



Mayflower London

Odour Management Plan

June 2023

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Mayflower London

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Warspite Road
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1. Introduction

1.1 Purpose

This document represents the Odour Management Plan (OMP) for the Mayflower Waste Transfer Station in Woolwich. The OMP outlines

- The sensitive receptors;
- Potential odour release sources;
- Odour control strategies in place;
- Odour monitoring undertaken;
- Contingency measures in place in the event of persistent odour problems.

1.2 Guidance

In developing the OMP the following guidance detailed within Table 1 below has been used:

Table 1 – List of Guidance	
Document Reference	Title
Application Form Guidance EPB	'How to apply for an environmental permit Part B: New permit guidance notes – Appendix 10 Guidance on odour management plans.'
EPR H1	'Environmental Risk Assessment Part 1: Simple assessment of environmental risk for accidents, odour, noise and fugitive emissions'
H4 Part 1	Formal Horizontal Guidance for Odour
H4 Odour Management	Odour Management – Consultation Draft V1.2

2. Receptors

2.1 Receptor Identification

Vulnerable receptors are identified on a to-scale map of the location see **Appendix F**. These receptors will be considered when identifying and implementing odour management plans and procedures for the site. The wind rose, **see Appendix G**, identifies the most likely wind direction and becomes a factor in mitigating the effects of any odours both on site and to neighbouring premises.

2.2 Receptor Location Plans

In order to focus on the closest sensitive receptors and those most likely to be impacted in the event of an off-site odour release, which would be unlikely to extend beyond 300 metres, an initial 1000 metre buffer zone from the facility boundary has been used. The actions that we will take to mitigate any adverse effect of odours on the receptors identified are detailed in this document.

3. Odour Sources, Releases and Impacts

3.1 Summary of Waste Activities

Waste activities on site will be limited to the following: -

- 1 - Repacking of waste prior to disposal
- 2 - Storage of waste in appropriate waste containers pending collection for treatment or recovery (R13) or disposal operations (D15) elsewhere.
- 3 - Compaction of offensive waste in purpose-built soft compaction sealed units

Total Waste Volume

The total volume of permitted waste stored on site at any one time will not exceed 6 tonnes.

Waste types accepted and stored on Site

The site will accept and store a range of wastes from both Healthcare (Human) and Non-healthcare settings. A detailed list of these wastes is provided, see **Appendix H**. This document gives the EWC code, Waste Description, the Maximum Volume that may be stored on site at any one time of that particular waste type, the Receptacle used to store the waste and the Maximum pile size.

Processing of Waste:

Waste will only be bulked up for storage on site. No processing of wastes will take place other than by soft compaction for offensive waste (EWC 18:01:04, 18:02:03 or 20:01:99) which will be compacted using a purpose-designed vehicle at a 3:1 ratio prior to transfer off site.

Waste Storage Location:

To limit spillages or odours, all waste types will be stored separate from each other, inside UN approved containers in the appropriate, designated waste storage areas ref. **Appendices B and D**, Site Layout Plans.

Storage of Offensive Waste on site:

On arrival at site, the sealed sacks of offensive waste will be transferred from the small PHS vans into dedicated 1100ltr Euro bin waste containers with lockable lids (all bins will be locked at the end of the working day). All euro bins containing offensive waste (maximum of 0.6 tonnes) will be serviced by an SCV a minimum of once per week so the quantity of offensive waste stored on site will be kept to an absolute minimum.

Storage of Sharps Waste on site:

On arrival at site, the sealed containers of sharps waste will be transferred from the small PHS vans into a dedicated 770ltr Euro bin waste container with a lockable lid and stored within the building pending collection. All sharps waste containers will be serviced by an approved contractor at a minimum rate of once per week. This will ensure the volume of this type of waste stored on site will be kept to an absolute minimum.

Storage of Other waste on site:

Other wastes such as waste packaging (plastic or cardboard), returned WEEE, waste batteries, used fragrance aerosol containers etc will be stored in suitable UN Approved containers and will be serviced by an approved authorised contractor when there is sufficient quantities for a viable collection.

Quarantined Waste:

The types of non-conforming waste that we may encounter during service could include glass bottles and cans which have been placed in with sanitary waste. These waste types will be segregated at source and placed into eco-locs and sent for incineration due to cross contamination. All other non-conforming waste that conforms with any of the waste types that the site is permitted to accept, will be placed in a lockable Euro-waste bin and an authorised waste contractor will be appointed to assess and dispose of this waste.

3.2 Odorous Material Inventory

Odorous Material	EWC Code	Description	Age of Waste	Source of Waste	Character	Intensity	Volume
Non - hazardous SANPRO Offensive Waste	18 01 04, 20 01 99	This waste will predominantly consist of feminine sanitary products, nappies and in-continance pads. Occasionally, the waste will also include swabs and dressings from non-healthcare establishments	All waste collected will be transferred to its final disposal destination within 7days However, the waste could have been stored in the receptacle at the customers site longer. Most of our sanitary hygiene bins are serviced monthly and nappy bins 2 weekly.	Waste is collected predominantly from customers' washroom facilities, first aid rooms and healthcare treatment facilities e.g. dentists, hospitals, vets etc.	The waste is defined as offensive as it has an unpleasant smell of decay, ammonia and faeces. We would rate it as -1 on the Hedonic Tone Scale. In the event of staff illness causing the waste to be retained on the vehicle longer or if it is exposed to more heat due to abnormally hot weather this could increase to a -2 on the Hedonic Tone Scale. If a fire was to occur we would expect the waste to reach a similar odour level of -2 on the Hedonic Tone Scale.	We would define the intensity of the odour from this waste as moderate at the point of transfer as it is easily detectable while walking and breathing normally. However, this will only be in the immediate vicinity of the waste transfer process. It drops to un-detectable after a distance of 5M from the transfer area.	No more than 0.6 tonnes will be stored on site at any time.
Non-Hazardous sharps wastes	180101	This waste is predominantly produced from healthcare and similar activities, but does not pose a risk of infection and is not contaminated with medicines or chemicals	All wastes collected will be transferred to its final disposal destination at least once per week.	Waste is collected predominantly from healthcare customers and non-healthcare activities such as tattooists.	The waste will be solid. We would rate it as 0 on the Hedonic Tone Scale.	We would define the intensity of the odour from this waste as minimal at the point of transfer. The waste remains in a sealed container and is then placed into a secondary euro-waste bin Any odour will not be easily detectable while walking and breathing normally.	No more than 0.065 tonnes will be stored on site at any time

3.2 Odour Identification Assessment

Operation	Pathway	Receptors	Potential Odours	Potential Odour Release Under Normal Operations	Potential Odour Release Under Upset or Fault Operations	Potential Odour Release in an Emergency
Waste Pre-acceptance	Atmosphere	<ul style="list-style-type: none"> Residential Industrial/ Commercial/ Offices Retail 	Potentially pungent faeces/ammonia odours	<p>Pre-acceptance audits will be carried out for all waste that is collected from Healthcare customers and all waste requirements will be determined for all other customers at point of sale. The Pre-acceptance audit will allow the characteristics of the waste to be correctly assessed and enable a decision to be made about the waste type, the packaging used to contain it and the appropriate disposal or recovery method for the waste.</p> <p>This will also ensure that we only enter into contracts to collect waste where we have the correct control measures in place to prevent odour.</p> <p>Our drivers will visually inspect and conduct a 'sniff' test of the waste at the point of collection to ensure it relates to the type of waste that we are contracted and authorised to collect and will check that the waste is correctly packaged before collecting it.</p>	<p>If we did not carry out pre-acceptance audits and / or apply diligence at the point of sale we may collect wastes that are more odorous than the waste we are set up and authorised to collect</p> <p>In addition, waste receptacles may be handled by the customer in a manner that increases their odour e.g. storing in hot places, placing non-contracted waste material into the waste bin etc.</p> <p>If our drivers did not inspect the waste before collecting it we could take away non-conforming wastes with a high odour potential e.g. body parts.</p>	N/A
Waste acceptance at site	<ul style="list-style-type: none"> Atmosphere 	<ul style="list-style-type: none"> Residential Industrial/ Commercial/ Offices Retail 	Potentially pungent faeces/ammonia odours	<p>Waste will be collected in liner bags which will be contained within sealed areas on the vehicles. Wastes will be relatively fresh.</p> <p>Waste will be viewed by the driver during transfer to identify any non-conforming wastes.</p> <p>Odour release under normal operating conditions will be minimal.</p>	<p>In very hot weather odours from offensive waste could build up and travel further than they would under normal operating conditions.</p> <p>Poor scheduling could lead to waste being collected after it has been on a customer site longer than expected and therefore further decayed releasing stronger odours.</p> <p>Drivers failing to view the waste during transfer would reduce the likelihood of us identifying non-compliant wastes.</p>	If site was inaccessible for any reason we would be unable to accept the waste which may be held on the vehicle longer than normal, marginally increasing the odour.

<p>Waste Transfer – Vehicle to Euro bin</p>	<ul style="list-style-type: none"> • Atmosphere 	<ul style="list-style-type: none"> • Residential • Industrial/ Commercial/ Offices • Retail 	<p>Potentially pungent faeces/ammonia odours</p>	<p>Odours can be released when waste is moved from a vehicle to a waste container or when residual waste is spilled onto the ground during the transfer.</p>	<p>If waste is not deposited into waste containers correctly, there could be spillages to ground which could result in material to be dispersed and odours to be released.</p> <p>If drivers are not trained to complete the transfer process correctly waste could escape and cause odours.</p> <p>If drivers are not trained to clear spillages correctly a build-up of waste residues could increase odours.</p>	
<p>Waste Storage – In compactor</p>	<ul style="list-style-type: none"> • Atmosphere 	<ul style="list-style-type: none"> • Residential • Industrial/ Commercial/ Offices • Retail 	<p>Potentially pungent faeces/ammonia odours</p>	<p>Odours can be released when waste is being compacted into the compactor. However, as the waste is contained in a sealed area with little access to oxygen, the opportunity for odour release will be minimal.</p>	<p>Vehicle breakdowns causing waste to be stored in vehicles longer than the planned 7-day maximum period or extended periods of hot weather could cause the release of odours that may breach the perimeter of the site.</p> <p>Poor housekeeping of vehicles and of the site could allow odours to build up. Capacity problems at final disposal sites could prevent us from removing the waste from site.</p>	<p>Waste could catch fire due to arson, vehicle faults etc. allowing significant odours to be released.</p> <p>Heavy snow could prevent waste vehicles leaving site and allow odours to build up.</p>
<p>Waste Storage – In Euro bin waste containers</p>	<ul style="list-style-type: none"> • Atmosphere 	<ul style="list-style-type: none"> • Residential • Industrial/ Commercial/ Offices • Retail • Habitats 	<p>Potentially pungent faeces/ammonia odours</p>	<p>Odours could be released if full waste containers are left on-site for long periods of time. Although, with the container lids down and shutter doors are closed, the opportunity for odour release is minimal.</p>	<p>Vehicle breakdowns causing waste to be stored in waste containers on site longer than the planned 7-day maximum period or extended periods of hot weather could cause the release of odours that may breach the perimeter of the site.</p> <p>In very hot weather odours could build up and travel further than they would under normal operating conditions.</p> <p>Poor scheduling could lead to waste being removed after it has been on a customer's site longer than expected and therefore further decayed releasing stronger odours.</p>	<p>Waste could catch fire due to arson, allowing significant odours to be released.</p> <p>Heavy snow could prevent waste vehicles from entering site and therefore waste will not be collected allowing odours to build up.</p>

					Poor housekeeping of waste containers and the site could allow odours to build up. Capacity problems at final disposal sites could prevent us from removing the waste from site.	
Site Management, Monitoring & Inspection	<ul style="list-style-type: none"> • Atmosphere 	<ul style="list-style-type: none"> • Residential • Industrial/ Commercial/ Offices • Retail 	Potentially pungent faeces/ammonia odours	If there is competent management on site then all odour monitoring and inspection will be carried out and the waste acceptance, transfer and storage processes managed to reduce the likelihood of odour occurring.	If the site manager is absent due to an un-planned absence then odour monitoring, site inspections and management of waste acceptance, transfer and storage processes will not be completed which could allow odours to develop and adversely affect identified local receptors.	N/A

3.3 Odour Control Assessment

Odour Control Measures			
Operation	Release point identified	Control Measures in Place	Implementation of Measures
Waste pre-acceptance	Fugitive emissions from waste collections	<ul style="list-style-type: none"> • Pre-acceptance audits are completed annually with all healthcare customers and will be reviewed at annual management review meetings. • Sales staff are trained to identify customer requirements align with PHS offerings and to educate the customer regarding correct use of waste receptacles to reduce the likelihood of non-contracted wastes being presented. • Drivers are trained to visually inspect waste at point of collection and to identify and reject any non-conforming wastes. 	<ul style="list-style-type: none"> • Incorporation of review of pre-acceptance audits completion rates at Annual Management Review Meeting • Training requirement included in Sales training package. • Training requirement included in Drivers Training Handbook.
Waste Acceptance on site	Fugitive emissions from vehicles containing waste	<ul style="list-style-type: none"> • Waste will only be accepted onto site in PHS or Mayflower vehicles • Gate checks will be completed by the competent manager on site who will confirm that the waste type and documentation match. Non-conformances will be dealt with as per the Corrective and Preventative Action process detailed in section 4.12. • Vehicles are scheduled to arrive at different times to avoid any backlog and queuing at the entrance to the site. • Weather patterns will be reviewed to identify any extended hot periods so that the frequency of disposal from site can be increased where required. • Vehicles are inspected daily and maintained as per vehicle maintenance schedules. • A Fire Risk Assessment will be completed every year to review fire safety arrangements on site. • Contingency plans will be in place to operate waste vehicles out of other PHS sites where access to the site is an-available due to an emergency. 	<ul style="list-style-type: none"> • Site managers will be trained to ensure that waste acceptance requirements are adhered to. • Vehicle scheduling will be managed by in-house scheduling team. • Adverse weather requirements will be incorporated into scheduling planning. • Training of relevant staff in regard to all procedures relating to the transfer of wastes on site. • Competent fire risk assessors will be appointed to conduct the fire risk assessments. • Site Business continuity plan will be reviewed at audit and annual management review meetings.

<p>Waste Transfer</p>	<p>Fugitive emissions from vehicle to waste container transfer or waste container to SCV / contractor vehicle transfer</p>	<ul style="list-style-type: none"> • Vehicle to container transfer will only take place in the designated area. • Waste container to SCV / contractor vehicle transfer will only take place in the designated area • Waste transfers will only be carried out by trained operatives to ensure spillages are minimised and dealt with effectively when they do occur. • Each van will hold a maximum payload of 260 kilograms and there will be up to 10 vans arriving at the site daily. • Spillage materials will be provided inside the Waste storage building to ensure prompt clear up of any overspill. • Waste transfers during windy periods will be avoided to prevent escape of waste. 	<ul style="list-style-type: none"> • All staff will be trained in regard to all procedures relating to the transfer of wastes on site. • Spillage materials will be purchased and placed in a lockable container in close proximity to the waste transfer area. • Site managers will be trained to ensure that waste transfer requirements are adhered to. • Waste transfer process will be overseen by competent site management.
<p>Waste Storage</p>	<p>Fugitive emissions from storage of waste on vehicles and in Euro bin waste containers</p>	<ul style="list-style-type: none"> • Maximum daily quantity of waste on site will not be allowed to exceed 4 tonnes. • Vehicles will be parked in dedicated vehicle parking area. • Vehicles will be locked when un-attended with the waste containment area always maintained in a closed position (except during transfer). • Waste will be contained in the sealed storage area on vehicle • Vehicles will be inspected daily and maintained on a 6-weekly preventative maintenance (PMI) schedule to prevent breakdowns. • Waste containers will be stored in a locked building. • Waste will not be stored on site for longer than 7 days. • Housekeeping will be maintained for all vehicles and at site (see section 4.8) to ensure that waste materials are not allowed to build up. • Capacity at waste recovery sites will be continually assessed to identify any bottlenecks. • Gritting and snow clearing company will be appointed to ensure that access to site is not lost. 	<ul style="list-style-type: none"> • Waste volumes will be monitored by the Site Manager to ensure that the daily 6 tonne limit is never breached. • Training requirement included in Drivers Training Handbook. • Lockable gates and security fencing has been installed. • All drivers trained regarding vehicle security and safe storage of waste. • Scheduling to ensure that vehicles are scheduled to adhere to the maximum waste storage duration with the aim to have all waste removed from site by Friday pm latest. • Drivers trained to conduct thorough inspections of their vehicles. • Preventative maintenance contractor appointed to carry out 6 weekly preventative maintenance visits. • Drivers will be trained to carry out regular housekeeping of their vehicle and the site. • Capacity availability incorporated into operation daily review calls
<p>Site Management - Monitoring & Inspection</p>	<p>Fugitive emissions from waste acceptance, transfer and storage of waste</p>	<ul style="list-style-type: none"> • Site will be managed by competent manager conversant with odour management requirements. • Site supported by TCM COTC holder. • Competent managers are available from 23 other clinical waste transfer stations operated by the PHS Group as well as the in-house Environment Team in the event of site manager being absent from work. 	<ul style="list-style-type: none"> • Site manager is provided with in-house PHS training, currently training to be a COTC. • Notification system in place to identify absentees by 10.00am in order that replacements can be appointed. • Weekly visits by TCM COTC holder to review waste operations.

4. Control Measures and Contingency

4.1 Planned Preventative Maintenance (Vehicle)

To minimise the potential for odorous emissions, Planned Preventative Maintenance (PPM) will be undertaken on all waste vehicles. A PPM Schedule will be maintained on site for all vehicles to reduce the likelihood of vehicle failure occurring and to mitigate the severity of any impact, including reducing the likelihood of odour emissions occurring.

The PPM regime will act as a mechanism to ensure that odorous releases do not occur by preventing or minimising the breakdown and failure of key odour abatement and control measures e.g. fast turnover of waste, sealed waste areas etc. and where breakdown does occur, reducing the time it takes to fix the problems that have occurred.

4.2 Vehicle Inspection

Vehicle inspections will be carried out every day by the driver via the daily vehicle defect sheet to identify any defects that affect the functionality of the vehicle and its ancillary equipment. All defects will be recorded along with the corrective action taken. All defects will be investigated to determine the root cause and prevent re-occurrence. In addition, a daily inspection will be carried out via the PHS Site Diary Requirements and Inspections Checklist to identify any leaks or releases from waste vehicles that are stored on site.

4.3 Transfer Surface Inspection

The transfer surface will be inspected daily via the PHS Site Diary Requirements and Inspections Checklist to ensure the surface remains impermeable.

4.4 Planned Preventative Maintenance (Waste Storage Building)

Planned Preventative Maintenance (PPM) of the waste storage building will be completed in line with PHS site maintenance procedures. This will include maintaining all doors, building fabric (including walls), floor, lighting, fire detection and alarm and emergency equipment (Spillage kits, Fire extinguishers, Fire blanket and First Aid equipment).

4.5 Waste Storage Building Inspection

Inspections of the waste storage building will be carried out daily by the site manager via the PHS Site Diary Requirements and Inspections Checklist. This will check for any defects that would affect the integrity and functionality of the building and any equipment, such as security & fire safety and impermeable floor surfaces. All defects will be investigated to determine the root cause and prevent re-occurrence.

4.6 Planned Preventative Maintenance (Secondary Containment Bund)

Planned Preventative Maintenance (PPM) of any secondary containment bunds will be completed in line with PHS site maintenance procedures or as required. This will include emptying of any liquids that may be present inside bund using the correct disposal methods.

4.7 Housekeeping

Vehicles

All waste vehicles will be cleaned in accordance with the following timescales: -

Daily (SCV only) – The waste compaction mechanism will be cleaned of any loose material using a scraping tool.

Daily (Vans) – The waste compartment on all small vans will be cleaned daily by their drivers.

Weekly (SCV only) – Any loose material that collects between the compaction mechanism and the bulkhead will be removed.

Every 2 weeks – An exterior wash of all vehicles will be carried out.

Site

The site will be inspected by the Site Manager daily and any identified loose waste material will be cleared up. The general transfer processes are low risk for site spillages, but housekeeping standards are stated and inspected regularly.

4.8 Communication and Complaints Procedure

All complaints relating to odour at site will be managed in accordance with the Odour Complaints Procedure detailed in **Appendix 2**. This will ensure that the site management will engage with neighbours to address any concerns and complaints they may raise including responding to their complaints effectively. The system will also enable data to be collected which will help identify odour source or events that can be mitigated against.

4.9 Training Requirements

Key roles which may have an impact on the odour generation will be identified and relevant training will be provided to ensure that odour mitigation measures are fully implemented and maintained in accordance with requirements.

4.10 Corrective and Preventative Action

All faults or deficiencies encountered in relation to the management of the site and its infrastructure will be fully investigated to identify the root cause and any contributing factors. Suitable corrective and preventative actions will then be identified to resolve the issue and prevent re-occurrence. Records will be maintained of all identified defects and the corrective / preventative action will be taken via the PHS Group Master Action Register.

4.11 Physical Control Measures

The following physical measures to control odour emissions from site will be in place at the facility:

For Offensive Waste storage:

- All offensive wastes will be stored in sealed bags placed inside closed containers.
- A maximum of 0.6 tonnes of offensive waste will be held in Euro Waste Bins at any one time.
- Waste containers will be inspected periodically in-line with the Site Diary Inspections and Requirements Checklist for leaks, damage and signs of excess odour. Non-conforming containers will be quarantined for disposal / repair or investigation.
- Waste containers will only be mechanically emptied by engaging the bin with the automatic bin lifting equipment of the SCV. No waste will be manually removed from any Euro bin waste containers, unless the container is deemed defective, in which case waste will be manually transferred to a new compliant waste container.

For Sharps Waste storage:

- All sharps wastes will be stored in sealed, rigid packages inside closed containers
- All sharps waste containers (empty and full) will always remain inside the building
- Waste containers will be inspected periodically in-line with the Site Diary Inspections and Requirements Checklist for leaks, damage and signs of excess odour. Non-conforming containers will be quarantined for disposal / repair or investigation.
- Sharps waste containers will be serviced a minimum of once per week by an approved authorised waste contractor.

4.12 Contingency Measures

The following contingency measures will be implemented by site management where a scenario has arisen that gives rise to odours persistently impacting on receptors beyond the facility boundary:

- Where there is an extended period of hot weather, the scheduling team will reduce the duration that waste is stored on the vehicles, particularly on a Friday where collections are not taken from site until the Monday by scheduling extra weekday collections.
- In the event of a vehicle compaction mechanism locking in the open position or a vehicle breaking down, we have contracts with mobile vehicle repair contractors who will visit the site to repair the defective mechanism.
- Spillage equipment and materials will be retained inside the waste storage building and near to the transfer area, to ensure a prompt clear up if a spillage was to occur.
- In the unlikely event that a spillage takes place that is beyond the capacity of the site team to clear we have appointed Adler & Allen, a 24/7 emergency response contractor to complete the clear up.
- Maintenance contractors will be available on a 24 hour call out basis to undertake repairs on site such as for faulty shutter doors.
- Where the site manager is unable to attend site due to un-planned absence, a suitably qualified manager from elsewhere in the company will visit the site to ensure that the requirements of this plan are discharged.
- Where an SCV driver is un-able to attend work due to an un-planned absence a suitably qualified agency employee will be utilised to ensure that the waste is removed from site.

5. Odour Monitoring

5.1 Introduction

The odour monitoring will assess the level of odour generation on site and the potential for off-site impacts so that pro-active mitigation can be undertaken. Odour assessments will be carried out by the site manager in accordance with the On-site and Off-site Odour Assessment processes below and as per the Odour Assessment Procedure in **Appendix 1**.

5.2 On-site Odour Assessment

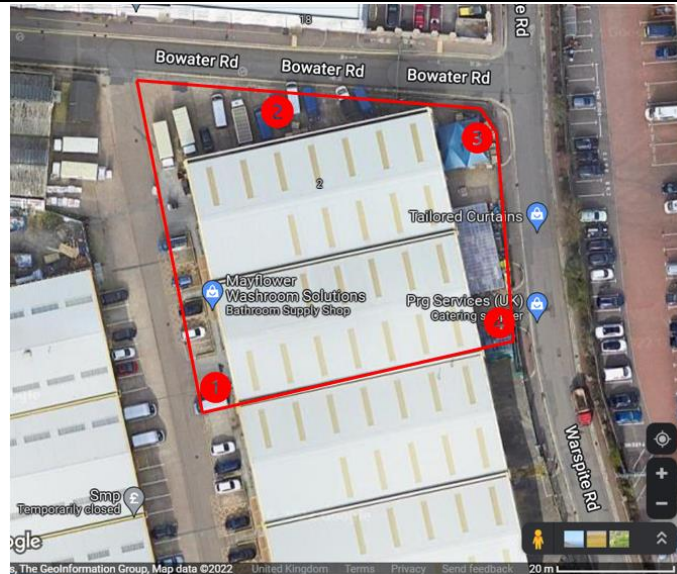
The on-site odour assessment considers receptors close to the site and the monitoring points have been selected close to these receptors. As a minimum, on-site odour monitoring will be undertaken twice per day by the site manager (am & pm) at each monitoring point (see Odour Monitoring Point Plan- below). The locations of the on-site monitoring points have been chosen for the following reasons: -

Monitoring Point 1 – To the SW of the site. This point represents upwind and is therefore a good point to identify 3rd party sources of odour.

Monitoring Point 2 – This is furthest from any waste and would give the best indication if any odours generated on site are prolific.

Monitoring Point 3 – NE of the site. This area represents downwind, as such would provide a good indicator of any odours likely to travel off-site. This is also closest to residential properties.

Monitoring Point 4 – SE of the site. This point is closest to the waste storage area and so is a good point to identify any odours generated on site.



Odour generation will be assessed on site by recording the odour intensity and the extent of the odour. The scales at which these are measured are detailed in **Appendix 1**.

If odour is detected at the site boundary at an intensity of 3 or above, the following steps will be taken:

1. An incident investigation will be carried out;
2. Where possible the source of the odour will be identified;
3. Based on the results of the investigation, relevant mitigation measures will be taken and will consider the following:
 - Removal of all waste from site;
 - Increasing the frequency of collection to reduce the time the waste is stored on site;
 - Conduct a deep clean of all waste vehicles;
 - Removal of broken-down vehicles from site;
 - Conduct a deep clean of the waste processing area;
 - Re-training of staff where deficiencies in the completion of the waste transfer process have been identified;
 - Employment of an external emergency response contractor (Adler & Allen) for any clear up beyond the capabilities of the site operational team e.g. flood, fire etc.
4. Further odour testing will be carried out to identify whether the source of the odour has been eliminated;
5. Further mitigation will be carried out until all odour has been eliminated;
6. The Environment Agency will be notified after the above measures have been implemented.

5.3 Off Site Odour Assessment

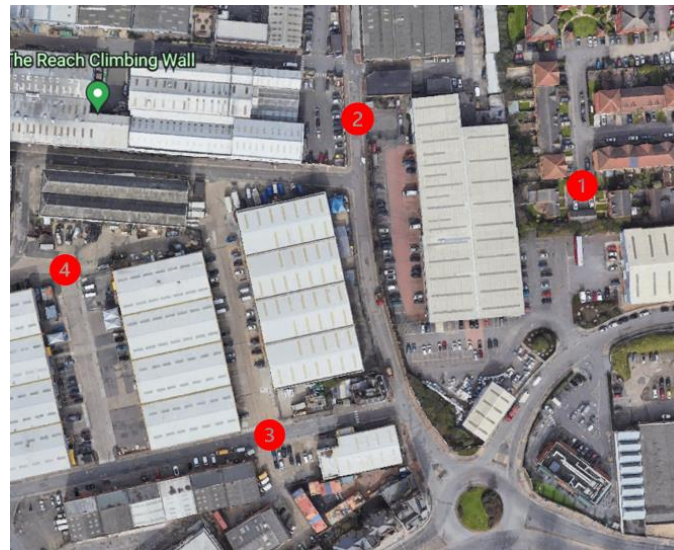
To provide re-assurance that odours from site will not adversely affect local receptors, in the event we identify odours on our on-site surveys, off-site odour monitoring will be carried out at the locations specified on the map below. An assessment at each monitoring point below will be completed by the site manager (or deputy). In the event that the site observes off-site odour that is attributed to our operation then we will instigate the steps outlined in **Appendix 1**, and also increase off-site odour monitoring to daily monitoring until we are certain the situation has been resolved, after which we will return to the normal practice. Results will be recorded in the Site Diary Requirements and Inspections Checklist.

Monitoring Point 1 – The end of Harlinger Street to the East of the site, this is representative of the nearest domestic receptors to the site and is downwind.

Monitoring Point 2 – On Warspite Road to the North of the site. This point represents some of the closest commercial receptors to the site.

Monitoring Point 3 – On Westfield Street to the South. This point represents upwind.

Monitoring Point 4 – On Siemens Road to the West of the site. This point represents some of the closest commercial receptors to the site and is downwind.



Odour generation will be assessed off site by recording the odour intensity and the extent of the odour. The scales at which these are measured are detailed in **Appendix 1**. Where odour is detected outside the site boundary at either an intensity of 3 or above the following steps will be taken;

1. Operations will cease immediately;
2. An investigation will be carried out to determine the source of the odour;
3. Based on the results of the investigation, relevant mitigation measures will be taken and will consider the following:
 - Removal of all waste from site;
 - Increasing the frequency of collection to reduce the time the waste is stored on site;
 - Removal of broken-down vehicles using an emergency breakdown contractor;
 - Conduct a deep clean of vehicles;
 - Conduct a deep clean of waste processing area;
 - Disciplinary Action/Re-training of staff where deficiencies in the completion of the waste transfer process are identified;
 - Employment of external emergency response contractor (Adler & Allen) for any clear up beyond the capabilities of the site operational team e.g. fire, flood etc.
4. Further odour testing will be carried out to identify whether the source of the odour has been eliminated;
5. Further mitigation will be carried out until all odour has been eliminated;
6. Any receptors affected by the odour will be notified of the results of the investigation and the actions that been taken to prevent re-occurrence;
7. The Environment Agency will be notified after the above measures have been implemented.

5.4 Documentation and Records

The above odour assessment will be carried out in accordance with the Odour Assessment Procedure – **Appendix 1** and Odour Monitoring Point Plans above, with the results recorded in the Site Diary Requirements and Inspections Checklist. Any odours detected at an intensity of 3 or more for either intensity or extent at the site boundary will be recorded indicating what actions have been taken.

Appendix 1 - Odour Assessment Procedure

Purpose

To assess the level of odour generation on site and the potential for off-site impacts so that pro-active mitigation can be undertaken.

Procedure

- The receptors close to the site have been selected and recorded on the odour management plan;
- Monitoring points will be located on each site boundary, where accessible;
- As a minimum, odour will be assessed at each on-site monitoring point twice daily (am/pm)
- At least one minute will be spent at each point and the odour in terms of its intensity and extent will be recorded using the following scales:

Odour Generation Assessment			
Odour Intensity		Extent of the Odour	
1	No detectable odour	1	Local and transient (only detectable in the facility or within the facility boundary during brief periods when wind drops or blows)
2	Faint odour (barely detectable, need to stand still and inhale facing into the wind)	2	Transient as above but detected outside of the boundary.
3	Moderate odour (odour easily detected while walking and breathing normally)	3	Persistent but localised.
4	Strong odour (strong but bearable)	4	Persistent and pervasive up to 50m outside the facility boundary.
5	Very strong odour (very offensive, possibly causing nausea, particularly if not accustomed to this odour)	5	Persistent and widespread (odour detected >50m from the boundary)

Note: Odour is assessed off-site when odour is detected at the site boundary at either an intensity of 3 or above and/or an extent of 3 or above.

Where off site odours are detected which could impact on receptors, perform the following:

- Complete an incident and corrective action form;
- Identify likely source;
- Mitigate the cause where possible;
- Inform the Environment Agency.

Odour Assessment Responsibilities

Site Management will be: -

1. Responsible for ensuring that all staff are aware of the need to monitor odour generation on site and to prevent or control odour emissions;
2. Responsible for identifying the odour assessment locations and marking these points on the Odour Monitoring Location Plan;
3. Responsible for ensuring that the odour assessment on the Site Diary Requirements and Inspection Checklist forms are up to date and is being completed correctly;
4. Responsible for reviewing the completed odour assessments on a six-monthly basis and reviewing the frequency for the monitoring, odour sources, and problems encountered;

All Staff are: -



1. Responsible for following the Odour Assessment Procedure;
2. Responsible for undertaking and completing the odour assessments as requested by site management;
3. Responsible for reporting abnormal odour sources to site management.

Records

Records of the completed Site Diary Requirements and Inspections Checklist will be kept in the Site Manager's office.

All odour monitoring records will be retained for a minimum of 3 years.

Correction of Non-Conformity

An investigation will be carried out via the Incident Reporting Form – WI57-05A and submitted to the PHS Quality, Environmental and Safety Team (QuEST) when odour is detected at the site boundary at either an intensity of 3 or above and / or an extent of 3 or above. QuEST will ensure that any required corrective / preventative actions are recorded in the PHS Group Master Action Register and monitored through to completion.

Training Needs and Updating Mechanisms

All staff required to undertake odour monitoring will receive training in relation to the correct procedure and the recording of results on the Site Diary Requirements and Inspections Checklist.

Training records will be held on site for a minimum of 3 years following an employee's departure from the business.

Any changes of the nature of the procedure and forms will require training to be updated.

Appendix 2 – Odour Complaints Procedure

Purpose

To manage communication with regulatory authorities and environmental complaints from third parties.

Procedure

- 1 Staff receiving complaints via the telephone or in person will record the complaint on the Complaints Summary Spreadsheet. The details of the complainant will be recorded for future contact:
 - i. Name;
 - ii. Address;
 - iii. Telephone Number.
- 2 The complainant will be asked to describe:
 - i. The time the odour was detected;
 - ii. Duration of the odour;
 - iii. How often it occurs;
 - iv. The nature of the odour i.e. what did it smell like?
- 3 The environmental conditions (weather) and activities being undertaken at the installation at the time of the odour complaint will be recorded using the Site Diary and Requirements Checklist.
- 4 The Incident Report Forms together with any letters of complaint or communication from authorities will be referenced appropriately and passed on to the Site Manager.
- 5 The Site Manager will determine if a complaint requires immediate action and to determine if it is a justified complaint. In either case an Incident Report form will be completed by the Site Manager.
- 6 The Site Manager will determine if communication with the authorities requires immediate action.
- 7 If a definite cause for the complaint is identified, appropriate corrective and preventative actions will be identified, and the QuES Team will be notified so everything can be recorded in the PHS Group Master Action Register.
- 8 The implementation of the identified corrective / preventative action will be monitored by the Site Manager and the QuES Team will be updated on successful completion so that the PHS Master Action Register can be updated. The complainant will be notified of the changes made and the complaint will be deemed to be resolved.
- 9 Where no specific cause can be found regarding the complaint, the Site Manager will monitor the issue for recurrence and a response will be issued to the complainant and the matter will be deemed as resolved.

Responsibilities regarding Odour Complaints

Site Manager will be:

- 1 Responsible for ensuring that all staff are aware of the need to manage complaints and communication with authorities;
- 2 Responsible for ensuring that corrective / preventative actions required following a complaint and / or communication with the authorities are implemented;
- 3 Responsible for ensuring that all relevant staff are aware of the Odour Complaints Procedure;
- 4 Responsible for ensuring that all staff designated to receive complaints are aware of the procedure and their role within that procedure.

All Staff will be:

- 1 Responsible for the following this procedure and for reporting instances where the procedure was not, or could not be, followed.

QuES (Quality, Environment and Safety) Team will:

- 1 Provide advice on appropriate corrective and preventative actions to address complaints;
- 2 Record reported corrective and preventative actions on PHS Master Action Register and monitor through to completion.

Records

All odour complaints will be recorded with any identified corrective / preventative action on the Complaints Summary Spreadsheets and the PHS Master Action Register.

Records of communication with the regulatory authorities will be stored in the Site Managers office and / or the sites network drive and will be kept for a minimum of 3 years.

Monitoring

Complaints and communication with authorities will be reviewed annually management review meetings.

Training Need and Updating Mechanisms

All relevant staff will be made aware of the Odour Complaints Procedure with Training Records held on site.