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DUNTON BRIDGE STREET NORTH

APPLICATION TO VARY AN ENVIRONMENTAL PERMIT

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1. NON-TECHNICAL SUMMARY

This application is submitted by Dunton Technologies Limited (referred to hereafter as "Dunton" or "the Client") to vary the Environmental Permit EPR/WE8923AB for the Dunton site located at Bridge Street North, Smethwick, B66 2BZ (the "Site"). The application proposes to update the existing permit to allow for the processing and treatment of non-hazardous waste to produce soils, soil substitutes and aggregate and increase the volume of hazardous waste permitted to be treated at the facility.

The Site previously held a Standard Rules Permit (EPR/QP3342YF/A001), issued on 18 January 2023, for the completion of non-hazardous waste treatment. Following the issue of the Permit, the site applied for a Substantial Variation to undertake hazardous waste operations. The proposed permit variation to undertake hazardous waste operations at the Site was determined by the Environment Agency (EA) on 23 February 2024 (EPR/WE8923AB).

However, in varying the Permit, the EA removed the activities that allowed the processing and treatment of non-hazardous waste. Dunton proposes to reinstate the processing of non-hazardous waste at the site and also to increase the maximum volume of hazardous waste to be treated at the facility.

The proposed changes to the Permit are subject to regulation under the Environmental Permitting (England and Wales) Regulations 2016 (as amended) as they relate to the addition of a waste operation to an existing installation permit and an increase in volume of a specified activity, specifically:

- Schedule 9, Physical treatment of non-hazardous waste.
- Schedule 1 Section 5.3 Part A(1) (a)(ii) hazardous waste installation – physico-chemical treatment (listed as AR2 in Table S1.1 on the Permit); and

As described above, the site is already permitted to treat hazardous waste material and is subject to regulation under Schedule 1 Section 5.3 Part A (1) (a)(i) and (ii) and Section 5.6 Part A (1)(a), there is no proposed change to the on-site process, procedures and layout as a consequence of the permit variation.

Treatment of non-hazardous waste is to be via physical sorting and separation using existing equipment with a maximum annual throughput capacity of up to 75,000 tonnes per year in an indoor facility.

It is proposed to increase the maximum annual throughput capacity for the physico-chemical treatment of asbestos contaminated waste from 30,000 tonnes to 110,000 tonnes per year. There is no proposed increase to the storage capacity of the facility as a consequence of the proposed activity or any proposed change to the maximum annual throughput of material proposed for bioremediation.

The proposed maximum total volume of waste to be processed at the site is 110,000 tonnes per year.

Whilst Dunton proposes to increase the maximum allowable volume of asbestos contaminated waste to be equal to the maximum allowable volume of material accepted for treatment at the Site, it is expected that the Site will treat both hazardous and non-hazardous waste at the Site

over the course of the year. The proposed change allows the Site to maintain flexibility with the type of waste accepted whilst also ensuring there is sufficient capacity to manage the additional volume of material.

The proposed increase in the maximum allowable volume of hazardous waste that can be treated at the Site is based on the rate of hazardous material that is currently being treated. The Site has demonstrated sufficient capability to accept and the volume of hazardous waste proposed.

EA guidance indicates that the type of variation required is a Substantial Variation [1]. Section 3.2 of the guidance document regarding Installations, indicates that due to the treatment capacity being increased on an existing activity by more than the threshold specified in the Schedule 1 activity description, then the variation is substantial. In this case the Scheduled activity falls under Section 5.3 and the threshold for the treatment of hazardous waste is 10 tonnes per day.

Best Available Techniques (BAT)

A BAT assessment was undertaken previously as part of the application to vary the permit to allow for the treatment of hazardous waste at the Site. The assessment concluded that the site operations are representative of best available techniques for hazardous waste treatment. There are no changes to the potential contaminants, mitigation measures or site operations to allow for the treatment of non-hazardous waste, therefore, the BAT assessment completed as part of the previous Substantial Permit Variation application is considered suitable and representative of the proposed activity.

In addition, an assessment of the proposed activity and associated control measures against the appropriate measures for non-hazardous and inert waste has been undertaken. The assessment concluded that the Site has undertaken the appropriate measures for the treatment of non-hazardous waste at a permitted facility.

Management Techniques

The Site will operate to an integrated management system accredited to ISO14001. The management system has been reviewed and is considered to meet the requirements of BAT.

Specific procedures will be in place to manage Site operations, in particular stringent waste pre-acceptance, waste acceptance procedures, decontamination procedures and emergency preparedness and response procedures.

Dunton has advised that the procedures developed as part of this Permit Variation application will be added to the management system.

Raw Materials

There will be no change to the raw material requirements for the Site operations from the proposed activity.

Emissions to Controlled Waters

There are no releases to controlled waters from Site operations.

Emissions to Sewer

There will be no change to the emissions to sewer from the proposed activity.

[1] Environmental permits: when and how you are charged - GOV.UK

Containment Strategy

There will be no change to the containment strategy for the Site operations from the proposed activities.

Emissions to Soil and Groundwater

There are no releases to soil or groundwater from Site operations.

Waste Generation

There are no additional waste streams generated from the proposed activities.

Energy Efficiency

The energy requirements of the site are mainly related to lighting, abatement systems and material transfers.

The site will be included in the overall company objectives and targets for energy efficiency applied which includes consideration of Scope 1, 2 and 3 emissions of CO_2.

Noise and Vibration

A noise assessment was undertaken previously as part of the Substantial Permit Variation application. The assessment concluded that sound levels at the nearest sensitive receptors were unlikely to have significant adverse effects. There are no changes to the Site operations that would generate additional noise to that previously assessed during the preparation of the Substantial Permit Variation application. Therefore, the noise assessment previously completed is considered suitable and representative of the proposed activity.

It is noted that whilst the proposed variation will increase the total maximum allowable throughout volume of the Site (from 30,000 tonnes per year to 110,000 tonnes per year), the noise assessment completed as part of the Substantial Permit Variation application was completed on the basis of a proposed volume of hazardous waste of 215,000 tonnes per year. Therefore no increase in noise impact is expected due to increased throughput.

Odour

An odour assessment was undertaken previously as part of the preparation Substantial Permit Variation application to vary the permit to allow for the treatment of hazardous waste at the Site. The assessment concluded that potential sources of odour are related to the treatment of hydrocarbon contaminated waste. There is little risk of odours being generated from the processing of non-hazardous waste. Therefore, the existing control measures are deemed acceptable.

Dust

Fugitive emissions of dust are minimised due to the storage and treatment of wastes being undertaken in the main processing building which has air extraction via HEPA and carbon filters which will effectively abate any potential dusts. During transfers, materials will be dampened to prevent the formation of dust.

Site Condition Report

A site condition report was prepared as part of the previous Substantial Permit Variation application. Monitoring of soils and groundwater were undertaken during the preparation of this site condition report to establish a baseline for the permit.

As the proposed activities are to be undertaken within existing facilities on the Site (i.e., there is no proposed change to the site layout as part of this variation), the site condition report completed as part of the previous Substantial Permit Variation application is considered to be representative of the site condition.

Environmental Risk Assessment

A qualitative assessment of the potential risks to the environment was undertaken during the previous Substantial Permit Variation application which concluded that the current mitigation measures are sufficient to minimise the risks to low or very low levels. The Environmental Risk Assessment has been updated to include the assessment of the proposed waste operation. A copy of the revised Environmental Risk Assessment is provided in Appendix 3.

As the proposed waste operation comprises the physical treatment of non-hazardous waste within existing structures and facilities at the site, there is no increase to the risk profile as a result of these activities.

2. Introduction

This application is submitted by Dunton Technologies Limited (referred to hereafter as "Dunton" or "the Client") to vary the Environmental Permit EPR/WE8923AB for the Dunton site located at Bridge Street North, Smethwick, B66 2BZ (the "Site"). The application proposes to update the existing permit to allow for the processing and treatment of non-hazardous waste to produce soils, soil substitutes and aggregate and increase the volume of hazardous waste permitted to be treated at the facility.

The Site previously held a Standard Rules Permit (EPR/QP3342YF/A001), issued on 18 January 2023, for the completion of non-hazardous waste treatment. Following the issue of the Permit, the site applied for a Substantial Variation to undertake hazardous waste operations. The proposed permit variation to undertake hazardous waste operations at the Site was determined by the Environment Agency (EA) on 23 February 2024 (EPR/WE8923AB).

However, in varying the Permit, the EA removed the activities that allowed the processing and treatment of non-hazardous waste. Dunton proposes to reinstate the processing of non-hazardous waste at the site and also to increase the maximum volume of hazardous waste to be treated at the facility.

The proposed changes to the Permit are subject to regulation under the Environmental Permitting (England and Wales) Regulations 2016 (as amended) as they relate to the addition of a waste operation to an existing installation permit and an increase in volume of a specified activity, specifically:

- Schedule 9, Physical treatment of non-hazardous waste.
- Schedule 1 Section 5.3 Part A(1) (a)(ii) hazardous waste installation – physico-chemical treatment; and

As described above, the site is already permitted to treat hazardous waste material and is subject to regulation under Schedule 1 Section 5.3 Part A (1) (a)(i) and (ii) and Section 5.6 Part A (1)(a), there is no proposed change to the on-site process, procedures and layout as a consequence of the permit variation.

The areas of the site proposed for the receival, storage and treatment of non-hazardous waste is currently used for the receival, storage and treatment of hazardous waste through bioremediation, that is, the current bioremediation bays may be used for either process.

Dunton will undertake treatment of non-hazardous waste on a 'campaign' basis. Prior to undertaking non-hazardous waste processing, the bays used for bioremediation will be decontaminated and verified by on-site operations personnel. This will provide segregation of hazardous and non-hazardous waste. Waste will be accepted to the Site through a dedicated receival bay and handled, stored, and treated using dedicated plant in specific areas of the existing facility.

Waste that is proposed for bioremediation is not to be received at the site at the same time as non-hazardous waste and that at no time should the two waste streams be mixed. This is reflected in the waste acceptance procedures.

Treatment of non-hazardous waste is to be via physical sorting and separation using existing equipment with a maximum annual throughput capacity of up to 75,000 tonnes per year in an indoor facility.

It is proposed to increase the maximum annual throughput capacity for the physico-chemical treatment of asbestos contaminated waste from 30,000 tonnes to 110,000 tonnes per year. There is no proposed increase to the storage capacity of the facility as a consequence of the proposed activity or any proposed change to the maximum annual throughput of material proposed for bioremediation.

The proposed maximum total volume of waste to be processed at the site is 110,000 tonnes per year.

Whilst Dunton proposes to increase the maximum allowable volume of asbestos contaminated waste to be equal to the maximum allowable volume of material accepted for treatment at the Site, it is expected that the Site will treat both hazardous and non-hazardous waste at the Site over the course of the year. The proposed change allows the Site to maintain flexibility with the type of waste accepted whilst also ensuring there is sufficient capacity to manage the additional volume of material.

The proposed increase in the maximum allowable volume of asbestos contaminated material that can be treated at the Site is based on the rate of material that is currently being treated at the Site. The Site has demonstrated sufficient capability to accept the volume of hazardous waste proposed.

Decontamination procedures will be in place to ensure that bays used for non-hazardous wastes and plant are free from hazardous materials.

EA guidance indicates that the type of variation required is a Substantial Variation [2]. Section 3.2 of the guidance document regarding Installations, indicates that due to the treatment capacity being increased on an existing activity by more than the threshold specified in the Schedule 1 activity description, then the variation is substantial. In this case the Scheduled activity falls under Section 5.3 and the threshold for the treatment of hazardous waste is 10 tonnes per day.

[2] Environmental permits: when and how you are charged - GOV.UK

The principal treatment objective for hazardous/non-hazardous waste received at the site is to render the waste materials appropriate for re-use at nearby restoration or environmental betterment schemes.

2.1 Background

The Permit currently allows for the treatment of hazardous waste at the Site and a maximum treatment capacity of 30,000 tonnes of hazardous waste per year. The processing of non-hazardous waste was recently permitted at the site (non-hazardous waste was processed and treated at the Site up until 23 February 2024), under a Standard Rules Permit (EPR/QP3342YF/A001). Dunton proposes to treat both non-hazardous and hazardous waste at the Site, with a proposed maximum total volume of 110,000 tonnes per year of waste processed at the Site.

The proposed variation is to allow for the treatment of additional non-hazardous waste streams and additional volumes of hazardous waste using existing processes and procedures. There will be no change to the site layout, raw material usage or hours of operation to facilitate this.

The Site will operate under an environmental management system certified to the ISO14001 standard and process operations are considered to be representative of best available techniques (BAT) for the treatment of waste. There is no change to the process operations, with the exception of decontamination activities, to facilitate the treatment of non-hazardous waste at the Site.

The Site location, hazardous and non-hazardous treatment areas are shown in Figures 1 and 2 and Figure 9.1.

3. Installation Details

3.1 Applicant Details

Company Name	Dunton Technologies Ltd.
Installation Name	Bridge Street North Waste Treatment Facility
Installation Address	Bridge Street North, Smethwick. B66 2BZ
Installation Contact	James Hill
Registered Office	Soterion House, Northgate, Aldridge, Walsall, West Midlands. WS9 8TH
Company Registration Number	09223580
Permit Reference	EPR/WE8923AB

3.2 Scheduled Activities

Activity Listed in Schedule 1 of the EP Regulations	**Description of Specified Activity**	**Details**
S5.3 A1(a)(i) Disposal of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment.	Biological treatment of hazardous waste for recovery (R5)	From storage of wastes to treatment using bioremediation in biopiles.
S5.3 A1(a)(ii) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment.	Asbestos removal from wastes (R5)	From storage of wastes to treatment via hand picking and despatch of waste off-site. Treatment in a dedicated enclosed and abated picking cabin.
S5.6 A1(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.	Storage of hazardous waste prior to on-site treatment for the purpose of recovery (R13)	From receipt of waste to its treatment.
Waste Operation Subject to the Requirements of Schedule 9 of the EPR	**Description of Specified Activity**	**Details**
Physical treatment of non-hazardous waste	Physical treatment of non-hazardous waste through sorting and separation for recovery (R5) Recycling or Reclamation of Organic Substances which are not used as solvents (R3)	From storage of wastes to treatment using physio-chemical treatment.

	Storage of wastes pending the above operations (R13)	
Directly Associated Activities		
Pre-treatment	Mechanical screening and sorting of waste to remove any materials not suitable for bioremediation and/ or solidification and/or stabilisation	No pre-treatment of asbestos containing materials. Separated oversize fractions will be stored separately prior to removal off site.
Storage of treated waste	Storage of treated wastes from asbestos picking and bioremediation treatment activities.	Two covered post treatment storage bays.
Storage of raw materials	Fuel storage and non-waste process additives	All fuels will be stored in tanks with secondary containment at a designated location on an impermeable surface with sealed drainage. Non-waste additives used in the waste treatment process will be stored in a dedicated storage area in the main building.
Collection and storage of process water prior to offsite removal	Collection and storage of contaminated process water	Contaminated surface water runoff and process collected from waste storage and treatment areas, not reused in the treatment process shall be removed off site for treatment or disposal. Discharge to surface water and/or sewer is not allowed.
Abatement systems	Operation of carbon filtration units and particulate filters	All storage and treatment areas to be vented through two activated carbon absorption units fitted in series followed by a HEPA/bag filters. Treated air to be vented via the identified emission points.

3.3 Site Setting and Permit Boundary

There is no proposed change to the permit boundary presented in Schedule 7 of the Environmental Permit as a consequence of the proposed activity. A figure showing the site plan and hazardous and non-hazardous waste processing areas is presented in Figure 9.1.

3.4 Best Available Techniques

A Best Available Techniques (BAT) assessment was previously undertaken in support of the substantial variation application. The full assessment is presented in '1620013520-002 – Dunton Bridge Street North BAT Assessment, Ramboll, June 2023'.

The BAT Reference documents that were used to undertake the assessment are:

- Best available techniques (BAT) conclusions for waste treatment (2018).

The BAT assessment that was previously undertaken for the Site was reviewed as part of the preparation of this permit variation application. The conclusions of the previous BAT assessment are considered to be representative of the proposed activities and the processes are expected to achieve applicable BAT-AELs.

In addition to the review of the aforementioned BAT Assessment, an assessment of the proposed activities against the EA guidance for appropriate measures for the treatment of non-hazardous and inert waste at permitted facilities[3] has been undertaken. The outcome is presented in the table below

Appropriate Measure	**Overview**	**Compliant**	**Operator Assessment**
2.1 Management System	You must have an up-to-date written management system, and activities at your facility must follow it. Your management system must incorporate the following features.	Yes	Management techniques and management systems maintained by the site are described in Section 8 of the Report.
2.2 Staff Competence	Your facility must be operated at all times by an adequate number of staff with appropriate training, qualifications and competence. You must keep records of training, qualifications and relevant experience.	Yes	Staff technical competencies is described in Section 8.2 of this Report. Waste acceptance and pre-acceptance procedures are described in Sections 4.3 and 4.4 of the Report.

[3] https://www.gov.uk/guidance/non-hazardous-and-inert-waste-appropriate-measures-for-permitted-facilities accessed on 26 February 2025

2.3 Accident Management Plan	As part of your written management system you must have a plan for dealing with any incidents or accidents that could result in pollution, including near misses.	Yes	Emergency response procedures and incident reporting is described in Sections 8.3 and 8.4 of the Report, respectively. In addition, the Environmental Risk Assessment for the site has been updated to include the proposed activity. A copy of the revised Environmental Risk Assessment is provided in Appendix 3.
2.4 Contingency Plan and Procedures	You must implement a contingency plan so that you: • comply with all of your permit conditions and operating procedures during maintenance or shutdown at your facility, including disruption at other facilities that would affect supplies to your facility or the removal of waste from it • do not exceed limits in your permit and continue to apply appropriate measures for storing and handling waste • stop accepting waste unless you have a clearly defined method of recovery or disposal and enough permitted capacity	Yes	Waste acceptance and pre-acceptance procedures are described in Sections 4.3 and 4.4 of the Report, respectively. As outlined in the pre-acceptance procedure, non-hazardous waste will only be accepted if there is sufficient capacity available at the facility for the segregation and treatment of the waste.
2.5 Facility Decommissioning	You must consider the decommissioning of the facility at the design stage and make suitable plans to minimise risks during decommissioning.	N/A	There is no proposed change to the existing facility as a consequence of the proposed activity.

3.1 Waste Pre-acceptance	You must implement waste pre-acceptance procedures so that you know enough about a waste (including its composition) before it arrives at your facility. You need to do this to assess and confirm that the waste is technically and legally suitable for your facility. If you accept the waste, you must keep records to justify your decision. Your pre-acceptance procedures must follow a risk-based approach, considering: • the source and nature of the waste • potential risks to process safety, occupational safety and the environment (for example from odour and other emissions) • knowledge about the previous waste holder(s)	Yes	Waste pre-acceptance procedures are described in Section 4.4 of the Report.
3.2 Waste Acceptance	You must implement waste acceptance procedures to check that the characteristics of the waste received matches the information provided to you during waste pre-acceptance. This is to confirm the waste is as expected and that you can accept it. If the waste does not conform to the pre-acceptance information, you may still be able to accept the waste, but you must confirm	Yes	Waste acceptance procedures and waste acceptance are described in Section 4.3 and 4.5 of the Report, respectively.

	first that your permit allows it and that your facility can handle it appropriately. Otherwise, you must reject the waste.		
3.3 Quarantine	Your facility must have a dedicated waste quarantine area or areas which you use to temporarily store waste being rejected, or non-conforming waste whilst it is being assessed. Quarantine areas must have impermeable surface with self-contained drainage if there is a risk of contaminated runoff from the quarantined waste.	Yes	Waste rejection and quarantine procedures are described in Section 4.6 of the Report. Please refer to Figure 2 regarding the site layout showing the location of the quarantine area.
3.4 Waste Tracking	You should use an electronic or equivalent system to hold up-to-date information about the available capacity of different parts of your facility, for example reception, quarantine, treatment and storage areas. If you do not have an electronic system you still need to hold the equivalent level of information. You should use a pre-booking system to make sure that you have enough waste storage and process capacity for the incoming acceptable waste.	Yes	Waste tracking procedures are described in Section 8.7 of the Report.
4. Waste Storage	You must have waste storage and handling procedures. You must store and handle waste in a way that makes sure	Yes	As described in the Report all waste is to be received, stored and treated on an impervious surface within an existing building.

	you prevent and minimise pollution risks by using appropriate measures.		The site currently receives and treats hazardous waste, as there is no change to the existing building, infrastructure or site layout as a consequence of the proposed activity the waste storage areas are considered appropriate.
4.1 Segregation	You should keep different types of waste segregated if contamination would inhibit the recovery of the waste.	Yes	Non-hazardous waste will be received and treated on a 'campaign' basis. Non-hazardous waste will only be received, treated and stored in areas of the site that have been dedicated for non-hazardous waste. Should hazardous waste be treated in these areas of the site prior to the proposed receival of non-hazardous waste then these areas of the site will undergo decontamination in accordance with the procedure described in Section 6 of the Report. Waste proposed for bioremediation will not be accepted at the same time as non-hazardous waste to ensure that the hazardous and non-hazardous wastes are segregated. For further information please refer to the Process Description for the proposed activity in Section 4 of the Report.
5. Waste Treatment	Waste treatment must have a clear and defined benefit. You must fully understand, monitor and optimise your waste treatment process to make sure that you treat waste effectively and efficiently. The treated output material must meet your expectations and be suitable for its intended disposal or recovery route. You must identify and characterise emissions from the process	Yes	The treatment process is described in Section 5 of the Report.

	and take appropriate measures to control them at source.		
5.1 Soils and Inert Waste	Soil and aggregate washing is a physico-chemical treatment (not a separation or sorting activity) and you must categorise the outputs as set out in WM3.	N/A	This is not proposed for the site.
5.2 Waste treatment outputs including fines	You must not make assumptions about the nature of the outputs from your waste treatment processes. You must make sure that you appropriately classify the outputs following WM3 If you do not, you may breach your Duty of Care for waste and commit an offence under the Environmental Protection Act 1990.	Yes	Waste acceptance procedures are described in Section 4.5 of the Report.
5.3 Waste Treatment for Landfill	If you are handling or treating waste before you send it to landfill follow our guidance Dispose of waste to landfill.	N/A	This is not proposed for the site.
6.0 Emissions Control	You must identify, characterise and control emissions from your activities that may cause pollution.	Yes	The control and monitoring measures for emissions generated from the proposed activity is described in Sections 10 and 11 of the Report.
6.1 Enclosure Within Buildings	Enclosing activities within buildings can be an appropriate measure for preventing and minimising emissions of pollution, given that an appropriately designed building will reduce a range of types of pollutants, in particular, noise,	Yes	The proposed activity will be undertaken within an enclosed buildings.

	dust and odour. A partially enclosed building may be an appropriate measure on its own, or together with other appropriate measures, depending on the site-specific circumstances.		
6.2 Point Source Emissions to Air	You must use appropriate measures to make sure that you collect, extract and direct all process emissions to an appropriate abatement system for treatment before release.	Yes	Mitigation measures for emissions generated from the proposed activity are described in Section 10 of the Report.
6.3 Fugitive Emissions to Air	You must use appropriate measures to prevent and minimise fugitive emissions to air, including dust, mud and litter, odour and noise and vibration.	Yes	Mitigation measures for emissions generated from the proposed activity are described in Section 10 of the Report. An assessment of noise, dust and odour generated from the proposed activity is described in Sections 14, 15 and 16 of the Report, respectively.
6.4 Point Source Emissions to Water (Including Sewer)	You must identify the main chemical constituents of your facility's point source emissions to water and sewer as part of your inventory of emissions.	N/A	There is no change to the process for emissions to the sewer described in Table S3.2 of the Environmental Permit as a consequence of the proposed activity.
6.5 Fugitive Emissions to Land and Water	You must use appropriate measures to control potential fugitive emissions and make sure that they do not cause pollution. See the guidance on emissions to water and leaks from containers.	N/A	There are no emissions to soil and groundwater from site operations, including the proposed activity.

6.6 Pests	You must manage waste in a way that prevents pests. For example, if you do not manage flies, rats and birds they can affect operations, be a nuisance to neighbours and pose an environmental and health hazard as a potential vector for pathogens. We have produced internal guidance for our officers on fly management. Contact us if you would like a copy.	N/A	Processing of soils is unlikely to attract pests. However, the proposed activity is undertaken within an enclosed building.
7.1 Emissions to Air	Your facility's emissions inventory must include information about the relevant characteristics of point source emissions to air, such as the: • average values and variability of flow and temperature • average and peak concentration and load values of relevant substances and their variability • presence of other substances that may affect the waste gas treatment system or plant safety, for example, oxygen, nitrogen, water vapour and dust	Yes	There is no proposed change to the dust emission limits described in Tables S3.1 and S3.4 of the Environmental Permit as a consequence of the proposed activity.
7.2 Medium Combustion Plant Directive	If you operate medium combustion plant or specified generators you must monitor your emissions following the	N/A	Not applicable to the proposed activity.

	Environment Agency guidance on Monitoring stack emissions: low risk MCPs and specified generators and maintain a record of the type and quantity of fuel used in the plant.		
7.3 Emissions to Water and Sewer	Your facility's emissions inventory must include information about the relevant characteristics of point source emissions to water or sewer, such as: • average values and variability of flow, pH and conductivity • average concentration and load values of relevant substances and their variability, for example, chemical oxygen demand (COD) and total organic carbon (TOC), metals, priority substances or micropollutants • data on bio-eliminability, for example, biochemical oxygen demand (BOD), BOD to COD ratio, biological inhibition potential (for example, inhibition of activated sludge)	N/A	There is no change to the process for emissions to the sewer described in Table S3.2 of the Environmental Permit as a consequence of the proposed activity.
8.1 Energy Efficiency	You must create and implement an energy efficiency plan at your facility. This must:	N/A	This is a condition of the existing Environmental Permit and is not related to the proposed activity.

	• define and calculate the specific energy consumption of the activity (or activities) you carry out and waste stream(s) you treat • set annual key performance indicators, for example specific energy consumption (expressed in kWh/tonne of waste processed) • plan periodic improvement targets and related actions		
8.2 Raw Materials	You must maintain a list of the raw materials used at your facility and their properties. This includes auxiliary materials and other substances that could have an environmental impact.	N/A	This is a condition of the existing Environmental Permit and is not related to the proposed activity.
8.3 Water Use	You must take measures to make sure you optimise water consumption to: • reduce the volume of waste water generated • prevent or, where that is not practicable, reduce emissions to soil and water	N/A	This is a condition of the existing Environmental Permit and is not related to the proposed activity.
9 Waste Minimisation, Recovery and Disposal	You must have and implement a residues management plan that:	Yes	Waste minimisation and management is described in Section 12 of the Report.

	• minimises the generation of residues, that is solid waste arising from the treatment of waste • optimises the reuse, regeneration, recycling or energy recovery of residues, including packaging • makes sure you properly dispose of residues where recovery is technically or economically impractical		

4. Process Description

4.1 Overview

It is proposed that there will be a maximum total annual throughput of 110,00 tonnes per annum of waste with no more than 75,000 tonnes of non-hazardous waste to be accepted in any one year.

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 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.

Existing hazardous waste treatment operations and proposed non-hazardous waste treatment operations are shown in Figure 4.1.

4.2 Permitted Waste Types

The Site is permitted to operate under a bespoke Environmental Permit (EPR/WE8923AB) to accept hazardous waste (soils) for the purpose of physico-chemical treatment and bioremediation, to produce soils, soil substitutes and aggregate. The waste types currently permitted to be accepted at the site are defined in Table S2.2 of the existing Permit. Dunton would like to vary the Permit so that the following wastes can be accepted and treated at the site **in addition to** those already received. The proposed waste types for each treatment activity are provided in Table 4.1. The wastes are listed with the description and code provided under the List of Wastes (England) Regulations 2005. A complete list of waste (i.e., hazardous and non-hazardous) proposed to be processed at the Facility following the revision of the Permit is provided in Appendix 2.

Only waste types previously permitted to be accepted at the Site under the Standard Rules Permit are to be added as part of this Permit Variation Application.

Table 4.1: Non-Hazardous Waste Types for Treatment

Code	Description
01	**WASTES RESULTING FROM EXPLORATION, MINING, QUARRYING AND PHYSICAL AND CHEMICAL TREATMENT OF MINERALS**
01 04	**wastes from physical and chemical processing of non-metalliferous minerals**
01 04 08	waste gravel and crushed rocks other than those mentioned in 01 04 07
01 04 09	waste sand and clays
02	**WASTES FROM AGRICULTURE, HORTICULTURE, AQUACULTURE, FORESTRY, HUNTING AND FISHING, FOOD PREPARATION AND PROCESSING**
02 02	**waste from preparation and processing of meat, fish and other foods of animal origin**

02 02 02	shellfish shells from which the soft tissue or flesh has been removed only
03	**WASTES FROM WOOD PROCESSING AND THE PRODUCTION OF PANELS AND FURNITURE, PULP, PAPER AND CARDBOARD**
03 01	**wastes from wood processing and the production of panels and furniture**
03 01 01	waste bark and cork
03 03	wastes from pulp, paper and cardboard production and processing
03 03 01	waste bark and wood
10	**WASTES FROM THERMAL PROCESSES**
10 01	**waste from power stations and other combustion plants**
10 01 01	bottom ash and slag only
10 01 02	pulverised fuel ash only
10 01 05	gypsum (solid) only
10 01 07	gypsum (sludge) only
10 01 15	bottom ash and slag only from co-incineration other than those mentioned in 10 01 14
10 11	**wastes from manufacture of glass and glass products**
10 11 12	clean glass other than those mentioned in 10 11 11
10 12	**wastes from manufacture of ceramic goods, bricks, tiles and construction products**
10 12 08	waste ceramics, bricks, tiles and construction products (after thermal processing)
10 13	**wastes from manufacture of cement, lime and plaster products and articles and products made from them**
10 13 14	waste concrete only
15	**WASTE PACKAGING**
15 01	**packaging**
15 01 07	clean glass only
17	**CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)**
17 01	**concrete, bricks, tiles and ceramics**
17 01 01	Concrete
17 01 02	bricks
17 01 03	tiles and ceramics
17 01 07	mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
17 02	**wood, glass and plastic**
17 02 02	clean glass only
17 03	**bituminous mixtures, coal tar and tarred products**
17 03 02	road base and road planings (other than those containing coal tar) only
17 05	**soil (including excavated soil from contaminated sites) stones and dredging spoil**
17 05 04	soil and stones other than those mentioned in 17 05 03
17 05 06	dredging spoil other than those mentioned in 17 05 05
17 05 08	track ballast other than those mentioned in 17 05 07
17 08	**gypsum based construction material**
17 08 02	gypsum only other than that mentioned in 17 08 01
19	**WASTES FROM WASTE MANAGEMENT FACILITIES, OFF SITE WASTE WATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION / INDUSTRIAL WASTE**

19 05	**wastes from aerobic treatment of solid waste**
19 05 03	compost from source segregated biodegradable waste only
19 08	**wastes from waste water treatment plants not otherwise specified**
19 08 02	washed sewage grit (waste from desanding) free from sewage contamination only
19 09	**wastes from the preparation of water intended for human consumption or water for industrial use**
19 09 02	sludges from water clarification
19 12	**wastes from the mechanical treatment of wastes**
19 12 05	clean glass only
19 12 09	minerals (for example sand, stones)
19 12 12	treated bottom ash including IBA and slag other than that containing dangerous substances only
19 13	**wastes from soil and groundwater remediation**
19 13 02	solid wastes from soil remediation other than those mentioned in 19 13 01
19 13 04	sludges from soil remediation other than those mentioned in 19 13 03
20	**MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS**
20 01	**separately collected fractions**
20 01 02	clean glass only
20 02	**garden and park wastes**
20 02 02	soil and stones

4.3 Waste Acceptance Procedure and Pre-acceptance Procedures

Prior to waste soils being accepted on the site, waste pre-acceptance and acceptance testing is undertaken.

4.4 Waste Pre-Acceptance

The procedure requires that all wastes to be received on site are first screened for acceptability. Dunton's technical compliance department will screen each enquiry from a customer. Details will be taken on the nature of the material, where the waste originated, the List of Wastes category (EWC), chemical composition and any other pertinent details. A decision as to whether a waste can be treated will then be made.

Waste soils are sampled and analysed prior to being transported to the site for treatment. Wastes will be received from a single source and will be sampled every 250 tonnes of soil to ensure the composition is representative of the source. Samples of the soil will be analysed at a UKAS accredited laboratory to ensure that the waste acceptance criteria are met.

Waste must be categorised as non-hazardous waste in accordance with the WM3 guidance for it to be accepted at the Site as non-hazardous waste.

Dunton advised that non-hazardous waste will only be accepted for treatment should dedicated receival, storage and treatment areas be available to ensure the segregation of non-hazardous and hazardous waste materials.

4.5 Waste Acceptance

On receipt at the Site, further testing will be undertaken prior to the materials being offloaded. This ensures that the waste delivered to the site conforms to the information provided at the pre-acceptance stage.

To ensure that sufficient capacity is available at the Site for both non-hazardous and hazardous materials, any waste deliveries are pre-booked with a minimum of 24 hours' notice. Waste loads are only accepted if there is sufficient capacity, if this is not the case then the load will be returned to the waste producer.

On arrival at the Site, the load will undergo visual and olfactory inspection by the site manager or deputy. The waste is cross checked against the accompanying documentation; if it does not match the written description then it will be rejected and returned to the producer. At this point, if waste is noted to be significantly odorous, then the waste will be rejected.

In addition, the Site will use portable analysers to provide reassurance that the waste received is of a similar chemical composition to the pre-acceptance analyses. Portable analysers will be used to detect hydrocarbons (photoionisation detector) and x-ray fluorescence is used for heavy metal analysis.

Following waste acceptance checks, wastes are offloaded and transferred to dedicated storage bays within the main building for processing.

Verification sampling and analysis is also undertaken with waste being representatively sampled; one sample (generated from three sub-samples) for every 250 tonnes of waste received. Verification samples are analysed at a UKAS accredited laboratory or equivalent standard.

The waste verification criteria contains a full suite of both aliphatic and aromatic hydrocarbons, as well as heavy metals and asbestos. Material will only be accepted as non-hazardous where analyte concentrations are sufficient for non-hazardous determination.

As the Site also accepts hazardous waste, a dedicated storage and processing area will be used for the acceptance and processing of non-hazardous waste, including dedicated plant for the handing of non-hazardous waste. Where hazardous waste has previously been accepted, stored and processed in areas to be used for the processing of non-hazardous waste; a stringent decontamination procedure is to be completed prior to the acceptance/processing of non-hazardous waste. Please refer to Section 6 below, for further information regarding the proposed decontamination procedure.

In addition to the hazardous waste and non-hazardous waste storage bays, the Site has a separate quarantine bay. Wastes may be stored here whilst verification analysis is undertaken, if non-hazardous waste is to be stored in the quarantine bay, the quarantine bay is to be subject to the decontamination procedure described in Section 6. Should the material fail the acceptance criteria, then it will be removed from the site within five working days.

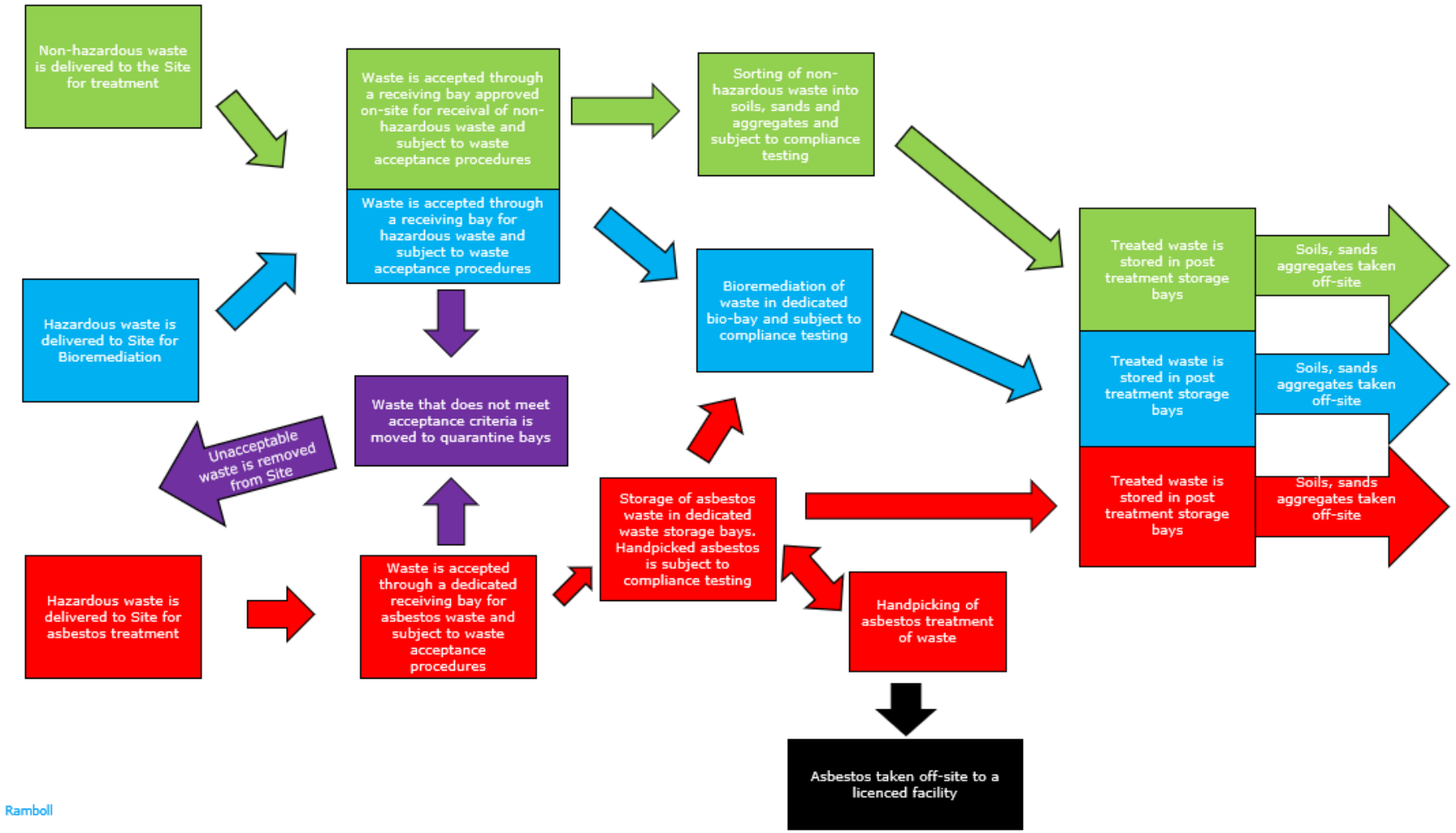
For clarity, hazardous and non-hazardous waste receival, storage and treatment areas are shown in Figure 9.1 of the Report.

4.6 Rejected Waste

It is unlikely that waste received at the Site will need to be rejected due to the extensive pre-acceptance and acceptance procedures applied. However, if non-compliant or untreatable wastes are received on Site, they will be returned to the producer if it is safe to load them back onto the vehicle that delivered them. Where this is not possible, they will be moved to the quarantine area and removed from Site within five working days either to an alternative permitted facility that can treat them, or to a suitable disposal facility. Additionally, the producer of the waste will be notified.

The Environment Agency will be informed of any non-compliant wastes arriving at the Site.

Figure 4-1: Site Process Operations



5. Non-Hazardous Waste Treatment Process

Wastes for treatment will be received in accordance with the Site waste pre-acceptance and acceptance procedures.

On arrival at the site, waste will be inspected to ensure that it is consistent with the accompanying documentation. The Site will also utilise portable analysers to provide reassurance that the waste received is of a similar chemical composition as the pre-acceptance testing. Portable analysers will be used to detect hydrocarbons and heavy metals.

If the waste fails either the visual, olfactory or waste acceptance criteria using the portable analyser, then the waste will be returned to the waste producer.

Sampling will also be undertaken at this point, with one sample being analysed for every 250 tonnes of material. Three subsamples will be taken to generate one composite sample. The analyses will be undertaken at a UKAS accredited laboratory or to an equivalent standard.

Following waste reception, waste is transferred into the non-hazardous delivery bay. Waste delivery, storage and treatment will be undertaken within the main building. This limits the potential for nuisance to result from noise, dust or odour.

Once confirmatory analysis has determined that the waste meets the acceptance criteria, soils will be screened to remove any large objects and deleterious material. Screening will be undertaken within the building.

Further screening will then be undertaken to separate the non-hazardous material into soils, sands and aggregates. The screening process will be undertaken within the main processing building and a misting system will be used to prevent dust being created from this process.

Emissions to air are controlled using the onsite abatement system. The exhaust to air extraction system for the non-hazardous waste treatment bays are connected to two carbon absorption units fitted in series followed by a HEPA filter. Routine monitoring will be undertaken by site personnel to ensure that the HEPA and carbon filters remain effective and compliance monitoring will be undertaken every six months in line with BAT and Permit requirements.

The waste receival, storage and treatment areas are constructed of kerbed hardstanding.

Effluent will not routinely be generated from the non-hazardous waste treatment process. Water will be used to minimise the generation of dust from the process. However, as the storage bays are located within a building, the moisture content can be carefully controlled. There are four sumps within the main building to collect any excess water, including a dedicated sump for the non-hazardous waste treatment area, but it is not expected that these sumps will require emptying routinely.

Fugitive emissions are controlled in accordance with the Dust Management Plan. Whilst fugitive releases are minimised by the majority of operations being undertaken inside a building, monitoring for dust will be undertaken at various points on the site.

Once the soil meets the external re-use criteria, the soil is removed from the processing bays and transferred to the treated soils storage area or taken directly off-site. The post-treatment bays are covered to prevent fugitive emissions of dust.

6. Decontamination Procedure

As described above, there will be a dedicated area for the storage, processing and treatment of non-hazardous waste on-site. This is to reduce the likelihood of cross-contamination of the non-hazardous waste with hazardous waste that is also to be processed at the site.

The Facility is currently permitted to process hazardous soils through bioremediation. This activity is to be undertaken in two dedicated bioremediation treatment bays 'biodpad bays'. The 'biopad bays' will be used as a non-hazardous waste processing bay, following suitable decontamination procedures. That is, no additional infrastructure will be required to allow for the processing of non-hazardous waste at the site.

When non-hazardous material is received, the bay will be marked as 'non-hazardous' by the site manager to ensure segregation of waste streams. This will be communicated to the team during the team's daily briefing meeting.

In order to retain flexibility, the storage and treatment bays may be used for either hazardous or non-hazardous waste processing. To that end, a 'bay decontamination procedure' has been prepared to ensure that hazardous waste does not contaminate the non-hazardous waste streams.

It is noted that the primary preventative method for preventing cross-contamination is the segregation of the two waste streams by using dedicated storage and processing areas. The decontamination procedures have been developed in the event that non-hazardous processing areas are used to process hazardous materials due to business demands.

In addition, as part of waste pre-acceptance procedures non-hazardous waste will only be accepted at the Site if sufficient space is available in dedicated treatment areas for non-hazardous waste. Hazardous waste proposed for bioremediation will not be received at the same time as non-hazardous waste.

Key aspects of the bay decontamination procedure are presented in Section 6.1.

6.1 Bay Decontamination Procedure

If contaminated waste has been received or stored in an area of the site proposed for non-hazardous waste the following process is to be undertaken:

- Significant residual waste is gathered using a dedicated loading shovel / telehandler. The residual waste is to be treated in accordance with the hazardous waste treatment procedure;
- Following the removal of all residual waste the inside walls, floor and ceiling of the bay are misted with water and the bay is allowed to dry. Effluent (if any) generated during the decontamination process will be managed in accordance with the requirements described in the Site's Environmental Permit;

- Verification that the bay has been decontaminated and is suitable for the receival of non-hazardous waste will be carried out through visual inspections to ensure all potential contaminants have been effectively removed; and
- Once a bay has been verified to be used for non-hazardous waste treatment, it will be communicated to the team via an updated status log and included in the briefing during the team's daily operational meeting.

7. Oversize Materials Processing

Oversize material constitutes large pieces of concrete and similar building materials that are extracted from the waste soils prior to treatment. These materials are screened out of the waste material and stored prior to collection for off-stie treatment at a licenced facility. Oversize materials are not treated on-site.

There is no change to this process as a consequence of this activity.

8. Management Techniques

8.1 Overview

Dunton operates several waste treatment facilities that all adhere to an integrated management system (IMS) accredited to the ISO 14001 standard and externally audited by Alcumus ISOQAR. The management systems have extensive operational and emergency preparedness procedures. The relevant procedures will be implemented at the site located at Bridge Street North for the processing of hazardous and non-hazardous waste. The Site management system is considered suitable for the management of the proposed activities.

The effectiveness of the EMS will be monitored regularly to ensure the continual improvement of environmental performance at the Installation. Changes to operations at the Facility are reflected and managed through the review and update of the components of the EMS.

Site management reviewed the EMS with regards to the requirements defined in the Best Available Techniques (BAT) conclusions for "Waste Treatment, August 2018'" during the previous substantial permit variation application. The review concluded that the Environment Management System (EMS) is compliant with BAT. As the proposed activities (i.e. processing of waste soils) are considered to be commensurate with those assessed during the Substantial Variation, the EMS continues to be representative of BAT.

8.2 Technical Competence

The facility will be supervised by an appropriately experienced waste manager with Certificate of Technical Competence (COTC) Level 4 in managing non-hazardous and hazardous treatment and transfer operations.

It is noted that the specific personnel proposed for this role is currently undergoing their COTC certification and is expected to obtain the qualification by 31 July 2025. Notwithstanding, the person has over nine years' experience working for Dunton at waste sites and is considered to have sufficient knowledge and experience to manage the operations proposed as part of this application.

The transfer and treatment of the waste will be overseen by the Technically Competent Manager or other trained staff. This will include overseeing pre-acceptance procedures, waste acceptance procedures, storage and transfer.

All personnel involved in the waste treatment operation have undergone training, as a minimum, by a Technically Competent Manager.

8.3 Emergency Response

During the preparation of the Substation Variation previously completed for the Site, 'other than normal operating conditions (OTNOC)' scenarios were considered to ensure that potential pollution events resulting from abnormal and emergency conditions were considered.

An Environmental Risk Assessment was developed in support of the substantial variation application. The findings are presented in '1620013520-002 Dunton Bridge Street North, Environmental Risk Assessment', November 2022. The Environmental Risk Assessment was updated to include the assessment of any potential risk to environmental receptors that may arise from the proposed activity. Please refer to Section 20 for further information regarding this aspect and Appendix 3 for a copy of the revised Environmental Risk Assessment.

The proposed activity will be completed within existing infrastructure, using procedures developed on-site for the treatment of hazardous waste. Therefore, the procedures prepared for potential emergency scenarios are considered suitable to manage any potential emergency scenarios resulting from the proposed activity.

8.4 Incidents and Non-Conformances

In addition to the emergency response procedures, all incidents and non-conformances will be recorded and investigated. The Site operates an electronic tracking tool (Be Safe) to ensure that all environmental, health and safety incidents and near misses are recorded and investigated.

Odour, dust and noise management plans have been developed for the Site operations. The management plans include routine monitoring of potential nuisance.

There are standard procedures for addressing complaints from third parties which are currently implemented at the Site. All non-conformances will be recorded and investigated and where applicable, corrective actions will be implemented.

8.5 Maintenance

As described above, there is no change to site layout, infrastructure or site operations as a consequence of the proposed activity. Therefore, the Planned Preventative Maintenance (PPM) system that is in place for the Facility, as described in the Substantial Variation Application, is considered suitable for the management and maintenance of site infrastructure.

8.6 Records

Records are to be maintained on-site in accordance with the requirements of the Site's Environmental Permit. No change as a consequence of this proposed variation is considered to impact the record keeping process currently undertaken on-site.

8.7 Waste Tracking

The site maintains a waste inventory and tracking spreadsheet so that all materials can be tracked throughout the treatment process from receipt until the treated material leaves the site.

9. Storage

9.1 Storage of Soils

All waste storage is undertaken within the main building overlying concrete hardstanding.

Waste delivered to the site will be stored in dedicated storage bays that have been cleared for the storage of non-hazardous waste prior to treatment. Waste will be delivered into one delivery bay dedicated for non-hazardous wastes. The delivery bay has a 252 m^3 capacity.

Following receipt, waste received will remain in the delivery bay until verification testing has been undertaken using portable analysers. It will then be moved directly to a dedicated non-hazardous storage bay that is located within the building. A storage bay has a capacity of 455 m^3.

Two post treatment bays are provided for the storage of material that has been successfully treated. Each storage bay has a capacity of 150 m^3.

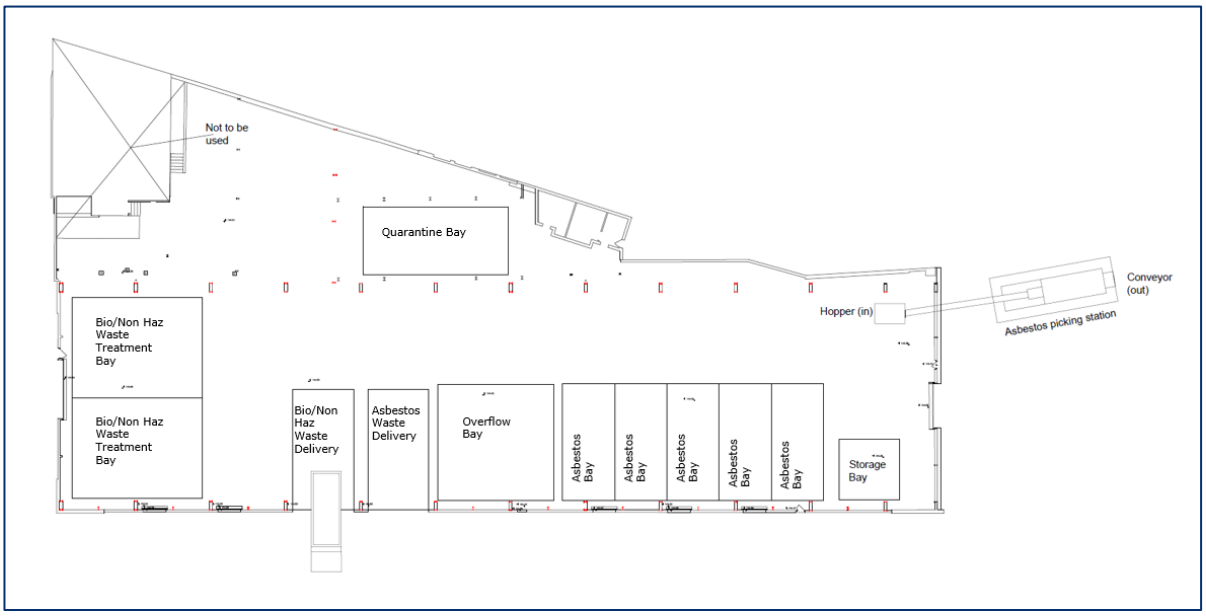
The post treatment bays are roofed to prevent surface water runoff during periods of heavy rain; and if required, kept damp to prevent the formation of dust. They will contain only materials that have been verified as non-hazardous.

A quarantine bay is also provided which is located within the main building. The approximate storage capacity is 24 m^3. Non-hazardous waste will only be permitted to be stored in the quarantine bay if appropriate decontamination of the storage bay has been undertaken.

There is no proposed increase to the storage volume of the site as a consequence of the proposed activity. The site layout was developed on the basis of the maximum throughput of 215,000 tonnes per year of waste, as opposed to the proposed 110,000 tonnes per year.

A site plan showing the locations of the storage bays is presented in Figure 9.1.

Figure 9.1 Soil Storage Locations



9.2 Raw Materials

There will be no change to the raw materials used on-site, or the storage requirements for these materials as a consequence of the proposed activity.

The raw materials and associated storage areas were assessed as part of the Substantial Permit Variation application previously prepared for the Site, as there is no increase in the raw material requirements and/or additional materials required for the completion of the proposed activity, the raw materials and associated areas are considered appropriate. As outlined above, the assessment of raw materials was assessed as part the Substantial Permit Variation application and developed on the basis of the maximum throughput of 215,000 tonnes per year of waste, as opposed to the proposed 110,000 tonnes per year.

9.3 Fuel Storage

A 5,000 litre diesel tank is located on the site for refuelling of the site vehicles. There is no change to the associated activity described in Table S1.1 of the Environmental Permit as a consequence of the proposed activity.

9.4 Effluent Storage Tanks

There is no additional volume or type of effluent generated from the proposed activity. Therefore, the current effluent treatment system is considered suitable for the management of any effluent generated from on-site activities. See Section 11.3.2.2 for further details.

10. Emissions to Air

10.1 Point Source Release

There will be one emission point from the main processing building associated with the proposed non-hazardous waste treatment activity. The location of the release point is shown on the site layout plan presented in Appendix 1.

The point source release point to air is defined as:

- A2 – extraction from the non-hazardous waste/biopads.

Only emission sources relevant to the non-hazardous waste activities have been assessed and discussed in the Sections below. Emission sources relevant to the hazardous waste treatment activities were assessed as part of the Substantial Permit Variation application and the assessment was completed on the basis of a maximum throughput of 215,000 tonnes per year of waste, as opposed to the proposed 110,000 tonnes per year. Therefore, the assessment completed as part of the Substantial Permit Variation application for this aspect is considered to be suitable.

10.2 A2 Extraction from the non-hazardous waste/Biopads

The non-hazardous waste will be processed in the same portion of the main building on-site that bioremediation is undertaken. As outlined in Section 5, the processing of non-hazardous waste in this portion of the Site will only occur once the storage bays have been suitably decontaminated to prevent cross-contamination of the non-hazardous waste.

The exhaust to air extraction system in this portion of the Site is connected to HEPA filter and then two carbon absorption units fitted in series. This design applies a level of inbuilt redundancy, allowing for failure and replacement of one carbon filter without it impacting on the final emission quality.

The extracted air will ultimately release to a combined vent at roof height which is designated as A2.

As outlined above, the area of the Site that non-hazardous waste will be processed is the same area that bioremediation will take place. Therefore, the abatement system in this portion of the Site is over-designed for the processing of non-hazardous waste.

10.3 Fugitive Releases

The potential for fugitive releases is minimised due to the majority of process operations being undertaken indoors, with damping provided on dry materials.

Waste received on site are delivered into the delivery bay that are located within the main building. Waste is tested using a portable analyser and provided they meet the waste acceptance criteria, it is then transferred into one of the dedicated storage bays.

Wastes are kept damp to minimise the potential for dust and odour generation and the waste storage bays have HEPA and carbon filters installed.

10.4 Monitoring

10.4.1 Monitoring of Point Source Releases

10.4.1.1 Dust

The dust monitoring requirements for the site are described in Table S3.1 of the Environmental Permit. As there is no proposed change to the site layout, site infrastructure or site operations as a consequence of the proposed activity there is no proposed change to the dust emission monitoring requirements described in the Environmental Permit as a result of this Permit Variation Application.

In addition, the confirmatory sampling undertaken at the site for dust emissions will be commensurate with that described in the Substantial Permit Variation (i.e., no change).

10.4.2 Monitoring of Fugitive Releases

10.4.2.1 Dust

The fugitive dust monitoring requirements for the site are described in Table S3.4 of the Environmental Permit. As there is no proposed change to the site layout, site infrastructure or site operations as a consequence of the proposed activity there is no proposed change to the fugitive dust emission monitoring requirements described in the Environmental Permit as a result of this Permit Variation Application.

In addition, the visual monitoring of dust undertaken at the site will be commensurate with that described in the Substantial Permit Variation (i.e., no change).

10.5 Emissions Limits

There is no proposed change to the dust emission limits described in Tables S3.1 and S3.4 of the Environmental Permit as a consequence of the proposed activity. The abatement systems installed at the site, as described in the Substantial Permit Variation, were considered suitable to achieve the BAT-AELS defined in the Waste Treatment BAT Conclusions. As there is no change the abatement systems or emission limits as a consequence of this Variation Application, the abatement systems installed at the site are considered suitable.

10.6 Dust – Channelled Emission Limits

There is no proposed change to the dust BAT-AEL (5mg/Nm^3) requirement described in the Environmental Permit as a consequence of the proposed activity..

10.7 Dust – Fugitive Emission Limits

There is no proposed change to the dust monitoring requirements for the Site, at the Site boundary (i.e., 200 mg m² day-1 for PM10), as part of this Permit Variation.

Visual monitoring of dust will be undertaken throughout the Site's operating hours. The following observations would result in action being taken:

- None observed – No action
- Slight Dust – Review working method, alter working method or areas being worked
- Moderate Dust – Temporarily suspend works, change working method or areas being worked
- Severe – Halt operations immediately.

11. Emissions to Water and Sewer

11.1 Emissions to Controlled Waters

There are no releases to controlled waters from site operations.

11.2 Emissions to Sewer

There is no change to the process for the emissions to sewer described in Table S3.2 of the Environmental Permit as a consequence of the proposed activity.

11.3 Drainage and Containment Strategy

The proposed activity will be undertaken within a building and in existing areas of the site (i.e., no change to site layout or infrastructure to facilitate the proposed activity). As such, there is no change to the containment and drainage strategy implemented on-site and described in the Substantial Permit Variation Application as a consequence of the proposed activity.

11.4 Main Process Building

All storage of waste materials will be undertaken within the main process building in dedicated areas for that waste material (i.e., hazardous and non-hazardous areas). This minimises the generation of contaminated surface water as there is no rainwater runoff.

Contaminated water generated in the process will be contained within dedicated sumps. There will be four sumps located within the main process building for the collection of any excess water that is used for damping down. The water used for damping can be easily controlled such that dust is suppressed without generating excess effluent.

The sumps do not have any connection to surface water or foul sewer. In the unlikely event that the sumps become full, the water can be reapplied for damping down or manually pumped out into a container prior to testing and discharge if appropriate, or removal for offsite disposal. Only water previously used for damping down non-hazardous waste will be used re-used for this purpose. That is, no water collected from sumps in storage bays that are used for the treatment of hazardous waste (unless suitable decontamination has been completed) will be used for damping down non-hazardous waste.

11.5 External Areas

There will be no change to the external areas of the Site (i.e., effluent holding tanks, wheel wash, oversized processing area and vehicle processing area), or associated activities, as a consequence of the proposed activity.

12. Waste Minimisation and Management Techniques

Effluent generated from the decontamination procedure will be collected and treated within existing infrastructure in accordance with the process described in the Substantial Variation Application, therefore, there is no change to the management of waste generated on-site as a consequence of the proposed activity.

As described in Section 6, it is not expected that decontamination of bays will be a frequent occurrence on-site and the effluent generated from this process will be minimal.

13. Emissions to Soil and Groundwater

There are no emissions to soil and groundwater from site operations, including the proposed activity.

14. Noise and Vibration

The permitted operations at the Site (i.e., treatment of hazardous waste) introduced noise sources from vehicle movements, plant and equipment, and storage areas. For this reason, a noise impact assessment was undertaken as part of the Substantial Permit Variation to establish the impact of noise sources on nearby receptors. A noise management plan (NMP) was also prepared for the Site (1620013520-002 Bridge Street North Noise Management Plan) as part of this Substantial Permit Variation.

The noise assessment undertaken previously as part of the Substantial Permit Variation application concluded that sound levels at the nearest sensitive receptors were unlikely to have significant adverse effects. There are no changes to the Site operations that would generate additional noise to that previously assessed during the preparation of the Substantial Permit Variation application. Therefore, the noise assessment previously completed is considered suitable and representative of the proposed activity.

The noise mitigation and control measures, as described in the Site's Noise Management Plan are considered suitable to manage any noise generated from the proposed activity.

It is noted that whilst the proposed variation will increase the total maximum allowable throughout volume of the Site (from 30,000 tonnes per year to 110,000 tonnes per year), the noise assessment completed as part of the Substantial Permit Variation application was completed on the basis of a proposed volume of hazardous waste of 215,000 tonnes per year. Therefore, no increase in noise impact is expected due to increased throughput.

On this basis, noise generated from the proposed activity has been suitably assessed as part of the previous noise impact assessment completed for the site, as part of the Substantial Permit Variation application, and the current Site Noise Management Plan is considered suitable to

manage noise generated from the proposed activity. No further assessment of noise is considered necessary at the Site.

15. Dust And Particulate Matter

A Dust and Emission Management Plan (DMP) was developed for the site (1620013520-002 Bridge Street North Dust Management Plan) as part of the Substantial Permit Variation Application. The DMP defined the procedures undertaken to manage and monitor fugitive emissions of dust and particulate matter.

As described above, the proposed activity will be undertaken within the existing building, with no proposed changes to the site infrastructure and site operations. In addition, there is no change to the emission limits or monitoring requirements for the site as a consequence of the proposed activity to those presented in the existing Environmental Permit for the Facility.

Therefore, the DMP currently prepared for the Site is considered suitable to manage dust and particulate matter generated as a consequence of the proposed activity. No further assessment of dust and particulate matter or revision of the DMP is considered necessary at the Site.

As described in Section 14 above, the documentation prepared as part of the Substantial Variation Application prepared for the Site was prepared on the assumption that the Site would receive a maximum allowable throughput volume of 215,000 tonnes per year of hazardous waste.

16. Odour

An Odour Management Plan (OMP) has been developed for the site (1620013520-002 Bridge Street North Odour Management Plan) as part of the Substantial Permit Variation Application. The OMP defined the procedures undertaken to monitor for odours. The site operates a complaints procedure, and any complaints are investigated and corrective actions implemented.

No odour should be generated from the processing of non-hazardous waste. As outlined in Section 4.3 waste is initially screened on arrival at the Facility and if it is determined to be odorous it will not be accepted at the site as non-hazardous waste. Notwithstanding this, the Site will operate under an OMP which is considered suitable to manage odour generated from waste processing activities at the site.

17. Energy Management

The site will operate to an integrated management system that will be certified to ISO14001. The site will therefore identify key performance indicators and develop objectives and targets relating to energy consumption.

The Bridge Street North site will report into a Group wide sustainability programme. This includes overall targets for carbon reduction and Scope 1, 2 and 3 emissions are reported.

The Site is not an energy intensive site. There is no expected increase in energy usage as a consequence of the proposed activity to that originally described in the Substantial Permit Variation Application. As outlined above, the site was initially designed for a much bigger throughput than will be permitted at the site (i.e., 110,000 tonnes to be proposed as part of this minor variation as opposed to 215,000 tonnes described in the substantial variation).

18. Water Management

There is no change to the management of water on-site as a consequence of the proposed activity.

19. Site Condition

Ramboll prepared a Site Condition Report (SCR) for the facility (Ref. 1720013520-002 Site Condition Report 01) based on the Environment Agency, Environmental Permitting Regulations H5 Guidance, "Site Condition Report – Guidance and Templates", Version 3.0, 2013 as part of the previous Substantial Variation Application.

The SCR was reviewed against the proposed activity process description, as described in Section 4 above, to determine if there is any change to the potential pollutant source or potential pathway to soil and groundwater beneath the Site.

Review of the SCR previously completed for the Substantial Variation Application showed the following:

- There are no additional 'hazardous substances' to those already permitted at the Site as a consequence of the proposed activity;
- There is no change to the site layout, processing activities, site operations (with the exception of decontamination of existing facilities) and site infrastructure as a consequence of the proposed activity; and
- There has been no change to the ground conditions or environmental incidents at the Site since the preparation of the SCR.

In view of this, the baseline condition of the land and groundwater at the time of the Substantial Permit Variation Application and risk to soil and groundwater as a result of activities completed on-site is unchanged from those described in the SCR. Therefore, no change to the SCR is necessary.

20. Environmental Risk Assessment

20.1 Qualitative Environmental Risk Assessment

The qualitative risk assessment completed as part of the Substantial Permit Variation was undertaken on the basis of hazardous waste being accepted at the Site.

Review of the qualitative risk assessment undertaken as part of the previous Substantial Permit Variation application shows that there has been no change to the source, pathways and receptors identified during this risk assessment. However, as the Environmental Risk Assessment was prepared on the basis of hazardous waste being accepted at the site, the risk associated with the potential for mixing of non-hazardous and hazardous waste streams had not been considered. Therefore, the qualitative risk assessment was updated to consider the risk of treating non-hazardous waste at the site, including the potential of mixing non-hazardous and hazardous waste streams during this process. On the basis of this assessment, there is not considered to be an increase in the risk to the environment from the proposed activity (i.e., processing of non-hazardous waste).

The site's management system incorporates a number of policies and procedures for emergency and incident response as well as those for the reporting and investigation of incidents. There is no change to these aspects of the management system as a consequence of the proposed activity.

On this basis there is no increased risk to the environment at the Site from undertaking the proposed activity and the Site's management system will be updated to mitigate and manage the risks that are presented from the non-hazardous waste treatment activity. A copy of the revised Environmental Risk Assessment is provided in Appendix 3.

20.2 Quantitative Environmental Risk Assessment

20.2.1 Emissions to Air

As outlined in Section 10, the mitigation and abatement system has been designed for the management of emissions generated from hazardous waste, as opposed to non-hazardous waste. In addition, there is no change to the emission monitoring and reporting requirements described in the Environmental Permit as a consequence of the proposed activity.

Therefore, the mitigation and abatement system at the Site is considered to be suitable for the management of point source air emissions generated from the proposed non-hazardous treatment activity and the conclusions from the Air Impact Assessment completed as part of the Substantial Permit Variation Application are considered to be representative of the assessment of any point source emissions from the proposed activity. No further assessment of the risk to air from the proposed activity is considered to be necessary.

20.2.2 Emissions to Water

A quantitative risk assessment has not been prepared for emissions to water. As described in Section 11, there are no emissions to water as a consequence of the proposed activity, therefore it was not deemed appropriate to complete a quantitative risk assessment for emissions to water.