Environmental Risk Assessment

Fornax (North) Limited

Merchant Park

1 Millennium Way

Aycliffe Business Park

DL5 6UG

Olive Compliance Ltd

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admin@olivecompliance.com

Basis of Report

This report has been prepared by Olive Compliance Ltd with all reasonable skill, care, and diligence, and taking account of the manpower and resources devoted to it by agreement with the client. Information reported herein is based on the interpretation of data collected and has been accepted in good faith as being accurate and valid.

This report is for the exclusive use of Fornax (Northeast) Limited (Fornax) no warranties or guarantees are expressed or should be inferred by any third parties. This report may not be relied upon by other parties without written consent from Olive Compliance Ltd.

Olive Compliance Ltd disclaims any responsibility to the client and others in respect of any matters outside the agreed scope of the work.

Information reported herein may be based on the interpretation of public domain data collected by Olive Compliance Ltd, and/or information supplied by the Client and/or its other advisors and associates. This data has been accepted in good faith as being accurate and valid.

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REFERENCED DRAWINGS

Drawing 001 **Site Location**

Drawing 002 **Installation Boundary**

Drawing 004 **Receptor Plan**

Drawing 005 **Site Drainage Plan**

Revision	Date	Originator	Description of changes
V0.1		JH	Initial draft for comment
Vol. 2	04/11/2024	JH	Final Document for submission

1.0 Introduction

Fornax (Northern) Limited (FNX) has instructed Olive Compliance Limited (OLIVE) to prepare an application for a Bespoke Environmental Permit under the Environmental Permitting (England and Wales) Regulations 2016. As part of the application an Environmental Risk Assessment (ERA) must be prepared in support of the application.

The application seeks to apply for a bespoke permit to incinerate hazardous waste for 10,450 tonnes of waste per annum.

Planning permission for the Installation has been obtained.

It is assumed that the Installation would be subject to the requirements of the relevant Articles and Annex of the Industrial Emissions Directive ("IED"), accordingly, the Installation would need to be permitted by the EA as a Part A1 process covered by Part 1 of Schedule 1 to the Environmental Permitting Regulations, Section 5.1 Part A (1), sub-paragraph (a)

"The incineration of hazardous waste in an incineration plant or waste co-incineration plant with a capacity exceeding 10 tonnes per day". However, this will be confirmed with the EA as part of the pre-application advice request.

1.1 Methodology

This ERA has been undertaken in accordance with the Environment Agency (EA) *Risk assessments for your environmental permit*[1] (2016) and is a simple assessment of the risks to the environment and human health from accidents, noise and fugitive emissions that may be associated with the proposed operations at the site.

The aim of the assessment is to identify any significant risks and demonstrate that the risk of pollution or harm will be acceptable by taking the appropriate measures to manage these risks.

The above guidance requires all receptors that are near the site and could reasonably be affected by the proposed activities to be identified and considered as part of the ERA. Therefore:

- a 2km radius has been adopted in reviewing potentially sensitive receptors of ecological importance; and
- a radius of 1km from the proposed permit boundary has been adopted for all other potentially sensitive receptors (for example, residential, cultural heritage, commercial, industrial, agricultural and surface water receptors).

[1] https://www.gov.uk/guidance/risk-assessments-for-your-environmental-permit

2.0 Site Setting and Receptors

2.1 Site Setting

The site (centred at NGR NZ2670622077) is located at:

Merchant Park
1 Millennium Way
Aycliffe Business Park
DL5 6UG

The site location and environmental site setting is shown on Drawing 001.

A summary of the immediate environmental site setting is provided in Table 1 below.

Table 1
Surrounding Land Uses

Boundary	Description
North	Agricultural Land/ Golf Course to North East, Deciduous Trees
East	Industrial/Commercial,
South	Industrial/commercial , Demons Beck
West	Agricultural Land, Deciduous Trees

2.1.1 Permitted Sites

Permitted sites within 1k of the site are listed below in Table 2. After a review of the permitted activities carried out there is no posed risk to the proposed activities.

Table 2 – Permitted sites within 1km

Site Name	Address	Permit	Distance (m)
H W Martin Waste Limited	Heighington H W R C, Heighington Lane, Newton Aycliffe, County Durham, DL5 6AP	PB3831AZ	0.7
Durham County Council	Heighington Lane Waste Transfer Station, Heighington Lane, Aycliffe, County Durham, DL5 6AP	AB3209CB	0.8

2.1.2 Exemptions

Waste exemptions registered within 1k of the site are listed below in Table 3. After a review of the registered exemptions there is no posed risk to the activities proposed on site.

Table 3 – Registered Exemptions within 1k

Site Name	Address	Exemption	Registration Number	Distance (m)
Hitachi Rail Limited	Merchant Park, Millennium Way, Aycliffe Business Park, Newton Aycliffe, DL5 6UG	T4, T6	WEX361433	0.0
H.W Martin Waste Ltd	H.W Martin Waste Ltd, Heighington Lane, Newton Aycliffe, DL5 6AP	S2	WEX240984	0.7
Durham County Council	Durham County Council, Heighington Lane Waste Transfer Station, Long Tens Way, Newton Aycliffe Business Park, Newton Aycliffe, DL5 6AP	S1, S2	WEX304301	0.7
Lidl GB Ltd	Moordale Road, Aycliffe Business Park, Newton Aycliffe, DL5 6BA	S2, T13, T17, T4	WEX245621	0.9
Lidl GB Ltd	Moordale Road, Aycliffe Business Park, Newton Aycliffe, DL5 6BA	T10	WEX282647	0.9

2.1.3 Waste Carriers

Fornax Environmental Solutions Limited are not a registered waste carrier.

2.1.4 European/International Sites

Searches on the Multi Agency Geographical Information for the Countryside (MAGIC)[iii] website confirm there are no Sites of Special Scientific Interest (SSSI), a special area of conservation (SAC), special protection areas (SPA) or RAMSAR sites within 1km of the site boundary.

2.1.5 Other receptors

None of the following receptors have been identified within 1km of the proposed permit boundary.

- National Nature Reserves;
- World Heritage Sites;
- Registered Parks and Gardens;

- Area of Outstanding Natural Beauty;
- Woodland Trust Sites; and
- National Forest.

2.1.6 Major Roads and Transport Links

The site is accessed from Millennium Way from the A167.

The A1 (M) runs approximately 2km southeast of the site.

There is a rail link that runs 430m east of site, with Northern Railway, Heighington train station being situated 425m northeast of site.

There are no motorways within 1km of the site boundary.

2.1.7 Prevailing Wind Direction

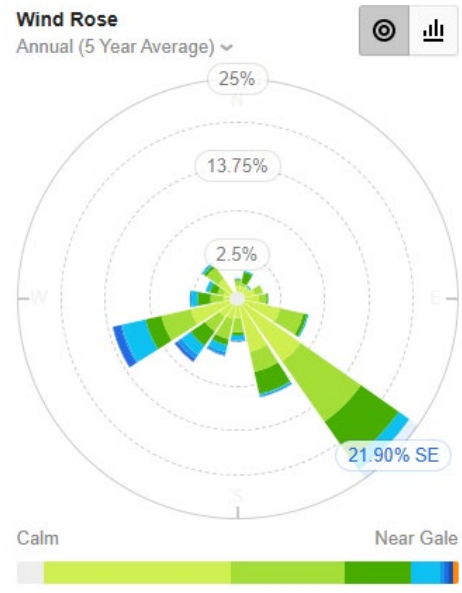
Using the Willy Weather application, meteorological forecast information is available for over 45000 British locations. The available data includes Met Office weather radar, satellite images and synoptic charts. The application also provides current conditions and warnings.

Upon review of historic wind data, the prevailing wind directions are predominately south easterly in respect of the site.

Given the prevailing wind, the receptors that could principally be affected by fire at the site would be the rural areas situated directly to the west north westerly of the site and would not affect highlighted residential areas or sensitive receptors.

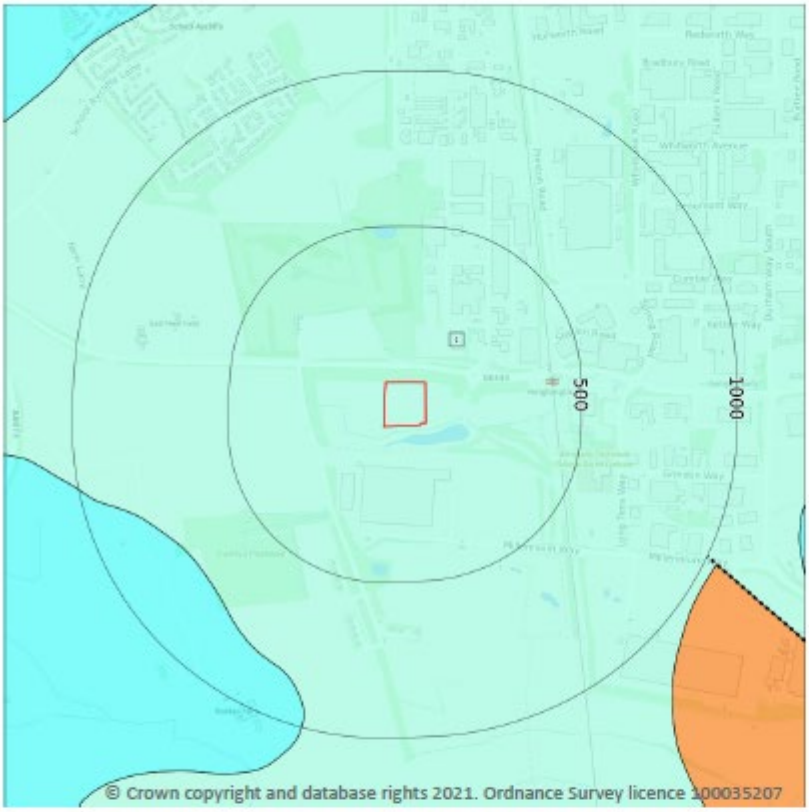
Aycliffe Wind Forecast, Durham DL5 6 - WillyWeather accessed September 2024.

Image 2 – Wind Direction Average 5-year data Aycliffe



2.1.8 Geology

Geology 1:10,000 scale - Bedrock



Site Outline

Search buffers in metres (m)

Bedrock faults and other linear features (10k)

Bedrock geology (10k)
Please see table for more details.

14.5 Bedrock geology (10k)

Records within 500m	1

Bedrock geology at 1:10,000 scale. The main mass of rocks forming the Earth and present everywhere, whether exposed at the surface in outcrops or concealed beneath superficial deposits or water.

Features are displayed on the Geology 1:10,000 scale - Bedrock map on page 78

ID	Location	LEX Code	Description	Rock age
1	On site	FML-DOLO	Ford Formation - Dolostone	Late Permian Epoch [Obsolete name]

This data is sourced from the British Geological Survey.

Hydrogeology

According to the relevant bedrock aquifer designation map, the site is located on the below:

Aquifer Designation Map (Bedrock) (England)

Principal

Aquifer Designation Map (Superficial Drift) (England)

Secondary (undifferentiated)

Groundwater Vulnerability Map (England)

Medium

Soluble Rock Risk

Medium - Low

2.1.9 Hydrology

The Demon's Beck is situated 115m south of site.

The River Skerne is situated 1.86km east of site.

There are 11 water discharge consents within 1km of the site.

2.1.10 Air Quality

Checks conducted on Defra's AQMA mapping system (AQMAs interactive map (defra.gov.uk)) and Durham County Council Website has evidenced the site is not in an air quality management zone.

2.1.11 Flood Risk

Using the Environment Agency Long Term Flood Risk Information service, the site is identified as having a 'very low risk' from surface water flooding and rivers and seas.

Very low risk means that this area has a chance of flooding of less than 0.1% each year.

2.1.12 Water Courses

The Demon's Beck is situated 115m south of site.

The River Skerne is situated 1.86km east of site.

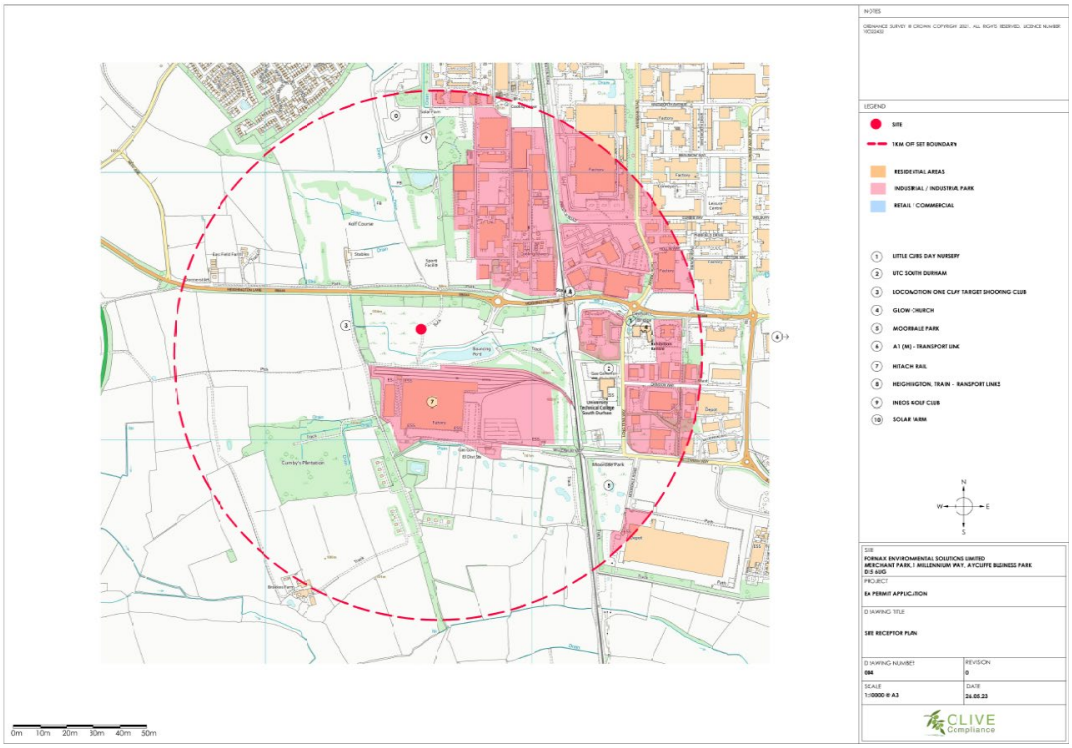
Groundsure Report provides a site baseline and is included in Appendix 1.

2.1.13 Sensitive Receptors

Receptor	Distance	Receptor Assessment	Advice
Little Cubs Day Nursery	660m	Due to the proximity of site, there is risk of impact from site activities.	Staff to contact the nursey 01325312288 to advise staff of any incidents that may have any impact.
UTC South Durham	611m	Due to the proximity of site, there is risk of impact from site activities.	Staff to contact the school 01325430250 to advise staff of any incidents that may have any impact.
Locomotion One Clay Target Shooting Club	340m	Due to the proximity of site, there is risk of impact from site activities.	Staff to contact the club 07760283151 to advise staff of any incidents that may have any impact.
Glow Church	680m	Due to the proximity of site, there is risk of impact from site activities.	Staff to contact the church 08454505871 to advise staff of any incidents that may have any impact.
Moordale Park	880m	Due to the proximity of site, there is risk of impact from site activities.	Await further instruction from Emergency Services.
A1 (M) – Transport Link	1.42km	Due to the proximity of site, there is a small risk of impact from site activities. In the event of fire, it could be difficult to drive in due to short-term poor visibility from smoke and damage to vehicles from ash, which could result in short-term commercial impact and traffic disruption.	Await further instruction from Emergency Services. Contact Highways Agency 0300 123 5000 Police 999
Hitachi Rail	200m	Due to the proximity of site, there is a risk of impact from site activities.	Staff to contact 01325 621 6531 to advise staff of any incidents that may have any impact.

		Dust, Nosie, and Fire Controls in place to prevent impact to the neighbouring businesses. Constant boundary monitoring of noise and dust also identifies any possible emissions from site to allow the site to cease activities and undertake any remedial action.	
Heighington, Train-Transport Links	425m	Due to the proximity of site, there is risk of impact from site activities. In the event of fire, it could be difficult to drive in due to short-term poor visibility from smoke and damage to trains from ash, which could result in short-term commercial impact to businesses that use the railway.	Await further instruction from Emergency Services. Contact Northern Railway 03457484950 Police 999
Durham Animal Feeds	Adjacent on West Boundary	Due to the proximity of site, there is risk of impact from site activities.	Staff to contact 01388720411 to advise staff of any incidents that may have any impact.
INEOS Golf Club	North East of site	Due to the proximity of site, there is risk of impact from site activities.	Staff to contact 07854054286 to advise staff of any incidents that may have any impact.

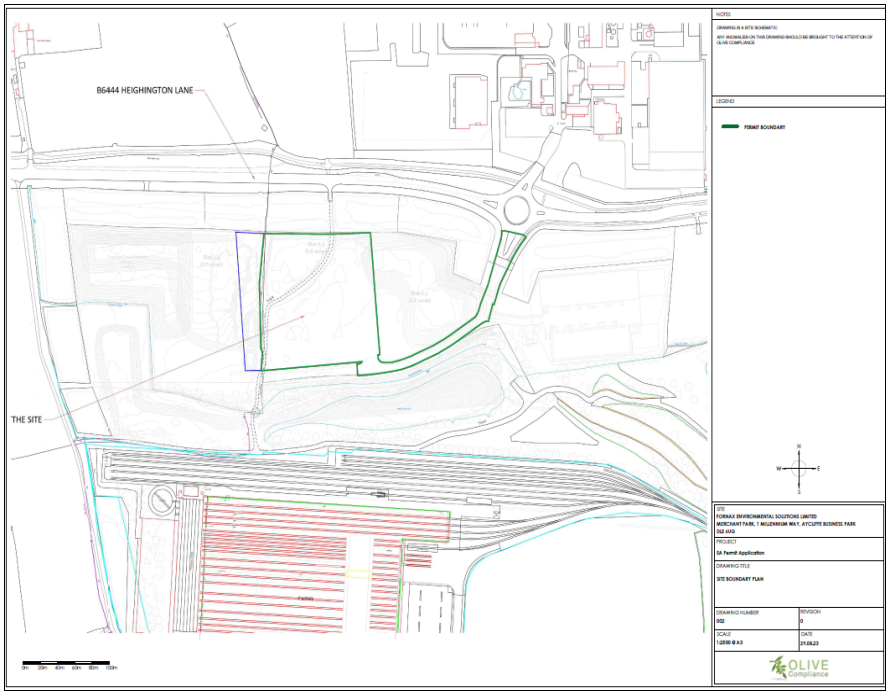
2.1.14 Receptor Plan



2.2 Risk Assessment of site activities

2.2.1 Permitted Area

The proposed permitted boundary is shown below.



3.0 Environmental Risk Assessment

3.1 Overview and Approach

This section outlines the procedure that has been followed in the undertaking of the ERA for the site. The results are presented, in accordance with the EA Guidance, in the tables presented in Section 3.2.

3.1.1 Identification of Hazards

The first step of an ERA is to consider and identify the risks posed to the environment by the activities proposed for a site.

The EA Guidance states that an operator must:

"*…identify whether any of the following risks could occur and what the environmental impact could be:*

- *any discharge, for example sewage or trade effluent to surface or groundwater*
- *accidents*
- *odour (not for standalone water discharge and groundwater activities)*
- *noise and vibration (not for standalone water discharge and groundwater activities)*
- *uncontrolled or unintended ('fugitive') emissions, for which risks include dust, litter, pests and pollutants that shouldn't be in the discharge*
- *visible emissions, eg smoke or visible plumes*."

3.1.2 Identification of Receptors

Section 2 of this document describes the site setting and the land uses in the vicinity of the proposed site. This information has been used in order to focus on the main receptors that could be potentially at risk from the activities of the site.

The site due the site setting and low risk activities it is not felt that the facility will impact sensitive receptors, habitats or local environment.

The site naturally lies in a depression with a natural and manmade soil bunds to screen offsite activities.

All site activities are enclosed within a building, concrete walls cladding are used as a further site control to reduce the risk of escape the of waste and any fugitive emissions such as noise, odour and dust from site.

In accordance with the EA Guidance, drawing 004 presents a map showing the location of the site and the receptors considered within the ERA.

3.1.3 Identification of Potential Pathways

For each of the identified hazards for operation of the site, the ERA has considered that pathways through which each hazard may impact on a sensitive receptor. Where such pathways exist, the risks of potentially significant impacts have been assessed in accordance with Sections 3.1.4 and 3.1.5 (below) and the full details are included in the tables in Section 3.2.

Where no pathway exists between an identified hazard and an identified receptor, the associated risks are not considered further within the ERA and are, thus, not included in Section 3.2.

3.1.4 Assessment of Risks

The EA Guidance states that the nature of the ERA will be influenced by the type of activity (or activities) that are proposed for a site. For installations/waste operations, the ERA is required to consider, "*…one or more of the following, depending on the substances you discharge and where they're discharged to:*

- *assess the risks of your air emissions*
- *calculate the global warming impact of your air emissions*
- *assess risks to groundwater*
- *assess risk to groundwater from landfill leachate*
- *assess risks to surface water from hazardous pollutants*
- *assess risks to surface water from sanitary and other pollutants*"

For installations and waste operations, an operator is also required to decide how to treat, recycle or dispose of waste. The ERA has therefore included consideration of the environmental impact of the ultimate fate of the materials that will be processed by the proposed activities of the site.

3.1.5 Controlling Risks

The EA Guidance states:

"*You'll need to show how you're managing any risks appropriately by controlling and monitoring your emissions and through your management system.*"

Where an ERA identifies risks that are potentially significant, the ERA is required to demonstrate how the risk of pollution or harm can be mitigated by measures to manage these risks. The approach undertaken to the implementation of management/mitigation measures, for this ERA, is (in order of preference):

- Avoidance / prevention;
- Minimisation / management;
- Mitigation; and
- Offset / compensation.

The following tables present the assessment in terms of hazards posed, receptors and pathways, along with management and residual risks for the following hazards:

- Odour;
- Noise and Vibration;
- Fugitive Emissions (including dust, mud, litter and pests); and
- Accidents.

Table 3-1 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? – 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**
Odours from the acceptance and storage of waste	*Site personnel and local human population*	Air	• Low odour loads anticipated with little opportunity for fugitive emissions • Specific controls odorous wastes such as booking in and immediately covering such loads. • Abatement system are in place to manage odours potentially arising from site production activities. Robust O&M procedures to support all odour management and abatement activities on site. • Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on site. • In the event that odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • All activities are conducted internally with the building enclosing all activities from sensitive receptors. • A Study into Fornax HTI Extract and air from the waste reception hall will be utilised as air feed for the combustion process. • Abatement Requirements was undertaken and concluded that adequate measures in place • The Site Manager will be responsible for implementing risk management measures. • Waste received in locked Eurobins.	Negligible	Odour nuisance and loss of amenity.	Not significant

			• Wastes stored for limited periods. • Wastes securely destroyed on site. • All bins washed following emptying. • Hazardous wastewater is brought to site via a pre booking system and sent for secure destruction on the facility. No blending or bulking will be undertaken therefore no odour issues expected.as it is managed through the plant. • The procedure for managing complaints is included in the EMS. • The management of odour emissions is detailed further in the site Specific OMP within the EMS.			

Table 3-2 Noise 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? – 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**
Noise from vehicular movements (site access road and yard) Noise from operation of site plant.	*Site personnel and local human population*	Air.	• The site is located within a mainly industrial and commercial area with limited human receptors. • Waste treatment operations will only be carried out during operational hours. All equipment will be maintained and operated in accordance with manufacturer's guidance and	Mobile. Intermittent throughout the day. Medium.	Noise nuisance and loss of amenity.	Not significant

			will be maintained in good working order. • Regular maintenance of all plant and of site plant and machinery to minimise noise resulting from inefficient operation of pumps, generators and moving equipment. • All activities are conducted internally with the building enclosing all activities from sensitive receptors. • The site will be operated to minimise noise emissions from the site. Measures that will be taken at the site include: • The imposition of a speed limit for vehicles delivering waste to the site. This will reduce noise associated with high engine speeds; • training of all personnel in the need to minimise site noise. All personnel are responsible for monitoring and reporting excessive noise when carrying out their everyday roles; • regular maintenance of site surfaces to prevent the development of potholes and damaged surfaces. This will significantly reduce noise generated by vehicles, particularly empty vehicles exiting the site; • Any noise complaint received will be logged in the site diary. The Site Manager will investigate the complaint and will take action to identify the source of the noise and implement remedial measures where appropriate. • The measures employed at the site to minimise the emission of noise will be regularly reviewed by the Site Manager and additional measures will be employed where required. • A noise assessment was carried out as part of the initial planning process and there was no perceived noise nuisance. • It shall be noted from the at-receptor noise			

			level tables presented within the noise assessment that the noise contribution from all individual noise sources are below the existing Background Sound Level. As a result, any acoustic character associated with individual noise sources is not expected to be clearly discernible at the nearest noise sensitive receptor above the existing environmental noise climate. • Furthermore, whilst individual noise sources associated with the Facility are likely to generate noise with a particular acoustic character (i.e., such as tonal, impulsive, intermittent features), it is considered that such features would not be as prominent when observed when the remainder of the plant is running.			

Table 3-3 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	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? – 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**
To Air:						
Dust from: Vehicle movements	*Site personnel, local receptors,*	Air	• Due to the nature of the waste accepted at site, there is a not expected to be dust particles	Low	Dust nuisance	Not significant

Waste storage and treatment Dusty wastes Waste deposition Waste surfaces	*and local human population*		released as dust to air. • All activities are conducted internally with the building enclosing all activities form sensitive receptors. **Housekeeping** • Site access roads and operational areas will be maintained and repaired to minimise emissions of dust due to uneven and poor surfacing. These are checked on a daily basis for damage with any remedial action logged within the recording systems and emailed to senior management. • Any temporary repairs are made good within 24 hours and arrangements are made to have permanent repairs, if required, will be completed within one week. (Any substantial repair timescales may exceed this timescale dependant on weather conditions and work required), this would be tracked and recorded in the electronic site diary in the event until complete. • Records of all repairs made are recorded in the site diary and contractor invoices/records are kept in the site office for inspection if required. • The entire site benefits from concrete surfacing throughout. • The site and entrance/exit routes are swept using a sweeper hired in if necessary. • Site cleaning is carried out to clean working areas down at the start of the day and at the end of the working day if required. • During the day if dust is identified by the Site Manager, and site staff action will be taken to clean site access areas and operational areas will be swept where		Harm to human health	

			necessary to reduce dust emissions. If required, the site will be washed down in particularly dry conditions using the water suppression such as hoses. • External Roads are checked daily and cleaned if required. • Plant cleaning and maintenance are carried out every Monday as a routine measure. Records for each machine/plant are kept to evidence this. • Prior to leaving site vehicles on can be washed down using the site power washer if the site supervisor or driver identify dust or debris on the vehicle body or wheels. Water is directed and controlled via the site drainage system. • The management of dust emissions will be detailed in EMS. • Speed limits will be implemented for vehicles using the site. The entire site benefits from concrete surfacing throughout. • All roads and operational areas will be swept where necessary to reduce dust emissions. If required, the site will be washed down in particularly dry conditions. • Daily visual inspections of all areas of the site and the site boundary will be carried out by site personnel. • In the event that significant visual dust is observed at the boundaries of the operational areas, action will be taken to suppress the dust. • The procedure for managing complaints will be included in the EMS.			
Dust Emissions from Ash	*Site personnel, local receptors, and local human*	Air	• Ash is collected in a sealed system and deposited into an enclosed skip chute. • Skips are sealed to prevent ash escape and Ash	Low	Contamination of surface water and groundwater.	Not Significant

	population		enclosed prior to skip exchange		Air Born Dust	
Emissions from Stack	*Site personnel, local receptors, and local human population*		• Air Quality emissions are modelled as part of the application with appropriate abatement specified. • Monitoring during operation will be carried out by direct emission measurements for relevant pollutants using CEMS. • Detailed air quality modelling using the AERMOD 7 dispersion model has been undertaken to predict the impacts associated with stack emissions from the facility. Emissions from the site have been assumed to occur at the BREF daily emission limit values for new plant. • For a proposed stack height of 30 m, predicted maximum off-site concentrations are assessed as 'not • significant' and well below the relevant air quality standards for all pollutants considered. • The predicted process contributions are 'not significant' compared with the critical levels for NOx, SO2, NH3 and HF and critical loads for nutrient nitrogen deposition and acidification at the local wildlife sites considered. • Therefore, it is concluded that air quality does not pose a constraint to the development of the site as proposed.	Low	Harm to human health	Not Significant
To Water						
Runoff from waste storage areas & site surfaces Percolation of contaminated water	Surface water: Groundwater within bedrock deposits. Groundwater Protection Zone	Overland percolation through the ground	• Strict waste acceptance procedures will ensure that only permitted waste types are accepted on site reducing the risk of contaminated run off; • Waste received and stored within the building. • In the event that non-conforming waste is delivered to site, it will be isolated and	Low	Contamination of surface water and groundwater.	Not significant

	3		removed from site at the earliest opportunity. • Surface water system has Penstock valves to contain spillages • The Site Manager will be responsible for implementing risk management measures. • Surfacing / containment has been designed in accordance with CIRIA Guidance The drainage system will be maintained and regularly cleaned to prevent it silting up. • Drainage arrangements are shown in Drawings within the Environment Management System			
Pests						
Birds, vermin and insects.	*Site personnel and local human population*	Via air (flies and birds) or over ground (vermin and birds).	• Due to the nature of the wastes to be accepted at the site, and the containerised nature of the waste it is not anticipated that pests will pose a risk at the facility. • The facility will be inspected by both site management and operatives for infestations of pests, vermin and insects on a routine basis. • A specialist pest control contractor will be deployed if required. • The management of pests is further detailed within the EMS.	Negligible	Nuisance, loss of amenity and harm to human health.	Not significant
Mud/Litter						
Litter from acceptance and storage of waste	*Local human population and wildlife.*	Airborne litter	• Due to the nature of the waste to be accepted on site, it is not anticipated that litter will pose a serious risk as it is received containerised and within the building. • The boundary of the site and its environs will be regularly visually inspected, and any litter cleaned up. • Inspections will be carried out on a daily basis and a record maintained within the site diary. • The management of litter is detailed further in EMS	Low	Nuisance and loss of amenity	Not significant

Mud on roads	*Local human population*	Transferral of mud on vehicle wheels	• Due to the nature of the waste to be accepted on site, it is not anticipated that the deposition or tracking of mud or debris from the site onto public areas or highways will pose a risk: • site surfaces will be maintained free of significant quantities of mud and debris;	Low	Mud on road, road traffic accidents.	Not significant

Table 3-4 Accidents 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? – 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**
Unauthorised waste	*Site personnel and local human population* *Local environment*	Via air (odours and dust) Overland (to sewer, surface water and groundwater)	• Upon delivery waste will be subject to strict waste acceptance procedures to identify, reject and/or segregate potentially non-conforming waste. • Only waste authorised by the permit will be accepted at the site. • All wastes will be subject to inspection and checking against the declaration on the waste transfer documentation. • In the event that unauthorised waste is delivered to the site, the waste will be reloaded onto the delivery vehicle for removal from site, or will be segregated and stored in a designated quarantine area prior to export from site. • The waste acceptance procedures are included in the EMS SOP3.2/3.3.	Low	Water contamination Odour and dust nuisance, loss of amenity	Not significant

			• The Site Manager will be responsible for implementing risk management measures.			
Fire	*Site personnel and local human population* *Local environment*	Air, water runoff	Due to the nature of the waste activity the risk of Fire could be low. A brief summary of the measures which will be employed is as follows: • incompatible materials will not be accepted at the site; • fire extinguishers will be provided at designated locations; • smoking will not be permitted in operational areas of the site; • working practices will ensure the assessment of fire hazards and training of employees in fire prevention, e.g. the use of fire extinguishers and emergency procedures; and • no wastes will be burned on the site and any fire at the site will be treated as an emergency. • In the event of a major fire, the following action will be taken: • the Site Manager and Fire Brigade will be notified immediately and the Environment Agency as soon as practicable; • the burning area will be isolated and attempts will be made to extinguish the fire utilising the onsite fire extinguishers, if safe to do so; and • the site and buildings will be evacuated. • The site has an approved Fire Prevention Plan.	Low	Nuisance (smoke and fumes) and harm to human health. Water contamination (runoff)	Not significant
Spillage and Leakage	Local land quality, surface water and groundwater. *Site personnel,*	Runoff and percolation through ground. Direct	To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented: • Containment system: any facilities for the storage of oils, fuels or chemicals will be sited above ground on impervious bases and	Low	Contamination of groundwater and surface water. Harm to human health.	Not significant

	emergency services personnel and local human population	exposure and transport via air	surrounded by impervious bund walls. The volume of the bunded compound will be at least the equivalent to the capacity of the tank plus 10%. All filling points, vents and gauges will be located within the bund. • Storage vessels: storage tanks will be constructed to the appropriate British Standard; • Inspection: tanks will be inspected visually on a daily basis by site staff to ensure the continued integrity of the tanks, and identify the requirement for any remedial action; • Spill kits: materials suitable for absorbing and containing minor spillages will be maintained on site; and • Monitoring techniques: the site staff will undertake daily monitoring for evidence of spillage and leakage. • In the event of any potentially polluting leak or spillage occurring on site, the following action will be taken: • Minor spillages will be cleaned up immediately, using sand or proprietary absorbent. The resultant materials will be placed into containers and will then be removed from site and disposed of at a suitably permitted facility. The incident will be logged in the site diary. • Any dry wastes spilled on site will be quarantined immediately and controlled by the site manager. Wastes will be re bagged and stored within the container. • In the event of a major spillage, which is causing or is likely to cause polluting emissions to the environment, immediate action will be taken to contain the spillage and prevent liquid from entering surface water or drains.			

			The spillage will be cleared immediately and placed in containers for offsite disposal, and the Environment Agency will be informed. • The spillage procedure, included in the EMS.			
Security and Vandalism	Personnel on site, emergency service workers.		The following security measures are in place: • Site is situated within a secure port area, that you must enter via the gate house to be vetted to receive ID to be able to access. • CCTV is installed around the site with external monitoring by the Operator and external Security Company. • Authorised access system: all visitors to the site will be required to register in the visitor's book and sign out again on exit to minimise the risk of unauthorised visitors being present on site; and • Monitoring techniques: operational procedures, including regular inspections, will ensure continual monitoring of security provision at the site. • In the event of a breach of security at the site, the cause will be investigated, and appropriate mitigation measures implemented. Records to be maintained include inspections and maintenance of security fencing and gates, breaches of security, investigations and actions taken. • The security procedure, included in the EMS,	Low	Nuisance and harm to human health. Contamination of land and surface water.	Not significant
Flooding	*Site personnel and local human population* *Local environment*	Overland	• According to the UK government Flood Map for Planning, has a low risk of flooding; • Evacuation procedures will be implemented in the event of flooding. • The Site Manager will be responsible for implementing risk management measures.	Low	Inundation of site with flood water	Not significant