Odour Management Plan

Energy Ventures No1 Ltd

Selby Energy Recovery Plant

14th August 2025

Project No.: SOL_24_PO76_PCM

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Odour Management Plan

Selby Energy Recovery Plant

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1. ODOUR MANAGEMENT PLAN

1.1 Introduction

This document has been prepared by Sol Environment Ltd on the behalf of Energy Ventures No1 Ltd, in support of an Environmental Permit Application at their energy recovery facility in Sherburn in Elmet, Leeds.

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;
- Transfer of Odour Chemicals to Air;
- Containment of Contaminated Air;
- Transport and Dispersion;
- 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 updated as and when required.

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

2. SITE BACKGROUND

2.1 Site Setting

The facility is located at Aviation Road, Sherburn in Elmet, Leeds, LS25 6NF (Grid Reference: SE 51183 33256).

The treatment process will be permitted by Environmental Agency (EA) as a Waste Incineration Activity and will be operated in accordance with the Environmental Permitting Regulations 2018 and Chapter IV of the Industrial Emissions Directive (IED).

The site is located within industrial area adjacent to the south of Kingspan Insulation Plant facility and northeast of Aviation Road. The site is accessed off Enterprise Way to the east and is situated within an industrial park located around 375m south of the B1222.

The nearest residential dwelling is an estimated 407m north of the site, with the residential area of Sherburn in Elmet 600m west.

The site is not considered to be overly 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 2.6.

2.2 Facility and Process Overview

The proposed development is an energy recovery facility which has been designed to recover energy from Refuse Derived Fuel (RDF) and mixed municipal waste feedstocks using combustion, specifically for the production of electricity. The facility will produce a high temperature flue gas which is then used to raise steam and generate electricity, through steam cycle turbine generation.

The facility is designed to process a maximum of 240,000 tonnes per annum of pre-prepared RDF and municipal waste feedstocks.

Pre-prepared RDF fuel will be delivered directly to the Fuel Reception Hall, either in baled or loose form. Walking floor HGV's will reverse into the unloading lane and unload directly into the reception bunker, during which a visual inspection will take place. The reception bunker has been designed to hold 7,888m^3 / 1,972 tonnes of waste, which equates to approximately 3 days fuel supply. The bunker will be served by a dedicated crane which will mix and break up the bales, if required. In the event of a breakdown, feedstock may be stored for longer periods of time (no longer than 3 months).

Additionally, baled RDF may be delivered to site and stored externally in the baled waste storage area in order for the plant to carry on operating during extended public and national holiday periods. Bales will be stored in four bays, each able to hold 230m^3 and have been designed to meet the EA's Fire Prevention Plan Guidance. Bales will be appropriately wrapped to ensure no possibility of odour or dust emissions and stored in an area protected by a sealed drainage system and secondary containment. Bales will be stored for a maximum of 2 months.

The bunker crane will be utilised to move, mix and feed the feedstock into the feeding hopper, which subsequently automatically calls for more RDF when required.

Feedstock is then automatically transferred into the metering bin to allow for controlled feeding into the inclined moving grate combustion system. The grate consists of three separate grate sections in longitudinal

direction, cooled by air. The design of the grate ensures maximum contact between combustion air and the waste thus insuring complete and efficient combustion.

The resultant flue gas is then directed to the boiler for the generation of high pressure steam which is expanded through the steam turbine producing a gross electrical generation of 25MWe.

The combustion air for the process is taken directly from the reception bunker to facilitate odour and fugitive emissions control whilst maintaining a partial negative pressure within the reception hall.

Exhaust steam from the turbine is then sent to an air cooled condenser (ACC) to be condensed and returned to the system.

Flue gas cleaning and pollution control consists of Selective Non-Catalytic Reduction (SNCR) through urea injection, a dry scrubbing system incorporating sodium bicarbonate injection for acid gas neutralisation, activated carbon powder injection for absorption and removal of heavy metals, dioxins, VOCs and other harmful substances and a fabric filter for particulates removal.

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

The site operates a strict housekeeping policy ensuring all stockpiles are managed appropriately and the site is neat and tidy.

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

2.4.1 Source Materials

The site will process 240,000 tonnes of RDF and mixed municipal waste feedstocks per annum.

Pre-prepared RDF fuel will be delivered directly to the Fuel Reception Hall, either in baled or loose form.

Potentially odorous air from within the Fuel Reception Hall is extracted for use as primary combustion air and thermally destroyed within the combustion system. In addition, vehicle marshalling and building controls ensure that the fast action doors remain closed at all times during unloading, handling and treatment activities. The air extraction system maintains the building at a slight negative pressure, ensuring no escape of potentially odorous air when the buildings doors are opened. In the event of an unplanned shutdown, where the combustion system is unavailable, a back-up extraction and ventilation system has been installed which incorporates activated carbon filtration to treat odorous emissions prior to release to atmosphere.

The site will also store wrapped RDF bales externally which have the potential to become an odour source. The sites primary control measure in relation to external storage of bales is stringent management. Only well wrapped and non-odorous bales are suitable for external storage, thereby minimising potential for odour escape or rainwater ingress and subsequent generation of leachate. The bale storage area is subject to inspection as part of the twice daily site walkover and any damaged or loosely wrapped bales are immediately removed and stored internally prior to processing as soon as possible. Under normal operation, incoming waste fuel feedstocks will be stored for no longer than 3 days prior to use however may be stored for longer periods of time in the event of a breakdown (no longer than 3 months).

An inventory of Odorous Materials onsite has been provided in the table below.

Table 2.1: Source Materials

Waste Type	Description	Odour Potential	Quantities and Storage Time
Loose RDF	Loose RDF is delivered into the Fuel Reception Hall on a just in time basis by covered vehicles and stored within the reception bunker.	Medium Odour potential is minimised through: • Delivery in covered vehicles; • Unloading undertaken only when roller shutter doors are closed; • Rejection of excessively malodourous waste loads; • Short storage time preventing potential degradation of waste; • Internal storage and processing within the Fuel Reception Hall; • Fuel Reception Hall is kept under negative pressure with potential odorous air thermally destroyed within the combustion system; and • Back up extraction and ventilation system provided for the Fuel Storage Hall incorporating activated carbon filtration.	Fuel Storage Bunker – 7,888m^3 Max Under normal operation, fuel will be stored for 3 days however may be stored for longer periods of time in the event of a breakdown (no longer than 3 months).
Baled RDF	Baled RDF may be delivered to site and stored externally in the baled waste storage area in order for the plant to carry on operating during extended public and national holiday periods.	Medium Odour potential is minimised through: • Rejection of excessively malodourous waste loads; • Storage in wrapped form to prevent escape of odorous air or ingress of rainwater; • Twice daily inspection to ensure no damaged or loosely wrapped RDF bales remain in the external area; and • Minimising storage times and external storage utilisation.	External Storage Piles – 4 x 230m^3 Bales will be stored for a maximum of 2 months.
Ash residues	Bottom ash from the base of the moving grate and boiler ash is quenched prior to storage within a storage bunker. Boiler ash is collected and conveyed	Low Bottom ash and APC residues are not typically inherently odorous materials. Enclosed storage will reduce odour risk.	Stored onsite for typically 1 week. Storage capacities TBC

	to the same common bunker. APC Residue is collected and stored within an enclosed silo.		

2.4.2 Releases

There is potential for fugitive release of odours from the facility during offloading, transportation around site and processing activities are likely, should any of the control measures fail.

2.5 Off-site Odour Sources

The site is surrounded by neighbouring industrial processes which could potentially generate odour.

Due to the site being located in a heavily industrialised area and approximately 407m from the nearest residential dwelling, the site is considered to be located in an area with low sensitivity to odour.

2.6 Nearest Sensitive Receptors

The Site is located predominantly within an industrial setting.

The nearest residential dwelling is sited as approximately 407m north of the site adjacent to the B1222 road. The site is situated in an industrialised environment where other activities may contribute to background odours, as detailed above. The location is therefore considered to have low sensitivity to odour.

All sensitive receptors within a 1km radius are listed in Table 2.2 below and are shown on the plan in Appendix A.

Table 2.2: Sensitive Receptors

Human Receptor	Type	Distance
Kingspan Insulation	Industrial	Adjacent North
Aviation Road	Commercial and Industrial	Adjacent Southwest
Enterprise Way	Commercial and Industrial	93m West
Hurricane Way	Commercial and Industrial	191m East
Bishopdyke Road (B1222)	Commercial, Industrial and Residential	380m North
Residential dwellings	Residential	400m Northwest
Moxon Way	Commercial and Industrial	412m West
Bacon Factory Pond	Amenity	502m West
EGCJ Air Field	Commercial and Industrial	504m Southeast
Residential dwelling	Residential	519m Northeast
Sherburn-in-Elmet Train station	Amenity	589m Northwest
Moor Lane	Residential and Commercial	614m Northwest
Pond	Amenity	670m Northwest
Residential area of Sherburn-in-Elmet	Residential	683m West

Pond	Amenity	723m Northwest
Farm	Commercial	771m Northeast
Low Farm Energy Plant	Industrial	891m Southwest
British Gypsum	Industrial	953m North

Please refer to Appendix A which shows a site plan identifying the sensitive receptors.

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 minimises odour generation.

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

3.1 Receipt and Management of Odorous Materials

The primary odour control measure on site is the strict adherence to the waste acceptance procedures. The below waste acceptance regime will result in a significant reduction in the likely odour potential of waste treated at the facility.

Pre-Acceptance of Waste

In order to prevent the acceptance of unsuitable wastes at the facility which may lead to adverse reactions or uncontrolled odours and emissions, the following systems and procedures are in place to ensure that wastes are suitable for treatment at the facility.

The site will only accept pre-treated RDF and mixed municipal waste feedstocks.

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

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

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

- The type of process producing the waste;
- The specific process from which the waste derives;
- The quantity of waste;
- The form the waste takes;
- Hazards associated with the waste; and
- Description of the waste.

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

Acceptance of Waste

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

A check shall be made that the waste type and source has been Pre-Accepted. The vehicle will be then directed from the weighbridge to the Fuel Reception Hall where it will unload the waste and undergo visual inspection.

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

Waste Rejection

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

If a malodourous load arrives on site, the Site Manager will be informed immediately. The Site Manager will assess the load and decide if it should be rejected. The criteria for rejection is whether the load is likely to cause offense at the site boundary or cannot be processed through the plant without causing adverse impacts.

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

Waste Reception and Storage

All vehicles will enter the site and report to the weighbridge at the site entrance to weigh and record the delivered RDF in accordance to the sites working plan procedures.

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

Pre-prepared RDF fuel will be delivered directly to the Fuel Reception Hall, either in baled or loose form. Walking floor HGV's will reverse into the unloading lane and unload directly into the reception bunker, during which a visual inspection will take place. The reception bunker has been designed to hold 7,888m^3 / 1,972 tonnes of waste, which equates to approximately 3 days fuel supply.

Fuel will typically be delivered on a 'just in time' basis directly into the reception bunker where waste undergoes mixing via crane before transfer to the feed hoppers. The bunker has the capacity for 3 days fuel supply and as such storage of waste is typically limited to up to 3 days. This significantly reduces any potential biodegradation and odorous emissions from the waste onsite.

In the event of a breakdown, feedstock may be stored for longer periods of time (no longer than 3 months).

Additionally, baled RDF may be delivered to site and stored externally in the baled waste storage area in order for the plant to carry on operating during extended public and national holiday periods. Bales will be stored for a maximum of 2 months.

Bales will be delivered to site only when required and following visual inspection will be offloaded by telescopic handlers / front loaders. Any damaged or inadequately wrapped bales will be rejected. Storage of bales in the external bale storage area will be in piles sized 230m^3 per bay whilst allowing a 1 meter freeboard in in line with Fire Prevention Plan requirements. As such, the four bays allow a total storage capacity of 920m^3. All bales are wrapped to reduce potential rainwater ingress and odour emissions. Twice daily inspection and immediate removal of any damaged bales ensures that no odorous emission occur.

Loose RDF will be mixed for homogenisation within the reception bunker through the crane grab system.

The Fuel Reception Hall, including the reception bunker and feed system, is kept under slight negative pressure through an extraction and ventilation system which draws potentially odorous air to the combustion system, thermally destroying any odorous compounds prior to release.

Site Management

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

3.2 Transfer of Odour Chemicals to Air

The mobilisation of odorous chemicals to the air will be minimised through the following control measures:

- Reducing the rate of evaporation through only accepting dry wastes onto site;
- Ensuring any odorous wastes are stored internally;
- Ensuring externally stored baled wastes are well wrapped to prevent rain ingress and escape of potentially odorous air;
- Minimising storage times of wastes onsite;
- Storage of waste for short periods of time (ordinarily 3 days); and
- Locate storage of odorous materials out of direct sunlight to prevent heating.

The process itself will ensure no escape of odorous emissions to air due the thermal destruction of any potentially odorous compounds within the waste during combustion prior to release to atmosphere.

3.3 Containment of Contaminated Air

All incoming waste transferred to site will be delivered to site within sheeted/covered vehicles. Initial waste reception and unloading of delivered wastes takes place internally within the Fuel Reception Hall. All unloading of wastes takes place within the building with the roller shutter doors closed.

Only inspected and well wrapped bales will be stored externally. Wrapping of the waste ensures the containment of any potentially odorous wastes during storage.

The Fuel Reception Hall is kept at slight negative pressure by air extraction, preventing escape of potentially odorous air during opening of the roller shutter doors. Extracted air is utilised as primary combustion air within the incineration process, ensuring thermal destruction of any odorous compounds prior to release to atmosphere. A back-up extraction and ventilation system incorporating active carbon filtration is additionally installed.

3.4 End of Pipe Treatment

Any odorous air from the Fuel Reception Hall is extracted to the combustion system via an air extraction system.

The air extraction system will result in odorous air within the building being thermally destroyed by the combustion system.

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

A back up extraction and ventilation system is installed for use during potential plant shutdowns (planned or unplanned). This system utilises active carbon filtration.

3.5 Engaging your Neighbours

If an action is being considered that has the potential to cause temporary odour impacts (however small) outside of the normal operational procedures, then the Local EA area team will be informed in advance. Neighbours who may be affected (see Table 2.4) will be contacted to advise them of the operation being undertaken, and that any increase in odour will be of a temporary nature.

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

In the event of a complaint received from the public, Energy Ventures will operate in accordance with the dedicated odour complaints procedure (See Section 3.6 below).

3.6 Response to Complaints

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

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

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 Appendix 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).

3.7 Ceasing or Reducing Operations

If the investigations carried out as a result of the complaint suggest that the activities on site need to cease, no more waste will be accepted on site and the process will be stopped until such time that the root cause has been addressed.

3.8 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;
- Any vandalism which could cause damage to the plant and equipment resulting in spillage of waste;
- Flooding;
- Fire due to plant malfunction or electrical equipment causing an ignition source;
- Receiving incompatible waste on site;
- Failure of main services;
- Failure of major plant and equipment;
- Failure or unavailability of any environmentally critical plant; and
- Being unable to receive waste into the site i.e. alternative storage or refusal of loads.

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

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 Environment Agency;
- Site Inspections by the Planning Authority; and
- Third party audits.

4.1 Responsible Persons

Responsible persons are detailed within Appendix D. 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 Appendix B. Surveys shall be carried out in accordance with the monitoring protocol contained within Technical Guidance Note H4.

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

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

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

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

Monitoring frequencies shall be as detailed in Table 4.2.

Table 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 Further Monitoring

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

4.6 Records

Daily records shall be maintained and include the following details:

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

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

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

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

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 waste;
- Breakdown of plant resulting in failure of air extraction system; and
- Fire.

Failure and abnormal event scenarios are presented in Appendix E and summarised below.

Breakdown of plant resulting in potential backlog of waste

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.

In the event that repairs cannot be promptly carried out relevant activities will be suspended where there is an increased risk of odour emissions or offsite impact.

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

Breakdown of plant resulting in failure of extraction system

All receipt of feedstock will cease.

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

The back-up extraction system incorporating active carbon filtration will be activated.

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 feedstock 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, all plant would be inspected, replaced and repairs implemented as necessary. Further waste receipt would be suspended until normal 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.

APPENDIX A FIGURES

LEGEND:

- MECHANICAL EQUIPMENT
- ELECTRICAL EQUIPMENT
- EXISTING BUILDINGS & EQUIPMENT
- BUILDING
- ASPHALT ROAD
- CONCRETE ROAD
- PAVEMENT
- OUTSIDE ROAD
- DISABLED PARKING
- CROSSING
- DNO PARKING
- FENCE
- SITE BOUNDARY

KEY PLAN

TAG	DESCRIPTIONS	DIMENSIONS LENGTH (MM)	WIDTH (MM)	HEIGHT (MM)
POW	POWER SUBSTATION (15)	6430	6770	2835
SEAB	SERVICE AND ELECTRICAL ANNEX BUILDING	40700	14860	26670
EDG	EMERGENCY DIESEL GENERATOR AND TANK	9630	2200	1776
STB	SET-UP TRANSFORMER BUILDING	6690	9650	3973
ATE	ACC & TURBINE BUILDING EL ROOM	9550	20450	30514
WRA	WASTE RECEIVING HALL	24340	30010	17101
FSA	FUEL STORAGE AREA	30610	38380	34520
UEH	DO AND AMMONIA UNLOADING AREA	–	–	–
UEK	DO AND AMMONIA TANK AREA	14600	7680	–
RSA	RESIDUES STORAGE AREA	24680	13530	–
BPS	BYPRODUCT STORAGE AREA	23011	10860	11329
WTP	WATER TREATMENT PLANT	–	–	34.77M²
ESA	EFFLUENT STORAGE AREA	13800	4850	3388
SGP	STEAM GENERATION PLANT	38350	29340	38000
EXS	EXHAUST STACK	3000	3000	50000
STH	STEAM TURBINE HALL	32280	20450	30514
ACC	ACC AREA	34420	29180	22587
FEA	FIRE EQUIPMENT AREA	–	–	103.08M²
FGT	FLUE GAS TREATMENT	15165	14752	20837
IWB	INCOMING WEIGHBRIDGE	–	–	–
GTH	GATE HOUSE	7450	3450	2473
OWB	OUTGOING WEIGHBRIDGE	–	–	–
CRP	CAR PARK	72710	18496	–

GENERAL NOTE:

1. All dimensions are in millimeters, unless noted otherwise.

0 20 40 60 80 100

S NO	DRAWING NUMBER AND TITLE			
	REFERENCE			
16	15/07/25	BUILDING LENGTH AND WIDTH MODIFIED	EC	CM	SM
15	09/07/25	REVISED AS PER CLIENT COMMENT	EC	CM	SM
14	23/02/25	REVISED AS PER CLIENT COMMENT	EC	CM	SM
13	23/02/25	REVISED AS PER CLIENT COMMENT	EC	CM	SM
REV	DATE	DESCRIPTION	DRN	CHK	APR

REVISION HISTORY

Client:
ENERGY VENTURES NO. 1 LIMITED

Main Con

Sub Con

Sub Con:

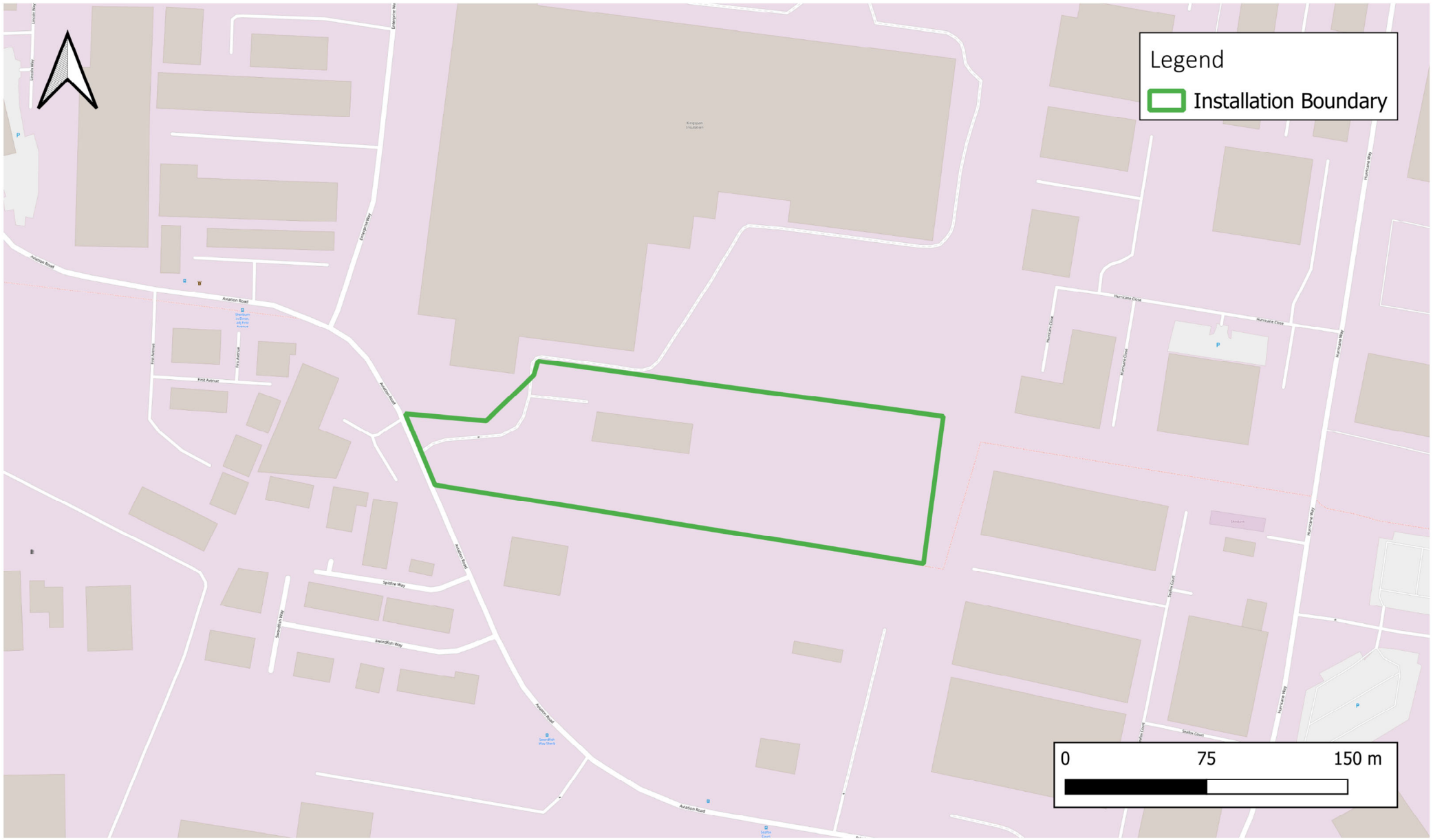
PROJECT NAME:
SELBY EFW PLANT UK

PROJECT NUMBER: AGD-23-10044
LOCATION: SELBY UK

DRAWING TITLE:
SITE PLAN (UZA) LAYOUT
GENERAL OVER ALL

DRAWING NO: DJ-066-M-101
REV: 16

Scale: 1:500
Size: A1
Projection:
Sheet: 01 of 08



Project Number: SOL_24_P076_PCM Map Title: Installation Boundary Date: 23/03/2025 Drawn by: CH Checked by: SR	Site Address: Aviation Road Sherburn in Elmet Leeds LS26 6NF	1. Do not scale off this drawing 2. All dimensions to be confirmed on site 3. This drawing is copyright of Sol Environment Ltd 4. This drawing is to be read in conjunction with relevant consultant drawings and specifications 5. QMS Reference: QMS_7.5.39_TEM - Template - GIS Drawing - Horizontal v1

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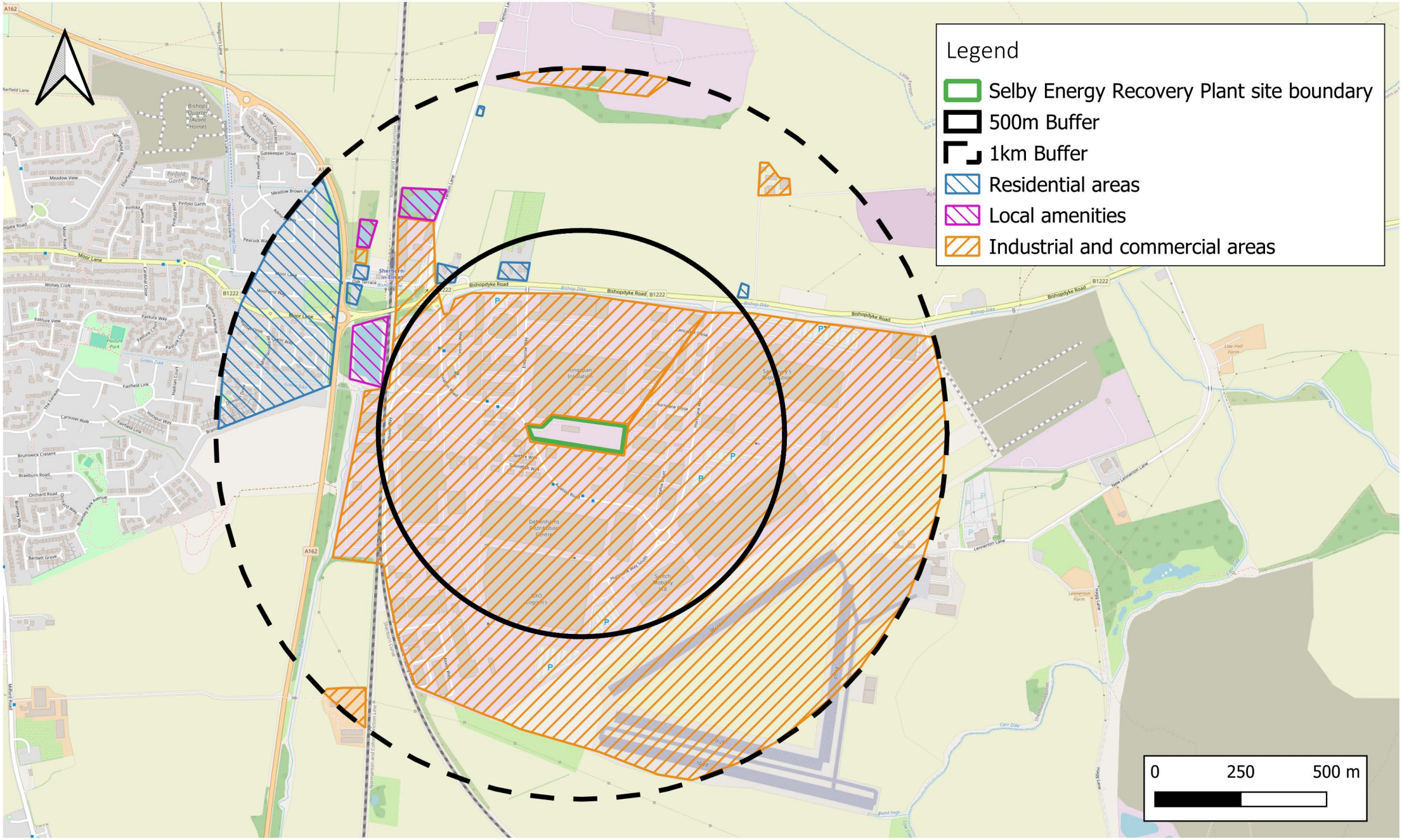

Project Number: SOL_24_P076_PCM Map Title: Seniative Receptor Map Date: 11/04/1995 Drawn by: CH Checked by: SR	Site Address: Aviation Road Sherburn in Elmet Leeds LS25 6NF	1. Do not scale off this drawing 2. All dimensions to be confirmed on site 3. This drawing is copyright of Sol Environment Ltd 4. This drawing is to be read in conjunction with relevant consultant drawings and specifications 5. QMS Reference: QMS_7.5.39_TEM - Template - GIS Drawing - Horizontal v1

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APPENDIX B 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 biofilter beds / drying plant 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 during brief periods when wind drops or blows)
2	Transient as above, but detected away from site boundary
3	Persistent but fairly localised
4	Persistent and pervasive up to 50m from site boundary
5	Persistent and widespread (odour detected > 50m from site boundary

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

APPENDIX C ODOUR COMPLAINT REPORT 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)

APPENDIX D RESPONSIBLE PERSONS

Control Measure	Responsible Persons	
	Implementation on-site	Overall Manager
Receipt and Management of Odourous 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		
Further Monitoring In accordance with Section 4.5.		
Record Keeping In accordance with Section 4.6.		
Complaint and Corrective Action Monitoring In accordance with Section 5.		

APPENDIX E FAILURE AND ABNORMAL EVENT SUMMARY TABLE

Appendix E: Failure and Abnormal Event Summary					
Odour Generating Process	*Release Points*	*Abnormal Situation / Failure*	*Potential Outcome*	*Control Measure*	*Action (Resp)*
Back log of waste	Fuel Reception Hall and External Bale Storage Area	Breakdown of plant	Odour release	Immediate repair of plant – critical spares are stored on site	Replacement of components.
Fugitive emissions from the combustion of waste	Combustion plant	Breakdown of plant / failure of extraction system	Odour release	Activation of the back up extraction system Immediate repair of plant Ceasing of waste acceptance	Repair of plant- Maintenance Team Assess reason for failure and amend procedures as necessary - Site Manager
Acceptance of odorous wastes into site	Quarantine area	Accidental acceptance of odourous wastes onsite	Odour release	Immediate quarantine of waste internally and processing as soon as practicably possible	Removal of waste and review of staff training in acceptance procedures – Site Manager
Damage to building	Building Fabric	Damage to building preventing negative pressure seal	Odour release	Immediate temporary repair of building fabric	Replacement of damaged sections.