# **Erith Soil Treatment Facility**

784-B066441

# **Dust Management Plan**

**Environmental Permit Application** 

**Hanson Quarry Products Europe Ltd** 

**June 2024** 

Document prepared on behalf of Tetra Tech Environment Planning Transport Limited. Registered in England number: 03050297



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## **Appendices**

Appendix A – Proposed Waste Types

Appendix B - Complaints Form

Appendix C - Daily Site Inspection Log

## 1.0 Introduction

### 1.1 Report Context

- 1.1.1 This Dust Management Plan (DMP) has been prepared by Tetra Tech on behalf of Operator, Hanson Quarry Products Europe Ltd (Hanson) to support an Environmental Permit Application for Hanson's site located at Hanson Quarry Products Ltd, Church Manorway, Erith, DA8 1DE, at approximate National Grid Reference (NGR) TQ 50786 79709.
- 1.1.2 Hanson seek to obtain a Bespoke Environmental Permit for a Soil Washing Facility and a Treatment of Non-Hazardous Waste Facility that will process a maximum of 800,000 tonnes per annum of non-hazardous soils. The activities on site will comprise of both dry recycling and soil washing to produce quality aggregates, soils and clay products for construction projects.
- 1.1.3 According to the Environment Agency's (EA) 'Control and Monitor Emissions for your Environmental Permit' guidance a DMP must be prepared to support an application that comprises the "keeping or treatment (or both) of household, commercial or industrial waste in a materials waste transfer station/ material recycling facility" as well as the "keeping or treating (or both) scrap metal".
- 1.1.4 As such, this DMP has been prepared in accordance with the EA's 'Dust & Emission Management Plan' template (Version 10, October 2018).
- 1.1.5 This DMP is a working document, intended to be used as a reference document for operational staff on a day-to-day basis. Hanson will implement the plan to ensure that all reasonable measures are taken to control dust emissions, and in the event that an adverse impact is caused, prompt action will be taken to identify the source and apply corrective measures. It provides a schedule of actions that will be taken to minimise dust impact and details site management procedures for the management and monitoring of dust.

## 2.0 Site Description

## 2.1 Site Setting

- 2.1.1 The site is situated on the western bank of the River Thames approximately 1.6km north of Erith in southeast London and is centred at approximate National Grid Reference (NGR) TQ 50807 79777. The application site is detailed on Drawing Number ERI/B066441/PER/01.
- 2.1.2 The site is predominantly industrialised area surrounded by additional industrial and commercial properties with the River Thames immediately to the east. The additional industrial and commercial properties border the north, south, and west of the site and include a quarry, freight service, several vehicle repair shops, and scaffolding service. The site is not within 1km of any land-based designations.
- 2.1.3 Access to the site is achieved via the Sutton Courtenay Quarry access road which leads off Main Road (B4016).

#### 2.2 Overview of Site Activities

- 2.2.1 It is the intention of Hanson to obtain an Environmental Permit to operate a Soil Washing Facility on site.
- 2.2.2 The soil treatment facility will be to create recycled aggregates which are suitable for use in construction projects.
- 2.2.3 The proposal entails the operation of a soil treatment facility that will process a maximum of 800,000 tonnes per annum of non-hazardous soils.
- 2.2.4 It is considered that the proposed soil washing activity will fall under the following Recovery and Disposal codes (R and D codes) shown in Table 2, provided for in Annex II to Directive 2008/98/EC of the European Parliament and The Council of 19<sup>th</sup> November 2008 Waste.

Table 1: Proposed R and D Codes

R/D Code	Description of Activity
R3	Recycling/ reclamation of organic substances which are not used as solvents
R5	Recycling/reclamation of other inorganic compounds
R13	Storage of waste pending any of the operations numbered R1 to R12 (excluding temporary storage, pending collection, on the site where it is produced)
D15	Storage pending any of the operations numbered D1 to D14 (excluding temporary storage, pending collection, on the site where it is produced).

### 2.3 Waste Types

2.3.1 Details of the proposed waste types are provided as Appendix A.

#### 2.4 Waste Quantities

- 2.4.1 The proposed facility will have an annual throughput of 800,000 tonnes.
- 2.4.2 There will be no hazardous waste accepted on site.

## 2.5 Process Description

#### Soil Washing Facility

- 2.5.1 Upon arrival, all loads will be inspected by site management and any large or nonconforming materials will be removed prior to treatment. All stockpiles on site will be stored in a loose form. All soil washing activities will be undertaken on hard standing.
- 2.5.2 Materials will be fed into a hopper with the assistance of mobile plant and will then travel along a conveyor, at which point any small pieces of scrap metal which may be present within the waste loads will be removed using an overband magnet.
- 2.5.3 Any oversize materials (particles 100mm 150mm) will be removed via a screener subject to materials feed.

- 2.5.4 The remaining waste material, varying in size depending on market demands, will then travel along a log washer where it will be sprayed with wash water. After passing along the log washer, the clean waste materials will be separated into smaller fractions via a gravel sizing screen.
- 2.5.5 The sand and silt fraction together with most of the water passes through screen and enters a sump from where it is pumped into a hydrocyclone or plate press, which will separate the sand from any contaminants. The water together with the silt and clay sized particles (together with any associated contaminants) will be forwarded from the hydrocyclone to the Siltbuster Water Treatment Plant. The water will then be recirculated back into the washing process.

#### **Physical Treatment Facility**

- 2.5.6 Treatment undertaken under this activity within the Environmental Permit will consist of sorting, separation, screening, crushing, and blending of waste for recovery as a soil, soil substitute or aggregate.
- 2.5.7 All treatment and storage activities will occur on made ground.

## 2.6 Waste Storage

- 2.6.1 There will be clearly defined areas for waste storage and treatment at the site.
- 2.6.2 There will be a maximum storage capacity of 400,000 tonnes of untreated material.
- 2.6.3 There will be a further maximum storage capacity of 400,000 tonnes of treated material.

### 2.7 Operating Hours

- 2.7.1 The operating hours of the Facility will be as follows: -
  - 24 hours Monday Sunday
- 2.7.2 There will be no works undertaken on Sundays or Bank Holidays

## 2.8 Plant and Equipment

- 2.8.1 The following equipment will be used on site: -
  - Front end loading vehicle (FEL)

- 360 grab excavator
- Mobile screener
- Mobile crusher
- Tractor bowser
- Telehandler
- Hopper
- Conveyor
- Over band magnet
- Log washer
- Gravel sizing screen
- Hydrocyclone / filter press.
- 2.8.2 As a function of the Environmental Management System, the performance of all plant and equipment will be reviewed in comparison to other models that may be available on the market. If there happens to be other models available that perform more efficiently than the site's existing plant and is financially feasible, Hanson may decide to change their existing plant and equipment. As part of the process, Hanson will ensure that all non-road going mobile plant have a minimum Stage IV emission rating and road going vehicles will have a minimum emission rating of Euro VI. As such, the brand, make, model and specification of the mobile plant and equipment that will be used on site is expected to vary throughout the operational life of the facility.
- 2.8.3 Only personnel who are trained and licensed to operate equipment and carry out maintenance will do so.
- 2.8.4 All plant and equipment will be maintained in accordance with a preventative maintenance programme which will be defined by the manufacturer's requirements. This will ensure that the integrity and operational efficiency of all plant and equipment is maintained and therefore minimise the risk of mechanical failure which may result in increased dust emissions. This particular programme forms part of the site's Environmental Management System.

- 2.8.5 In addition, all plant and equipment will be visually inspected on a daily basis by the Site Manager (or a nominated deputy) prior to use. The purpose of this inspection is to identify any signs of defects that may affect the integrity and operational efficiency of the plant.
- 2.8.6 In the event that a defect is identified on any item of plant or equipment, the use of the plant/equipment will be suspended until the necessary remedial works have been undertaken.

## 2.9 Dust Sensitive Receptors

2.9.1 Receptors within 1km of the site have been listed in Table 2 and are shown on Drawing Number ERI/B066441/REC/01. Location of Potential Receptors Within 1km of the Site.

Table 2: Location of Potential Receptors Within 1km of the Site

ID	Receptor	Direction from Operational Area	Minimum Distance from the Permit Application Boundary (approx. m)
Dom	estic Dwellings		
1	Jenning Tree Way Residencies	W	400
2	Estate west of Picardy Manorway	W	860
3	Residential Estate off B213	SW	755
4	Residential Estate off Battle Road	SW	760
5	Lower Road Residencies	S	810
6	Estate south of Corinthian Manorway	S	925
7	Properties South of Franks Park	SW	945
Com	mercial and Industrial Premises		
8	Erith Wharf Industrial and Commercial Premises	N/S/W	Adjacent
9	Capital Industrial Estate (off Crabtree Manorway S)	SW	590
10	Industrial Premise	SW	770
11	Bronze Age Way Industrial and Commercial Premises	SW	580
12	Coldharbour Lane Industrial and Commercial Premises	NE	780
13	Waste Management Terminal on the River Thames	SE	905
14	Veolia Rainham Landfill	SE	825

Schools	45		10/	005	
16         Belvedere Community Centre/Infant School         SW         840           17         Mitchell Close Amenities         SW         810           18         Little Brights Road Amenities         W         865           19         Lower Road Shops and Amenities         SW         960           20         Belvedere Junior School         SW         965           21         Amenities south of Corinthian Manorway         S         975           Recreation           22         Galleon Close Play Space         S         925           23         The Green Chain Walk         S         840           24         Thames Path Erith         E         Adjacent           25         Franks Park         SW         995           26         Sports Facility Franks Park         SW         995           Highways/Minor Roads/Rallways           Use Facility Franks Park         SW         995           Highways/Minor Roads/Rallways           27         Broaze Age Way A2016         SW         555           28         Picardy Manorway B253         W         830           29         Lower Road B213         W         750 <t< td=""><td>15</td><td>Industrial and Commercial Properties off Little Brights Rd</td><td>W</td><td>865</td></t<>	15	Industrial and Commercial Properties off Little Brights Rd	W	865	
Mitchell Close Amenities	Scho	Schools / Hospitals / Shops/Amenities			
Little Brights Road Amenities   W   865	16	Belvedere Community Centre/Infant School	SW	840	
19 Lower Road Shops and Amenities SW 960 20 Belvedere Junior School SW 965 21 Amenities south of Corinthian Manorway S 975  Recreation  22 Galleon Close Play Space S 925 23 The Green Chain Walk S 840 24 Thames Path Erith E Adjacent 25 Franks Park SW 940 26 Sports Facility Franks Park SW 995  Highways/Minor Roads/Railways  27 Bronze Age Way A2016 SW 555 28 Picardy Manorway B253 W 830 29 Lower Road B213 SW 695  Protected Habitats  30 Frog Island W 750 31 Deciduous Woodland Anderson Way W 725 32 Deciduous Woodland Bronze Age Way SW 915  Listed Buildings and Scheduled Monuments  4 Parish Church Of St John the Baptish (Grade II¹) S 910  Surface Water e.g. rivers and streams  5 River Thames E 10 5 Fronze Age Way Pond (#2) SW 585	17	Mitchell Close Amenities	SW	810	
Belvedere Junior School	18	Little Brights Road Amenities	W	865	
Amenities south of Corinthian Manorway   S   975	19	Lower Road Shops and Amenities	SW	960	
Recreation  22 Galleon Close Play Space S 925 23 The Green Chain Walk S 840 24 Thames Path Erith E Adjacent 25 Franks Park SW 940 26 Sports Facility Franks Park SW 995  Highways/Minor Roads/Railways  27 Bronze Age Way A2016 SW 555 28 Picardy Manorway B253 W 830 29 Lower Road B213 SW 695  Protected Habitats  30 Frog Island W 750 31 Deciduous Woodland Anderson Way W 725 32 Deciduous Woodland Bronze Age Way SW 850 33 Deciduous Woodland Franks Park SW 915  Listed Buildings and Scheduled Monuments  Listed Buildings and Scheduled Monuments  Surface Water e.g. rivers and streams  8 River Thames E 10 37 Church Manorway Pond SW 255 39 Bronze Age Way Pond (#2) SW 585	20	Belvedere Junior School	SW	965	
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The Green Chain Walk  24 Thames Path Erith  E Adjacent  25 Franks Park  SW 940  26 Sports Facility Franks Park  SW 995  Highways/Minor Roads/Railways  27 Bronze Age Way A2016  SW 555  28 Picardy Manorway B253  W 830  29 Lower Road B213  SW 695  Protected Habitats  30 Frog Island  Y 750  31 Deciduous Woodland Anderson Way  Deciduous Woodland Bronze Age Way  Deciduous Woodland Bronze Age Way  Deciduous Woodland Franks Park  SW 915  Listed Buildings and Scheduled Monuments  Listed Buildings and Scheduled Monuments  SFirst World War Memorial at St John the Baptish (Grade II*)  Sufface Water e.g. rivers and streams  River Thames  E 10  River Thames  Bronze Age Way Pond  SW 585	Reci	reation	'	,	
24         Thames Path Erith         E         Adjacent           25         Franks Park         SW         940           26         Sports Facility Franks Park         SW         995           High-ways/Minor Roads/Railways           27         Bronze Age Way A2016         SW         555           28         Picardy Manorway B253         W         830           29         Lower Road B213         SW         695           Protected Habitats           30         Frog Island         W         750           31         Deciduous Woodland Anderson Way         W         725           32         Deciduous Woodland Bronze Age Way         SW         915           Listed Buildings and Scheduled Monuments           Listed Buildings and Scheduled Monuments           34         Parish Church Of St John the Baptish (Grade II*)         S         910           55           Sufface Water e.g. rivers and streams           56         River Thames         E         10           37         Church Manorway Pond         SW         200           38         Bronze Age Way Pond (#2)         SW         585 <td>22</td> <td>Galleon Close Play Space</td> <td>S</td> <td>925</td>	22	Galleon Close Play Space	S	925	
Sw   940	23	The Green Chain Walk	S	840	
26 Sports Facility Franks Park         SW         995           High-ways/Minor Roads/Railways           27 Bronze Age Way A2016         SW         555           28 Picardy Manorway B253         W         830           29 Lower Road B213         SW         695           Protected Habitats           30 Frog Island         W         750           31 Deciduous Woodland Anderson Way         W         725           32 Deciduous Woodland Bronze Age Way         SW         850           33 Deciduous Woodland Franks Park         SW         915           Listed Buildings and Scheduled Monuments           34 Parish Church Of St John the Baptish (Grade II*)         S         910           35 First World War Memorial at St John the Baptist Church, Erith (Grade II*)         S         935           Surface Water e.g. rivers and streams           36 River Thames         E         10           37 Church Manorway Pond         SW         200           38 Bronze Age Way Pond         SW         585	24	Thames Path Erith	E	Adjacent	
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Protected Habitats  30 Frog Island W 750  31 Deciduous Woodland Anderson Way W 725  32 Deciduous Woodland Bronze Age Way SW 850  33 Deciduous Woodland Franks Park SW 915  Listed Buildings and Scheduled Monuments  34 Parish Church Of St John the Baptish (Grade II*) S 910  35 First World War Memorial at St John the Baptist Church, Erith (Grade II*)  Surface Water e.g. rivers and streams  36 River Thames E 10  37 Church Manorway Pond SW 200  38 Bronze Age Way Pond (#2) SW 585	27	Bronze Age Way A2016	SW	555	
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39 Bronze Age Way Pond (#2) SW 585	37	Church Manorway Pond	SW	200	
	38	Bronze Age Way Pond	SW	515	
40 Church Manorway Stream SW 110	39	Bronze Age Way Pond (#2)	SW	585	
	40	Church Manorway Stream	SW	110	

41	Anderson Way Stream	W	570		
42	River Thames Inlet	E	750		
Natu	Nature and Heritage Screening Results				
43	River Thames and Tidal Tributaries	E	10		
44	Coastal Saltmarsh (Protected Habitat)	Е	10		
45	Atlantic Salmon (Migratory Route)	Е	10		
46	Allis Shad (Migratory Route)	E	10		
47	European Eel (Migratory Route)	E	10		
48	River Lamprey (Migratory Route)	E	10		
49	Sea Lamprey (Migratory Route)	E	10		
50	Smelt (Migratory Route)	Е	10		
51	Twait Shad (Migratory Route)	E	10		
Gro	Indwater (sensitivity)	1			

#### **Groundwater (sensitivity)**

According to the Multi-Agency Geographic Information for the Countryside's (MAGIC) website, the site is not situated within a Groundwater Source Protection Zone. The MAGIC website also indicates that the site is designated as a Secondary A bedrock aquifer and a Secondary (undifferentiated) Superficial Drift Aquifer. The site has a Medium-High Groundwater Vulnerability.

#### 2.10 Wind

- 2.10.1 The prevailing wind direction will determine which receptors will be affected and at what frequency.
- 2.10.2 Meteorological data has been used from Erith from <a href="www.meteoblue.com">www.meteoblue.com</a> which is considered to be representative of conditions within the vicinity of the application site. According to the wind rose data for the area, the prevailing wind in the local area is from the southwest (SW) as shown in Figure 1 below.

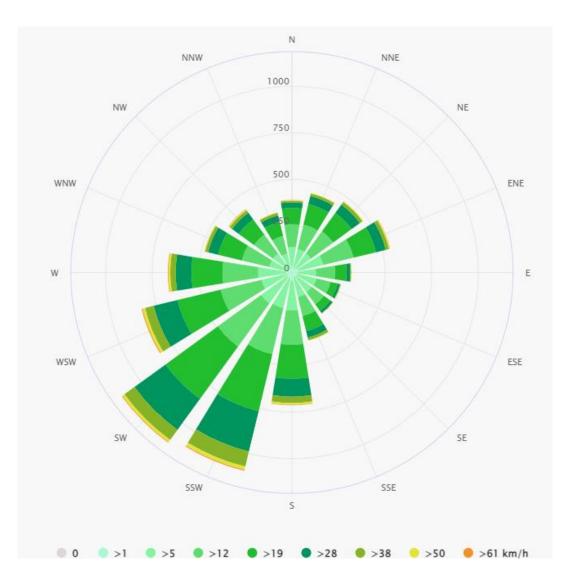


Figure 1: Erith Prevailing Wind Direction

- 2.10.3 As such, areas at most risk from dust emissions, should it occur, are therefore located northeast of the site. The northeastern boundary is immediately bounded by the River Thames. Consequentially, it is not anticipated dust emissions will negatively impact receptors beyond this boundary.
- 2.10.4 As noted in Table 2, there are surface water features within 1km of the site.

  According to the EA's 'Dust & Emission Management Plan' template, surface water and groundwater are not identified as receptors that that are susceptible to the adverse effects of exposure to high levels of dust and particulates. As such, these receptors are not considered further in this DMP.

2.10.5 As indicated in Drawing Number ERI/B066441/PER/01, the north, south, and west of the site is bordered by additional industrial activities.

#### 2.11 Local Contributors to Dust

2.11.1 According to the EA's public register, there are a few waste facilities within 1km of the site that may be considered as local contributors to dust emissions. Details of these facilities are summarised in the table below.

Table 3: Local Contributors of Dust within 1km of the Site

Name of Site	Name of Operator	Site Address	Site Type	Direction and distance from the site
Tyre Channel Recycling	TYRE CHANNEL LIMITED	Unit 1, Mulberry Way, Belvedere, DA17 6AN	A16: Physical Treatment Facility	360m north west
BBS Skips	DBS STAIRCASES LIMITED	Crabstree Manorway South, Belvedere, Bexley, DA17 6AB	S1506 No 6: 75kte HCI Waste TS + treatment	780m southwest
Westminster Waste	WESTMINSTER WASTE LIMITED	Anderson Way, Beledere, D17 6BG	S1506 No 6: 75kte HCI Waste TS + treatment	780m west

## 3.0 Dust and Particulate Management

## 3.1 Responsibility for the Implementation of the DMP

- 3.1.1 The implementation and dissemination of this DMP will be the responsibility of the Site Manager, supported by other staff. The Site Manager can delegate certain tasks as required, although ultimate responsibility will remain with them.
- 3.1.2 A nominated deputy will be appointed for all times when the Site Manager is not on site. In such circumstances, it will be the nominated deputy's responsibility to ensure that the requirements of the DMP are adhered to.
- 3.1.3 All site staff will receive instructions on how the plan is to be implemented during toolbox talks on site.
- 3.1.4 This document forms part of the site's Environmental Management System (EMS) and will be reviewed on an annual basis to ensure that it is fit for purpose and meets the requirements of current guidance.

#### 3.2 Sources and Control of Dust

3.2.1 The key aspects of the process which may lead to dust emissions are identified in Table 5 below and the control measures that will be used are detailed in Table 6.

Table 4: Source-Pathway-Receptor Routes from Waste Activities at the Site

Source	Pathway	Receptor	Type of impact
Mud	Tracking dust on wheels and vehicles, then mud dropping off wheels/vehicles when dry	Public highways listed in Table 3.	Visual soiling, also consequent resuspension as airborne particulates
Debris	Falling off waste delivery vehicles	Public Highways listed in Table 3.	Visual soiling, also consequent resuspension as airborne particulates
Tipping, storage and treatment of waste inside building	Escape from buildings and subsequent atmospheric dispersion	Occupiers of domestic dwellings listed in Table 3.  Workforce in commercial and	Visual soiling and airborne particulates.

		industrial properties listed in Table 3.  Amenities listed in Table 3.  Habitats listed in Table 3.	
Vehicle exhaust emissions	Atmospheric dispersion	Occupiers of domestic dwellings listed in Table 3.	Visual soiling and airborne particulates  Airborne particulates
Non road going	Atmospheric dispersion	Workforce in commercial and	Airborne particulates
machinery exhaust emissions		industrial properties listed in Table 3.  Amenities listed in Table 3.  Habitats listed in Table 3.	Airborne particulates

Table 5: Measures to Control Dust/Particulates from Permitted Waste Activities

Abatement Measure	Description / Effect	Trigger for implementation
Preventative Me	asures	
Enclosure	Wastes accepted for the site will be stored on external hard standing. All soil washing activities will be undertaken on an impermeable surface. There are trees along the northeastern boundary which lie between the site and rural land. As the wind direction is of a southwestern direction it is anticipated that the suspension of dust or the likelihood of dust transgressing the sites boundary will be minimal.	All preventative measures will be implemented during the operating hours detailed in Section 2.7.
Enclosure of waste treatment processes	Treatment of waste will comprise of soil washing and dry recycling activities.	

Site speed limit	The site will have a speed limit of 5mph in place to restrict speed on site. This will prevent the suspension and entrainment of dust. Clear signage is established on the site to reinforce the speed limit.	
No-idling policy	A 'No-idling policy' is in place at the site which requires all vehicles and plant to be switched off when not in use.	
Minimising drop heights for waste	Drop heights will be minimised as much as practicable to reduce the generation of dust whilst waste is being deposited.	
Site surfacing	The site surfaces comprise of hardstanding and impermeable surface. All soil washing activities will be undertaken on the impermeable surface. The site surfacing will be visually inspected on a weekly basis to ensure that all areas provide a smooth-running surface. In the event that any damage is identified on the site's surfacing, necessary remedial work will be undertaken as soon as possible. If possible, the area may also be closed off until the necessary remedial works have been undertaken.	
Sheeting of vehicles	Wastes being delivered to the site will be covered or sheeted to prevent dust emissions whilst the waste is in transit.	
Maintenance of Plant and Equipment	All plant and equipment will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which may result in increased dust emissions.	
	In addition, all plant and equipment will be subject to visual checks on a daily basis prior to use to ensure that the equipment functions correctly. In the event that any damage is identified on any plant or equipment that may affect its performance, necessary remedial work will be completed as soon as practicable. If necessary, defective plant or equipment may be isolated/closed off for use until the necessary remedial works have been undertaken. With regards to cleaning equipment (i.e. road sweeper), arrangements will be made to employ alternative equipment.	
Good housekeeping	The site will be subject to visual inspections on a daily basis to ensure that there is not a build-up of particulates on surfaces and equipment. In addition, site staff will remain vigilant during operational hours for any visible dust on surfaces and equipment. Any abnormal build-up of dust noticeable on surfaces and equipment will be removed as soon as is practicable.	

### 3.3 Best Available Techniques

- 3.3.1 The EA's 'Dust & Emission Management Plan' template has been used to ensure that the Best Available Techniques (BAT) are implemented on site.
- 3.3.2 General site housekeeping will ensure that dust does not build up on site and all dust generating activities will be monitored closely and site operatives will be vigilant and report any excessive dust issues to the Site Manager to be dealt with at the next available notice.
- 3.3.3 The Site Manager will undertake a daily visual assessment of dust levels and all site operatives will be vigilant and report any problems to the manager.
- 3.3.4 Should dust, mud, litter or other debris be identified, a road sweeper will be employed to maintain the site cleanliness.
- 3.3.5 Further, the site layout has been constructed with consideration to neighbouring receptors, including the Protected Habitats, Surface Water Features and Deciduous Woodlands, so that they are unlikely to experience an increase in dust levels this is because the prevailing wind direction is from the southwest.
- 3.3.6 Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit. Drop heights will also be minimised as much as practicable to reduce the generation of dust from loading/unloading activities.
- 3.3.7 All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the risk of mechanical failure which could result in increased dust emissions.
- 3.3.8 With the above measures in place, it is considered that the site is considered to be compliant with BAT.

## 3.4 Visual Dust Monitoring

- 3.4.1 Visual dust monitoring of waste stockpiles will be undertaken to determine if dust is being generated on site.
- 3.4.2 Monitoring will also comprise daily observations on the meteorological conditions (particularly the wind speed and direction) at the site. This information will be used

by the Site Manager (or a nominated deputy) to determine the risk of dust emissions which is typically elevated during periods of dry weather or high winds. For the purposes of this DMP high winds have been defined Number 7 on the Beaufort scale where wind speeds range from 28-33 knots. The Beaufort Scale defines land conditions in high winds as "whole trees in motion; inconvenience felt when walking against the wind".

- 3.4.3 Daily monitoring will be undertaken by a member of site personnel who is trained in this procedure.
- 3.4.4 The results of the visual assessment and comments on the meteorological conditions will be recorded in the Daily Site Inspection Log (Appendix C) and will be reviewed by the Site Manager (or a nominated deputy). Hanson will maintain a record of the Daily Dust Conditions Log and will be referred to in the event of a complaint (as detailed in Table 7).
- 3.4.5 Monitoring will be undertaken during the operating hours detailed in Section 2.7.Hanson do not propose to make any arrangements to monitor dust outside operating hours as it's considered that the risk of dust will be low during this period.
- 3.4.6 In the event that visible dust or high winds are identified through daily monitoring, the following actions will be undertaken.

Table 6: Action Plan for Visible Dust or High Wind Speeds

	Action	Person responsible for ensuring action is carried out	Timescale for action completion
1	The Site Manager (or a nominated deputy) will be notified and will make the appropriate managerial staff and site operatives aware.  In the event that visible dust is identified from daily monitoring,	Site Manager (or a nominated deputy)	Within one working day of observing visible dust or high wind speeds.
	the Site Manager (or a nominated deputy) will review site operations to establish if the site can be identified as the source of the dust.		
	In the event that high wind speeds are observed, the Site Manager (or a nominated deputy) will proceed to implement remedial action(s) that are detailed in Step 2.		

2	If the visible dust can be directly related to the site or high wind speeds are observed, remedial action will be undertaken and may include the following depending on the source: -  Reduce/limit waste deliveries to and from the site; and,  Reduce/limit waste treatment activities that present a high risk to dust emissions (e.g. shredding and granulator).	Site Manager (or a nominated deputy)	Within one working day of observing visible dust or high wind speeds.
3	A follow up visual assessment will be undertaken off site on the local road network for any visible dust.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).
4	If visible dust is not identified, the Site Manager (or a nominated deputy) will ensure that any action taken and the effectiveness of that action is documented and a record will be maintained.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).
5	In the event that visible dust is identified following the implementation of remedial action(s), operations on site will cease and the EA will be informed.	Site Manager (or a nominated deputy)	Within one working day of implementing remedial measure(s).

## 4.0 Reporting and Complaints Procedure

### 4.1 Purpose of Complaints Procedure

- 4.1.1 A DMP should show how the operator will respond to complaints. Any complaints should be investigated promptly, and appropriate remedial action should be taken. The complainant and anyone else likely to be affect should be informed of any action taken in response to the complaint.
- 4.1.2 A procedure has been developed (see Table 8 below) to ensure that complaints will be handled by Hanson appropriately and consistently and to reassure the EA and the public that any of their concerns will be acknowledged and acted upon where appropriate. The procedure will be reviewed on an annual basis or in the event of any significant dust issues.

### 4.2 Complaints Reporting Route

4.2.1 In order to ensure that members of the public are easily able to report any complaints relating to dust emissions from the site, there will be a display board at the site entrance which details the site name, the permit number, the EA's contact details and Hanson's contact details. By providing contact details for the EA as well as the operator, this ensures that the member of public can report their complaint and be confident that it will be received by the appropriate party even if they feel uncomfortable discussing directly with the operator.

## 4.3 Complaints Records

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

## 4.4 Community Engagement

4.4.1 Hanson will be undertaking regular community liaison group meetings with any interested local parties and any issues with dust can be raised at that time.

Report complaint directly to Hanson

Member of public

Hanson

Pass on complaint to Hanson

Report complaint to Hanson

Table 7: Complaints Procedure

	Action	Person responsible for ensuring action is carried out	Timescale for Action Completion
1.	The Site Manager (or a nominated deputy) will be notified of the complaint and will make the appropriate managerial staff and site operatives aware of the complaint.  The EA will also be notified of the complaint. The complaint shall be formally recorded using the Complaint Report sheet (Appendix B).	Site Manager or appropriately trained operator	Within two working day of receipt of the complaint.
2.	<ul><li>The complaint will be investigated by: -</li><li>a) Checking the monitoring records to see whether the complaint corresponds to the monitoring records.</li><li>b) Checking the Site Diary and waste acceptance records to see if any particularly dusty waste was accepted.</li></ul>	Site Manager or appropriately trained operator	Within one working day of receipt of the complaint.

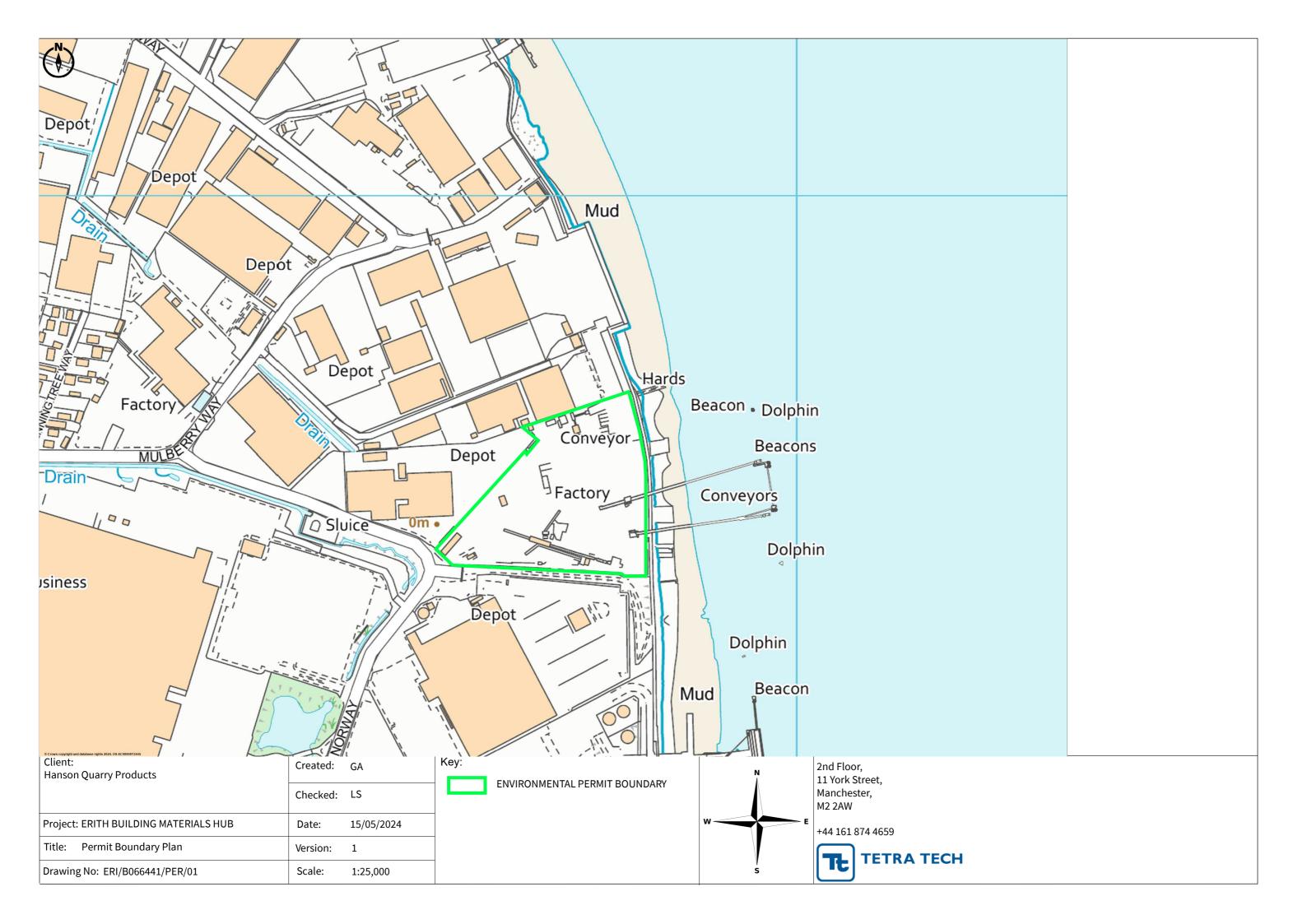
	<ul> <li>c) Checking the Site Diary to see whether the complaint corresponds to any operational issues at the site.</li> <li>If the cause of the complaint is established, it will be recorded within the Complaint Record Sheet (Appendix B).</li> <li>If no particular cause is identifiable then this will also be recorded.</li> </ul>		
3.	If more than one complaint is received about a particular incident, and the cause has not been established, Hanson would engage with the complainant(s) and agree corrective action(s) to be undertaken and timescales to implement.	Site Manager or appropriately trained operator	Within one working day of receipt of the complaints.
4.	The Site Manager will instigate any necessary reviews of procedures and will implement corrective action(s) that were agreed with the complainant(s).	Site Manager or appropriately trained operator	Works would commence within seven working days of agreeing corrective action. Completion will depend on timescales agreed with the complainant.
5.	Following the corrective action(s) have been implemented, the complainant and the Environment Agency will be informed.	Site Manager or appropriately trained operator	Within one working day of corrective action(s) being implemented.
6.	A follow up audit on the corrective actions implemented shall be undertaken to ensure the complaint is not made again in the future and that the preventive procedure is effective.	Site Manager or appropriately trained operator	Within two weeks of corrective action(s) being implemented.
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 Environmental Management System.  This record shall also note any amendments to procedures, both environmental and health & safety, which may be required following the investigation. The record shall be kept in the site office at all times or if it is an electronic record, it will be accessible from the site.	Site Manager or appropriately trained operator	Within two weeks of receipt of corrective action(s) being implemented.

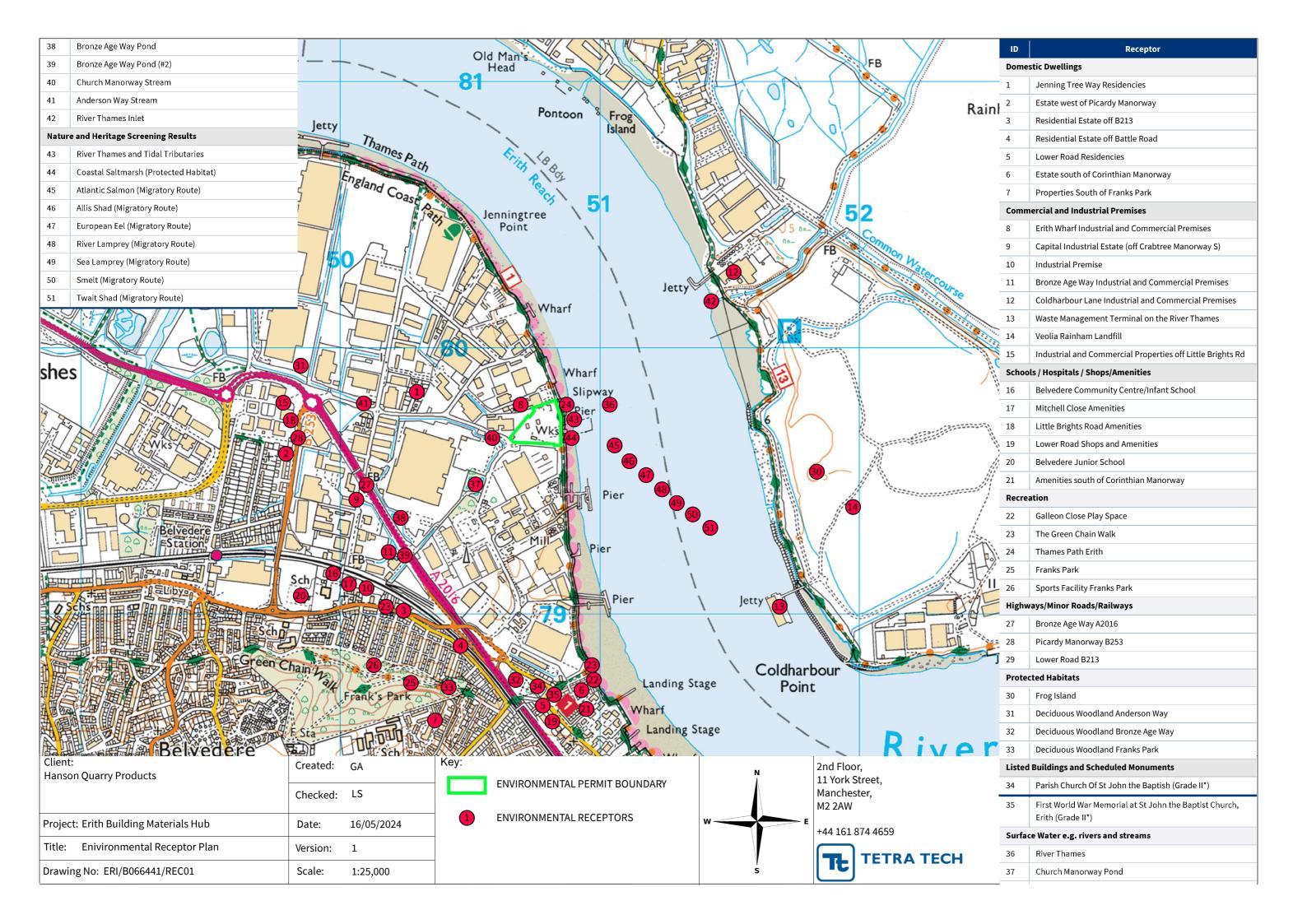
## Drawings

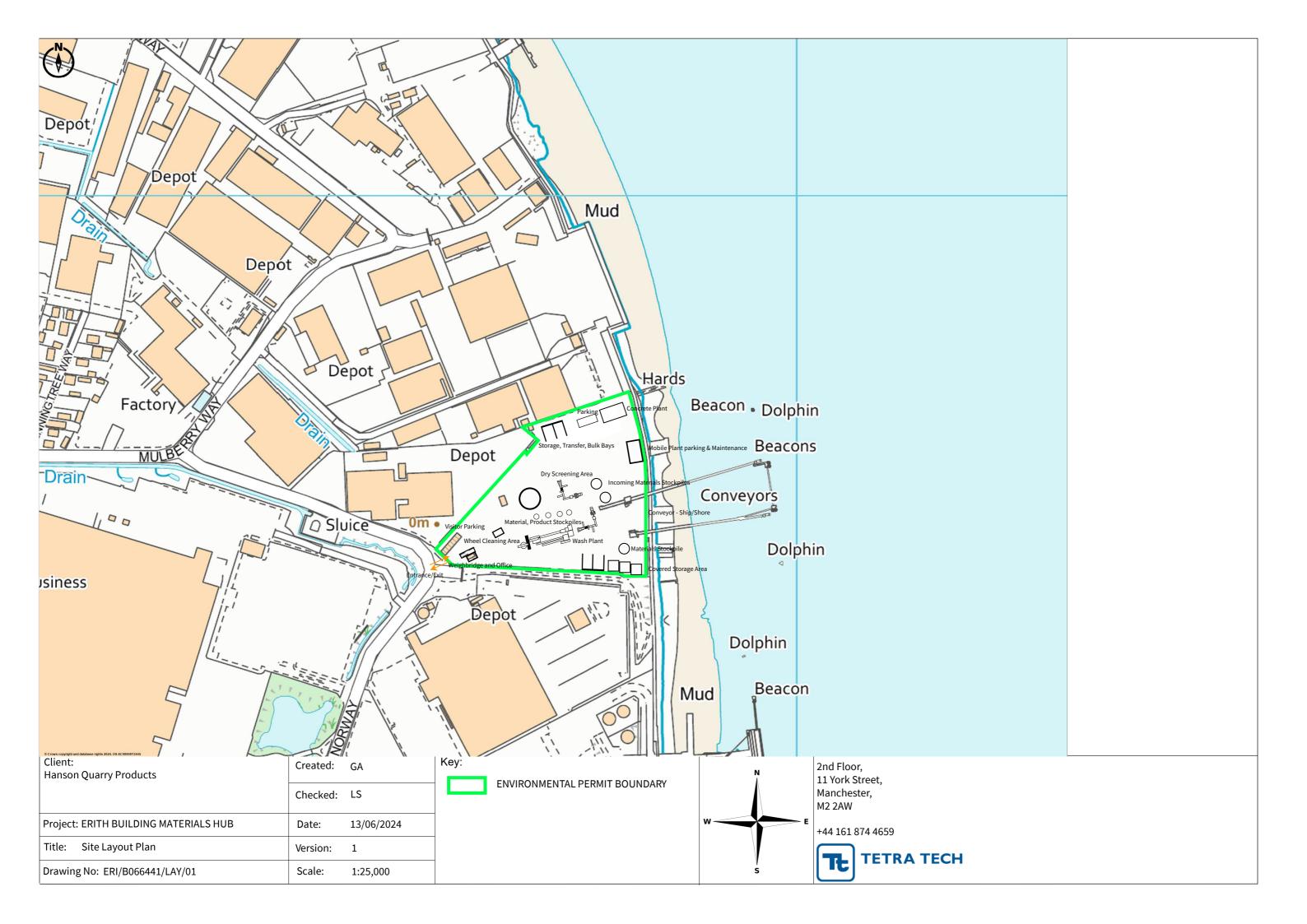
ERI/B066441/PER/01 - Permit Boundary Plan

ERI/B066441/REC/01 – Environmental Receptor Plan

ERI/B066441/LAY/01 - Site Layout Plan







Erith Soil Treatment Facility	
Dust Management Plan	
Appendix A – Proposed Waste Types	

**Table A1: Soil Washing Facility Waste Types** 

EWC Code	Description	Restriction
01	WASTE RESULTING FROM EXPLORATION, MINING, QUARRY AND CHEMICAL TREATMENT OF MINERALS	ING AND PHYSICAL
01 04	Wastes from physical and chemical processing of non-metafil	llerous minerals
01 04 08	Waste gravel and crushed rocks other than those mentioned in 04 04 06	
01 04 09	Waste sand and clay	
01 04 13	Wastes from stone cutting and sawing other than those mentioned in 01 04 07	
10	WASTES FROM THERMAL PROCESSES	
10 11	Wastes from manufacture of glass and glass products	
10 11 12	Waste that as waste glass other than those mentioned in 10 11 11	
10 12	Wastes from manufacture of ceramic goods, bricks, tiles and products	construction
10 12 08	Waste ceramics, brick, tiles and construction products (after thermal processing)	
10 13	Wastes from manufacture of cement, lime and plaster and articles from them	and products made
10 13 14	Waste that as waste concrete and concrete sludge	
17	CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXFROM CONTAMINATED SITES)	CAVATED SOIL
17 01	Concrete, bricks, tiles and ceramics	
17 01 01	Concrete	Selected C&D waste only
17 01 02	Bricks	Selected C&D waste only
17 01 03	Tiles and ceramics	Selected C&D waste only
17 01 07	Mixtures of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06	Selected C&D waste only. Metal from reinforced concrete must have been removed.
17 03	Bituminous mixtures, coal tar and tarred products	
17 03 02	Bituminous mixtures other than those mentioned in 17 03 01	

17 05	Soil (including excavated soil from contaminated sites),	stones and dredging spoi
17 05 04	Soil and stones other than those mentioned in 17 05 03	Excluding topsoil, peat; excluding soil and stones from contaminated sites
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 09	Other construction and demolition wastes	
17 09 04	Mixed construction and demolition wastes other than those no 02 and 17 09 03	nentioned in 17 09 01, 17 09
19	WASTES FROM WASTE MANAGEMENT FACILITIES, OF TREATMENT PLANTS AND THE PREPARATION OF WAT HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL	ER INTENDED FOR
19 01	Wastes from incineration or pyrolysis of waste	
19 01 02	Ferrous materials removed from bottom ash	
19 01 11*	Waste that as bottom ash and slag containing hazardous sub	ostances
19 01 12	Bottom ash and slag other than those mentioned in 19 01 11	
19 01 14	Fly ash other than those mentioned in 19 01 13	
19 01 16	Boiler dust other than those mentioned in 19 01 15	
19 01 18	Pyrolysis wastes other than those mentioned in 19 01 17	
19 01 19	Sands from fluidized beds	
19 02	Wastes from physico/chemical treatments of waste (incledecyanidation, neutralisation)	uding dechromatation,
19 02 06	Waste that as sludges from physico/chemical treatment othe 19 02 05	r than those mentioned in
19 12	Wastes from the mechanical treatment of waste (for example compacting, pelletising) not otherwise specified	mple sorting, crushing,
19 12 09	Minerals only	Wastes from the treatment of waste aggregates that are otherwise naturally occurring minerals.  Does not include fines from treatment of any non-hazardous waste or gypsum from

		recovered plasterboard.
19 12 12	Other wastes (including mixtures of materials) from other mechanical treatment of wastes other than those mentioned in 19 12 11	Including IBAA
19 13	Wastes from soil and groundwater remediation	
19 13 02	Solid wastes from soil remediation other than those mentioned in 19 13 01	
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR CO INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEP COLLECTED FRACTIONS	
20 02	Garden and park wastes (including cemetery waste)	
20 02 02	Soil and stones	Only from garden and parks waste; excluding topsoil, peat.

**Table A2: Physical Treatment Facility Waste Codes** 

EWC 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
10	WASTES FROM THERMAL PROCESSES
10 01	Wastes from power stations and other combustion plants (except 19)
10 01 01	Bottom ash and slag only
10 01 02	Pulverised fuel ash only
10 11	Waste 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 processes)
10 13	Wastes from manufacture of cement, lime and plaster and articles and products made from them
10 13 14	Waste concrete only
15	WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED
15 01	Packaging (including separately collected municipal waste 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 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 08	Track ballast, soil and stones other than those mentioned in 17 05 07
20	MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS
20 01	Separately collected fractions (except 15 01)
20 01 02	Clean glass only
20 02	Garden and park wastes (including cemetery waste)
20 02 02	Soil and stones

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Dust complaint report form	Date:	Ref. No.
Name and address of complainant		
Tel no. of complainant		
Time and date of complaint		
Date, time and duration of offending dust		
Weather conditions (e.g., dry, rain, fog, snow)		
Wind strength and direction (e.g. light, steady, strong, gusting)		
Complainant's description of dust		
Has complainant any other comments about the offending dust?		
Any other previous known complaints relating to installation (all aspects, not just dust)		
Any other relevant information		
Potential dust sources that could give rise to the complaint		
Operating conditions at the time offending dust occurred		
Action taken:		
Final outcome:		
Form completed by	Signed	

Erith Soil Treatment Facility
Dust Management Plan
Appendix C - Daily Site Inspection Log

Date	
Name	
Observations	
Actions	
Signature	