

Erith Soil Treatment Facility

784-B066441

Environmental Risk Assessment

Environmental Permit Application

Hanson Quarry Products Europe Ltd

June 2024

Document prepared on behalf of Tetra Tech Limited. Registered in England number 01959704



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DOCUMENT CONTROL

Document:	Environmental Risk Assessment
Project:	Erith Soil Treatment Facility
Client:	Hanson Quarry Products Europe Ltd
Project Number:	784-B066441
File Origin:	X:\784-B066441_Appleford_Permit_Variation\60 Project Output\63 Published\Erith\Appendix D - Environmental Risk Assessment\Environmental Risk Assessment.docx

Revision:	Final to EA	Prepared by:	Lauren Stanger
Date:	June 2024	Checked by:	Lauren Stanger
Status:	Final	Approved By:	Andrew Bowker
Description of Revision:			

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			

Revision:		Prepared by:	
Date:		Checked by:	
Status:		Approved By:	
Description of Revision:			



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Appendix A – Environmental Risk Assessment

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1.0 Introduction

1.1 Report Scope

- 1.1.1 This section of the Environmental Permit application corresponds to Section 6 of Part B2 of the Environmental Permit application forms, and has been prepared on behalf of the operator, Hanson Quarry Products Europe Ltd (Hanson).
- 1.1.2 This application relates to Hanson's site Erith Soil Treatment Facility located at Hanson Quarry Products Ltd, Church Manorway, Erith, DA8 1DE and is centred at approximate National Grid Reference (NGR) TQ 50786 79709. The application site is detailed on Drawing Number ERI/B066441/PER/01.
- 1.1.3 Hanson seek to obtain a Bespoke Environmental Permit for a Soil Washing Facility that will process a maximum of 800,000 tonnes per annum of non-hazardous soils.
- 1.1.4 This Environmental Risk Assessment (ERA) has been prepared to support a bespoke environmental permit application to operate a soil washing facility at the site.
- 1.1.5 This ERA is limited to a qualitative assessment of the potential risks to the environment and human health specifically related to the proposed activity. This report will identify any significant risk and demonstrate that the risk of pollution will be acceptable by taking the appropriate measures to manage the risk.

2.0 Environmental Risk Assessment

2.1 Methodology

2.1.1 This report has been prepared following the Environment Agency's (EA) Risk Assessment guidance. It specifically relates to the potential risks associated with the following risk types: -

- Amenity and Accidents;
- Surface water discharges;
- Air;
- Global Warming potential;
- Site Waste; and,
- Groundwater.

2.1.2 There will be no direct emissions to groundwater or surface water as a result of this proposal. Subsequently, it's considered that no further assessment is required for groundwater.

2.1.3 This risk assessment addresses the above, and is based on the following methodology: -

- Identification of potential sources of risks;
- Identification of all potential receptors to risk; and,
- Risk assessment of each risk type.

2.1.4 The ERA is a tool used to identify the pollutant linkage i.e. source-pathway-receptor. For most risks, the atmosphere is the main pathway and will always exist. Therefore, the ERA deals primarily with the sources and receptors and is provided in Appendix A and summarised below.

2.1.5 A Nature and Heritage Conservation Screen (Reference Number EPR/AP3721SW/P001) was requested from the EA. This screen determines the presence of any sites of nature and heritage conservation, or protected species or habitats that may be impacted by the proposal.

2.1.6 The results of the screen (Appendix B) identified the following:-

Local Wildlife Sites (LWS)

- River Thames and Tidal Tributaries

Protected Species

- Atlantic Salmon migratory route
- Allis Shad migratory route
- Sea Lamprey migratory route
- European Eel migratory route
- River Lamprey migratory route
- Smelt migratory route
- Twaite Shad migratory route

Protected Habitats

- Coastal Saltmarsh

2.2 Sources

2.2.1 The potential sources of risks have been considered for each risk type, as provided in Appendix A and summarised below:

Odour

- Receipt and treatment of odorous waste; and,
- Odour from the storage of waste during contingencies (e.g. mechanical breakdown).

Noise and Vibration

- Engine noise from vehicle movements;
- Use of reverse vehicle warnings; and,
- Loading/unloading of waste.

Fugitive Emissions

- Particulate matter i.e., dust;
- Scavenging birds;
- Contaminated surface water run-off;
- Mud; and,
- Litter.

Accidents

- Fire or failure to contain firewater;
- Plant failure or breakdown;
- Flooding; and,
- Vandalism.

2.3 Pathways

Table 1: Potential Pathways

Risk Type	Pathway
Odour	Atmosphere
Noise and vibration	Atmosphere
Fugitive emissions	Atmosphere
Accidents	Atmosphere
	Surface water run-off
	Infiltration
	Percolation

2.4 Receptors

2.4.1 Receptors within 1km of the site, including those identified in the Nature and Heritage Conservation Screen (Appendix B), have been listed in Table 2 and are shown on Drawing Number ERI/B066441/REC/01. The main pathway for the identified sources will be atmosphere and as such, atmospheric conditions can affect dispersion rates and hence potential risk. As a result, the location of each

receptor in relation to the site may influence the potential impact of the risk, as summarised in Table 2.

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)
Domestic 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
Commercial 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
15	Industrial and Commercial Properties off Little Brights Rd	W	865
Schools / Hospitals / Shops/Amenities			
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			

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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			
34	Parish Church Of St John the Baptist (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	515
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
Nature and Heritage Screening Results			
43	River Thames and Tidal Tributaries	E	10
44	Coastal Saltmarsh (Protected Habitat)	E	10
45	Atlantic Salmon (Migratory Route)	E	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)	E	10
51	Twait Shad (Migratory Route)	E	10

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.

2.5 Risk Assessment

2.5.1 The ERA (Appendix A) looks at each specific hazard identified and assesses the likelihood of those hazards impacting on the receptors. This is achieved by fulfilling the following objectives: -

- Identify the location and nature of each hazard;
- Identify the specific receptors potentially at risk and assess the sensitivity of each receptor;
- Provide a qualitative assessment of the risk posed to each sensitive receptor;
- Identify management and monitoring techniques; and,
- Provide recommendations for more detailed assessments where necessary.

2.6 Summary of ERA

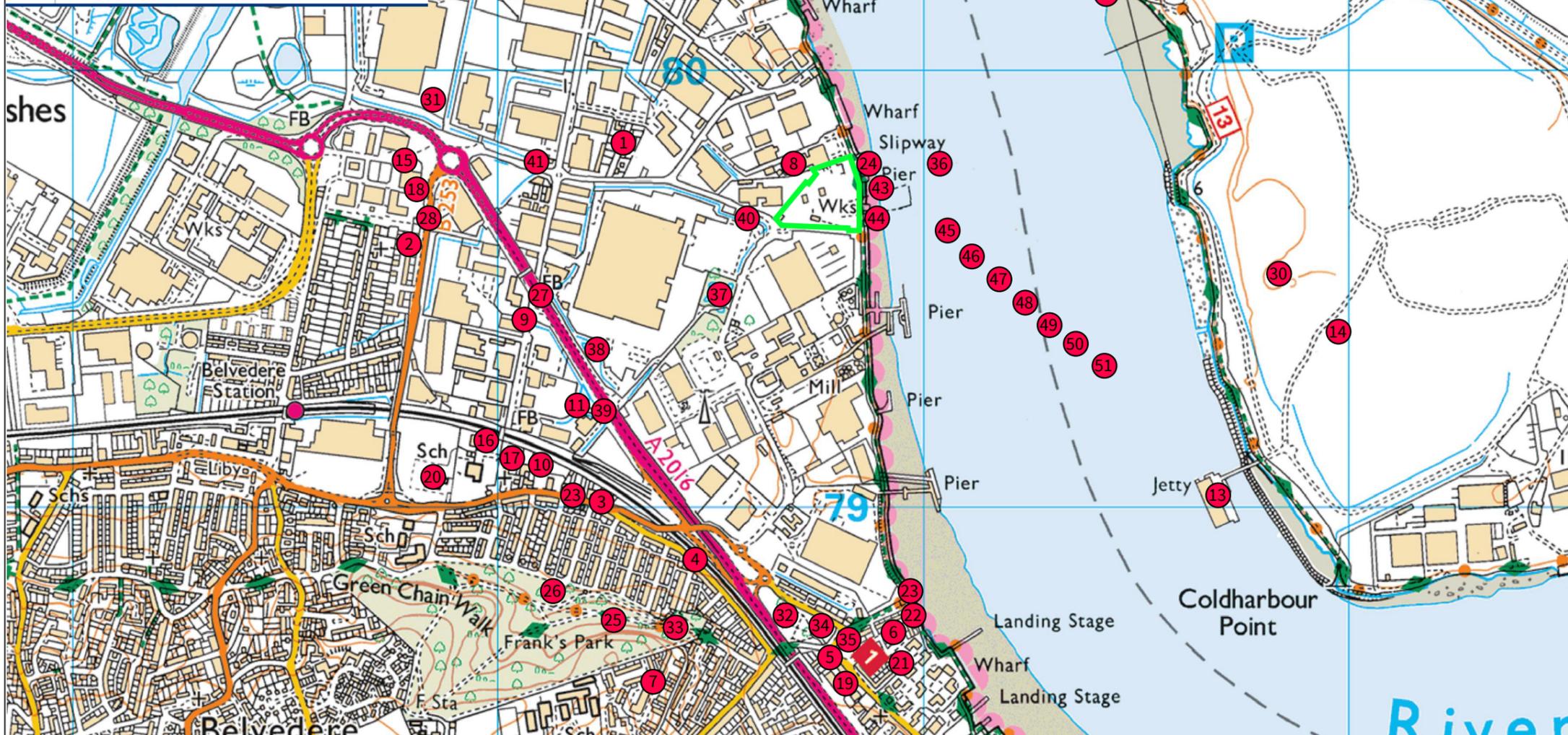
2.6.1 The ERA (Appendix A) indicates that the proposed development will have no significant impact with regards to odour, noise and fugitive emissions, and the likelihood of accidents is minimal.

Drawings

ERI/B066441/REC/01 – Environmental Receptor Plan

ERI/B066441/PER/01 – Permit Boundary Plan

38	Bronze Age Way Pond
39	Bronze Age Way Pond (#2)
40	Church Manorway Stream
41	Anderson Way Stream
42	River Thames Inlet
Nature and Heritage Screening Results	
43	River Thames and Tidal Tributaries
44	Coastal Saltmarsh (Protected Habitat)
45	Atlantic Salmon (Migratory Route)
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47	European Eel (Migratory Route)
48	River Lamprey (Migratory Route)
49	Sea Lamprey (Migratory Route)
50	Smelt (Migratory Route)
51	Twait Shad (Migratory Route)

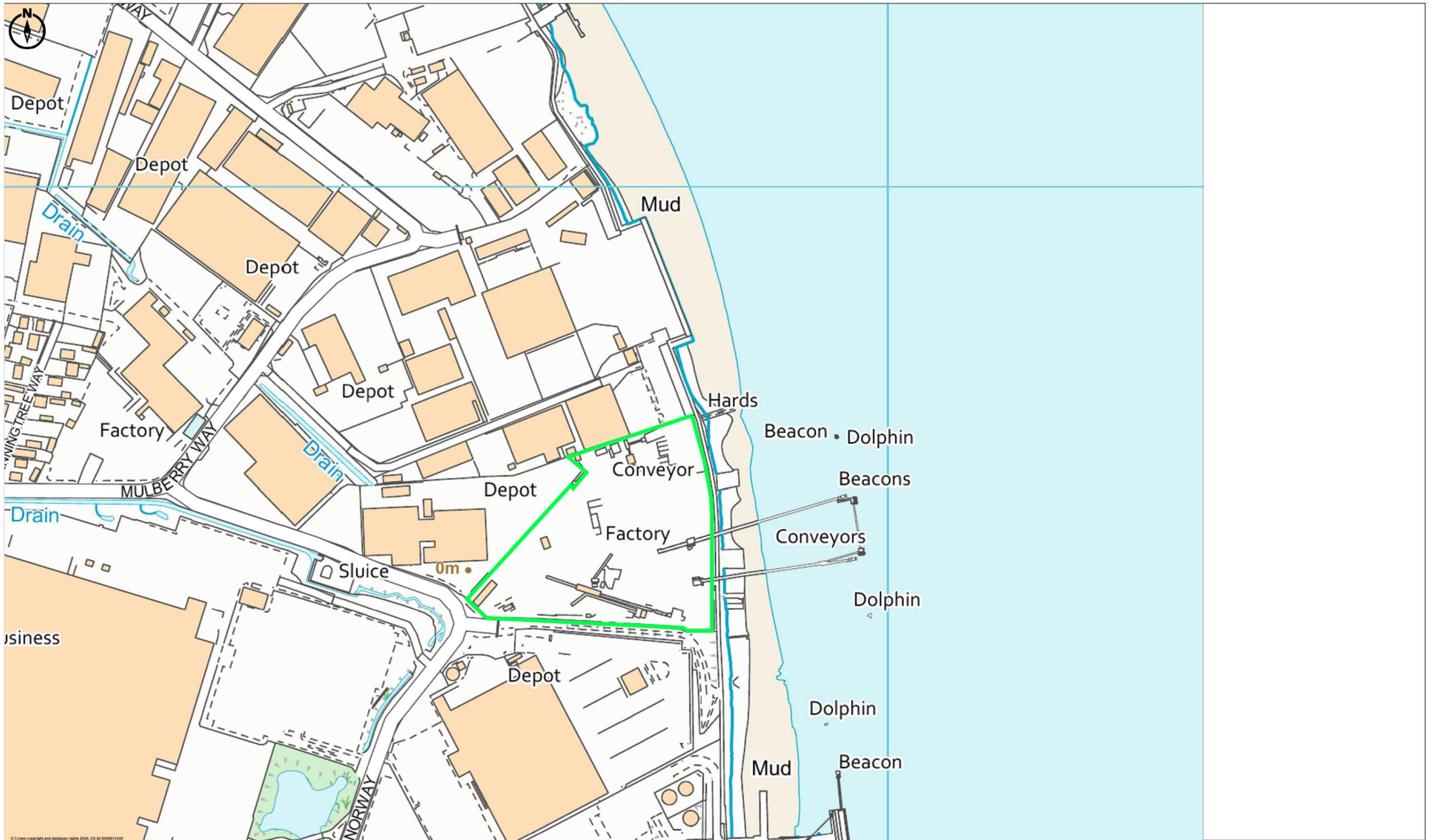


ID	Receptor
Domestic Dwellings	
1	Jenning Tree Way Residences
2	Estate west of Picardy Manorway
3	Residential Estate off B213
4	Residential Estate off Battle Road
5	Lower Road Residences
6	Estate south of Corinthian Manorway
7	Properties South of Franks Park
Commercial and Industrial Premises	
8	Erith Wharf Industrial and Commercial Premises
9	Capital Industrial Estate (off Crabtree Manorway S)
10	Industrial Premise
11	Bronze Age Way Industrial and Commercial Premises
12	Coldharbour Lane Industrial and Commercial Premises
13	Waste Management Terminal on the River Thames
14	Veolia Rainham Landfill
15	Industrial and Commercial Properties off Little Brights Rd
Schools / Hospitals / Shops/Amenities	
16	Belvedere Community Centre/Infant School
17	Mitchell Close Amenities
18	Little Brights Road Amenities
19	Lower Road Shops and Amenities
20	Belvedere Junior School
21	Amenities south of Corinthian Manorway
Recreation	
22	Galleon Close Play Space
23	The Green Chain Walk
24	Thames Path Erith
25	Franks Park
26	Sports Facility Franks Park
Highways/Minor Roads/Railways	
27	Bronze Age Way A2016
28	Picardy Manorway B253
29	Lower Road B213
Protected Habitats	
30	Frog Island
31	Deciduous Woodland Anderson Way
32	Deciduous Woodland Bronze Age Way
33	Deciduous Woodland Franks Park
Listed Buildings and Scheduled Monuments	
34	Parish Church Of St John the Baptist (Grade II*)
35	First World War Memorial at St John the Baptist Church, Erith (Grade II*)
Surface Water e.g. rivers and streams	
36	River Thames
37	Church Manorway Pond

Client: Hanson Quarry Products	Created: GA
	Checked: LS
Project: Erith Building Materials Hub	Date: 16/05/2024
Title: Environmental Receptor Plan	Version: 1
Drawing No: ERI/B066441/REC01	Scale: 1:25,000

Key:	ENVIRONMENTAL PERMIT BOUNDARY
	ENVIRONMENTAL RECEPTORS

2nd Floor,
11 York Street,
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Client:
Hanson Quarry Products

Created: GA

Checked: LS

Project: ERITH BUILDING MATERIALS HUB

Date: 15/05/2024

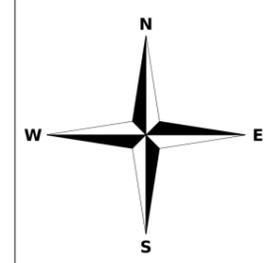
Title: Permit Boundary Plan

Version: 1

Drawing No: ERI/B066441/PER/01

Scale: 1:25,000

Key:
 ENVIRONMENTAL PERMIT BOUNDARY



2nd Floor,
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Appendices

Appendix A – Environmental Risk Assessment

Table A1 - Odour Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Receipt, storage, and treatment of odorous wastes.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2 above.	Atmosphere.	<p>Hanson do not propose that any putrescible wastes will be accepted at the site. All waste accepted on site will be inert and non-hazardous in nature.</p> <p>There are clearly designated areas throughout the site for the storage and treatment of waste for the proposed soil washing activity. All soil washing activities will be undertaken on an impermeable surface.</p> <p>Should putrescible waste be accepted at the site, the wastes will be quarantined, and arrangements will be made to transfer the waste off site as soon as practicable, storage will be limited to 72 hours from the date of receipt.</p> <p>Waste that's accepted will be accepted at manageable volumes to avoid a backlog of wastes. In the event of odorous materials being received at the site, or materials becoming odorous during storage, these will be prioritised before other materials already stored at the site.</p> <p>Hanson's Management System includes site inspection check sheets that include a daily requirement for site staff to qualitatively</p>	Low – the management procedures should prevent emissions of odour.	Medium/Low - Odour annoyance.	Low – The management procedures employed reduce the likelihood of impact.

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	Amenities listed in Table 2 above.	assess odour; if perceived to be excessive, measures will be taken to identify the source of any malodourous and take appropriate remedial action. Due to the nature of waste, it is determined that the risk of odour is minimal and therefore an Odour Management Plan has not been produced for the site.			
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Table A2: Noise and Vibration Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
<p>Vehicle movements on site and haul roads.</p> <p>Noise from reverse vehicle warnings.</p>	<p>Occupiers of domestic dwellings listed in Table 2 above.</p> <p>Commercial and industrial units' users in listed Table 2 above.</p> <p>Amenities listed in</p>	<p>Atmosphere.</p>	<p>The site is located within a predominantly industrialised area surrounded by additional industrial and commercial properties with the River Thames immediately to the east.</p> <p>The nearest residential receptors to the site are 400m to the west on Jennings Tree Way.</p> <p>Operations will be undertaken 24 hours a day.</p> <p>The proposed activities will not be dissimilar to the operations occurring at the immediate surrounding properties.</p> <p>All vehicle drivers will comply with the speed limits within the site and on the access roads.</p> <p>An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use.</p> <p>All vehicles will utilise low level reversing signals where possible.</p> <p>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 noise emissions.</p>	<p>Low – the site is situated within an operational industrial estate and the management procedures should prevent emissions of noise.</p>	<p>Medium/Low - Intermittent noise and vibration disturbance.</p>	<p>Low – The management procedures employed reduced the likelihood of impact.</p>

	<p>Table 2 above.</p> <p>Non-statutory ecological sites listed in Table 2 above.</p> <p>Protected species listed in Table 2 above.</p> <p>Protected habitats listed in Table 2 above.</p>		<p>All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>In addition to the above, a Noise Management Plan (NMP) has been prepared which provides an assessment of noise from the proposed activities and how noise will be managed at the site. The NMP is provided as Appendix F of the Environmental Permit Application.</p>			
Noise from the loading/unloading of wastes.	<p>Occupiers of domestic dwellings listed in Table 2 above.</p> <p>Commercial and industrial units' users in listed Table 2</p>	Atmosphere.	<p>Operations will be undertaken 24 hours a day.</p> <p>The site is located in a predominantly industrialised area surrounded by additional industrial and commercial properties with the River Thames immediately to the east.</p> <p>The nearest residential receptors to the site are 400m to the west on Jenning Tree Way.</p> <p>The loading/unloading of wastes will be undertaken in a controlled manner to keep noise/vibration to a minimum. For example, drop heights will be minimised as much as practicable.</p> <p>All noise generating activities will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p> <p>Drop heights will be minimised as much as practicable.</p> <p>In addition to the above, a Noise Management Plan (NMP) have been prepared which provides details regarding how noise will be managed at the site. The NMP is provided as Appendix F of the Environmental Permit Application.</p>	Low – the site is situated within an operational industrial estate and the management procedures should prevent emissions of noise.	Medium/Low - Intermittent noise and vibration disturbance.	Low – The management procedures employed reduced the likelihood of impact.

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	<p>above.</p> <p>Amenities listed in Table 2 above.</p> <p>Non-statutory ecological sites listed in Table 2 above.</p> <p>Protected species listed in Table 2 above.</p> <p>Protected habitats listed in Table 2 above.</p>					
Noise from the mechanical treatment of waste.	<p>Occupiers of domestic dwellings listed in Table 2 above.</p> <p>Commercial and industrial</p>	Atmosphere.	<p>Operations will be undertaken 24 hours a day.</p> <p>The site is immediately surrounded by additional industrial and commercial properties with the River Thames immediately to the east. The surrounding industrial activities are not dissimilar to the proposed activities on site.</p> <p>All plant and machinery will have effective silencers where practicable and be maintained in accordance with the manufacturer's requirements to minimise the generation of noise.</p> <p>An anti-idling policy will be employed on site which will require all plant and equipment to be switched off when not in use.</p> <p>The use of modern plant and equipment shall be practiced and</p>	<p>Low – the site is situated within an operational industrial estate and the management procedures should prevent emissions of noise.</p>	<p>Medium/Low - Intermittent noise and vibration disturbance.</p>	<p>Low – The management procedures employed reduced the likelihood of impact.</p>

<p>units' users in listed Table 2 above.</p> <p>Amenities listed in Table 2 above.</p> <p>Non- statutory ecological sites listed in Table 2 above.</p> <p>Protected species listed in Table 2 above.</p> <p>Protected habitats listed in Table 2 above.</p>	<p>will be maintained in accordance with the manufacturer's requirements. This will minimise the risk of mechanical failure which could result in increased noise emissions.</p>	<p>All noise and vibration generating activity will be monitored closely and site operatives will be vigilant and report any excessive noise or vibration issues to the Site Manager.</p>			
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Table A3: Fugitive Emissions Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Hazard	Receptor	Pathway	Hazard
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What has the potential to cause harm?
To Air						
Dust emissions from vehicle movements.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2 above. Amenities listed in Table 2 above. Non-statutory ecological sites listed in Table 2 above.	Atmosphere.	<p>Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit.</p> <p>The site is immediately surrounded by additional industrial and commercial properties with the River Thames immediately to the east. The surrounding industrial activities are not dissimilar to the proposed activities on site. The nearest residential receptors to the site are 400m to the west on Jenning Tree Way.</p> <p>Further, the receptors which are closest to the site, including the residential receptors 400m to the west on Jenning Tree Way, are unlikely to experience an increase in dust levels due to the prevailing wind direction coming from the SW.</p> <p>The speed limit on site will be restricted to 5mph to minimize the risk of dust arising from vehicle movements.</p> <p>An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use This will minimise the risk of dust that's typically associated with idling.</p> <p>The surfaces present on site will be visually inspected on a daily basis by site management and the impermeable surfaces swept clean in accordance with the strict housekeeping regime.</p>	Low - the management actions should prevent emissions of dust.	Low – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property. In addition, ecological receptors may be susceptible to smothering.	Low – The management procedures employed reduced the likelihood of impact.

	<p>Protected species listed in Table 2 above.</p> <p>Protected habitats listed in Table 2 above.</p>		<p>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 Site Manager.</p> <p>Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.</p>			
<p>Dust generated during loading/unloading of waste.</p>	<p>Occupiers of domestic dwellings listed in Table 2 above.</p> <p>Commercial and industrial units' users in listed Table 2 above.</p> <p>Amenities listed in Table 2 above.</p> <p>Non-statutory ecological sites listed in Table 2 above.</p> <p>Protected species listed in Table 2 above.</p>	<p>Atmosphere.</p>	<p>The site will have allocated areas for the unloading and loading of waste.</p> <p>Further, the receptors which are closest to the site, including the residential receptors 400m to the west on Jenning Tree Way , are unlikely to experience an increase in dust levels due to the prevailing wind direction coming from the SW.</p> <p>Drop heights would be minimised as much as practicable to reduce the generation of dust from loading/unloading activities.</p> <p>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.</p> <p>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.</p> <p>The site staff will be vigilant and will report any incidents of unacceptable dust emissions to the site management staff. The site manager or supervisor will be responsible for visually monitoring dust levels and implementing any necessary remedial action as required.</p> <p>Extra care will be taken during periods of prolonged dry weather or high winds.</p>	<p>Low - the management actions should prevent emissions of dust</p>	<p>Low – human health risk in immediate vicinity, nuisance risk to nearby vehicles and property. In addition, ecological receptors may be susceptible to smothering.</p>	<p>Low – The management procedures employed reduced the likelihood of impact.</p>

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	Protected habitats listed in Table 2 above.		Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.			
Dust and particulates from storage of waste.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2 above. Amenities listed in Table 2 above. Non-statutory ecological sites listed in Table 2 above. Protected species listed in Table 2 above. Protected habitats listed in Table 2	Atmosphere.	<p>The waste will arrive at the site in sheeted vehicles.</p> <p>The non-hazardous soil and aggregate wastes stored in waste piles will not contain fine materials likely to contribute to dust emissions.</p> <p>Further, the receptors which are closest to the site, including the residential receptors 400m to the west on Jenning Tree Way , are unlikely to experience an increase in dust levels due to the prevailing wind direction coming from the SW.</p> <p>Dust suppression measures will be in place and the storage areas will be provided with misting equipment and water sprays. A permanent supply of water will be available in the instance that dust emissions begin to occur.</p> <p>Further dust suppression measures will be identified and implemented if there is any risk identified of dust emanating past the site boundary, with attention to meteorological conditions which may exacerbate potential dust issues.</p> <p>The Site Manager will undertake daily visual assessments of dust levels and all site operatives will be vigilant and report any problems to the Site Manager.</p> <p>Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix E of the environmental permit application.</p>	Low - the management actions should prevent emissions of dust.	Low – human health risk in immediate vicinity.	Low – The management procedures employed reduced the likelihood of impact.

	above.					
To Water						
Contaminated rainwater run-off. Run off of contaminants from wastes or non-wastes (e.g. oil, fuel).	Groundwater. Surface water features listed in Table 2.	Direct surface water run-off from site. Infiltration. Percolation.	<p>All pre and post storage will be undertaken outside on hardstanding. The soil washing process will be entirely enclosed, there is minimal risk of the transmission of potentially contaminated liquids into groundwater beneath the site.</p> <p>All areas of the impermeable concrete surface, fixed/temporary bays and containers will be visually inspected on a daily basis to ensure continuing integrity and fitness for purpose. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.</p> <p>All site surfaces and waste piles will be visually inspected on a daily basis to ensure continuing integrity and fitness for purpose. In the event that any damage breaches the integrity of the engineered containment so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.</p> <p>Fuel storage will be provided, and storage will be in line with latest legislation.</p> <p>All deliveries of fuel will be supervised to ensure no spillages occur.</p> <p>Emergency spillage procedures are in place to ensure any oil, hydraulic fluids etc. are dealt with before they enter the drainage system. A supply of absorbent granules will be stored on site. The drainage system will be sealed off to prevent discharge in the event of an incident.</p> <p>Weekly check sheets include a requirement for site staff to undertake visual inspections of the status of the drainage.</p>	Low – The engineered systems and infrastructure are designed to prevent any discharge of contaminated rainwater runoff.	Medium – contamination of local water bodies and/or groundwater.	Low - due to the design of the site.

Pests/Scavenging birds

<p>Birds and Pests.</p>	<p>Occupiers of domestic dwellings listed in Table 2 above.</p> <p>Commercial and industrial units' users in listed Table 2 above.</p> <p>Amenities listed in Table 2 above.</p> <p>Non-statutory ecological sites listed in Table 2 above.</p> <p>Protected species listed in Table 2 above.</p> <p>Protected habitats listed in Table 2 above.</p>	<p>Air.</p> <p>Ground.</p>	<p>Hanson do not propose that any putrescible wastes will be accepted at the site.</p> <p>All waste accepted on site will be inert and non-hazardous in nature.</p> <p>The waste streams accepted are unlikely to attract pests due to the nature of wastes. A full list of these wastes can be found in Appendix A of the Operating Techniques (Appendix C).</p> <p>Should putrescible waste be accepted at the site, the wastes will be quarantined, and arrangements will be made to transfer the waste off site as soon as practicable, storage will be limited to 72 hours from the date of receipt.</p> <p>Waste will be accepted at manageable volumes to avoid a backlog of wastes. In the event of odorous materials being received at the site, or materials becoming odorous during storage, these will be prioritised before other materials already stored at the site.</p> <p>Waste acceptance procedures will include a requirement for incoming waste to be checked for fly infestation prior to deposition.</p> <p>Any wastes found to contain flies on entry to the site will either be treated appropriately with the fly spray or rejected from the site.</p> <p>Routine inspections are undertaken as required by the IMS and appropriate action will be taken in the event that the inspections indicate the presence of any pests or vermin.</p> <p>A pest control contractor will be appointed to attend the site at regular intervals (to be determined) by the contractor in accordance with IMS procedures. Additionally, the pest control contractor will be called to site to deal with any vermin/pest related problems that may arise between scheduled visits.</p>	<p>Low – The management actions should reduce the risk.</p>	<p>Medium - Nuisance, property damage and risk of vermin spread infections.</p>	<p>Low – the management procedures in place reduce likelihood of impact.</p>
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Mud

<p>Litter/debris and mud on public highway.</p>	<p>Highways listed in Table 2.</p>	<p>Tracked by vehicles.</p>	<p>The site is situated within a purpose-built industrial estate and the proposed soil washing treatment area will benefit from a hard standing surface. The access road also benefits from a hard standing surface and therefore the risk of mud is considered to be low.</p> <p>Vehicles will be sheeted/netted, if necessary, when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways.</p> <p>The site will employ good housekeeping criteria. Any litter that's noticed on site will be removed as soon as is practicable and a check will be undertaken at both the start of the workday and the end of the workday to ensure that there is no litter.</p>	<p>Low – the management actions should prevent materials being tracked/dropped onto local highways.</p>	<p>Medium - Nuisance and potential health and safety hazard caused by waste on the highway.</p>	<p>Low – The management procedures in place minimise the likelihood of impact.</p>
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Table A4: Accident and Incident Risk Assessment and Management Plan

What do you do that can harm and what could be harmed?			Managing the risk	Assessing the risk		
Hazard	Receptor	Pathway	Risk Management	Probability of Exposure	Consequence	What is the overall risk?
What has the potential to cause harm?	What is at risk? What do I wish to protect?	How can the hazard get to the receptor?	What measures will you take to reduce the risk? If it occurs – who is responsible for what?	How likely is this contact?	What is the harm that can be caused?	What is the risk that still remains? The balance of probability and consequence.
Fire or failure to contain firewater	Groundwater. Site Operators Surface water features listed in Table 2. Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2 above. Amenities listed in Table 2 above.	Infiltration. Contaminated rainwater runoff.	<p>There will be strict waste acceptance procedures in place at the site to prevent the acceptance of non-conforming waste types. Details of the waste acceptance procedures are provided in the Operating Techniques document (Appendix C of the Environmental Permit Application).</p> <p>There will be no combustible waste accepted on site.</p> <p>All plant to be maintained in accordance with the manufacturer's guidance. This will minimise the risk of mechanical failure which may result in an increased risk of fire.</p> <p>Smoking is only permitted in designated areas.</p> <p>Weekly checks of fire safety equipment will be carried out.</p> <p>In the event of a fire, the drainage system will be sealed off to prevent discharge in the event of an incident. An agreement has been reached with a local tanker to remove wastewater offsite at short notice.</p>	Low – the management actions should prevent fire	Medium- possible respiratory irritation from smoke inhalation Nuisance from smoke and emissions of particulates	Low – due to Management system in place

	<p>Non-statutory ecological sites listed in Table 2 above.</p> <p>Protected species listed in Table 2 above.</p> <p>Protected habitats listed in Table 2 above.</p>					
Spillage of oil, fuel or hydraulic fluid from plant colliding with infrastructure, mechanical failure, leak during refueling or maintenance	<p>Groundwater.</p> <p>Surface waters listed in Table 2.</p>	<p>Surface run-off.</p> <p>Infiltration.</p> <p>Percolation</p>	<p>Storage of oil and fuel is located to the southwest of the permitted area.</p> <p>The site is provided with impermeable surfaces to prevent the transmission of potentially contaminated liquids into groundwater beneath the site.</p> <p>All plant to be maintained in accordance with the manufacturer’s guidance. This will minimise the risk of mechanical failure which will minimise the risk of leaks and/or spillages.</p> <p>Hansons’s Management System will require site staff to check plant and site infrastructure daily to ensure continuing integrity and fitness for purpose. In the event that any defects are identified so that it no longer meets the required standards, necessary remedial work will be completed as soon as practicable.</p>	<p>Low – the Management actions should prevent accidents and the engineered systems and infrastructure are designed to prevent any discharge of contaminated water run off</p>	<p>Medium - Pollution of local water courses, groundwater and aquifers</p>	<p>Low - The management procedures in place should prevent this occurring</p>
Flooding	<p>Groundwater.</p> <p>Surface water bodies listed in Table 2.</p>	<p>Infiltration.</p> <p>Contaminated surface water runoff.</p>	<p>Liquids, oils and fuel are located securely to the southwest of the permitted area.</p> <p>In the event of a flood, the drainage system will be sealed off to prevent discharge in the event of an incident.</p>	<p>Low – the management actions should prevent flooding</p>	<p>Medium - Disruption to works on site.</p> <p>Contamination of local groundwater and/or surface water.</p>	<p>Low – due to Management system in place</p>

Erith Soil Treatment Facility

Environmental Risk Assessment

					Contamination of local agricultural land.	
<p>Vandalism / theft – damage to waste containment and fuel storage infrastructure</p>	<p>Groundwater. Surface water features listed in Table 2. Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2 above. Amenities listed in Table 2 above. Non-statutory ecological sites listed in Table 2 above. Protected species listed in Table 2 above.</p>	<p>Unauthorised entry to the site.</p>	<p>Site security, perimeter fencing, and gates are installed to prevent unauthorised access to the site outside operational hours. A CCTV system, with movement detection, is installed on site to deter and record any unauthorised activity. In addition, the site will benefit from being monitored by a security guard at Hanson's head office out of hours. Security alarms are also installed on site.</p>	<p>Low – the management actions should prevent unauthorised access and the engineered systems and infrastructure are designed to prevent any discharge of harmful liquids</p>	<p>Medium - Pollution of local water courses, groundwater and aquifers</p>	<p>Low - The management procedures in place should prevent this occurring</p>

Protected habitats listed in Table 2 above.					
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**Appendix B – Nature and Heritage Conservation Screen
(EPR/AP3721SW/P001)**

Nature and Heritage Conservation

Screening Report: Bespoke Waste

Reference	EPR/AP3721SW/P001
NGR	TQ 50831 79784
Buffer (m)	20
Date report produced	22.05.2024
Number of maps enclosed	3

This nature and heritage conservation report

The nature and heritage conservation sites, protected species and habitats, and other features identified in the table below **must be considered in your application**.

In the further information column, there are links which give more information about the site or feature type and indicate where you are able to self-serve to get the most accurate site boundaries or feature locations.

Most designated site boundaries are available on [Magic map](#). Using Magic map allows you to zoom in and see the site boundary or feature location in detail, Magic map also allows you to measure the distance from these sites and features to your proposed boundary. [Help videos](#) are available on Magic map to guide you through.

Where information is not publicly available, or is only available to those with GIS access, we have provided a map at the end of this report.

Sites and Features within screening distance

Screening Further Information distance (m)

Local Wildlife Sites (LWS) (see map below)

200

[Appropriate Local Record Centre \(LRC\)](#)

River Thames and Tidal Tributaries

Protected Species within screening distance

Atlantic Salmon – migratory route
Allis Shad – migratory route.
European Eel – migratory route.
River Lamprey – migratory route.
Sea Lamprey – migratory route.
Smelt – migratory route.
Twaite Shad - migratory route.

Screening distance (m)

up to 500m

Further Information

Environment Agency. Dial 03708 506 506 for your local Fisheries and Biodiversity team

Protected Habitats within screening distance

Coastal Saltmarsh (see map below)

Screening distance (m)

up to 50m

Further Information

[Natural England](#)

Where protected species are present, a licence may be required from [Natural England](#) to handle the species or undertake the proposed works.

The relevant Local Records Centre must be contacted for information on the features within local wildlife sites. A small administration charge may also be incurred for this service.

The following nature and heritage conservation sites, protected species and habitats, and other features have been checked for, where they are relevant for the permit type requested, but have not been found within screening distance of your site unless included in the list above.

Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

Please note we have screened this application for features for which we have information. It is however your responsibility to comply with all environmental and

planning legislation, this information does not imply that no other checks or permissions will be required.

The nature and heritage screening we have conducted as part of this report is subject to change as it is based on data we hold at the time it is generated. We cannot guarantee there will be no changes to our screening data between the date of this report and the submission of the permit application, which could result in the return of an application or requesting further information

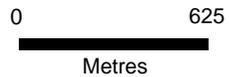
Local Wildlife Sites

Legend

-  Local Wildlife Sites
- Protected species screened for Env Permits - complete set
 -  Protected species, non fish
 -  Protected fish
 -  Protected fish migratory route
-  Protected Habitats screened for Env Permits



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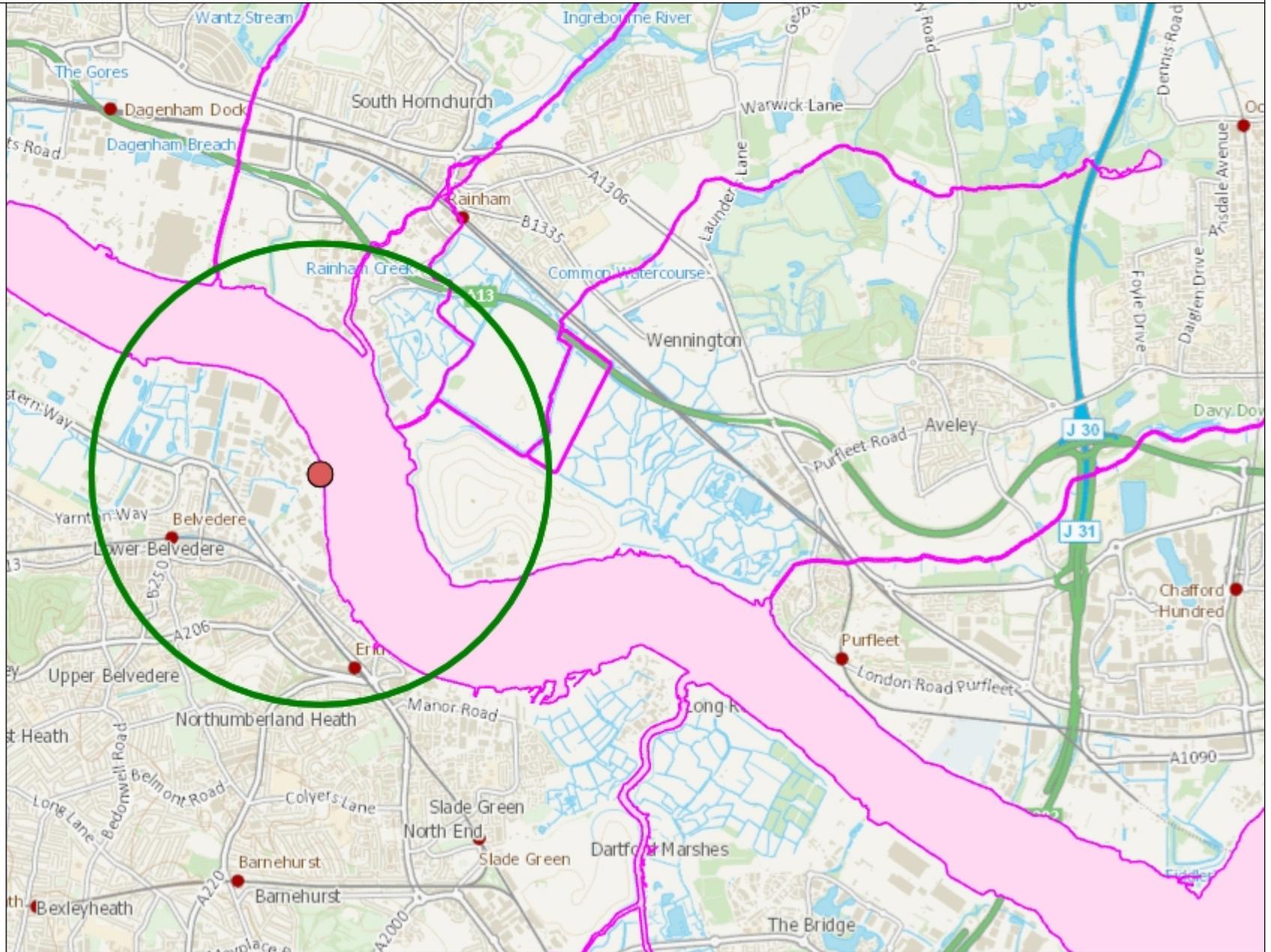


Protected Species

Legend

Protected species screened for Env Permits - complete set

-  Protected species, non fish
-  Protected fish
-  Protected fish migratory route
-  Fish migratory routes screened for Environmental Permits



Protected Habitats

Legend

-  Protected Habitats screened for Environmental Permits

