1. NON-TECHNICAL SUMMARY

Dunton Technologies Limited ("Dunton") proposes to operate a Hazardous Waste Treatment Facility located at Bridge Street North, Smethwick, UK. The site currently operates under a Standard Rules Permit (EPR/QP3342YF/A001) to produce soils, soil substitutes and aggregate, issued on 18/01/2023. The site is therefore required to apply for a Substantial Variation to the existing Permit in order to undertake hazardous waste operations. This report has been prepared in support of that application.

The proposed activities are subject to regulation under Schedule 1 of the Environmental Permitting (England and Wales) Regulations 2016 (as amended) as they relate to the treatment of waste, specifically:

- Section 5.3 A(1)(a)(i) Disposal of hazardous waste with a capacity exceeding 10 tonnes per day involving biological treatment;
- Section 5.3 A(1)(a)(vi) Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving physico-chemical treatment; and
- Section 5.6 A1(a) Temporary storage of hazardous waste with a total capacity exceeding 50 tonnes.

Site treatment is to be via physio-chemical treatment and bioremediation and the Operator proposes to treat a maximum of 215,000 tonnes of hazardous waste per year in an indoor facility.

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

Best Available Techniques (BAT)

A BAT assessment has been undertaken and concluded that the site operations are representative of best available techniques for waste treatment

Management Techniques

The site will operate to an integrated management system that will be 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 preacceptance, waste acceptance procedures and emergency preparedness and response procedures will be in place.

Raw Materials

The raw material requirements for the site operations are quite minimal. Raw materials will be stored within a dedicated storage area within the main processing building. Storage will be in 25 kg/25 litre containers and drums.

A 5,000 litre diesel storage tank will be located on site for the refuelling of site vehicles. The diesel storage tank is a self-bunded tank that will be located within a dedicated concrete bund. Refuelling will be undertaken within a dedicated refuelling area; which will be of concrete construction with a humped concrete arrangement at the front of the bay to allow vehicles access whilst offering containment for any leaks or spills. A collision barrier will be installed in front of the diesel tank to prevent vehicles driving into it.

Emissions to Controlled Waters

There are no releases to controlled waters from site operations.

Emissions to Sewer

Potentially contaminated water from the site will be discharged to foul sewer under a trade effluent discharge consent with the relevant water undertaker.

Containment Strategy

The site has developed a containment strategy to prevent the release of potentially contaminated surface water. The main contaminative area of the site will be of concrete hardstanding that will naturally drain to a sump. The sump can be isolated to provide containment in the drainage system in the event of a significant spill.

The site drainage system will pass via a full retention interceptor and into two effluent storage tanks. The two effluent storage tanks have a capacity of 10,000 litres each and will located within a bund. Effluent will be isolated within the tanks and analysed to ensure that it is within the consent limits of the Trade Effluent Discharge Consent prior to discharge to sewer.

Emissions to Soil and Groundwater

There are no releases to soil or groundwater from site operations

Waste Generation

Waste is limited to asbestos that is removed during the asbestos treatment process. This will be double bagged and stored in a locked skip prior to offsite disposal with an approved waste disposal contractor.

Other wastes on site are general wastes, office waste, recyclables, scrap metal and raw material containers.

Energy Efficiency

The energy requirements of the site are mainly related to lighting, abatement systems and material transfers. Wherever possible, the most energy efficient equipment will be installed. 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 CO₂.

Noise and Vibration

The majority of process operations are undertaken within buildings which minimises the potential for noise nuisance. The majority of the noise is generated from the movement of vehicles on site. A noise assessment was undertaken to assess the noise on nearby receptors. The assessment concluded that sound levels at the nearest receptors were unlikely to have significant adverse effects.

Odour

Potential sources of odour are related to the treatment of hydrocarbon contaminated wastes. The wastes will only be accepted under stringent waste pre-acceptance and acceptance criteria which does not allow for odorous materials. In addition, processes for the storage and treatment of hydrocarbon contaminated wastes will be undertaken in the main processing building which has air extraction via HEPA and carbon filters which will effectively abate any potential odours.

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 material transfers, materials will be dampened to prevent the formation of dust.

Site Condition Report

A site condition report covering the whole installation is appended. Monitoring of soils and groundwater was undertaken to establish a baseline for the permit.

Environmental Risk Assessment

A qualitative assessment of the potential risks to the environment was undertaken and concluded that the current mitigation measures are sufficient to minimise the risks to low or very low levels.