

Intended for

Dunton Technologies Limited

Document type

Odour Management Plan (OMP)

Date

December 2022

BRIDGE STREET NORTH ODOUR MANAGEMENT PLAN (OMP)



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BRIDGE STREET NORTH ODOUR MANAGEMENT PLAN (OMP)

Project name **Dunton - Smethwick Permit Application**
Project no. **1620013520-002**
Recipient **Dunton Technologies Limited**
Document type **Odour Management Plan (OMP)**
Version **01**
Date **December 2022**
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Description **Bridge Street North Odour Management Plan (OMP)**

Version	Date	Made by	Checked by	Approved by	Description
01	19/12/2022	AB	LJ	RW	Issue

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1. INTRODUCTION

This Odour Management Plan (OMP) has been prepared using Environment Agency guidance note 'H4 Odour Management'¹ and 'SGN 5.06: Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste'. It is specified in the H4 guidance that the operator must 'employ the appropriate measures necessary to prevent the odour pollution or minimise it when prevention is not practicable'.

The operator proposes to undertake the storage and treatment of hazardous soils via physico-chemical treatment and bioremediation in an indoor facility.

This report assesses the risk of odour at the facility and provides details of the odour management procedures that will be in place to control any odorous emissions at the facility. The purpose of this is to ensure that the risk of adverse odour impacts on potential nearby receptors is minimised.

This document forms part of the site's Integrated Management System (IMS) and will be reviewed on an annual basis and in the event of any odour-related incidents/complaints.

As required by the H4 guidance document, the OMP seeks to:

- Employ appropriate methods, including monitoring and contingencies, to control and minimise odour pollution;
- Prevent unacceptable levels of odour at all times; and
- Reduce the risk of odour releasing incidents or accidents by anticipating them and planning accordingly.

To meet the above objectives, this OMP considers the potential sources, releases and impacts of odour pollution and identifies appropriate opportunities for odour management.

¹ H4 Odour Management, March 2011. Available at:
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/296737/geho0411btqm-e-e.pdf

1.1 Sensitive Receptors

A receptor is defined as something that could be adversely affected by a pollutant. Based on desk-based research, information provided by the client and the information relating to its environmental setting (provided in the Site Condition Report, ref. 1620013520-002 Bridge Street North SCR) Ramboll has identified the receptors within the vicinity of the site. A summary of the identified receptors is provided in Table 1.1.

Table 1.1: Summary of identified receptors

Receptor	Location
<p><i>Designated Ecological Sites:</i> There are no statutory designated ecologically sensitive sites located within 2km of the site.</p>	<p>>2 km</p>
<p><i>Human Occupation:</i> Facility workers and visitors are anticipated to be present across the internal and external areas of the site. The nearest residential dwellings are located approximately 90 m north-east of the site (located at Hidden Lock, Everest Close and Surrey Close). Commercial and light industrial units are present from 10m east and 15m south (located on Bridge Street North and Rolfe Street).</p>	<p>On-site and directly adjacent</p>

2. OPERATIONS AT BRIDGE STREET NORTH

2.1 Site Description

The site is a proposed Hazardous Waste Treatment Facility. The materials to be accepted on site will consist of hazardous wastes contaminated with asbestos and hydrocarbons from waste soils.

The derivation of treatment and storage capacities is provided in the permit application supporting information submitted with this application (ref. 1620013520-002 Dunton Bridge Street North Permit application). The proposed site layout is presented in Appendix 1.

The site is located in an industrial area, with neighbouring land uses including the Birmingham Canal to the north and south, and industrial and commercial properties to the east and west. The nearest residential properties are located approximately 90m north-east.

The standard Operating Hours for the facility are:

- Monday – Friday 07:30 – 17:00; and
- Saturday 08:00 to 13:30.

The site will not undertake operations (including waste reception) on Sundays or Public Holidays. Wastes will be accepted onto site from 08:00 up to 30 minutes prior to the site closing. Processing will continue until the end of the working day.

2.2 Inventory of Potentially Odorous Waste Streams

The incoming waste will comprise of hazardous wastes, predominantly long chain hydrocarbon contaminated soils that are not particularly odorous.

2.3 Odour Generation Potential

Waste pre-acceptance and acceptance procedures specify that odorous materials are not to be received on site, and materials that are deemed to be odorous will not be accepted. The materials brought on site will be stored and treated inside a building, therefore limiting the potential for odours to be released. Furthermore, the building extraction system incorporates carbon filters for odour control.

The main application document² describes the waste pre-acceptance and acceptance procedures and specifies the threshold by which wastes will not be acceptable at the site.

The components of odorous compounds in the wastes are likely to vary depending on proportion of the incoming wastes accepted. Odour tends to consist of a complex mix of chemicals in gaseous form. Wastes accepted at the site tend to be long chain hydrocarbons which generally exhibit petrol/solvent type odours.

For details of odour control measures relating to waste reception, storage and processing see Section 5, Odour Management.

² 1620013520-002 Dunton Bridge Street North Permit application

3. ODOUR PATHWAYS

3.1 Odour Pathway Characterisation

The principal mechanism for the transit of odorous emissions from site operations to adjacent sensitive receptors is via ambient air. The distance and direction that these emissions will be carried is determined by factors such as meteorological conditions and topography.

3.2 Meteorological Conditions

3.2.1 Wind Direction

The prevailing wind is from the south-south-west, as determined by historical wind rose data at Birmingham (2019) (www.windfinder.net). A wind rose is provided in Figure 3.2 showing the distribution of wind speed and wind direction around the site.

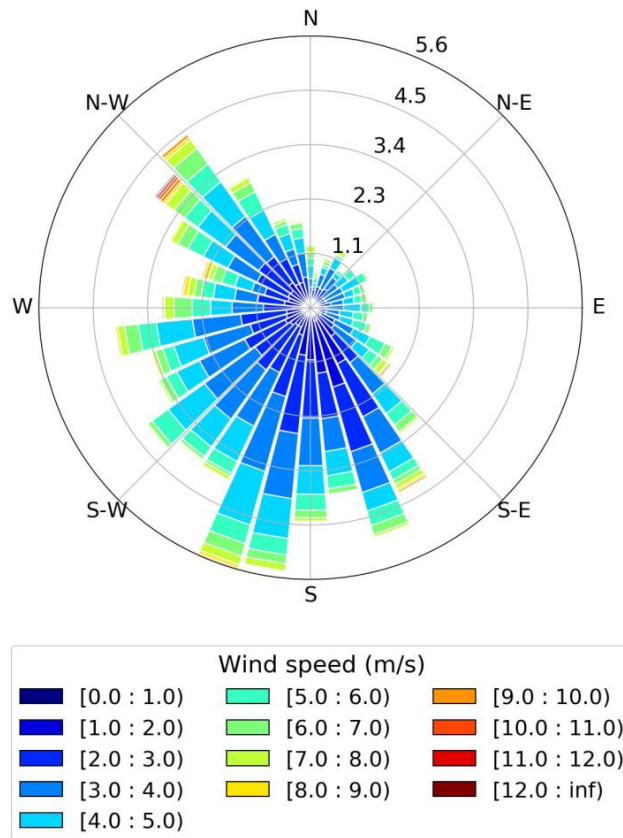


Figure 3.2: Wind rose (Birmingham, 2019).

3.2.2 Wind Velocity

Wind velocity will affect the distance an odour emission will travel. Conversely, increased wind speed could also beneficially improve dispersal. However, those receptors closest to the site itself are still at the highest risk of a negative impact.

3.2.3 Air Temperature

Warm air may carry odours upwards by convection for their dispersal away from the site. However, warm weather will encourage the onset of biodegradation of exposed or temporarily stored wastes and therefore increase odour potential. Therefore, in the summer months the risk of odour emissions is greater. However, due to material storage and processing being undertaken within a building, the effect of temperature will be negated.

3.3 Topography

The topography of the site and the surrounding area can influence the potential dispersion of odour emissions. The site is situated within a commercial/industrial area with the Birmingham Canal located up-wind of the site and industrial/commercial businesses being located down-wind of the site.

4. POTENTIAL IMPACTS

4.1 Impacts associated with odour

In order to minimise the impacts of odour pollution, it is necessary to have an understanding of the surrounding community and how odour emissions could affect the people living nearby. The potential receptors are identified in Table 1.1. The potential impacts of odour emissions are as follows:

- Damage to local amenity – members of the public may choose not to visit areas that they perceive are affected by odour emissions;
- Damage to human health – some members of the public may be severely affected by odour emissions due to existing health conditions or enhanced sensitivity; and
- Nuisance – members of the public may perceive odour emissions as a nuisance.

The facility is located within a predominantly industrial setting with the nearest residential housing located approximately 100 m away from the site boundary. Due to the industrial setting there are limited receptors that are likely to be affected by nuisance.

5. ODOUR MANAGEMENT

5.1 Odour Control Measures

The H4 guidance requires that an OMP provides specific details regarding the proposed control measures that will be in place to control odour.

For clarity, the following guidance documents have been referred to inform the odour control methods that will be implemented at the facility to ensure that the site complies with the applicable BAT requirements:

- H4 - Odour Management (2011); and
- SGN 5.06: Guidance for the Recovery and Disposal of Hazardous and Non-Hazardous Waste;

There will be specific control measures in place to minimise the risk of the emission of odours beyond the site boundary. These measures, which relate to the operation of the site during normal conditions, have been specified in relation to each potential odour source and are described below.

For details relating to the control of odour during abnormal conditions, see Section 7.

5.2 Receipt of Potentially Odorous Waste

Dunton has extensive waste pre-acceptance and acceptance procedures.

Prior to waste being transported to site, it is sampled and analysed at a UKAS accredited laboratory or equivalent. All wastes received at the site are characterised by the client with support from Dunton's technical department, on a site-specific basis.

Waste is brought to the site in covered vehicles. On receipt at the site, wastes are inspected, and verification sampling of hydrocarbons is undertaken using a portable analyser. If waste is perceived to be particularly odorous then it will be rejected.

The access roads will be inspected on a daily basis as part of routine site inspections and cleaning or sweeping of the access roads and site roads will be instigated to prevent track-out of any spilled materials.

All incoming loads will be inspected upon arrival at the waste reception area and if site operatives determine that a load is particularly odorous, they will alert the Site Manager or deputy.

Once it has been decided to accept a delivery, the driver will be directed to a delivery bay where the waste will be unloaded into a designated area inside the building. Odour monitoring procedures will be in place to confirm that the odour control measures are effective (see Section 6).

5.3 Storage of Potentially Odorous Waste

Waste will be stored only within the designated storage areas inside a building. Wastes are unloaded into the delivery bay before being moved to the designated storage bays. Materials will be dampened to minimise odour generation during material transfers.

Wastes will be stored in dedicated storage bays within the building. Air will be extracted via carbon filters for the abatement of VOCs and odour.

Odour monitoring procedures will be in place to confirm that the odour control measures are being carried out and are effective.

5.4 Treatment of Potentially Odorous Waste

- Asbestos

Asbestos treatment will take place within a specially designed picking station. The treatment of asbestos does not pose a risk to the release of odorous emissions in itself. Materials may be brought to site for both asbestos treatment and bioremediation. In this case, the materials will first pass through the asbestos picking station. The picking station will have carbon filters installed for the abatement of VOCs and odour.

- Bioremediation

Waste received for bioremediation will either pass through asbestos treatment process or be directed to a biopad. During transfers, the material will be dampened to prevent odour generation and then moved to the treatment area where the waste will be formed into engineered biopiles. Biopads will be extracted via carbon filters.

Odour monitoring procedures will be in place to confirm that the odour control measures are being carried out and are effective.

5.5 Site Cleanliness

Procedures will be in place to ensure that the site is maintained to a high standard of cleanliness. The site has an Integrated Management System (IMS) accredited to the ISO 14001 standard which contains the maintenance and cleaning schedules and records.

In summary, the following measures will be in place:

- **Routine Site Inspection Programme** – all areas of the site, including the waste reception, storage and treatment areas and items of plant and machinery will be inspected routinely. If considered necessary, additional housekeeping techniques will be employed. All inspections will be recorded in line with the IMS and will be undertaken by appropriately trained personnel.
- **Routine Site Cleaning Programme** – all areas of the site, including the waste reception, storage and treatment areas and items of plant and machinery will be cleaned in line with site procedures.

- **Vigilance and Reporting** – all site operatives will be vigilant and will inform a senior member of staff if they notice that the site is unclean or that high levels of odour are being generated at the site.

Odour monitoring procedures will be in place to confirm that the odour control measures are being carried out and are effective (see Section 6).

6. MONITORING

6.1 Monitoring

Odour monitoring will be undertaken in order to assess the effectiveness of the control measures described above. If fugitive odour is identified, then immediate remedial actions will be implemented.

The monitoring will provide an ongoing record of any odour events and this record can then be referred to if there are any odour complaints.

6.2 General Monitoring

All site personnel will be vigilant and will report odour problems to the Site Manager or deputy.

The Site Manager will record any reported odour issue in line with the IMS.

6.3 Off-Site Odour Monitoring

A subjective sniff testing exercise will be undertaken each day that the site is operational. Sniff testing will also be undertaken should there be any complaints relating to odour at the site.

The assessor will be a member of site personnel who is trained in the procedure. The assessor will be a member of staff who is based mainly inside the site office. Being located within a building the operative is likely to be less exposed to site odours and therefore less likely to be desensitised.

To ensure that the assessor is not suffering from odour fatigue, they will not enter the waste buildings on the day of the assessment until they have completed the monitoring exercise. The assessor must also not be suffering from a cold, sinusitis, or a sore throat as these may affect their sense of smell. In addition, the assessor should be a non-smoker, and will avoid food and drink (except water) for at least half an hour before undertaking the assessment. These measures will ensure that the results of the assessment are robust and reliable.

The assessor will make an olfactory assessment of odours near the site and identify their sources.

The meteorological conditions during the assessment will be recorded and any relevant information relating to site operations will be noted. A note will also be made if there are any other noticeable sources of odour in the vicinity.

The exact locations for monitoring will depend on the meteorological conditions at the time of the exercise. Additionally, specific sniff testing will be undertaken at the monitoring locations shown in Appendix 1.

7. ABNORMAL EVENTS AND CONTINGENCY PLANS

7.1 Possible Abnormal Events

Potential abnormal events that may result in the generation of odour have been considered in order to identify and implement contingency measures. Abnormal events will be recorded in line with the IMS along with any actions taken in response. If deemed necessary, operational procedures may be reviewed and amended following the event.

The identified abnormal events and response measures and contingencies are presented in Table 9.2.

8. REPORTING AND COMPLAINTS RESPONSE

8.1 Purpose of Complaints Procedure

The Environment Agency H4 guidance details that an OMP should demonstrate how the operator will respond to complaints. Complaints should be investigated within one working day and appropriate remedial action should be taken. The complainant and anyone else likely to be affected should be informed of any action taken in response to the complaint.

A procedure has been developed (see Table 8.1) to ensure that complaints will be handled in accordance with the requirements of H4. The procedure will be reviewed on an annual basis or in the event of any significant odour issues.

8.2 Complaints Reporting Route

To ensure that members of the public are easily able to report any complaints relating to odour emissions from the site, there will be a display board at the site entrance which details the site name, the permit number, the Environment Agency's contact details and Dunton's contact details.

8.3 Complaints Records

Auditable records will be kept of any complaints made and the investigations undertaken. This will provide an ongoing record of the causes of odour incidents which will enable Dunton to identify any patterns which would prompt a review in odour management procedures and control measures.

Table 8.1: Odour complaints procedure

Action	Person responsible for ensuring action is carried out	Timescale for Action Completion
1. The Site Manager will be notified of the complaint and will inform site personnel.	Site Manager	Within one working day of receipt of the complaint.

<p>The complaint will be formally recorded using the Complaint Report sheet contained within the site's IMS.</p>		
<p>2. The complaint will be investigated by:</p> <ul style="list-style-type: none"> a) Checking the odour monitoring records to see whether the complaint corresponds to the monitoring records. b) Checking the Site Diary and Waste Acceptance Records to see if any particularly odorous waste was accepted. c) Checking the Site Diary to see whether the complaint corresponds to any operational issues at the site. <p>If the cause of the complaint is established, it will be recorded within the Complaint Record Sheet.</p>	<p>Site Manager</p>	<p>Within one working day of receipt of the complaint.</p>
<p>3. If a number of complaints are received about a particular incident, then it may be necessary to increase the frequency of odour monitoring until the issue is resolved.</p>	<p>Site Manager</p>	<p>Within one working day of receipt of the complaint.</p>
<p>4. The Site Manager will instigate any necessary reviews of procedures and will implement any required changes. Any repair or maintenance to odour management infrastructure will be undertaken as soon as possible.</p>	<p>Site Manager</p>	<p>Maintenance and repair of odour management infrastructure: As soon as possible.</p> <p>Review of updates and procedures; Within seven working days of receipt of the complaint.</p>
<p>5. The complainant and the Environment Agency will be informed of any corrective actions taken.</p>	<p>Site Manager</p>	<p>As soon as possible. May be up to seven working days from receipt of the complaint depending on the complexity of the issue and resolution measures required. The EA officer responsible for the site will be</p>

		updated daily (working hours) during this period.
6. A follow up audit on the corrective actions will be undertaken to ensure the preventative procedure was effective and to determine if any additional actions are required.	Site Manager	Within two weeks of receipt of the complaint.
7. Once the follow up audit has been completed, the Site Manager will ensure that the complaint and any action taken and the effectiveness of that action are recorded in the IMS. This record will also note any amendments to procedures which may be required following the investigation.	Site Manager	Within two weeks of receipt of the complaint.

9. RISK ASSESSMENT AND MANAGEMENT PLAN

An odour risk management plan has been developed to determine the potential impact of odour from soil processing operations on sensitive receptors. The outcome of the assessment for normal operations is presented in Table 9.1, and for abnormal conditions in Table 9.2.

Table 9.1: Odour Emissions Risk Assessment and Management Plan – Normal Operations

Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the Overall Risk?
<p>Odours resulting from delivery of accepted contaminated solid wastes</p>	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	<p>Atmosphere.</p>	<p>Assessment of each waste load against waste pre-acceptance and acceptance criteria.</p> <p>Wastes are inspected upon arrival at the site and any odorous loads will be rejected.</p> <p>All waste to be delivered in covered vehicles.</p> <p>Delivery bays are located inside a building and served by abatement equipment.</p> <p>Wheel wash area located on site for delivery vehicles.</p> <p>All waste is to be dampened down on site.</p> <p>Daily inspections of access routes and routine road sweeping.</p> <p>Odour monitoring procedures in place.</p>	<p>Unlikely due to control measures in place.</p>	<p>Local nuisance from odour.</p>	<p>Low</p>

Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the Overall Risk?
Odours resulting from the storage of accepted wastes prior to treatment	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	Atmosphere	<p>Wastes only to be stored in designated storage areas.</p> <p>Storage areas are located inside a building with odour abatement systems installed (extraction via carbon filters).</p> <p>Abatement systems are subject to routine planned preventative maintenance schedules.</p> <p>Regular maintenance and cleaning of waste storage areas.</p> <p>Sumps for collection of potential runoff from the bioremediation process are located inside the building.</p> <p>Odour monitoring procedures in place.</p>	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Low
Odours resulting from the storage of rejected wastes in quarantine area	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	Atmosphere	<p>Dedicated quarantine storage bay located within the building. Materials entering the quarantine bay are very infrequent due to the waste pre-acceptance and acceptance procedures. However, if it is deemed that the waste cannot be treated then it will be removed from site within five working days.</p> <p>Due to the rigorous waste pre-acceptance and acceptance procedures, it is unlikely that wastes will be quarantined.</p> <p>Odour monitoring procedures in place.</p>	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Low

Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the Overall Risk?
<p>Odours resulting from the transport/ movement of wastes on site</p>	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	<p>Atmosphere</p>	<p>Regular inspections, housekeeping techniques and maintenance of all site areas.</p> <p>Majority of the material transfers are undertaken inside the building.</p> <p>Wastes to be dampened down prior to transfer to reduce potential emissions of odour.</p> <p>Odour monitoring procedures in place.</p>	<p>Unlikely due to control measures that will be put in place.</p>	<p>Local nuisance from odour.</p>	<p>Low</p>
<p>Odours resulting from the treatment of wastes - Biological treatment of hazardous wastes (bioremediation)</p>	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	<p>Atmosphere</p>	<p>Bioremediation is undertaken in engineered biopads that are located within the building. The biopads have extraction via HEPA and carbon filters.</p> <p>Appropriate planned preventative maintenance schedule in place for treatment bays and abatement equipment.</p> <p>Odour monitoring procedures in place.</p>	<p>Unlikely due to control measures that will be put in place.</p>	<p>Local nuisance from odour.</p>	<p>Low</p>

Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the Overall Risk?
<p>Odours resulting from the treatment of wastes - Physico-chemical treatment of hazardous waste (picking of asbestos)</p>	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	<p>Atmosphere</p>	<p>Wastes for asbestos picking are stored within the building. The waste is transferred to a hopper that is fitted with spray bars to dampen the material and prevent odorous releases.</p> <p>Waste is transferred from the hopper via a covered conveyor to the asbestos picking station. The picking station is extracted via carbon and HEPA filters to atmosphere.</p> <p>Class H vacuum cleaner to be available in case of spills.</p> <p>Odour monitoring procedures in place.</p>	<p>Unlikely due to control measures that will be put in place.</p>	<p>Local nuisance from odour.</p>	<p>Not significant due to the management techniques employed.</p>
<p>Odours resulting from site effluent</p>	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	<p>Atmosphere</p>	<p>Effluent from the site is limited to surface water runoff. Leachate resulting from the bioremediation process is captured and contained within sumps within the building, which is then recycled into biopiles to maintain moisture levels.</p> <p>Leachate generation is minimal due to careful application of water to maintain moisture levels.</p> <p>There are no connections from the building to surface water or foul sewer.</p> <p>Surface water runoff is very unlikely to be contaminated to result in odour.</p> <p>Odour monitoring procedures in place.</p>	<p>Unlikely due to control measures that will be put in place.</p>	<p>Local nuisance from odour.</p>	<p>Low</p>

Table 9.2: Abnormal event and response measures

Abnormal Event	Receptor	Pathway	Risk Management & Response Measures	Probability of Exposure	Consequence	What is the Overall risk?
Breakdown of plant	Occupiers of domestic dwellings listed in Table 1.1. Industrial and commercial premises listed in Table 1.1. Birmingham Canal.	Atmosphere	The site will operate a planned preventative maintenance programme for all plant and equipment on site and will maintain critical spares for those items that could potentially lead to odour being generated If the failure is for an extended period, the site will cease the acceptance and treatment of waste. A decision as to whether the transfer of waste off-site in an abnormal event will be made within 48 hours.	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Low
Power failure	Occupiers of domestic dwellings listed in Table 1.1. Industrial and commercial premises listed in Table 1.1. Birmingham Canal.	Atmosphere	Electricity is supplied to the site from the National Grid. Extended power outages are not common. If the failure is for an extended period, the site will cease the acceptance of waste A decision as to whether the transfer of waste off-site is an abnormal event will be made within 48 hours.	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Very Low
Restricted staff availability	Occupiers of domestic	Atmosphere	The Site Manager will ensure that they have an appropriately trained staff	Unlikely due to control measures	Local nuisance from odour.	Very Low

Abnormal Event	Receptor	Pathway	Risk Management & Response Measures	Probability of Exposure	Consequence	What is the Overall risk?
causing increased emissions due to backlogged materials	<p>dwelling listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>		<p>member to which they can delegate their role should they be unavailable.</p> <p>The site management will maintain a staff resources plan that ensures that sufficient numbers of staff are available to undertake each role.</p> <p>If required additional staff may be hired on a temporary basis</p> <p>In the unlikely event of there being insufficient staff, wastes would not be accepted at the site.</p> <p>If it is deemed that there are insufficient qualified staff to safely and properly run the plant, activities will be temporarily halted.</p> <p>In the highly unlikely event that activities were suspended for an extended period of time due to staff shortages, then the wastes already present on site would be kept in storage with the abatement systems operational.</p>	that will be put in place.		
Extreme wind and gales	Occupiers of domestic dwellings listed in Table 1.1.	Atmosphere	Waste materials are stored within dedicated storage bays within the building. Strong winds will not impact the materials in storage.	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Very Low

Abnormal Event	Receptor	Pathway	Risk Management & Response Measures	Probability of Exposure	Consequence	What is the Overall risk?
	Industrial and commercial premises listed in Table 1.1. Birmingham Canal.		The bioremediation bays are located within the building and there is limited potential for these to be impacted by strong winds. Materials are transferred from storage to the asbestos picking station via covered conveyors. If the conveyors do not provide adequate protection from the wind when the operation will cease temporarily. Wastes will not be transported outdoors during conditions subject to Met Office weather warnings for wind or rain.			
Extreme cold weather / snowfall	Occupiers of domestic dwellings listed in Table 1.1. Industrial and commercial premises listed in Table 1.1. Birmingham Canal.	Atmosphere	Weather conditions will be monitored using Met Office forecasts. If possible, snow will be cleared to enable normal access into and within the area.	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Very Low
Fire	Occupiers of domestic	Atmosphere	A fire risk assessment has been prepared by third-party consultants.	Unlikely due to control measures	Local nuisance from odour.	Very Low

Abnormal Event	Receptor	Pathway	Risk Management & Response Measures	Probability of Exposure	Consequence	What is the Overall risk?
	<p>dwelling listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>		<p>Firefighting equipment will be installed throughout the site.</p> <p>Waste materials are not combustible and therefore the risk of fire is low.</p> <p>Fire risk has been assessed as part of the Environmental Risk Assessment.</p> <p>Should a fire occur within the site, operations will be temporarily suspended and no further waste will be accepted on site.</p> <p>If necessary, wastes will be transferred off-site to an appropriately permitted facility.</p>	<p>that will be put in place.</p>		
<p>Flooding</p>	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	<p>Atmosphere</p>	<p>Should flooding occur on site, operations will be temporarily suspended and no further waste will be accepted on site.</p> <p>If necessary, wastes will be transferred off-site to an appropriately permitted facility.</p>	<p>Unlikely due to control measures that will be put in place.</p>	<p>Local nuisance from odour.</p>	<p>Very low.</p>

Abnormal Event	Receptor	Pathway	Risk Management & Response Measures	Probability of Exposure	Consequence	What is the Overall risk?
Unexpected large loads of waste received	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	Atmosphere	<p>Inventories of materials are tracked using an electronic system. Waste is only accepted on site when there is sufficient capacity to receive it.</p> <p>The Site Manager will assess the volumes of waste present on site on a daily basis.</p>	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Very low
Poor housekeeping	<p>Occupiers of domestic dwellings listed in Table 1.1.</p> <p>Industrial and commercial premises listed in Table 1.1.</p> <p>Birmingham Canal.</p>	Atmosphere	The Site Manager will undertake inspections at the end of each working day to ensure that the site is clean, and that abatement equipment is working correctly.	Unlikely due to control measures that will be put in place.	Local nuisance from odour.	Low

10. SUMMARY

This odour management plan has been developed in support of an application for an Environmental Permit for a waste soil treatment facility.

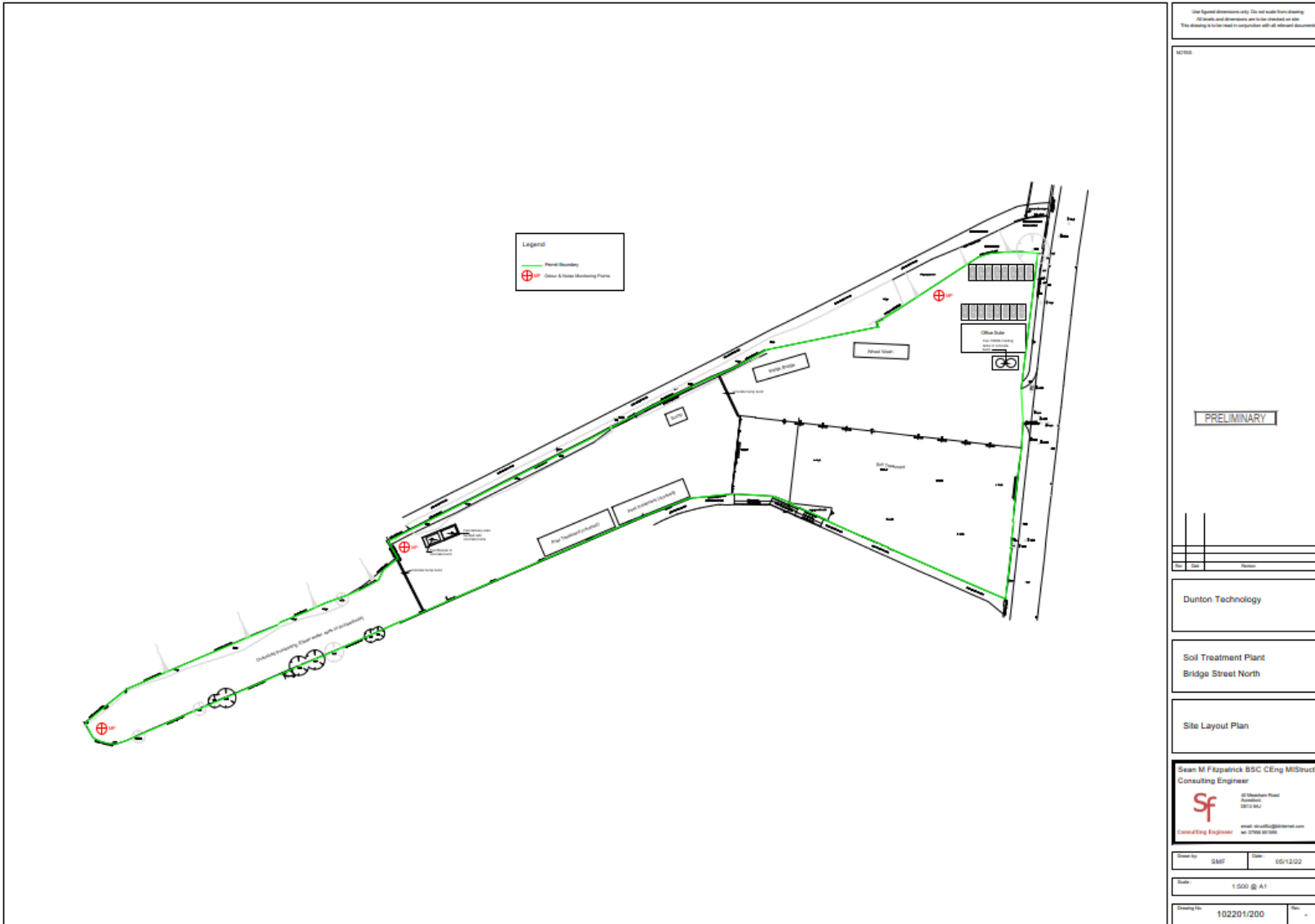
The information contained within the assessment detailed in Tables 9.1 and 9.2 indicates that site activities are unlikely to cause any disturbance to nearby sensitive receptors as a result of site operations.

The proposed operations are unlikely to produce odour due to the management systems in place. In addition, the incoming waste will comprise of hazardous wastes, predominantly long chain hydrocarbon contaminated soils that are not considered to be particularly odorous.

Due to the above measures, we conclude that it is unlikely that local receptors will be impacted by the proposal.

APPENDIX 1

PERMIT BOUNDARY AND SITE LAYOUT



APPENDIX 2

COMPLAINTS PROCEDURE

Bridge Street North Waste Treatment Facility Complaints Procedure

In an attempt to simplify and improve our Company complaints procedure and to ensure that matters are dealt with correctly I would be obliged if you would with immediate effect follow the new process detailed below:

1. Complaint received by email

Please forward immediately to Dunton Technologies Limited.

2. Complaint received by phone

- a. Please forward immediately to Dunton Technologies Limited with the following information:
- i. Name of Company/Person making complaint
 - ii. Contact phone number of Company/Person making complaint
 - iii. Details of complaint (all relevant details)
 - iv. Site/Location details
 - v. Full postal address of Person making complaint if Non account customer
 - vi. Email address of Person making complaint

Please under no circumstances and without exception attempt to deal with the matter independently.

We take all complaints received from customers, members of the public, etc. very seriously, irrespective of how minor they may at first appear and it is vitally important for the company to deal with any such matters expediently and efficiently as possible.

Should you have any further questions with regard this matter then please do not hesitate to contact myself.

Dunton Technologies Limited

Complaints Procedure Part 2

In the event of a complaint being received from a member of the public or from the relevant Authority, the actions in the table below will be undertaken.

Actions	In the event of a complaint being received
Inform Site Manager	●
Check boundary and receptors for odour	●
Review activities occurring on site including date, time, what loads have been delivered, wind direction and general site conditions	●
Inform Environment Agency or Local Authority	●
Trace source of the odour and remediate	●
Review the current odour management techniques to determine if still appropriate	●
Determine if additional measures need to be implemented (including reviewing site layout and storage arrangements)	●
Report back to EA, LA or Complainant regarding what actions have been undertaken	●

- Compulsory Actions
- If deemed necessary