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| A close-up of several logos  Description automatically generated |
| Odour Management PlanHousehold, commercial and industrial waste transfer station  |

Unit 19 Bakers Park,

Cater Road,

Bishopsworth,

Bristol,

BS13 7TT

**Document Control**

|  |  |
| --- | --- |
| **Document Title** | Odour Management Plan |
| **Revision** | 1.0 |
| **Date** | 30-09-24 |
| **Document Reference** | ETM Caters Road OMP 30-09-24 |
| **Prepared For** | ETM Recycling Ltd |
| **Authored By** | MTS Environmental Ltd |

**Quality Control**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Revision No.** | **Date Revised** | **Amendments** | **Authored By** | **Sign Off** | **Approved By** | **Sign Off** |
| 1.0 | 30-09-24 | Original Draft | Shawn Almeida |  | Luke Bridges |  |
| 2.0 | 31-03-25 | Review and updates | Shawn Almeida |  | Luke Bridges |  |

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**Appendix I** – Site Drawings

**Appendix II** – Record Keeping Forms

# Introduction

## 1.1 General

1.1.1 This document has been prepared by MTS Environmental Ltd on behalf of the Operator. This Odour Management Plan (“OMP”) has been prepared for ETM Recycling Ltd for their waste installation facility at Bakers Park, Caters Road. This plan addresses the impact of odour and details the control measures implemented by ETM Recycling Ltd to mitigate this risk.

1.1.2 The site is operated in accordance with an Environmental Management System (EMS) and Fire Prevention Plan (FPP) along with other documents targeted to specific environmental considerations including this OMP.

1.1.3 This OMP will allow ETM Recycling Ltd to implement an action plan should the site operatives detect an odour presence, receive complaints from local business or residents and if the EA suspects odour emissions from the site during an inspection.

## 1.2 Site Location

1.2.1 The site is located at Unit 19, Bakers Park, Cater Road, Bishopsworth, Bristol, BS13 7TT). The approximate national grid reference for the site is ST 57464 68764. The site is located on an industrial park alongside multiple other commercial and industrial establishments. The nearest residential building sits ~105m away from the centre of the site.

## 1.4 Waste Types and Quantities

1.4.1 The waste types handled on site will be household, commercial and industrial wastes as defined in the Controlled Waste (England and Wales) Regulations 2012 and Section 75 of the Environmental Protection Act 1990.

1.4.2 The maximum amount of waste to be stored on site at any one time is 5,000 tonnes.

1.4.3 If the maximum storage capacity is reached then no further waste will be accepted until waste can be removed from the site and taken to a suitably permitted or exempt site.

1.4.4 There are four key storage areas as shown on the plan (plan ref - CR-MTS-DR-PL-002). All POPs related waste will be stored within the enclosed building, the two external bays will be used to store typical non-hazardous construction wastes.

1.4.4 The table overleaf details a summary of the main waste types which will be accepted and stored at the site, the rows highlighted in red are considered to be those wastes which have the potential to cause odour. The waste types shown below are those derived from the site permit.

**Table 1.1** - Waste storage table for stored odorous wastes

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Description** | **Common odourous EWC codes likely to be stored/ accepted on site** | **Storage type** | **Containment** | **Height/ width of firewall (m)** | **Max duration of storage** |
| POPs Storage | 20 03 01 / 20 03 07 | Unprocessed | Enclosed Building | Contained within the proposed building as shown in the plan | 6 months  |
| Shredded POPs | 20 03 01 | Shredded and sorted using over band magnets  | Enclosed Building | 6 months |
| Bale Storage | 20 03 01 | Baled POPs materials  | Enclosed Building | 6 months |
| Metal Skips | N/A – Not Odorous | Metals Recycling Skip | Enclosed Building | 14 days |
| Whole PVC  | N/A – Not Odorous | Outdoor Bays  | Outdoor covered storage bays with plastic on the front of the bays  | 3.2 m high, scaffold roof | 1 year |
| Shredded PVC | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 1 year |
| Wood | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |
| Paper and cardboard | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |
| Textiles | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |
| Concrete  | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |
| Glass  | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |
| Mixed construction and demolition | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |
| Soil and stones | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 7 days |
| Mixtures of concrete and bricks  | N/A – Not Odorous | Outdoor Bays  | 3.2 m high, scaffold roof | 14 days |

1.4.5 The site could also accept other common waste types with odorous potential which have not been listed in the table above. It is proposed if any of these wastes are discovered they would be stored in a segregated bay/container and removed from the site as soon as possible. Prior to hiring out a skip to the customer, the operator will request confirmation of the contents to be placed in the skip so in the event the below wastes are accepted, they can be stored and removed as detailed below.

**Table 1.2** – Permitted Waste Types

|  |
| --- |
| **European Waste Catalogue (EWC) – Commission Decision 2000/532/EC** |
| **Code** | **Waste type** |
| **02** | **WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING** |
| **02 01** | **Wastes from agriculture, horticulture, aquaculture, forestry, hunting and fishing** |
| 02 01 03 | plant-tissue waste |
| 02 01 04 | waste plastics (except packaging) |
| **03** | **WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE PULP, PAPER AND CARDBOARD** |
| **03 01** | **Wastes from wood processing and the production of panels and furniture** |
| 03 01 01 | Waste bark and cork |
| 03 01 05 | Sawdust, shavings, cuttings, wood, particle board and veneer other then those mentioned in 03 01 04 |
| **10** | **Wastes from thermal processes** |
| **10 11** | **Wastes from manufacture of glass and glass products** |
| 10 11 12 | Clean glass other than those mentioned in 10 11 11\* |
| **10 12** | **Wastes from manufacture of ceramic goods, bricks, tiles and construction products** |
| 10 12 08  | Waste ceramics, bricks, tiles and construction products (after thermal processing) |
| **12** | **Wastes from shaping and physical and mechanical surface treatment of metals and plastics** |
| **12 01** | **Wastes from shaping and physical and mechanical surface treatment of metals and plastics** |
| 12 01 01 | Ferrous metal filings and turnings |
| 12 01 03 | Non-ferrous metal filings and turnings |
| 12 01 05 | plastics shavings and turnings |
| **15** | **WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED** |
| **15 01** | **packaging (including separately collected municipal packaging waste)** |
| 15 01 01 | paper and cardboard packaging |
| 15 01 02 | plastic packaging |
| 15 01 03 | Wooden packaging |
| 15 01 04 | Metallic packaging |
| 15 01 05 | Composite packaging |
| 15 01 06 | Mixed packaging |
| 15 01 07 | Glass packaging |
| 15 01 09 | Textile packaging |
| **16** | **Wastes not otherwise specified in the list** |
| **16 01** | **End-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance (except 13, 14, 16 06 and 16 08)** |
| 16 01 03 | End-of-life tyres |
| **16 02** | **Wastes from electrical and electronic equipment** |
| 16 02 14 | Discarded equipment other than those mentioned in 16 02 09\* to 16 02 13\* |
| 16 02 16 | Components removed from discarded equipment other than those mentioned in 16 02 15\* |
| **17** | **CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)** |
| **17 01** | **Concrete,  bricks, tiles and ceramics** |
| 17 01 01 | Concrete |
| 17 01 02 | Bricks |
| 17 01 03 | Tiles and ceramics |
| 17 01 07 | Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06\* |
| **17 02** | **Wood, glass and plastic** |
| 17 02 01 | Wood |
| 17 02 02 | Glass |
| 17 02 03 | Plastic |
| **17 04** | **Metals (including their alloys)** |
| 17 04 01 | Copper, bronze, brass |
| 17 04 02 | Aluminium |
| 17 04 03 | Lead |
| 17 04 05 | Iron and steel |
| 17 04 07 | Mixed metals |
| 17 04 11 | Cables other than those mentioned in 17 04 10\* |
| **17 05**  | **Soil (including excavated soil from contaminated sites), stones and dredging spoil** |
| 17 05 04 | Soil and stones other than those mentioned in 17 05 03\* |
| **17 08** | **Gypsum-based construction material** |
| 17 08 02 | Gypsum-based construction materials other than those mentioned in 17 08 01\* |
| **17 09** | **Other construction and demolition wastes** |
| 17 09 04 | Mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03 |
| **19** | **WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE** |
| **19 12** | **Wastes from the mechanical treatment of waste (for example sorting, crushing, compacting, pelletising) not otherwise specified** |
| 19 12 01 | Paper and cardboard |
| 19 12 02 | Ferrous metal |
| 19 12 03 | Non-ferrous metal |
| 19 12 04 | Plastic and rubber |
| 19 12 05 | Glass |
| 19 12 07 | Wood other than that mentioned in 19 12 06\* |
| 19 12 08 | Textiles |
| 19 12 10 | Combustible waste (refuse derived fuel) |
| 19 12 12  | Other wastes (including mixtures of materials) from mechanical treatment of wastes other than those mentioned in 19 12 11\* |
| **19 13**  | **Wastes from soil and groundwater remediation** |
| 19 13 02 | Solid waste from soil remediation other than those mentioned in 19 13 01\* |
| **20** | **MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS** |
| **20 01** | **Separately collected fractions (except 15 01)** |
| 20 01 01 | Paper and cardboard  |
| 20 01 02 | Glass |
| 20 01 08 | Biodegradable kitchen and canteen waste |
| 20 01 10 | Clothes |
| 20 01 11 | Textiles |
| 20 01 36 | Discarded electrical and electronic equipment other than those mentioned in 20 01 21\*, 20 01 23\*, and 20 01 35\* |
| 20 01 38 | Wood other than that mentioned in 20 01 37\* |
| 20 01 39 | Plastics |
| 20 01 40 | Metals |
| **20 02** | **Garden and park wastes (including cemetery waste)** |
| 20 02 01 | Biodegradable waste |
| 20 02 02 | Soil and stones |
| **20 03** | **Other municipal wastes** |
| 20 03 01 | Mixed municipal waste |
| 20 03 07 | Bulky waste |

1.4.6 It must be noted that the above wastes are not routinely accepted or stored at the site and therefore do not have a specific storage location. The primary wastes that will be accepted at site for processing are POPs waste and PVC.

1.4.7 If any of the above wastes are discovered following tipping, they will be stored in the outdoor covered bays and removed from the site within 14 days (or as per designated within table 1.1).

1.4.8 Wastes will be removed sooner if a very strong odour (see section 6.1.1) is detected.

## 1.5 Site Management

1.5.1 The site has Technically Competent Managers (TCMs) who will be responsible for the general management of the site including the acceptance and handling of any potentially odorous wastes. They are on-site for at least 20% of site operational hours.

1.5.2 The company, through the TCM, will ensure that a nominated deputy is sufficiently trained and familiar with all site management documentation (which includes this OMP) in addition to all relevant company procedures who, in the absence of the TCM, will act the competent person.

# 2. Odour Risk Assessment

## 2.1 Methodology

2.1.1 This OMP has been completed to identify where the likely risks are in relation to surrounding land uses. This assessment has been used to inform Section 5.0 of this OMP with regard to specific odour monitoring procedures.

## 2.2 Odour Intensity

2.2.1 The table below highlights the intensity of the odour and provides a description by which to measure the intensity:

**Table 2.1** – Odour Intensity

|  |  |
| --- | --- |
| **Odour Intensity** | **Criteria** |
| Negligible | No detectable odour |
| Low | Faint odour (barely detectable) |
| Moderate | Moderate odour easily detected while walking, possibleinterference) |
| High | Strong odour (bearable, but offensive) |
| Severe | Very strong odour (this is when you really wish you weresomewhere else) |

## 2.3 Receptor Sensitivity

2.3.1 The table below outlines the receptor sensitivity to odour which will be used when determining nearby odour sensitive receptors:

**Table 2.2 –** Receptor sensitivity

|  |  |
| --- | --- |
| **Sensitivity of Receptor** | **Criteria** |
| Low | Industrial workplaces |
| Medium | Industrial workplaces / Residential >250 m |
| High | Residential areas <200m |

## 2.4 Sensitive Receptor Locations

2.4.1 The sensitive receptors in proximity to the site are shown on the sensitive receptor plan. The nearest residential receptors are situated on Headley Road which is approximately 105m north of the site.

## 2.5 List of receptors

2.5.1 The receptors listed from the SRP are also shown in the table below with approximate distances to these properties.

**Table 2.3** – Distances to Selected, Representative Sensitive Locations

|  |  |  |
| --- | --- | --- |
| **Boundary** | **Receptor** | **Approximate distance from centre of site (m)** |
| North / East / South/ West | Residential Properties | 105 – 395  |
| North / East / South/ West | Industrial / Commercial / Agricultural | 0 -1000 |
| East | Imperial Park Shopping Centre | 710 |
| North | Bishopsworth Road Allotments | 40 |
| West | St Peter’s Church | 375 |
| North-East | Headley Park Primary School | 310 |

2.5.2 Other receptors not shown in the above table are illustrated on the Cater Road sensitive receptor plan

## 2.6 Risk Matrix

2.6.1 The odour risk in any particular event can be established using the risk assessment matrix given in the table below.

**Table 2.4** – Risk matrix

|  |  |
| --- | --- |
|  | ***Sensitivity*** |
| **Low** | **Medium** | **High** |
| **INTENSITY** | **Negligible** | **NEGLIGIBLE** | **LOW** | **LOW** |
| **Low** | **LOW** | **LOW** | **MEDIUM** |
| **Moderate** | **LOW** | **MEDIUM** | **MEDIUM** |
| **High** | **MEDIUM** | **MEDIUM** | **HIGH** |
| **Severe** | **MEDIUM** | **HIGH** | **VERY HIGH** |

# 3. Potential Sources of Odour

## 3.1 POPs Waste – storage prior to processing

3.1.1 These wastes would be stored in the enclosed building shown in the site plan (CR-MTS-DR-PL-0002), the building has a roller shutter door which will effectively mitigate odour.

3.1.2 Whilst these wastes are not commonly associated with odorous emissions, they do contain some fine organic materials which can, in some cases, be attributed to a general “musty” odour. This smell is exacerbated following ingress of rainwater which occurs predominantly whilst the wastes are resident in skips/containers at the sites of production and prior to receipt at the site.

3.1.3 Whilst not common, these wastes have the potential to contain materials of a putrescible nature which are not identifiable until the load has been tipped at the site.

## 3.2 General Waste - residual wastes for landfill

3.2.1 These wastes are essentially the lighter, non-recyclable fraction of the “general waste” input which is residual following treatment of wastes on site which are stored in dedicated holding bays or transferred directly to an articulated trailer prior to removal from the site. Some of the finer organic materials are still likely to be present in the material, however, any putrescible materials (such as ‘black bag’ wastes) will have been identified, isolated and rejected during the sorting process. Therefore, these residual wastes for landfill have less potential to cause odour than the original mixed waste input described in Section 3.1 above.

## 3.3 Foul Surface Water

3.3.1 In the event of a rainfall incident, the external concreted area will drain by gravity to a series to a catchment pit, into the interceptor (with silt trap) and then into foul sewer.

3.3.2 In the event of a rainfall incident which leads to a blockage of the drainage system, an emergency drainage consultant would be called to the site and water pooling in the external concreted areas of the site would be pumped from site.

3.3.3 Some skips which have stood on producer’s sites for a long time often contain foul smelling water give rise to odour when tipped which will not be found until deposit in assuming the skip is sealed. The site infrastructure and drainage system would contain and remove any foul-smelling water.

## 3.4 Green wastes

3.4.1 Separated green wastes also have the potential to give rise to odorous emissions. It is important to note that the site is not a dedicated green waste handling facility – the green wastes produced at the site comprises almost entirely of branches (with/without leaves) and tree trunks separated from skips of other mixed wastes. This means that the propensity for odour is much less than that of a dedicated green waste handling facility which accepts green waste consignments consisting of branches, tree trunks, leaves, tree clippings and grass cuttings. The leaves, tree clippings and grass cuttings (not routinely accepted at the site) harbour the greatest potential for odour due to their susceptibility to aerobic composting and decomposition whilst in storage, where branches and tree trunks are not susceptible.

## 3.5 Processing of waste

3.5.1 The processing of waste may result in odorous emissions; however, the risk of this occurring is considered to be low. The treatment plant and other processing activities will be operated within an enclosed building ensures that potential odorous emissions are contained.

## 3.6 Background Odour Sources in the Area

3.6.1 Other potentially odour emitting operators, sites or areas are tabulated below in the table below.

**Table 3.1** - Other Odour Generating Operators

|  |  |  |  |
| --- | --- | --- | --- |
| **Company** | **Address** | **Type** | **Approximate distance & location from site boundary (m)** |
| Cater Business Park | N/A | Industrial Buildings  | South and East |
| Industrial Premises | N/A | Industrial/Commercial | Surrounding |
| Imperial Park Shopping Centre | N/A | Industrial / Commercial | 710m/ East |

3.6.2 There are also a number of industry and commercial premises situated to the north, east, south and west of the site; which will all have wheelie bins and/or skips stored externally which could generate a smell if not emptied regularly.

3.6.3 Odour release could also be the result of abnormal weather conditions, machinery breakdowns and human error.

3.6.4 In order to determine whether complaints are the result of activities from the site or from other nearby sites an odour complaints form will need to be completed in line with the company’s complaints procedure which is attached in Appendix II.

# 4. Odour Control

## 4.1 Pre-acceptance Checks

4.1.1 The driver collecting the skip will be trained (by site management) to identify any odorous loads in the skip and following an initial assessment, the driver will load the skip onto the wagon. If any odorous wastes are discovered, the driver would report back to site management who would contact the customer who would need to declare the contents. Site management would then decide whether or not to accept the waste. This should prevent any odorous wastes being accepted at the site.

## 4.2 Waste acceptance procedure

4.2.1 Strict waste acceptance procedures are in place at the site as shown below and the following details will be recorded for every load deposited at the site:

1. The date and time of delivery.
2. The name and address of the waste producer.
3. The detailed and accurate description of the waste including type, quantity (in tonnes and/or cubic metres) and EWC codes.
4. How the waste is contained e.g. loose, container type.
5. The carrier's name and address.
6. Driver’s name, signature and vehicle registration No.
7. Signature or initials of person(s) producing/ accepting/ inspecting/ carrying the waste.
8. Additional handling details/notes made by the driver after inspection of the load.
9. SIC code of the premises which produced the waste (where relevant).
10. Waste hierarchy declaration.
11. Information on previous treatment of the waste e.g. manual or mechanical.

4.2.2 During the initial check of the load the weighbridge, the skip will undergo a further visual inspection and if the load contains significant amounts of odour the load will be returned to source. If small levels of contamination are noted, the waste would still be tipped and odorous waste would be handpicked placed in a quarantine skip inside the building.

4.2.3 Once a mixed load of waste is tipped, contamination may still be present, so the banksman/ driver photographs the load before processing. This system is used to prove the presence of contrary items or misdescription, to enable the sales team to levy additional costs on the customer for their correct handling. In terms of plasterboard, if the customer refuses to segregate the plasterboard from other waste on the place of production, the skip will be subject to a more rigorous sort to pick out plasterboard and when delivered to the site and the operator would inform the customer of a penalty charge to prevent a reoccurrence.

## 4.3 Site Operations

4.3.1 Limiting odour from the waste recycling facility can best be achieved through employing effective site management and good general practice. It is much easier to minimise odours in the first instance rather than dealing with problems when they occur.

4.3.2 This section addresses the general site management guidelines and identifies specific procedures to mitigate against odorous emissions.

## 4.4 Receiving Wastes

4.4.1 Rigorous control of wastes delivered to the site is required, with contaminated or odorous wastes (stored too long) rejected in line with the procedures in the EMS and EP. Trained competent staff are in place to recognize odorous material and to inspect incoming wastes as it is deposited at the site. Malodorous waste will be returned to the producer or sent to another authorised facility for treatment. Waste suppliers and HGV skip vehicle drivers are required to ensure that only acceptable material is brought to site to minimise the incidence of rejection. If staff continually bring odorous waste to the site, the operator will initiate their three-strike rule:

1. Additional waste type recognition training (see EMS)
2. A verbal and written warning
3. Refused entry into the site or potentially disciplinary.

4.4.2 The site may accept was from other transfer stations so it is difficult to provide an average age of waste but upon reception of waste after visual checks, any loads which contain significant amounts of odorous waste will be rejected as above.

4.4.3 **Age of wastes** - ETM Recycling Ltd hire out skips to customers for a maximum of 2 - 3 weeks meaning that the waste received is unlikely to generate significant odorous emissions unless upon tipping. If unauthorised waste is discovered by trained staff following tipping, then actions shown in sections 6.1 and 6.2 will be followed.

4.4.4 These mixed skip wastes are not routinely accepted at Cater Road recycling facility, they are initially processed and segregated at another ETM site, before appropriate fractions are transferred to Cater Road for processing. In the event that these wastes are accepted to site the waste will be subject to the acceptance measures detailed.

4.4.5 Incoming waste will be processed as soon as practicably possible to ensure that any other malodorous (or potentially malodorous) wastes contained within the incoming mixed waste which were not identified during deposit.

## 4.5 Storage of Wastes

4.5.1 The site may store the following wastes which could be regarded as those which could present odour issues at the site and the table below details how they will be handled and stored on site:

1. Incoming mixed waste – (20 03 01, 20 03 07) – Stored in enclosed buildings
2. Separated Metals Waste – Metals Skip
3. Residual landfill waste – (19 12 12) – Outdoor Storage Bays (Enclosed)
4. RDF processed and shredded (19 12 10) (Shredded POPs Stockpile)
5. RDF – baled (19 12 10) – Refer to Bale Storage Area

4.5.2 The wastes listed above are the primary waste inputs that will be processed on site. Other wastes accepted on site are typical construction and demolition related wastes, which are not thought to cause odour issues.

**Table 4.1** - Waste storage / monitoring for odorous wastes on site

|  |  |
| --- | --- |
| **POPs Storage –** Incoming Bulky Waste | * The waste in this stockpile is the main material processed on site. This is segregated at another Ashton Vale site prior to being transferred to Cater Road, as a result this is thought to be free of any major contaminants.
* The waste is tipped inside the enclosed processing building in the POPs Storage Area.
* This is processed through the shredder on a conveyor belt, any metals which are present are separated and deposited in the metal skip.
* Any waste identified after tipping which has the potential to cause odours i.e. a black bin bag, food waste, green waste, packaging with residues will be removed from the pile and stored in a mobile rejected waste container. The container would be removed off site within 48 hours.
* Any large visible recyclables will be hand-picked or scooped using the loading shovel and placed into one of relevant storage bays at the site.
* The stockpile is dynamic and, given the material throughput of the plant on site but 5 days has been provided in the event of any extenuating circumstances. If the wastes exceed a period of 48 hours, the site will increase monitoring to three times every 12 hours.
* If odorous waste is identified during monitoring, the site will investigate, find the root cause and quarantine the odorous load in sealed containers inside the building which will be removed from site as soon as practicable.
 |
| **Shredded POPs Storage Bay** | * The waste in this stockpile is bulky waste following the shredding process and extraction of any recyclable/recoverable material.
* This is stored in an enclosed processing building to prevent any malodour. The stockpile is stored on site for a maximum of 6 months (worst case), but is processed further using the baler before being transferred to an appropriately permitted facility.
* This stockpile will be subject to daily monitoring, If odorous waste is identified during monitoring, the site will investigate, find the root cause and quarantine the odorous load in sealed containers inside the building which will be removed from site as soon as practicable.
 |
| **Metals Skip** | * Metals waste recovered from the processing of bulky wastes will be stored in a skip within the enclosed building.
* The areas surrounding the skip will be subject to daily monitoring, If odorous waste is identified during monitoring, the site will investigate, find the root cause and quarantine the odorous load in sealed containers inside the building which will be removed from site as soon as practicable.
* Metals skip waste is to be stored on site for no more than 14 days, if odourous waste is identified within the skips these will be removed at earliest practical opportunity, typically 48 hours.
 |
| **External Storage Bays** – Residual (non- recyclable) waste | * These bays will be used for the storage of other wastes permitted to be accepted on site, specifically PVC, however they may be used when required to hold other segregated wastes such as construction and demolition wastes.
* No wastes that have the potential to be odorous will be stored in these bays.
* These wastes will be stored on site temporarily and as per the designated time periods stated in Table 1.1.
* The bays will be subject to daily monitoring procedures, on identification of any malodourous waste these will be removed from site at the earliest practical opportunity.
 |
| **Bale Storage Area –** Baled RDF | * All waste is stored in bales and no free waste is stored inside the covered building.
* The area will be visually monitored by staff 24/7 and once it reaches capacity or every 12 hours, the waste will be removed from site.
* Baling reduces the odour from the waste and storage inside the covered building prevents odour escaping from the building.
 |

4.5.2 The above wastes are the primary wastes to be processed at Caters Road, if any other odorous wastes shown in section 1.4.5 are accepted, they will be tipped, sorted and stored inside the building. The storage of waste following assessment will be done so in a sealed container and removed from the site within 48 hours.

4.5.3 Waste will be stored to ensure compliance with the EP and as detailed in the EMS, FPP and this OMP document.

## 4.6 Loading and Transport of General Wastes

4.6.1 In all cases, the drop heights of mixed waste will be kept to an absolute minimum. All waste vehicles entering/leaving the site containing light and/or potentially malodorous wastes will be securely sheeted or enclosed at all times to ensure that odour pollution is not caused beyond the site boundary via queuing collection/delivery vehicles.

## 4.7 Housekeeping

4.7.1 Regular cleaning of operational areas (i.e. minimum once daily) such as roads, drainage channels and holding tanks will be carried out using mobile plant and water supplies to discourage odour generation from old degrading materials. Other than the use of a road sweeper which may be used to remove finer particles, all mobile plant is available to the site. Additional plant can be sourced instantaneously from the surrounding industrial estate. The odorous materials will then be placed in a sealed rejected waste skip which will be removed every 48 hours or sooner if staff detect odorous emissions following daily inspections. Site management will delegate these tasks to operational staff and seek radio or written confirmation that the tasks have been complete and whether any odours have been detected.

4.7.2 In addition to daily visual monitoring of the site; site management will monitor the integrity of the building on a quarterly basis. In the event that there are any issues resulting in odour escaping from the building then maintenance works will be carried out within 48 hours.

4.7.3 A housekeeping schedule has been produced overleaf and site management will train operational staff via toolbox talks every 6 months or sooner if site operations change to ensure the following housekeeping schedule is strictly adhered to.

* + Avoid fugitive odorous emissions through good housekeeping.
	+ Maintain a clean, well-organised site.
	+ Jet spray storage bays daily.
	+ Jet spray and disinfect storage bays once per week.
	+ Clean equipment that has been in contact with odorous materials.
	+ Carry out a deep clean of the reception / processing building once a quarter and record this in the site diary.
	+ Concrete floors draining appropriately and slopes / catchments pits are functioning.
	+ Floors are sealed to prevent absorption and adsorption of odour producing residues.
	+ Solid waste storage containers shall be robust, easily cleanable, designed for safe handling, and constructed to prevent loss of wastes from the equipment during storage. If such equipment is used to store other wet or liquid producing wastes, or wastes composed of fine particles, such equipment shall in all cases be non-absorbent and leak- resistant.
	+ Periodically treat drainage systems with bacteria-inhibiting solution.

## 4.8 Site Infrastructure

4.8.1 The waste processing and storage building is not operated under negative pressure and has a potential odour release point via the building’s roller shutter door opening. However, the site has alternative measures in place to ensure odours do not escape beyond the buildings or boundary.

*Alternative Measures:*

* + Monitoring – The site carries out olfactory/sniff assessments which have been outlined further in Section 5 of this OMP.
	+ Stock rotation – All potentially odorous wastes will be stored within the enclosed building or covered holding bays, both of which will undergo continuous monitoring. The bales are stored within the bale storage area shown on the plan. The site follows the first in, first out principle which ensures that the oldest wastes are removed from the site first and aren’t left to stand for a long period of time.
	+ Housekeeping – The site will carry out regular cleaning (minimum once daily) of all operational areas at the site paying special attention to storage areas for odorous wastes. The site has a housekeeping schedule shown in section 4.6.
	+ Storage procedures – All odour wastes are contained within enclosed areas. Any wastes with the potential to cause odour will not be stored for longer than 12 hours, 48 hours if identified and quarantined and 5 days only in extenuating circumstances ensuring that wastes are not left to stagnate; in most cases potential odour generating wastes will be cleared from the site by the end of the working day. Baled wastes have a much reduced odour potential due to the baling process.

4.8.2 Site management will visually monitor the building on a daily basis and will carry out quarterly monitoring of the building integrity. In the event that there are any issues the building maintenance/repair works will be carried out within 48 hours.

## 4.9 Liaison with Neighbours

4.9.1 In the extreme event of significant but temporary odour releases outside normal operations, immediate neighbours within 200m will be contacted via phone call or face to face to advise them of the situation and the action being taken. The EA will also be notified.

4.9.2 An open-door policy will be encouraged by the operator to enable any complaints from neighbouring premises (if received) to be dealt with immediately. The complainant will then be supplied with remedial actions taken and any procedures or measures put in place by the operator to reduce or ideally eradicate the likelihood of a subsequent complaint.

4.9.3 If any odour complaints are received, the complaint will be assigned to an operative familiar with the sites operation who will complete a 'complaints and events log' and detailed individually on the complaints form (in Appendix II), both of which will be kept for inspection on request by the EA. Details of information to be completed are dates, nature of complaint, weather conditions at the time of the complaint, investigation details, action taken and a signature (as a minimum). Odour complaints will be investigated and responded to within 24 hours and suitably reviewed by the site manager who is ultimately responsible.

4.9.4 The operator would also be required to make a note of any unavoidable events plant/equipment malfunctions in the site diary, rather than just actual complaints received. This will ensure that if complaints are received retrospectively from either the Council/EA or directly, any circumstances which led to that complaint as a result of elements outside of the operator’s control would be able to be attributed to the cause of the complaint. If there are significant odour releases outside normal operations, the operator will cease operation, investigate and resolve the issue before continuing.

## 4.10 Training

4.10.1 All employees and sub-contractors of ETM Recycling Ltd involved with potentially odorous materials and their handling will receive training in Sniff testing (including office/admin workers allocated to undertake the Sniff test) and complaint reporting (management and operations staff).

4.10.2 Training will be given to all relevant persons to make sure they are competent in completing olfactory assessment survey forms, odour complaint report forms and the odour diary to ensure sufficient monitoring and reporting of odours can be carried out.

# 5. Monitoring

## 5.1 Monitoring Odorous Releases

5.1.1 On-site – As there are up to 5 members of staff working at the site, it is considered at least one of these staff members would be able to detect if any odour is present on site, this would be usually office staff who are not continually exposed. If a non-operational staff member identifies an odour, they will report this to site management and then the procedure shown in section 5.2.3 will be followed. This would ensure the odour problem can be investigated on site prior to a potential odour complaint.

5.1.2 ETM Recycling Ltd will use the following techniques to monitor odorous releases if a complaint has been made to the company:

1. Olfactory Monitoring
2. Complaints Monitoring
3. Odour Diaries (when necessary)

## 5.2 Olfactory Monitoring

5.2.1 The site supervisor will monitor odour around the entire site perimeter at least twice daily and an Odour Diary will be completed (Appendix II). The monitoring will be carried at intervals out while the site is operational, additional monitoring may be carried should there be reason to suspect a potential odour problem (potentially malodorous waste onsite, foul surface water issues etc.).

5.2.2 The results of monitoring exercises and any remedial action taken will be entered into the log book which is available for the EA to inspect upon request. The name of the site supervisor will be stated in the site’s diary / inspection form for each day of operation along with notes on weather including precipitation, temperature, wind speed and direction (from Met Office information).

5.2.3 Should the monitoring conclude that a certain activity/waste is giving rise to odour which is migrating offsite, steps will be made to reduce the impact of this activity, which may include, but is not limited to; removal offsite to a suitably permitted facility, faster processing/lower storage rates, pumping and removal of standing surface water, removal of waste to a more suitable area of the site etc.

5.2.4 The site supervisor will be suitably trained to carry out these duties. Further information regarding training and technical competence is provided within the site’s EMS.

5.2.5 Prior to carrying out a routine odour check, the relevant member of staff will vacate the site for a period of 30 minutes (in addition to 5.3.2 below) and then carry out the assessment on their return to ensure they are not desensitised to the odour.

## 5.3 Odour Monitoring Procedure

5.3.1 Sniff testing will be carried out by trained; competent staff daily (at least twice) should the management have reason to suspect odorous emissions from the site or complaints received. Assessments will be carried out both routinely and in response to specific complaints.

5.3.2 The assessor should not:

1. Smoke or consume strongly flavoured food or drink for at least 30 minutes before the assessment.
2. Consume confectionary or soft drinks immediately before the assessment.
3. Apply scented toiletries, such as perfumes or aftershave immediately before an assessment.

5.3.3 Starting points of assessments should be downwind of the site, progressing towards the site boundary and then away from the site in an upwind direction. The person carrying out the assessment should walk slowly and breathe as normal. The points have not been provided on the site plan due to the regular variations in wind speed and direction.

## 5.4 Complaints Monitoring/Procedure

5.4.1 All odour complaints will be investigated promptly, and appropriate remedial action will be taken if the complaint is validated e.g. remove odorous materials off site as soon as reasonably possible. Complaints will be recorded on the form found in Appendix II.

5.4.2 Complaints to the EA will also be recorded and taken into account. An olfactory assessment survey will be carried out from where the complaint was made and from any convenient locations between the complainant/receptor and the site so that the complaint can be validated or rejected.

## 5.5 Odour Diaries

5.5.1 If members of the local community are frequently reporting odour issues in the vicinity, then they will be asked (if agreeable) to keep an odour diary. This will help to build up an account of when the odour occurs, their location and the site operations that were being carried out at the time, as well as the duration of the activities taking place. Any obvious problems can then be addressed.

# 6. Contingency Plans

## 6.1 Contingencies and Emergency Plans

6.1.1 In accordance with the Environment Agency’s guidance on OMPs contingency plans have been prepared to react to situations ‘where monitoring indicates that a potential odour source is not completely under control, meteorological conditions are unfavourable or that adverse impact has occurred’. Odours will be based on a 1 – 5 scoring scheme as shown below and in the odour diary shown in Appendix II:

* + 1 = No detectable odour
	+ 2 = Faint odour (barely detectable, need to stand still and inhale facing into the wind)
	+ 3 = Moderate odour (odour easily detected while walking & breathing normally)
	+ 4 = Strong odour
	+ 5 = Very strong odour (possibly causing nausea depending on the type of odour)

6.1.2 If odours based on 3-5 are detected at the site boundary, other monitoring point or a complaint is received, the following remedial procedures will be taken:

1. Firstly, identify the odour source; is it from:
	* 1. Site operations; or,
		2. An off-site source (e.g. agricultural spreading operation)
2. If on site:
	* 1. Report incidence to the site or technically competent manager;
		2. Identify the point of release of the odour;
		3. Identify the cause if the release i.e. machine breakdown, leakage, etc.;
		4. Identify a solution;
		5. Implement a solution;
		6. Carry out olfactory tests to check if fix is working;
		7. Record actions taken on relevant forms and site diary as required by this plan.

6.1.3 Then actions taken if odour is being produced on site will be:

1. Normal Operations: The offending odour will be traced and the reason for the cause of the problem will be investigated. Once solutions are in place, olfactory monitoring will be carried out to ensure the solutions put in place are having the desired effect.
2. Abnormal Conditions: Adverse weather conditions can promote generation of odour and inhibit its effective dispersion e.g. hot weather with little wind, resulting in increased risk of odour to receptor locations. If this happens odour causing operations will cease until more favourable meteorological conditions return.

## 6.2 Corrective Actions for Various Situations

6.2.1 The table below summarises the various problems likely at the site and the standard responses available, which will assist in reducing odour potential.

**Table 6.1** – Corrective actions

|  |  |  |
| --- | --- | --- |
| **Process** | **Problem** | **Corrective Action** |
| Waste Delivery (Tipping) | Deposit of odorous load | Isolate material. Reject material giving rise to odour. |
| Stored wastes (general) | Odorous emissions detected | Olfactory/sniff test required to pinpoint source. Ensure procedures outlined in Section 5 are adhered to in full. Remove malodorous waste to a suitably permitted facility. Implement liaison programme if risk deemed HIGH or VERY HIGH i.e., strong or severe asshown in Table 2.1. |

## 6.3 Staff Shortages/Human error

6.3.1 In the event of unforeseen staff shortages arising from illness, suspension or no shows, the operator will make a judgement whether to reduce the number of incoming loads, thus reducing processing frequency and storage of potentially odorous wastes. The operator will then seek further employment within a timely manner to ensure the site can continue to operate at its required capacity.

6.3.2 All staff are trained and undergo toolbox talks every 6 months (or sooner if operations change) to reduce the impact of human error. In instances where a human error has caused to an odour issue, the site may suspend operations until the issue has been rectified and the member of staff will be warned and re-trained accordingly.

## 6.4 Weather conditions / emergency situations

6.4.1 The site will set up a notification alert system with the Met Office to receive updated weather information for the following weather conditions which could cause a potential on or off-site odour issue:

* + High winds >30mph which could exaggerate an odour
	+ Droughts or periods of hot weather exceeding 3 major dry days which could lead to water shortages, hosepipe bans and excessive odour
	+ Flooding

6.4.2 The site would install the following preventative/contingency measures (in addition to control measures in Section 4) to avoid serious odour issues as a result of the above weather conditions or fire incident:

* + Stockpiles containing any odorous waste may be covered with tarpaulin in the event ongoing procedures are not considered effective.
	+ Roller shutter doors closed on the bale storage building.
	+ Contact an additional haulier to help remove the waste on site.
	+ Suspend any further waste deliveries to the site.
	+ Contact the Environment Agency to agree a suitable course of action.
	+ Contact members of the public or any other persons who could be affected by the odour and advise of the contingency measures the site has employed and timescales when the odour is likely to be reduced.

## 6.5 Operational failure

6.5.1 The manager will be contacted by staff in the event of any operational failure such as the breakdown of plant, systems or equipment and will decide whether operations are to continue or be suspended prior to corrective action being taken. Serious operational failures, which result in the closure of the site, will be recorded in the site diary.

6.5.2 All repairs to site security will be made within on the discovery of the damage if possible and the site will be made secure until the repair has been carried out.

6.5.3 Any major defects found during the daily site inspection which are likely to lead to a breach of permit conditions will be repaired by the end of the working day in which they are found, where possible. If a repair is not possible by the end of the working day and a potential breach of permit conditions may occur, the EA will be contacted to agree a suitable timescale for repair.

6.5.4 All defects and problems likely to give rise to odour will be recorded on the form ETM/RF/4 or the operators own recording procedures with repairs/solutions being carried out immediately; neighbours will be alerted if the problem cannot be rectified immediately and provided a timescale when the problem will cease.

## 6.6 OMP Management

6.6.1 This OMP will be reviewed at least annually unless it becomes apparent that the activities are giving rise to pollution outside the site due to odour, in which case it will be revised within 7 days and a copy forwarded to the Environment Agency for approval before implementation. It may also be revised upon request from EA, should the permit be varied, transferred etc.

## Appendix I – Site Drawings



## Appendix II – Record Keeping Forms