

Dagenham Dock Aggregate Recycling Facility

784-B066441

Environmental Risk Assessment

Environmental Permit Variation Application

Hanson Quarry Products Europe Ltd

May 2025

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

DOCUMENT CONTROL

Document:	Environmental Risk Assessment
Project:	Dagenham Dock Aggregate Recycling Facility
Client:	Hanson Quarry Products Europe Ltd
Project Number:	784-B066441
File Origin:	X:\784-B066441_Appleford_Permit_Variation\60 Project Output\61 Work in Progress\Dagenham\Appendix D - Environmental Risk Assessment\Environmental Risk Assessment.docx

Revision:	1	Prepared by:	Lauren Stanger
Date:	May 2025	Checked by:	Gemma Allan
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:			

Table of Contents

1.0	INTRODUCTION	4
2.0	ENVIRONMENTAL RISK ASSESSMENT	5

List of Tables

Table 1: Potential Pathways	7
Table 2: Receptors Within 1Km of the Site.....	7

Drawings

DAG/B066441/REC/01 – Environmental Receptor Plan

DAG/B066441/PER/01 – Permit Boundary Plan

Appendices

Appendix A – Environmental Risk Assessment

Appendix B – Nature and Heritage Conservation Screen (EPR/BB3005TG/P001)

1.0 Introduction

1.1 Report Scope

- 1.1.1 This section of the Environmental Permit application corresponds to Section 6 of Part C2 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 Dagenham Dock Aggregate Recycling Facility located at Land on Breach Lane, Dagenham Dock, Dagenham, London, RM9 6QD and is centred at approximate National Grid Reference (NGR) TQ 49239 82187. The application site is detailed on Drawing Number DAG/B066441/PER/01.
- 1.1.3 Hanson currently hold a Bespoke Environmental Permit (EPR/BB3005TG) for the site which was issued in March 2015. The permitted activities comprise of the treatment of wastes consisting of sorting, separation, screening, crushing, and blending of waste for recovery as soil, soil substitute or aggregate. The site accepts less than 250,000 tonnes of non-hazardous waste per annum.
- 1.1.4 Hanson are seeking to vary the existing Environmental Permit to add a soil washing facility that will process a maximum of 400,000 tonnes per annum of non-hazardous soils. Hanson also seek to extend the permit boundary to include the area to the northeast as shown on Drawing Number DAG/B066441/PER/01. The site will process no more than 650,000 tonnes per annum.
- 1.1.5 This Environmental Risk Assessment (ERA) has been prepared to support a variation application to operate a soil washing facility at the site and to extend the permitted boundary.
- 1.1.6 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/BB3005TG/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)

- Dagenham Breach and the lower Beam River in Dagenham.

Protected Species

- Atlantic Salmon migratory route.
- Allis Shad migratory route.

- European Eel.
- European Eel migratory route.
- River Lamprey migratory route.
- Sea Lamprey migratory route.
- Smelt.
- Smelt migratory route.
- Twaite Shad migratory route.

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 DAG/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	Residential Estate N of New Road	N	865
Commercial and Industrial Premises			
2	Perry Road Industry	W/SW	Adjacent
3	Chequers Lane Industry (W)	W	165
4	Hindmans Way Industry	W	530
5	London Sustainable Industries	W	900
6	Hitch Street Industry	NW	840
7	Eddie Stobart	NW	835

8	Chequers Lane Industry (NW)	NW	570
9	Walkerville Road Industry	N	485
10	Lake Road Industry	NW	430
11	Consul Ave	NW	830
12	Fiesta Drive	W	790
13	Industry W of Kent Drive	W	100
14	Thames Bubblers	S	820
Schools / Hospitals / Shops/Amenities			
15	Marsh Green Primary School	N	990
16	First Ave Surgery	NE	1,000
17	School Page	N	960
18	Lovely Tots Pres-school	N	960
19	Shops/Amenities New Road	N	925
Recreation			
20	BEAM Central Park	NW	885
Highways/Minor Roads/Railways			
21	Thames Gateway (A13)	N	310
22	Dagenham Dock Railway Station and Line	N/NW	520
23	New Road (A1306)		
Listed Buildings and Scheduled Monuments			
24	Jetty Number 4 And Approach, Formerly at Samuel Williams And Company, Dagenham Dock	S	350
Surface Water e.g. rivers and streams			
25	Dagenham Breach	N	75
26	River Thames	S	340
27	Beam River	E	760
28	Stream	W	620
29	Mean High Water	SW	555
30	The Gores	NE	725
Nature and Heritage Screening Results			
31	Dagenham Breach and the lower Beam River in Dagenham (LWS)	N	75
32	Atlantic Salmon migratory route (Protected Species)	S	340
33	Allis Shad migratory route (Protected Species)	S	340

34	European Eel (Protected Species)	W	760
35	European Eel migratory route (Protected Species)	W	760
36	River Lamprey migratory route (Protected Species)	S	340
37	Sea Lamprey migratory route (Protected Species)	S	340
38	Smelt (Protected Species)	S	340
39	Smelt migratory route (Protected Species)	S	340
40	Twaite Shad migratory route (Protected Species)	S	340

Groundwater (sensitivity)

According to the Multi-Agency Geographic Information for the Countryside's (MAGIC) website, the site area lies over a Secondary A Bedrock Aquifer and a Secondary (undifferentiated) Superficial Drift Aquifer. The site does not lie in a source protection zone. The site is in a predominantly Medium-High Groundwater Vulnerability area.

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

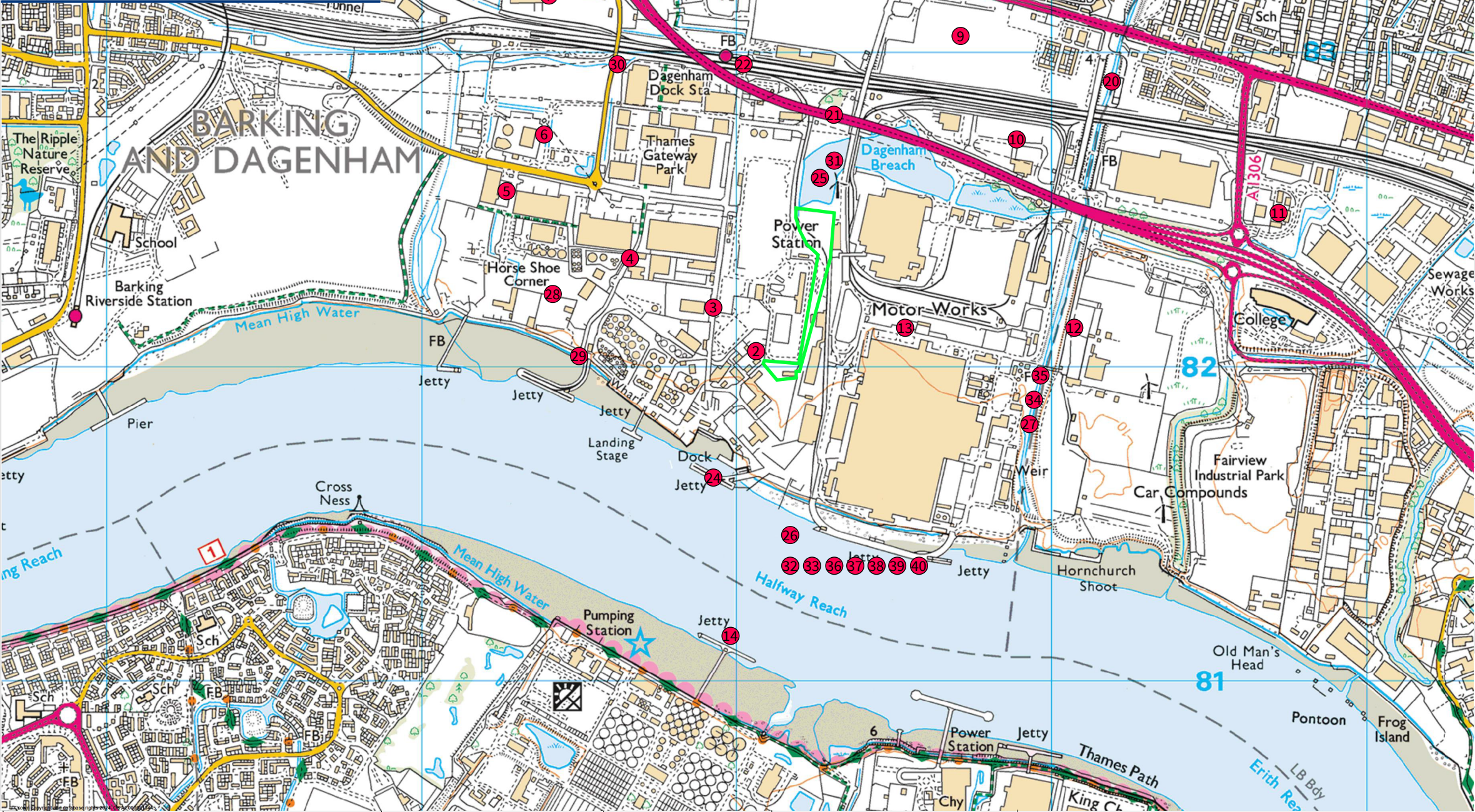
2.6.1 The ERA (Appendix A) indicates that the proposed development will have no significant impact with regards to odour, noise and fugitive emissions, and the likelihood of accidents is minimal.

Drawings

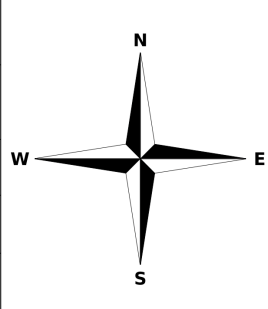
DAG/B066441/REC/01 – Environmental Receptor Plan

DAG/B066441/PER/01 – Permit Boundary Plan

- 32 Atlantic Salmon migratory route (Protected Species)
- 33 Allis Shad migratory route (Protected Species)
- 34 European Eel (Protected Species)
- 35 European Eel migratory route (Protected Species)
- 36 River Lamprey migratory route (Protected Species)
- 37 Sea Lamprey migratory route (Protected Species)
- 38 Smelt (Protected Species)
- 39 Smelt migratory route (Protected Species)
- 40 Twait Shad migratory route (Protected Species)



Client: Hanson Quarry Products Europe Limited	Created: GA
	Checked: AB
Project: Dagenham Dock Aggregate Recycling Facility	Date: 29/08/2024
Title: Environmental Receptor Plan	Version: 1
Drawing No: DAG/B066441/REC/01	Scale: 1:25,000



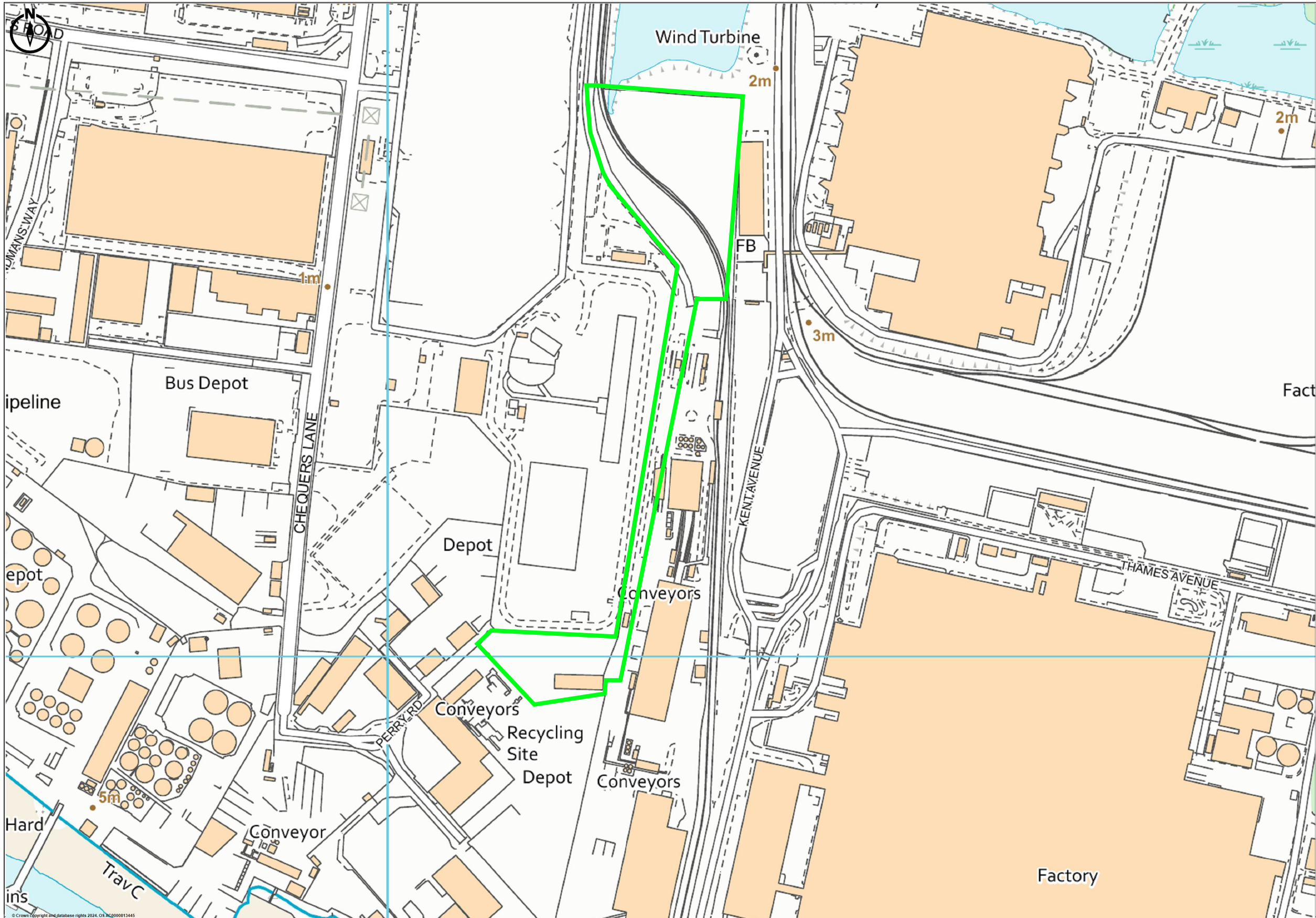
2nd Floor,
11 York Street,
Manchester,
M2 2AW

+44 161 874 4659

TETRA TECH

	Environmental Permit Boundary
	Environmental Receptor

ID	Receptor
Domestic Dwellings	
1	Residential Estate N of New Road
Commercial and Industrial Premises	
2	Perry Road Industry
3	Chequers Lane Industry (W)
4	Hindmans Way Industry
5	London Sustainable Industries
6	Hitch Street Industry
7	Eddie Stobart
8	Chequers Lane Industry (NW)
9	Walkerville Road Industry
10	Lake Road Industry
11	Consul Ave
12	Fiesta Drive
13	Industry E of Kent Ave
14	Thames Bubblers
Schools / Hospitals / Shops/Amenities	
15	Marsh Green Primary School
16	First Ave Surgery
17	School Page
18	Lovely Tots Pres-school
19	Shops/Amenities New Road
Recreation	
20	BEAM Central Park
Highways/Minor Roads/Railways	
21	Thames Gateway (A13)
22	Dagenham Dock Railway Station and Line
23	New Road (A1306)
Listed Buildings and Scheduled Monuments	
24	Jetty Number 4 And Approach, Formerly at Samuel Williams And Company, Dagenham Dock
Surface Water e.g. rivers and streams	
25	Dagenham Breach
26	River Thames
27	Beam River
28	Stream
29	Mean High Water
30	The Gores
Nature and Heritage Screening Results	
31	Dagenham Breach and the lower Beam River in Dagenham (LWS)



Client:
Hanson Quarry Products Europe Limited

Created: GA

Checked: AB

Project: Dagenham Dock Aggregate Recycling Facility

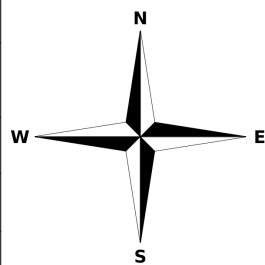
Date: 29/08/2024

Title: Environmental Permit Boundary Plan

Version: 1

Drawing No: DAG/B066441/PER/01

Scale: 1:25,000



2nd Floor,
11 York Street,
Manchester,
M2 2AW

+44 161 874 4659



 Environmental Permit Boundary

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	Atmosphere.	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. There are clearly designated areas throughout the site for the storage and treatment of waste for the permitted physical treatment facility and the proposed soil washing activity. All soil washing activities will be undertaken on an impermeable surface. 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. 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	Low – the management procedures should prevent emissions of odour.	Medium/Low - Odour annoyance.	Low – The management procedures employed reduce the likelihood of impact.

	Table 2 above. Amenities listed in Table 2 above.		becoming odorous during storage, these will be prioritised before other materials already stored at the site. Hanson's Management System includes site inspection check sheets that include a daily requirement for site staff to qualitatively assess odour; if perceived to be excessive, measures will be taken to identify the source of any malodorous 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.			
--	---	--	--	--	--	--

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.
Vehicle movements on site and haul roads. Noise from reverse vehicle warnings.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2 above.	Atmosphere.	The site is located within a predominantly rural area and immediately surrounded by additional industrial activities within the Sutton Courtenay Quarry. The site has, historically, not been the subject of any noise complaints. The nearest residential receptors to the site are 865m to the north of New Road. The proposed operating hours for the site will be 24 hours Monday – Sunday. The proposed activities will not be dissimilar to the waste operations already occurring on site for the physical treatment facility. All vehicle drivers will comply with the speed limits within the site and on the access roads.	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.

	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 above.		An anti-idling policy will be employed on site which requires all vehicles and plant to be switched off when not in use. All vehicles will utilise low level reversing signals where possible. 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. 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. 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 E of the Environmental Permit Application.			
Noise from the loading/unloading of wastes.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in	Atmosphere.	The site is immediately surrounded by additional industrial activities within a purpose-built industrial estate. The nearest residential receptors to the site are 865m to the north of New Road. 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.	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.

	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 above.		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. Drop heights will be minimised as much as practicable. In addition to the above, a Noise Management Plan (NMP) has been prepared which provides details regarding how noise will be managed at the site. The NMP is provided as Appendix E of the Environmental Permit Application.			
Noise from the mechanical treatment of waste.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed Table 2	Atmosphere.	The site is immediately surrounded by industrial activity in the purpose-built industrial estate. The surrounding industrial activities are not dissimilar to the permitted and proposed activities on site. 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. An anti-idling policy will be employed on site which will require all plant and equipment to be switched off when not in use.	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.

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 above.		The use of modern plant and equipment shall be practiced and 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. 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. A Noise Management Plan (NMP) has been prepared to support this application which provides details regarding how noise will be managed at the site. The NMP is provided as Appendix E of the Environmental Permit Application			
---	--	--	--	--	--

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	Atmosphere.	Vehicles delivering waste to the site will be covered or sheeted to prevent the generation of dust whilst the waste is in transit. The site is immediately surrounded by additional industrial activity in the purpose-built industrial estate. The surrounding industrial activities are not dissimilar to the permitted and proposed activities on site. The nearest residential receptors to the site are 865m to the north of New Road. Further, the receptors which are closest to the site, including the residential receptors 865m to the north of New Road, are unlikely to experience an increase in dust levels due to the prevailing wind direction coming from the WSW. The speed limit on site will be restricted to 5mph to minimize the risk of dust arising from vehicle movements. 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.	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.

	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 above.		The surfaces on site will be visually inspected on a daily basis by site management and swept clean in accordance with the strict housekeeping regime. A tractor bowser will be employed to dampen road surfaces should it be necessary. 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. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application.			
Dust generated during loading/unloading of waste.	Occupiers of domestic dwellings listed in Table 2 above. Commercial and industrial units' users in listed	Atmosphere.	The site will have allocated areas for the unloading and loading of waste. As stated in the original permit, notwithstanding the specification of permitted waste types, no wastes comprising solely or mainly of fine metals, dusts, powders, or loose fibres shall be accepted at the site. Further, the receptors which are closest to the site, including the residential receptors 865m to the north of New Road, are unlikely to experience an increase in dust levels due to the prevailing wind direction coming from the WSW. Drop heights would be minimised as much as practicable to reduce the generation of dust from loading/unloading activities.	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.

	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 above.		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. 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. 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. Extra care will be taken during periods of prolonged dry weather or high winds. Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application.			
Dust and particulates from storage of waste.	Occupiers of domestic dwellings listed in Table 2 above.	Atmosphere.	The waste will arrive at the site in sheeted vehicles. As stated in the original permit, notwithstanding the specification of permitted waste types, no wastes comprising solely or mainly of fine metals, dusts, powders, or loose fibres shall be accepted at the site. The non-hazardous soil and aggregate wastes stored in waste piles will not contain fine materials likely to contribute to dust emissions.	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.

Commercial and industrial units' users in listed Table 2 above.		Further, the receptors which are closest to the site, including the residential receptors 865m to the north of New Road, are unlikely to experience an increase in dust levels due to the prevailing wind direction coming from the WSW.			
Amenities listed in Table 2 above.		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.			
Non-statutory ecological sites listed in Table 2 above.		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.			
Protected species listed in Table 2 above.		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.			
Protected habitats listed in Table 2 above.		Dust will be managed in accordance with the Dust Management Plan that's provided as Appendix D of the environmental permit application.			

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.	All pre and post storage will be undertaken outside. As the soil washing process will be on an impermeable surface, there is minimal risk of the transmission of potentially contaminated liquids into groundwater beneath the site. Water from the site's drainage will be pumped into holding tanks to be used in the treatment process. All areas of the impermeable surface 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. All areas of the site surface 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. Fuel storage will be provided, and storage will be in line with latest legislation. All deliveries of fuel will be supervised to ensure no spillages occur. 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.	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.

			Weekly check sheets include a requirement for site staff to undertake visual inspections of the status of the drainage.			
Pests/Scavenging birds						
Birds and Pests.	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	Air. Ground.	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. As stated in the original permit, no hazardous waste or waste in liquid form is to be accepted. 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 B). 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. 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. Waste acceptance procedures will include a requirement for incoming waste to be checked for fly infestation prior to deposition.	Low – The management actions should reduce the risk.	Medium - Nuisance, property damage and risk of vermin spread infections.	Low – the management procedures in place reduce likelihood of impact.

	Table 2 above. Protected species listed in Table 2 above. Protected habitats listed in Table 2 above.		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. 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. A pest control contractor will be appointed to attend the site at regular intervals by the contractor. Additionally, the pest control contractor will be called to site to deal with any vermin/pest related problems that may arise between scheduled visits.			
Mud						
Litter/debris and mud on public highway.	Highways listed in Table 2.	Tracked by vehicles.	The site is situated within a purpose-built industrial estate and the proposed soil washing treatment area will benefit from an impermeable surface. Therefore, the risk of mud is considered to be low. Vehicles will be sheeted/netted, if necessary, when entering/leaving the site to prevent fugitive emissions of litter/waste materials onto the public highways. 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.	Low – the management actions should prevent materials being tracked/dropped onto local highways.	Medium - Nuisance and potential health and safety hazard caused by waste on the highway.	Low – The management procedures in place minimise the likelihood of impact.

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	Infiltration. Contaminated rainwater runoff.	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 B of the Environmental Permit Application). There will be no combustible waste accepted on site. 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. Smoking is only permitted in designated areas. Weekly checks of fire safety equipment will be carried out. In the event of a fire, the drainage system will be sealed off to prevent discharge in the event of an incident. An arrangement will be made with	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

	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 above.		a local tanker to remove wastewater offsite at short notice.			
Spillage of oil, fuel or hydraulic fluid from plant colliding with infrastructure, mechanical failure, leak during refueling or maintenance	Groundwater. Surface waters listed in Table 2.	Surface run-off. Infiltration. Percolation	The site is provided with impermeable surfaces to prevent the transmission of potentially contaminated liquids into groundwater beneath the site. 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. 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.	Low – the Management actions should prevent accidents and the engineered systems and infrastructure are designed to prevent any discharge of contaminated water run off	Medium - Pollution of local water courses, groundwater and aquifers	Low - The management procedures in place should prevent this occurring

Flooding	Groundwater. Surface water bodies listed in Table 2.	Infiltration. Contaminated surface water runoff.	In the event of a flood, the drainage system will be sealed off to prevent discharge in the event of an incident.	Low – the management actions should prevent flooding	Medium - Disruption to works on site. Contamination of local groundwater and/or surface water. Contamination of local agricultural land.	Low – due to Management system in place
Vandalism / theft – damage to waste containment and fuel storage infrastructure	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.	Unauthorised entry to the site.	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.	Low – the management actions should prevent unauthorised access and the engineered systems and infrastructure are designed to prevent any discharge of harmful liquids	Medium - Pollution of local water courses, groundwater and aquifers	Low - The management procedures in place should prevent this occurring

	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 above.					
--	---	--	--	--	--	--

Appendix B – Nature and Heritage Conservation Screen (EPR/BB3005TG/P001)

Nature and Heritage Conservation

Screening Report: Bespoke Waste

Reference	EPR/BB3005TG/P001
NGR	TQ 49256 82195
Buffer (m)	300
Date report produced	22/08/2024
Number of maps enclosed	2

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 distance (m)	Further Information
Local Wildlife Sites (LWS) (see map below)	200	Appropriate Local Record Centre (LRC)
Dagenham Breach and the lower Beam River in Dagenham		Appropriate Wildlife Trust

Protected Species within screening distance	Screening distance (m)	Further Information
Atlantic Salmon migratory route	up to 500m	Natural England
Allis Shad migratory route		Appropriate Local Record Centre (LRC)
European Eel		National Biological Network (NBN)
European Eel migratory route		
River Lamprey migratory route		Environment Agency. Dial 03708 506
Sea Lamprey migratory route		506 for your local Fisheries and
Smelt		Biodiversity team
Smelt migratory route		
Twaite Shad migratory route		

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.

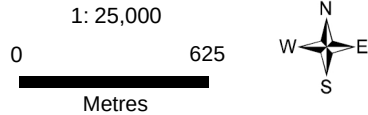
Special Areas of Conservation (cSAC or SAC), Special Protection Area (pSPA or SPA), Marine Conservation Zone (MCZ), Ramsar, Sites of Special Scientific Interest (SSSI), National Nature Reserve (NNR), Local Nature Reserve (LNR), Local Wildlife Sites (LWS), Ancient Woodland, relevant species and habitats.

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

Legend

- Protected species screened for Env Permits - complete set
-  Protected species, non fish
 -  Protected fish
 -  Protected fish migratory route
 -  Coded
- Fish protected species screened for Environmental Permits
-  Salmonid
 -  Eel
 -  Other protected fish
-  Fish migratory routes screened for Environmental Permits

