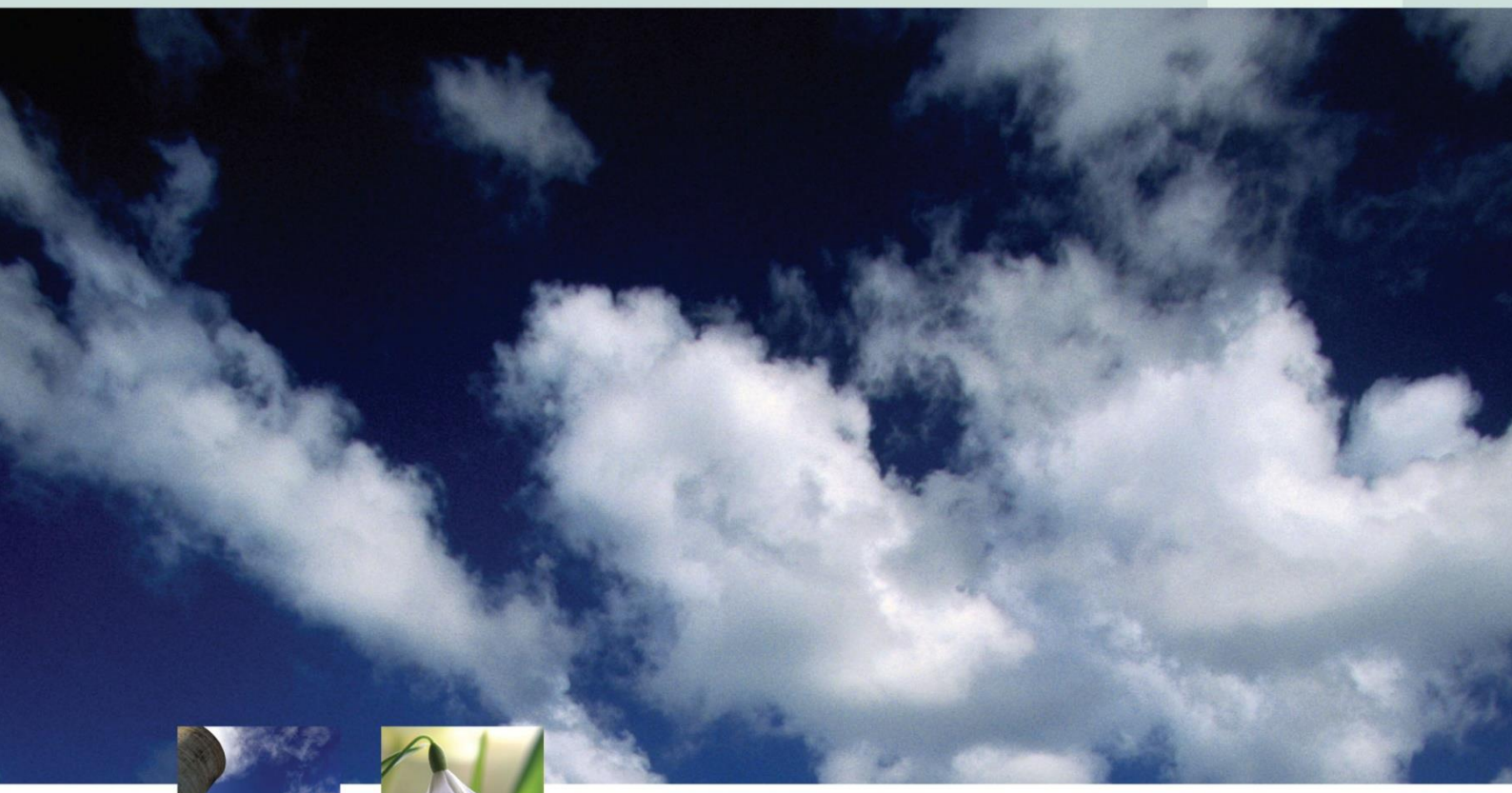

ODOUR MANAGEMENT PLAN

Biomass UK No.4 Ltd
Plymouth EfW Facility

Prepared By:
Sol Environment Ltd

Date:
September 2023

Project Ref:
SOL_21_P024_COG

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CONTENTS

1 ODOUR MANAGEMENT PLAN

1.1 Introduction

This document has been prepared by Sol Environment Ltd on the behalf of Biomass UK No.4 Ltd (in support of its Environmental Permit Application) for the proposed energy from waste facility at their site at Units 21-29, Belliver Way, Roborough, Plymouth, Devon, PL6 7BW.

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.

1.2 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 the measures by which odour emissions will be controlled and prevented, namely by:

- Receipt and Management of Odorous Materials;
- 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.

1.3 Status of the OMP

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

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

2 SITE BACKGROUND

2.1 Site Setting

Biomass UK No.4 Ltd (the 'Operator') intend to operate an energy from waste facility at their site at Units 21-29, Belliver Way, Roborough, Plymouth, Devon, PL6 7BW. The facility will be regulated in accordance with the requirements of the Environmental Permitting Regulations, under the conditions of an Environmental Permit.

The 2.13 acre (0.86 hectare) site is in Belliver Way, Roborough, around five miles north of Plymouth. It comprises a 3,700 m^2 industrial/warehouse unit, completed in 2011 and extended in 2017, which houses the facility and office accommodation.

The location of the subject Site is shown on Annex A1 of the main application, centred at approximate National Grid Reference: SX 49890 62378. The site layout is shown in Annex A2 of the main application.

Biomass No.4 intends to upgrade the existing facility and make changes to the combustion technology and boiler to enable the plant to operate reliably on a wider range of fuels to include refuse derived fuels (RDF), Solid Recovered Fuels (SRF) as well as mixed (PAS111:2012 Grade A – C) non-hazardous waste wood feedstocks.

The Facility comprises a single-line incineration process, including a single thermal oil boiler serving an ORC turbine. The turbine is designed to generate a gross electrical output of 4.64 MWe of electricity. The plant has a corresponding parasitic load of approximately 0.75 MWe resulting in a net electrical export of approximately 3.9 MWe.

The Facility will have the capacity to export up to approximately 10 MWth of heat, subject to configuration and available offtake partners.

The Installation has been designed to process an approximate annual throughput of 50,000 tonnes of waste feedstock per annum, with a maximum potential of 60,000 tonnes per annum assuming the lowest acceptable NCV.

The surrounding area is a mix of residential to the south and east (Roborough) and woodland to the north and west with farmland beyond. The Business Park houses a number of industrial neighbours including Toshiba Carrier (UK), Burts Potato Chips, Devon and Cornwall Food Action, and BD Vacutainer Systems.

The site is immediately bound to the south by Belliver Way, to the east and west by industrial units and to the north by Haxter Close with steeply sloping topography down into the wooded valley of Tamerton Foliot Stream which is located approximately 110 m distant.

The nearest residential areas to the site are on Lady Fern Road in Roborough which lies approximately 100 m southeast of the site.

With this in mind the site is not considered to be sensitive in relation to potential odour impacts. Details pertaining to potential odour receptors which have been considered in detail within the OMP are provided in Section 2.7.

2.2 Facility and Process Overview

The principle components of the process are as follows:

- *Waste Acceptance and Reception:* Refuse Derived Fuel (RDF) will be delivered to the Reception Hall. Waste is delivered and unloaded in the internal tipping area where a visual inspection will take place. The delivered RDF feedstocks will then be transferred to one of the internal storage bunkers. RDF is typically processed and used within 4 days of arrival onsite.
- *Reagent and raw material tanks and silos:* The Facility will receive deliveries of RDF by road. The Facility will also use consumables including sodium bicarbonate, activated carbon, urea, auxiliary fuel (mains gas or fuel oil depending on availability), water treatment chemicals and various maintenance materials as required (oils, greases, insulants, antifreezes, welding, and firefighting gases etc).
- *Residue Handling & Storage:* The initial handling and quenching of the IBA at the Facility will be undertaken in an enclosed building. In addition, any overflow from the ash quench will be contained in the process effluent drainage system, reused, and hence will not be released off-site. All Air Pollution Control Residues (APCR) is stored within sealed, fully contained skips
- *Combustion Process:* The combustion process will utilise a conventional moving grate technology which will agitate the fuel bed to promote a good burnout of the RDF and a uniform heat release. The moving grates will enable the RDF to be moved from the feed inlet along the grate to the ash discharge. The combustion chambers will be designed to ensure that the exhaust gases are raised to a minimum temperature of 850°C, with a minimum of 2 seconds flue gas residence time.
- *Start-up Burner:* Auxiliary start-up burners are mounted to the grate combustion system to maintain temperature and to enable start-up and shut down.
- Heat Recovery: The boiler contains the organic working medium (thermal oil) is pre-heated in a regenerator, then heated and vaporized through a heat exchanger with a thermal oil loop.
- *Organic Rankine Cycle (ORC) turbine/generator set:* The vapour is expanded in a turbine which drives an electric generator to generate electricity. Once the vapour has passed through the turbine, it passes through the regenerator that is used to initially pre-heat the organic working medium, increasing the overall efficiency of the process through internal heat recovery.
- *Air Pollution Control and Flue Gas Cleaning:* The abatement of oxides of nitrogen (NOx) will be achieved by careful control of combustion air, including flue gas recirculation, and an SNCR system. Sodium bicarbonate and powdered activated carbon (PAC) will be injected into the flue gases in a reaction chamber following the boiler to abate acidic gases, heavy metals and any remaining dioxins and furans.

2.3 Competent Operator

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

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

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

2.4 On-site Odour Sources

Source Materials

The Installation has been designed to process a maximum of 50,000 tonnes of pre-prepared Refuse Derived Fuel (RDF) per annum. All reception and unloading activities take place within the reception hall.

To avoid any odour emissions from the building, the building is kept at slight negative pressure. An air extraction system will be in place resulting in odorous air within the building being thermally destroyed by the combustion system.

Entry to the waste reception area is via electrically controlled fast acting roller shutter doors. Vehicles will enter backwards and discharge the waste onto the floor of the waste reception hall. The doors are complete with air curtains to prevent any odorous emissions escaping during the unloading of waste. Once unloaded the vehicles will exit the building and the roller shutter doors are closed.

The site will have strict waste acceptance procedures resulting in no odorous RDF being accepted on site.

Releases

The only potential odour release from the facility is during the reception of RDF, should any of the control measures fail.

2.5 Off-site Odour Sources

The only neighbouring industrial process considered to have potential for odour issues is the adjacent Burt Potato Chips.

2.6 Nearest Sensitive Receptors

The nearest residential areas to the site are on Lady Fern Road in Roborough which lies approximately 100 m southeast of the site.

Please refer to Figure 2.1 overleaf which shows the nearest receptors.

Due to the proximity of the nearest residents, the site could be considered to be moderately sensitive in relation to odour. However, the highest level of odour control and mitigation has been applied to site to ensure that all potential odour releases are prevented, therefore reducing this risk.

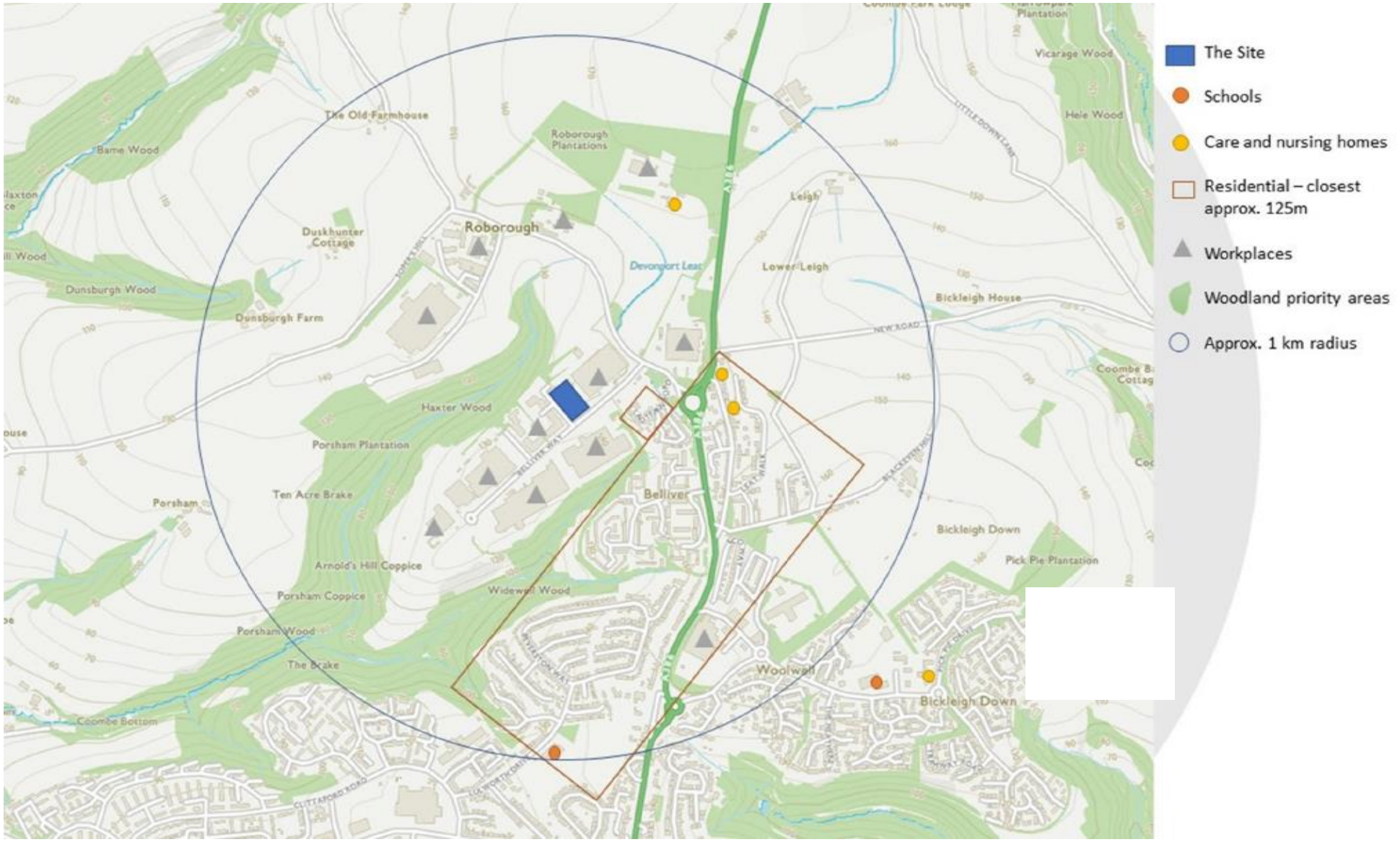

Figure 2.1: Sensitive Receptor Map

3 CONTROL MEASURES

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

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

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

3.1 Receipt and Management of Odorous Materials

Due to the design of the building structure and the fully enclosed processing activities, there is very little potential for offsite odour emissions and impacts to arise from the site. Furthermore, the fundamental design of the facility has a hierarchy of odour control and abatement measures to ensure that the potential for odour impacts are eliminated.

The combustion waste process itself has no significant potential for odours as the combustion effectively destroys any odorous compounds.

The primary odour control measure on site will be the strict adherence to the waste acceptance and reception procedures.

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

Reception of Waste

Entry to the waste reception area is via electrically controlled fast acting roller shutter doors. Vehicles will enter backwards and discharge the waste onto the floor of the waste reception hall. The doors are complete with air curtains to prevent any odorous emissions escaping during the unloading of waste. Once unloaded the vehicles will exit the building and the roller shutter doors are closed. HGVs will unload the waste in less than 5 minutes.

To avoid any odour emissions from the building, the building is kept at slight negative pressure. An air extraction system will be in place resulting in odorous air within the building being thermally destroyed by the combustion system.

Additionally, as part of the sites waste acceptance procedures, no odorous RDF will be accepted onto site and therefore the potential for offsite odour impacts is considered negligible.

The site will be operated such that there is never more than 4 days' inventory awaiting processing and will be managed in a manner that prevents RDF being accepted into the site in the event that the site is inoperable.

All RDF accepted on site will be required to be pre-declared and be deemed acceptable by the site manager prior to the transportation and delivery to site. All RDF accepted on site will be inspected on arrival to ensure compliance with the agreed 'Waste Declaration Form' and do not have any malodourous properties.

Waste Acceptance and inventory controls will be covered in the sites dedicated waste acceptance procedures.

3.2 Containment of Contaminated Air

Although the roller shutter doors will remain open during the unloading of waste, the installation of air curtains on the doors will prevent the escape of odorous air resulting in any odorous air from the reception of waste being fully contained. The doors will be open for a maximum of 5 minutes during the unloading and will remain closed at all times apart from the delivery of waste. Due to these measures, the delivery and reception of RDF are unlikely to produce any odour emissions.

To avoid any odour emissions from the building, the building is kept at slight negative pressure. An air extraction system will be in place that preferentially extract the air form the reception hall and introduces it to the intake of the primary combustion air fans. This method ensures that all odorous air within the building is extracted and thermally oxidised and destroyed prior to release to atmosphere.

3.3 End of Pipe Treatment

Any odorous air from the building is extracted to the combustion system and thermally destroyed.

There are no separate or additional release points associated with this system as all air is ultimately drawn into the combustion system.

3.4 Engaging your Neighbours

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 (see Figure 2.1) will be contacted to advise them of the operation being undertaken, and that any increase in odour will be of a temporary nature.

Such events are considered to be major plant outages or maintenance activities involving the access to the building.

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

In the event of a complaint received from the public, Biomass No.4 will operate in accordance with the dedicated odour complaints procedure (See Section 3.5).

3.5 Response to Complaints

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

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

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

- An olfactory survey following the procedure detailed in Section 4.3. The results of the survey will be recorded on the Odour Reporting Form provided within Annex B;
- An examination of the site activities at the time of the complaint;
- An examination of the meteorological conditions at the time of the complaint; and
- A review of the effectiveness of operational and odour control procedures.

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

3.6 Ceasing or Reducing Operations

If the investigations carried out as a result of the complaint suggest that the activities on site need to cease, no more RDF will be accepted on site.

3.7 Accident Management Plan

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

The accident 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 / leaks or loss of containment / Overfilling of Vessels;
- Any vandalism which could cause damage to the plant and equipment resulting in spillage of RDF;
- Flooding;
- Fire due to plant malfunction or electrical equipment causing an ignition source;
- Receiving incompatible RDF 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.

4 MONITORING

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

- Site inspections by the Site Manager or delegated personnel;
- Site audits and inspections by the Environmental Agency;
- Site Inspections by the Planning Authority; and
- Third party audits.

4.1 Responsible Persons

Responsible persons are detailed within Annex C. All site personnel are responsible for immediately reporting odour problems to the Site Manager or Managing Director.

4.2 Meteorological Conditions

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

Table 4.1: Meteorological Monitoring

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

4.3 Olfactory ('Sniff Test') Monitoring

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

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

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

The odour assessor must not be subject to significant odour in the 30 minutes prior to the assessment and shall be compliant with the requirements laid down in the Olfactory Survey procedure (detailed in Annex B). 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 Manager will be notified immediately and the olfactory survey will continue to attempt to determine the scope and extent of the odour plume, as follows:

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

Monitoring frequencies shall be as detailed in Table 4.2.

Table 4.2: Monitoring Frequencies

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

The following scales will be used:

Table 4.3: 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 4.4: 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

4.4 Internal Odour Monitoring

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

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

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

4.5 Records

Daily records shall be maintained and include the following details:

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

5 COMPLIANCE ACTION PLANS

5.1 Control and Trigger Levels

Control trigger levels are presented below in Table 5.1.

Table 5.1: 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

5.2 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).

5.3 Detection of Moderate Odour During Olfactory Survey

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

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

5.4 Corrective Actions

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

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

5.5 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.

6 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:

- Breakdown of plant resulting in potential backlog of RDF;
- Breakdown of plant resulting in failure of extraction system; and
- Fire.

Failure and abnormal event scenarios are presented in Annex D and summarised below.

Breakdown of plant resulting in potential backlog of RDF

A supply of critical spares will be maintained onsite. The site will employ skilled fitters / contractors to promptly repair any faults.

All plant and equipment will be maintained and regularly serviced in accordance with the manufacturer's recommendations and planned maintenance procedures to minimise breakdowns.

If necessary, the facility will remain closed to further deliveries of RDF until the plant is restored and the backlog is cleared, with the waste being diverted to landfill.

Breakdown of plant resulting in failure of extraction system

All receipt of RDF will cease.

All stored RDF will be processed through the plant as quickly as possible.

All plant and equipment will be maintained and regularly serviced in accordance with the manufacturer's recommendations and planned maintenance procedures to minimise breakdowns.

If necessary, the facility will remain closed to further deliveries of RDF until the plant is restored and the backlog is cleared.

Fire

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

Following a fire, the extraction system would be inspected, replaced and repairs implemented as necessary.

Further RDF deliveries would be suspended until the extraction system operation is restored.

6.1 Abnormal Meteorological Conditions

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

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

As all of the facility processes and stores waste indoors the risk of meteorological conditions creating adverse odour emissions is low.

ANNEX A: Odour Reporting Form

ODOUR REPORTING FORM		
Name of Assessor:		
Confirm Compliance with Reference Table 1:		
Survey Timings	Date	
	Start Time	
	Finish	
Location of Sniff Test :		
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]	Receptor Sensitivity [5]

Sketch

Provide a sketch of test and source locations

[1]What site boundary points / sensitive receptor?

[2]Refer to Reference Table 2

[3]Refer to Reference Table 3

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

[5]Refer to Reference Table 5

Notes;

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

The extent of the plume should be investigated as follows:

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

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

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

REFERENCE TABLE 1
Requirements for Assessor
Assessor has not been exposed to waste related odours for previous 30 minutes
Assessor has not smoked or consumed strongly flavoured food or drink in previous 30 minutes
Scented toiletries should not be applied immediately before or during assessment.
Vehicle used for assessment should not contain deodoriser and care should be taken concerning odour in windscreen wash.

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

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

REFERENCE TABLE 4	
Receptor Sensitivity	Description
1	Low (e.g., footpath, road)
2	Medium (e.g., industrial, or commercial workplaces)
3	High (e.g., housing, pub/hotel etc)

ANNEX B: Odour Complaint Form

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

Form completed by:	Date:	Signed;

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

ANNEX C: Responsible Persons

Annex C: Responsible Persons		
Control Measure	Responsible Persons	
	Implementation on-site	Overall Manager
Receipt and Management of Odorous Materials In accordance with Section 3.1.		
Engaging your Neighbours In accordance with Section 3.6.		
Response to Complaints In accordance with Section 3.7.		
Meteorological Conditions In accordance with Section 4.2		
Olfactory Monitoring In accordance with Section 4.3		
Internal Odour Monitoring In accordance with Section 4.4		
Record Keeping In accordance with Section 4.5.		
Complaint and Corrective Action Monitoring In accordance with Section 5.		

ANNEX D: Failure and Abnormal Event Summary Table

Annex D: Failure and Abnormal Event Summary

Odour Generating Process	Release Points	Abnormal Situation / Failure	Potential Outcome	Control Measure	Action
Back log of waste	Fuel Reception Hall	Breakdown of plant	Odour release	Immediate repair of plant – critical spares are stored on site	Replacement of components
Fugitive emissions from the Reception Process	Fuel Reception Hall	Breakdown of plant	Odour release	Immediate repair of plant. All plant continuously monitored.	Plant Engineering Team. Replacement of components
Fugitive emissions from the Reception Process	Fuel Reception Hall	Failure of extraction systems	Odour release	Immediate repair of plant. All plant continuously monitored.	Plant Engineering Team. Replacement of components
Damage to building	Main Processing Building	Damage to sealing systems preventing negative pressure operation	Odour release	Immediate temporary repair of building fabric	Replacement of panelling section