SECTION 4

Environmental Risk Assessment



Environmental Risk Assessment

A Buckler Haulage Ltd

At, Lloyd Street

Middlesbrough

Cleveland

TS2 1DW

Olive Compliance Ltd
Planet House
Northumbrian Way
Killingworth
NE12 6EH
Company Number:12861220

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1.0 Introduction

Buckler Haulage Ltd has instructed Olive Compliance Limited (OCL) to prepare an application for a variation of their Environmental Permit EPR/KP3696ZB Bespoke Permit for their site at At, Lloyd Street, Middlesbrough, Cleveland, TS2 1DW.

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).

2.0 Site Setting and Receptors

2.1 Site Setting

The site is located at At, Lloyd Street, Middlesbrough, Cleveland, TS2 1DW.

The site is principally bounded as shown below in Image 1.

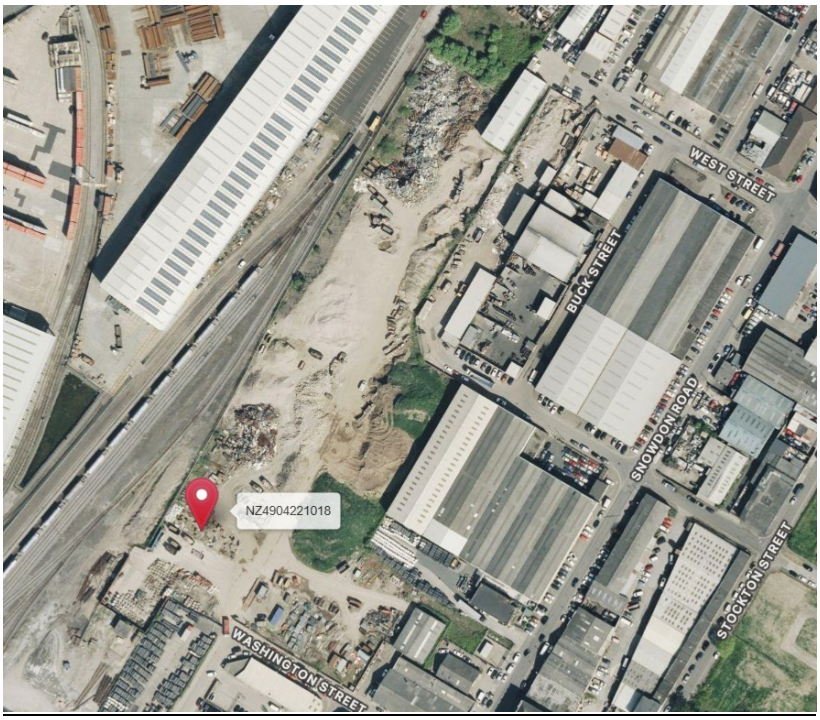
The site is principally bounded as shown below in Table 1 and Image 1.

Table 1 – Site Setting

Boundary	Description
North	**Commercial**
East	**Commercial**
South	**Commercial**
West	**Commercial**

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

Image 1 – Site Setting



Other Waste Management Facilities

There are a number of regulated permitted facilities and companies operating under waste exemptions operating on the Industrial Estate.

Permitted Sites

Searches made on the EA Public Register[2] there are 9 permitted sites are located within 1km of the site.

Exemptions

There are currently 16 waste exemption operations registered within 1k of the site are listed below in Table 2. After a review of the registered exemptions there is no posed risk to the activities proposed on site.

Table 2 – Registered exemptions

Name	Site address or grid reference	Environment Agency Operational Area	Is site a farm ?	Registration Type	Registration Number	Distance (km)	Name

[2] Results of searching Waste Operations Permits

Mirza hussain	Old economix site, Innes st, Middlesbrough, TS21LP	North East	no	U16	WEX394783	0.2	Mirza hussain
SICUT ENTERPRISES LIMITED	Site grid reference NZ4900520908	North East	no	U9	WEX425317	0.2	SICUT ENTERPRISES LIMITED
5 star skips ltd	157, STOCKTON STREET, MIDDLESBROUGH, TS2 1BY	North East	no	S2, T10	WEX313525	0.3	5 star skips ltd
SICUT ENTERPRISES LIMITED	Site grid reference NZ4923221026	North East	no	U9	WEX422186	0.4	SICUT ENTERPRISES LIMITED
Mitie Care & Custody Health	MIDDLESBROUGH HEADQUARTERS, BRIDGE STREET WEST, MIDDLESBROUGH, TS2 1AB	North East	no	T28	WEX353069	0.4	Mitie Care & Custody Health
ALRAHI & SINGH LIMITED	103, LINTHORPE ROAD, MIDDLESBROUGH, TS1 5DD	North East	no	T28	WEX427151	0.6	ALRAHI & SINGH LIMITED
ADWANI MOTORS LIMITED	2, INNES STREET, MIDDLESBROUGH, TS2 1JA	North East	no	T8	WEX401990	0.7	ADWANI MOTORS LIMITED
Parkville Care Centre	WALPOLE STREET, MIDDLESBROUGH, TS1 4HA	North East	no	T28	WEX341949	0.8	Parkville Care Centre
AV Dawson	Site grid reference NZ 49144 21490	North East	no	S2, T5, U1	WEX325010	0.8	AV Dawson
A.V.DAWSON LIMITED	Site grid reference NZ4973321159	North East	no	S2	WEX389860	0.8	A.V.DAWSON LIMITED
SICUT ENTERPRISE	Site grid reference	North East	no	U9	WEX425317	0.2	SICUT ENTERPRISE

S LIMITED	NZ4900520908						S LIMITED
5 star skips ltd	157, STOCKTON STREET, MIDDLESBROUGH, TS2 1BY	North East	no	S2, T10	WEX313525	0.3	5 star skips ltd
SICUT ENTERPRISES LIMITED	Site grid reference NZ4923221026	North East	no	U9	WEX422186	0.4	SICUT ENTERPRISES LIMITED
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Parkville Care Centre	WALPOLE STREET, MIDDLESBROUGH, TS1 4HA	North East	no	T28	WEX341949	0.8	Parkville Care Centre

Upon review of the exemptions there are no identified risks to BHL and this variation.

Waste Carriers

The company is a registered waste carrier.

European/International Sites

Searches on the Multi Agency Geographical Information for the Countryside (MAGIC)[3] and Groundsure Report[4] website confirm there are:

[3] MAGIC

[4] Home - Groundsure

- 7 - Special Scientific Interest (SSSI) with one located (Teesmouth and Cleveland Coast) 286m from the site and the remaining 6 designations located over 1km from the site boundary
- 2 - RAMSAR sites with both designations located over 1km from the site boundary
- 8 – SPA Special Protection Areas located within 1km from the site boundary
- 1 – Local Nature Reserve located over 1km from the site boundary

The information states there are no Special Areas of Conservation (SAC), no National Parks, or Country Parks within 1km of the site.

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

- National Nature Reserves;
- World Heritage Sites;
- Area of Outstanding Natural Beauty;
- Woodland Trust Sites; and
- National Forest.

Major Roads and Transport Links

The site is accessed from North Road via Lloyd Street.

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

Port rail links are located within 5m of the western permit boundary.

Water courses

Wilkinsons pond is located within 836m east of the site.

The River Tees is located 881m east of the site.

2.1.1 Geology, Hydrogeology & Hydrology

Geology

Mercia Mudstone Group - Mudstone. Sedimentary bedrock formed between 252.2 and 201.3 million years ago during the Triassic period.

Assigned where it is not possible to attribute either category A or B to a rock type. In general these layers have previously been designated as both minor and non aquifer in different locations due to the variable characteristics of the rock type

Source Protection zone

There are no source protection zones within 1km.

Site Drainage

Groundwater risk assessment

Areas of Unmade Ground

All waste treatment and transfer operations at the site are undertaken on concrete hardstanding with a comprehensive drainage system.

The site gradients and perimeter kerbing are designed to prevent surface water draining to areas of unmade ground that extend beyond the concrete hardstanding.

Surface Water

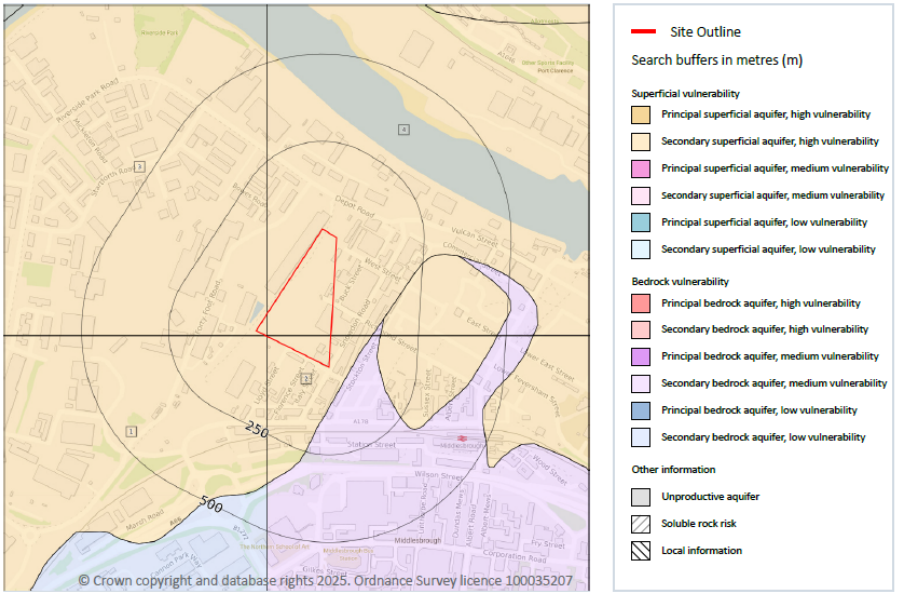
An assessment of the vulnerability of groundwater to a pollutant discharged at ground level based on the hydrological, geological, hydrogeological and soil properties within a one kilometre square grid. Groundwater vulnerability is described as High, Medium or Low as follows: High - Areas able to easily transmit pollution to groundwater. They are likely to be characterised by high leaching soils and the absence of low permeability superficial deposits. Medium - Intermediate between high and low vulnerability. Low - Areas that provide the greatest protection from pollution. They are likely to be characterised by low leaching soils and/or the presence of superficial deposits characterised by a low permeability.

Groundwater

The Bedrock (Secondary B) and Superficial deposit Aquifer Designation Maps for the area show that the site does not overlie any designated aquifers.[5]

Records show that the site is in a groundwater vulnerability classed as Secondary superficial aquifer, high vulnerability.

Image 2 – Ground Vulnerability Map



[5] Groundsure Report **Ref**: GS-8WC-QFS-CT6-GPQ

Table 3 below (Groundsure) below shows the classification of groundwater vulnerability within 50m of the site.

ID	Location	Summary	Soil / surface	Superficial geology	Bedrock geology
1	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: Low	Vulnerability: Low Aquifer type: Secondary Flow mechanism: Well connected fractures
2	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
3	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures
4	On site	Summary Classification: Secondary superficial aquifer - High Vulnerability Combined classification: Productive Bedrock Aquifer, Productive Superficial Aquifer	Leaching class: High Infiltration value: >70% Dilution value: <300mm/year	Vulnerability: High Aquifer type: Secondary Thickness: >10m Patchiness value: >90% Recharge potential: High	Vulnerability: Medium Aquifer type: Secondary Flow mechanism: Well connected fractures

This data is sourced from the British Geological Survey, the Environment Agency and Natural Resources Wales.

Flood Risk

The site is not within an area that is subject to flooding from rivers or sea. The site is not within an Environment Agency flooding zone.[6]

The risk of flooding as a result of surface water is LOW.

The risk of flooding from rives and seas is VERY LOW.

Air Quality Management Areas

The site is not within an Air Quality Management Area (AQMA)[7]

[6] Map – Flood map for planning – GOV.UK

[7] Air Quality Management Areas (AQMAs) - DEFRA UK Air - GOV.UK

2.2 Receptors

Table 4 below identifies receptors that are potentially sensitive and could reasonably be affected by the site within 1km of the site boundary. Receptor drawing 004 identifies all sensitive receptors.

Table 4 – Sensitive Receptors

Receptor	Distance from site (m)	Phone Number
River Tees (West)	1km	Environment Agency 0800 807060
Middlesborough College	965m	01642 333333
Zetland multi story Car Park	235m	01642 247398
Sainburys	249m	01642 241188
Middlesborough Town Hall	640m	01642 729729
Royal Mail Middlesborough PDO	340m	0345 774 0740
Middlesborough Train Station	548m	0345 600 1671
Transport bridge visitor centre	987m	01642 248566
Teeside Combined court centre	800m	01642 340000
Cleveland Police Middlesborough HQ	401m	01642 326326
Primark	271m	01642 243796

It is considered that the identified receptors will not be affected by the activities proposed at the site due to either distance from site or though onsite controls.

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.

Waste activities on site are deemed as low risk as the site is surrounded by commercial activities, conducting various commercial and industrial operations. The site will operate under a robust accredited management system, a working plan and an Environmental Agency approved Fire Prevention Plan. Site activities are monitored daily through checks, with monthly audits to ensure controls are in place and procedures are adhered to. External monitoring is also carried out by independent consultants to monitor amenity risks such as dust and noise.

In accordance with the EA Guidance, drawing 004 presents a map showing the location of the site and the human 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 with the full details are included in the Tables 3.1 to 3.4.

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 these tables.

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.

3.2 Screened Out Emisisions

Noise emissions were screened out using the EA Noise Screening Tool Noise and vibration risk assessment: using the noise advisory tool - GOV.UK based on low level operations, intermittent on site treatment and receptor sensitivity.

Odour emissions are risked as low therefore there is no Odour Management Plan in place due to the waste types handled.

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 , treatment and storage of waste	*Site personnel and local human population*	Air	• No odorous wastes will be accepted at the site. • Strict waste acceptance procedures will be adhered to, to ensure only permitted wastes are accepted on site. • Although permitted to accept various waste types, the facility accepts only HCI wastes. Food waste or black bin bag waste is not accepted, these wate would be rejection upon identification. This reduces the risk of odorous waste being accepted onto site. • Although the Environmental Permit Waste Codes could allow for potentially odorous waste types entering site, the company have a strict acceptance policy based on the management of the Site and business sector. • Inert wastes do not give rise to odour, to ensure odourous waste is not accepted, waste such as mixed packaging (plastic/carboards) is assessed at the time of enquiry, then checked at the time of collection for loading and depositing on site.	Negligible	Odour nuisance and loss of amenity.	Not significant

			• All waste will be fully assessed against the origin of the waste, the EWC codes, the process it arises from, the age of the waste and its prior storage conditions. • Stringent pre-acceptance, acceptance and rejection procedures will prevent any malodourous materials from entering site. • Any non-permitted wastes (including malodorous wastes), which are found following deposit or during subsequent storage and treatment operations, will be covered, segregated and removed within 48hrs. • Odour abatement in the form of Airopure, is also on site to treat odorous waste as a short term measure until waste is removed. • The waste acceptance and rejection procedures are included in the EMS (Procedure SOP3.2/3.3 refers). • All vehicles delivering and collecting materials from the site are covered or in enclosed vehicles. • Storage of HCI waste is for a limited period of time (3months max) • Odour is monitored on a daily basis during the daily site inspection. • In the event that odours are detected, investigations will be undertaken to determine the cause and appropriate remedial action taken. • The Site Manager will be responsible for implementing risk management measures. • The facility will not give rise to			

			reasonable cause for annoyance. In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures.			

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, waste acceptance and treatment (site access road and yard)	*Site personnel and local human population*	Air.	• The site is located within a predominantly industrial setting and as such is not considered unduly sensitive in regard to noise. • Very low volumes of wastes are tipped and treated externally , which mitigates against noise from waste activities. • The site accepts bulk volumes of soils and stones will be tipped externally in dedicated areas made up of hard standing mitigating against any noise from drop heights. • All potentially noisy plant will be acoustically enclosed and / or fitted with attenuation. • Appropriate preventative maintenance will be provided for the various elements of the installation. This will ensure no deterioration of plant or equipment that would give rise to increases in noise. • All equipment has been designed in accordance with best practice and to ensure that any noise does not present an issue to the employees at the site under the Control of Noise at Work	Mobile. Intermittent throughout the day. Medium.	Noise nuisance and loss of amenity.	Not significant

			Regulations, and also to ensure that noise breakout does not lead to noise nuisance at the identified sensitive 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 will be maintained in good working order. • The site will be operated so as to minimise noise emissions from the site. Measures that will be taken at the site include: • the avoidance of dropping loads,containers,skips off from height; • 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. 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. • All vehicles would be fitted with white noise reversing signals rather than the traditional 'beeper' warnings. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures.			

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 Waste storage and treatment Dusty wastes Waste deposition Waste surfaces During Dry and Dusty Conditions	*Site personnel , local receptors and local human population*	Air	• The site has water suppression controls to reduce the potential of any dust particles to be released to the air during acceptance, treatment and storage of waste accepted externally. There will be no acceptance or treatment of dust or powdered wastes on site. • Incoming wastes are inspected and validated prior to acceptance and would be rejected if too dusty. **Waste Tipping** **Preventative** • During waste acceptance a dedicated tipping area is identified for the deposit and inspection of waste inside a building. **Waste Processing** Preventative – All HCI wastes are	Medium	Dust nuisance Harm to human health	Not significant

			processed within a dedicated storage and acceptance area at very low volumes. **Waste Storage** **Preventative-** • All wastes will be stored in the designated storage areas, with all HCI waste stored inside secure containers externally. • Concrete panel walls are used for bay walls (tipping and boundary of HCI storage area) which act as containment and control of material on site externally. • All HCI stockpiles on site are stored no higher than 4m in concrete walled bays in line with the FPP. • Inert end of waste products are stored at a maximum of 6m This control measure prevents material getting blown offsite, wind whipping and containment. • Stockpiles are smoothed and banked to secure wastes in situ. **Waste Loading** **Preventative** • Low level loading of processed HCI material vehicles takes place inside an enclosed building reduce the risk of any dust arising from the movement and loading of			

			waste. **Site Controls** • A speed limit of 10mph is implemented for vehicles using the site. • Site staff have radios for communications to take action to address vehicles not adhering to the speed limit. • Access to cctv should the speed limit be breached can be used to take immediate action and report to management. • Water suppression systems are in place to dampen stockpiles of inert waste. • Site fencing or bay walls act as a containment measure around the eastern, western and northern boundary. • Incoming and outgoing vehicles carrying loads are covered, or secured and sheeted. **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 on the diary 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 for the storage of HCl waste. • The site and entrance/exit routes are swept using a sweeper hired in if necessary. • 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 necessary to reduce dust emissions. If required, the site will be washed down in particularly dry conditions using the water cannons, mobile IBC or fire hoses installed. • External Roads are swept and cleaned on a monthly basis.			

			• 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. • Detergents are not used. **Monitoring** **Proactive-** • Daily visual inspection around the perimeter of the site, site external site access areas and all operational areas of the site and the site boundary will be carried out by site personnel. This is recorded in the daily diary. • In very dry or windy conditions the frequency of these inspections will be increased, every 2 hours to check the site for signs of dust emissions and any impact off site. Load acceptance and delivery is always visually checked and observed by a site operative who can assess the load, and to apply suppression if			

			required before tipping to reduce and mitigate against dust impact arising from this activity. • Daily weather conditions are checked and recorded by the Site Manager both first thing in the morning then at noon. The supervisor (and key nominated staff) continue to monitor the weather conditions should they change drastically during the working day and review and implement control methods should dust be an issue. • The site has a windsock in place for the supervisor and staff to visually monitor wind direction during the day. • Should any complaints or visual inspections indicate emissions leaving site further monitoring will be carried out. A map of the Site and its surroundings identifies the off-site locations that shall be monitored, based on the nearest receptor areas. • The Site Manager or nominated trained personnel would carry out this monitoring. • The dust impacts (i.e. deposition, airborne particulate matter) will be monitored at external 4 key locations at 5minute periods. • The dust impacts will be assessed in accordance with			

			the following scoring scheme: 0 - No dust detected 1 - Very faint, unlikely to cause annoyance 2 - Faint dust, unlikely to cause annoyance 3 - Distinct dust, likely to cause annoyance 4 - Visible dust in continuous plumes, likely to cause annoyance 5 - Large amounts of visible dust, likely to cause annoyance 6 - Excessive amounts of dust and particles, highly likely to cause annoyance • The frequency of on-site and off-site inspections may be increased: • Upon receipt of material will be potential to generate significant amounts of dust is received at the Site; and/or • During periods of prolonged windy and/or dry conditions; • Or if complaints continued to be received. • Only employees with suitable training/competency will undertake the dust monitoring. • Quantitative monitoring is not proposed during routine inspections. In the event of a dust impact			

			scoring 3 or greater arising from site activities , the full extent of the impact will be determined and notified immediately to the Yard Supervisor and the management team with action taken e.g.; increase water suppression or cease activity (processing etc) Oher sources of dust will also be recorded should no impact be identified from the site, for example Local businesses, construction works, other wastes sites, external high traffic movements. All findings and monitoring would be recorded on the monitoring report form within the Dust Management Plan. The use of site CCTV can and Site Shield can also be used to investigate dust complaints and to review site or other external activities. • Site staff are trained to be aware of the weather conditions and the risks of impact both on and off site. They act on any visual signs of dust occurring and would implement further site controls such as further suppression, ceasing activities then inform the Site Manager. • In the event that significant visual dust is observed at the			

			boundaries of the operational areas, action will be taken to suppress the dust in the form of extra water suppression using the water cannon or fire hoses that access all areas of the site. • Should dust be a persistent issue due to severe dry periods or high winds the Site Manager would suspend waste activities immediately. This would be communicated to the EA. **Procedures and Recording Forms** • The management of dust emissions is detailed in Dust Management of the EMS (DEMP) • The procedure for managing complaints is included in the EMS. • Individual Plant and Equipment Maintenance Forms **Water Supplies** • The site has as access to local external water supply for general everyday use. **Severe Drought Conditions** • In the event water supplies are unavailable the site would consider the cessation of waste activities with direction of senior management or			

			divert wastes to other sites. **Management of procedures** • The Site Manager (and other nominated trained members of staff) will be responsible for implementing risk management controls and site recording. • The facility will not give rise to reasonable cause for annoyance. In the unlikely event of any complaints, these will be dealt with in accordance with the sites complaints procedures.			
To Water						
Runoff from waste storage areas & site surfaces Percolation of contaminated water	Surface water: Groundwater within bedrock deposits.	Overland percolation through the ground	• All HCI waste will be stored on an impermeable surface. All surface water drainage from the site is directed to the surface water system and discharged to an interceptor. • All site water falls to an interceptor on site located at the entrance of the site. The interceptor will have a capacity alarm, shut off valve and will be checked monthly for silt build up. • Site drainage is checked daily basis and cleared if required. Records of checks and cleaning are kept on the diary system. • Strict waste acceptance	Low	Contamination of surface water and groundwater.	Not significant

			procedures will ensure that only permitted waste types are accepted on site. • In the event that non-conforming waste is delivered to site, it will be isolated and removed from site within 48hrs.			
Pests						
Birds, vermin and insects.	*Site personnel and local human population*	Via air (flies and birds) or over ground (vermin and birds).	Although permitted to accept various waste types, the facility accepts only HCI wastes. Food waste or black bin bag waste is not accepted, these wate would be rejection upon identification. This reduces the risk of pest activity on site. Waste are collected by company vehicles and are inspected by trained operative before collection and delivery to site. This further reduces the risk of the acceptance of non compliant or putrescible wastes. The company conducts pre- and collection discussions with customer with instructions of permitted wastes and the returns policy – if prohibited items are found when the skip is emptied you are likely to be charged extra and the restricted items returned to customer. Strict was acceptance procedures implemented. Any non-permitted wastes (including infested wastes), which are found	Negligible	Nuisance, loss of amenity and harm to human health.	Not significant

			following deposit or during subsequent storage and treatment operations, will be covered, segregated and removed within 48hrs. The waste acceptance and rejection procedures are included in the EMS (Procedure SOP3.2/3.3 refers). Robust housekeeping procedures in the form of detailed in the DEMP and FPP also reduce the risk of pest infestation and easy identification of problems or signs of pest activity. Surfaces used for the storage of waste are to be kept clean with robust housekeeping procedures in the form of the below are in place. • Daily condition of waste in bays – waste material checks ensure that wastes are in good condition and have not degraded causing dust/debris; • Daily checks on the volume of waste in bays – to ensure that bay storage limits are not exceeded; • Daily inspections of the condition of impermeable areas – easy to conduct visual inspections and clean; • Daily inspections of the condition of bay walls – to ensure bays remain fit for purpose and control wastes; • Daily inspections of any evidence of dust/fluff build up on surfaces – to implement cleaning procedure and the potential risk of dust/debris			

			arising from waste handling; • Daily plant and equipment checks (recorded) to identify dust/fluff build up on mobile plant – to minimise potential risk of dust and debris arising during plant movement; • Daily inspections of the condition of perimeter fencing – to ensure fencing is fit for purpose to prevent any potential windblown litter is controlled. • Staff welfare/office areas are kept clean and free of waste and exposed food. • The site is to be monitored daily for any visible signs of rodent or insect activity, such as runways, and the findings logged in the site check sheet. • The management of pests is detailed and supported by procedure SOP 3.14 of the EMS.			
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. However, the boundary of the site and its environs will be visually inspected daily which is formally recorded and any litter cleaned up. The site will benefit from a perimeter fence which will limit the potential for litter to escape off-site.	Low	Nuisance and loss of amenity	Not significant

			• It will be the responsibility of the site staff to monitor the site for any signs of escaping materials either from within the site or from vehicles delivering or removing materials to and from the site. • 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 the EMS.			
Mud on roads	*Local human population*	Transferral of mud on vehicle wheels	• The site is surfaced with concrete at the entrance and exit point of the site with concrete access roads. It is therefore not expected that mud will feature as a problem on the site. The following measures will be taken to prevent the deposition or tracking of mud or debris from the site onto public areas or highways: • site surfaces will be maintained free of significant quantities of mud and debris; • all operational areas will be subject to monitoring by staff throughout the working day; and • all vehicles leaving operational areas will, before leaving the site, be checked to ensure that they are clear of loose waste and that any products being exported from the site are	Low	Mud on road, road traffic accidents.	Not significant

			secure. • In the event that mud, debris or waste arising from the site is deposited onto public areas outside the site, the following remedial measures will be implemented: • the affected public areas outside the site will be cleaned; and • traffic will be isolated from sources of mud and debris within the site to prevent further tracking of mud and debris, and measures will be taken to clear any such sources as soon as practicable.			

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.	Low	Water contamination Odour and dust nuisance, loss of amenity	Not significant

			• 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. • Any non-permitted wastes (including malodorous wastes), which are found following deposit or during subsequent storage and treatment operations, will be covered, segregated and removed within 48hrs. • Odour abatement in the form of Airopure, is also on site to treat odorous waste as a short term measure until waste is removed. • The waste acceptance and rejection procedures are included in the EMS (Procedure SOP3.2/3.3 refers). • The site also has an Odour Management Plan in place as part of the management system. • 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; • EA approved FPP in place; • 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 /Senior 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; • all internal drains will be blocked to retain fire water.	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, emergency services personnel and local human population*	Runoff and percolation through ground. Direct exposure and transport via air	To prevent loss of containment and minimise the risk and impact of releases the following measures will be implemented: • Containment system: no fuels or liquids are stored on site. • 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/dusty 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	Low	Contamination of groundwater and surface water. Harm to human health.	Not significant

			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, provides further information with respect to spillages on site. • An emergency spillage management plan will be produced and will be incorporated within the accident management plan. • Wastes stored upon impermeable concrete hardstanding and at distance from any surface water drainage. • There are no quantities of chemicals kept onsite and therefore little potential for major spills. • Site procedures will be in place to ensure that spill kit inventories are routinely checked and replacements ordered as required.			
Security and Vandalism	Personnel on site, emergency service workers.		The following security measures are in place: • Security gates: the site entrance will be locked at all times when the facility is unattended and when the site is not in use; • CCTV is installed around the site	Low	Nuisance and harm to human health. Contamination of land and surface water.	Not significant

			with external monitoring by the Operator and the 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.			
Flooding	*Site personnel and local human population* *Local environment*	Overland	• There are no surface water features within the 250m site boundary. • According to the UK government Flood Map for Planning, the site lies within flood zone 1. This means the site has a very low risk of flooding. • Evacuation procedures will be implemented in the event of flooding. • The Site Manager will be responsible for implementing	Low	Inundation of site with flood water	Not significant

			risk management measures.			
Litter	*Local residents*	Windblown/Air	• The site access and concrete hardstanding shall be swept as necessary. • All processed waste storage takes place internally. • Vehicles delivering waste to the site / collecting waste are covered. • The site has robust housekeeping measures in place in the form of the below : • Daily checks on the volume of waste in bays – to ensure that bay storage limits are not exceeded causing exceedance of storage and risk of litter escaping; • Daily inspections of the condition of impermeable areas – easy to conduct visual inspections and clean; • Daily inspections of the condition of bay walls – to ensure bays remain fit for purpose and control wastes; • Daily inspections of any evidence of litter around the buildings and site surfaces – to implement cleaning procedure and the potential risk of litter arising from waste handling; • Daily inspections of the condition of perimeter fencing – to ensure fencing is fit for purpose to prevent any potential windblown litter is controlled. • A housekeeping rota to clean bays, surfaces, fencing. • Any waste generated by the facility will be disposed of at the	Low: Little potential for waste to be generated	Nuisance	Very Low: – due to the proposed management techniques

			appropriate onsite location and subject to the general site waste management plan. • The site shall be inspected daily by the Site Manager and any litter or accumulated debris shall be dealt with immediately.			