the end of this document;
- 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 7).

5.9 Ceasing or Reducing Operations

Following investigations carried out as a result of an odour complaint, consideration will be given to wase acceptance until appropriate measures can be put in place to mitigate any odour impacts.

During adverse meteorological conditions, all processing activities taking place externally will cease to avoid potential odour emissions. Such conditions include high winds and storms.

5.10 Accident Management Plan

The site maintains an accident management plan as required by the Environmental Permitting Regulations.

The accident management plan 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 or leaks;
- Any vandalism;
- Flooding;
- Fire;
- Receiving incompatible waste on site;
- Failure of main services; and
- Failure of major plant and equipment.

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

6. MONITORING

The company will employ the following monitoring techniques to ensure that the Control Measures (**Section 5**) are maintained, and effective, operational procedures are followed and that good practices are being implemented:

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

6.1 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 6-1** below.

Table 6-1 – Meteorological Monitoring

Monitoring Requirements	Frequency
Observed and recorded description of condition	Recorded daily
Precipitation	
Wind speed and direction	
Temperature	

6.2 Olfactory Monitoring

Given the very low risk of odour impact, as determined by the Odour Impact Assessment, odour shall be monitored periodically as directed by the Site Operations Manager at nearby sensitive receptors and observations shall be noted electronically, a list of information that is recorded electronically is provided within **Appendix A** at the end of this document. A minimum of 3 surveys will be conducted per week, with additional surveys conducted as required and directed by the Site Operations Manager.

Surveys shall be carried out in accordance with the monitoring protocol contained within the Environment Agency's Technical Guidance Note H4.

Two locations will be selected to carry out the "sniff test" and these locations will be at both staff and visitor entrances. Tests carried out at these locations are to confirm that malodour is not detectable at the site boundary.

If 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 electronically, a list of information that is recorded electronically is provided within **Appendix A** at the end of this document.

The odour assessor must not be subject to significant odour in the 30 minutes prior to the assessment. This survey will be carried out in accordance with the guidance laid out in the *H4 Odour Management Guidance.* 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 Site Operations 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 6-2.**

Table 6-2 - Monitoring Frequencies

Parameter	Monitoring Technique	Frequency
Meteorology	See **Table 6-1** for details	
Odour	Olfactory Monitoring	Minimum of three times per week, additional surveys conducted as required. Increased frequency in response to complaints
	External Olfactory Monitoring	6 monthly
	Complaint monitoring	Continuous
Complaints	Corrective Action Monitoring	Post-implementation of a corrective action

The following scales will be used:

Table 6-3 - 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 6-4 -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

6.3 Internal Odour Monitoring

Odour monitoring is conducted at frequencies detailed in **Table 6-2** by a competent person.

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 operations manager may deem it necessary to find the precise source of the odour and attempt to eliminate it or neutralise it immediately.

6.4 Records

Appropriate 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.

7. COMPLIANCE ACTION PLANS

7.1 Control and Trigger Levels

Control trigger levels are presented below in **Table 7-1**.

Table 7-1 - 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

7.2 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).

7.3 Detection of Moderate Odour During Olfactory Surveys

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 6.2**). 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 meteorological conditions at the time of the olfactory survey; and
- A review of the effectiveness of process operations and odour control procedures.

7.4 Corrective Actions

The outcome of an investigation will determine the corrective actions to be implemented. The following corrective actions will considered, 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.

Extent of the corrective actions undertaken will be decided by the competent site operations manager, as per their responsibility of implementing this odour management plan.

7.5 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.

8. 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:

- Non-collection of waste by external party;
- Risk of fire on site resulting in plumes of odorous smoke; and
- Abnormal meteorological conditions.

Non-collection of Waste by External Party

There may be, under very exceptional circumstances, rare occasions where the contracted external party is unable to collect waste within a timely manner.

In such events, the site may consider employing a temporary third-party contractor to remove waste containers and/or waste within bays until the primary party can resume operations.

If necessary, the facility will temporarily close to the public to prevent an excessive build-up of waste occurring that may result in odour impacts to nearby receptors.

Non-collection of waste is deemed a highly unlikely scenario, however, has been considered for the completeness of this management plan.

Risk of Fire

Fire prevention procedures will be adopted onsite, as per the dedicated Fire Prevention Plan.

Fire presents a risk of abnormal odour, namely through the combustion of potentially odorous waste, such as black bag refuse waste. In the event of a fire, waste deposits from all sources would be suspended until the fire, potentially odorous impacts and any other resulting damages caused to the environment are managed effectively.

The likelihood of fire is deemed highly unlikely through a combination of operational procedures minimising the likelihood of fire and specific fire-prevention measures further minimising risk.

Abnormal Meteorological Conditions

Although the odour impact assessment deemed there is an insignificant level of risk of odour, it is accepted that several meteorological conditions can exist that promote the generation of odour and may inhibit its effective dispersion (i.e., high temperatures and still conditions). However, such scenarios are not considered to have the potential to impact the facility and surrounding receptors to any significant level.

Ongoing monitoring will ensure that odour impacts arising from meteorological conditions are minimised and pose no additional risk of odour to sensitive receptors.

APPENDIX A ODOUR REPORTING – INFORMATION LIST

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 Operations 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 RESPONSIBLE PERSONS

Control Measure	Responsible Persons	
	Implementation on-site	Overall Manager
Receipt and Management of Odorous Materials In accordance with Section 5.2	TBC prior to permit issue	Deputy Head of Waste Operations
Engaging your Neighbours In accordance with Section 5.7	TBC prior to permit issue	Deputy Head of Waste Operations
Response to Complaints In accordance with Section 5.8	TBC prior to permit issue	Deputy Head of Waste Operations
Meteorological Conditions In accordance with Section 6.1	TBC prior to permit issue	Deputy Head of Waste Operations
Olfactory Monitoring In accordance with Section 6.2	TBC prior to permit issue	Deputy Head of Waste Operations
Internal Odour Monitoring In accordance with Section 6.3	TBC prior to permit issue	Deputy Head of Waste Operations
Record Keeping In accordance with Section 6.4	TBC prior to permit issue	Deputy Head of Waste Operations
Complaint and Corrective Action Monitoring In accordance with Section 7	TBC prior to permit issue	Deputy Head of Waste Operations