

## EPR BESPOKE INSTALLATION PERMIT APPLICATION

### GED Environmental Services Heysham Hazardous Waste Transfer Station

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**Sol Environment Ltd**

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## NON-TECHNICAL SUMMARY

GED Environmental Services Limited (the 'Applicant', referred to as 'GED' hereafter) is making a Bespoke Installation Permit Application for the proposed operation of a hazardous waste transfer station at their site in Heysham.

The Site is located at The Oil Depot, Field Road, Heysham, Lancashire, LA3 2XU (Grid Reference SD 40788 60625). The site is in an established industrial area near to Heysham Ferry Port and is not in close proximity to any human receptors. There are ecological receptors in close proximity but there are no point source emissions from the facility. The site setting is therefore not considered to be in an area sensitive to nuisance impacts such as noise or odour.

The hazardous waste transfer station will accept, repack / bulk and temporarily store waste oils and garage wastes. The site will accept bulk transfers of liquid waste oils as well as drummed waste from several contracted third parties, prior to transfer offsite to other licensed waste management facilities for further processing or disposal.

The site comprises a bunded area containing nine dedicated tanks, as well as a number of storage areas upon good quality hard standing. At present only six tanks are present onsite, an additional three are proposed to be introduced in the future. All storage of waste is external, apart from a covered drum storage area adjacent to the laboratory and workshop.

All storage is in accordance with the Hazardous Waste Regulations 2005, Environment Agency Oil storage regulations (2020) and the Environment Agency Guidance S5.06.

The proposed repackaging / bulking activities at the hazardous waste transfer station meet the definition of an installation as defined in the Environmental Permitting Regulations by virtue of Schedule 1:

- **Section 5.3 'Disposal or recovery of hazardous waste' Part A(1)(a)** *Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities-*  
*(iv) repackaging prior to submission to any of the other activities listed in this section or section 5.1.*

In addition, the storage activities will meet the definition of an installation as defined by:

- **Section 5.6 'Temporary or underground storage of hazardous waste' Part A(1)(a)** *Temporary storage of hazardous wastes with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2, 5.3 and paragraph (b) of this section except – temporary storage, pending collection, on the site where the waste is generated,*

The facility will be permitted by the Environment Agency as a Section 5.3 Part A(1)(iv) and Section 5.6 Part A(1)(a)(i) Installation and will be operated in accordance with the Environmental Permitting Regulations 2016 (as amended).

### **Emissions to Air**

There will be no point source emissions to air from the proposed Installation.

The only potential emissions to air relate to fugitive emissions from the storage tank vent points. The site has a number of control measures in place to mitigate this risk.

### **Emissions to Controlled Water**

There are no process emissions to controlled water from the proposed development. None of the storage and bulking activities require the use of any process water, water cooling or create any effluents.

Surface water run-off from the yard areas drains through oil interceptors to foul sewer under consent from United Utilities (pending) to remove any trace oils and settleable sediments.

Accordingly, there is no pollution linkage or pathway to controlled waters from any of the activities at site.

### **Emissions to Sewer**

There are no process emissions to sewer from the proposed development.

Surface water run-off from the yard areas drains through oil interceptors to surface and foul sewer at discharge points S1 and S2 in accordance with the trade effluent consent from United Utilities (pending).

Surface water run-off from the carpark area and access road to the south of the site discharges to storm sewer at discharge point S3.

Run off from the washdown area and tanker unloading / loading area is collected in two blind sumps from where they are periodically pumped, under supervision, to the drainage system and via interceptor to foul sewer.

### **Emissions to Land**

There will be no emissions to land arising from the site.

### **Emissions of Noise**

The site is located within an existing industrial estate context with neighbouring 24/7 activities.

Site operation will be 24/7, however where possible most delivery and collection activities are carried out during daylight hours and night-time activities will be intermittent and limited to vehicle arrival only. All new site vehicles will be fitted with white noise reversing annunciators rather than tonal repeat sirens.

The proposed facility does not have the potential to create noise nuisance to the local surroundings or receptors due to the control measures in place and the industrial context.

### **Emission of Odour**

The site will accept waste oils and associated materials. As such there is the potential for odour emissions to arise from the delivery of waste and bulking activities. To minimise this, the site has control measures in place. These include (but are not limited to):

- Enclosed sealed systems for transferal of liquid wastes;
- Enclosed storage either within sealed drums, IBC's or tanks;
- Use of vapour balance lines during bulk liquid transfer; and
- Minimisation of breathing losses via vacuum valves and carbon adsorption abatement on tank vents.

### **Impact**

Under normal operating conditions, there are no significant adverse offsite impacts associated with this proposed facility.

These control measures are on site in place of an Odour Management Plan, which is deemed unnecessary.

# 1 INTRODUCTION

This document has been prepared on behalf of GED Environmental Services Limited by Sol Environment Ltd and provides supporting evidence as required by Environmental Permit Application Forms Part B2 and B3 issued by the Environment Agency.

GED Environmental Services Limited (the '*Applicant*', referred to as '*GED*' hereafter) is making a Bespoke Installation Permit Application for the proposed operation of a hazardous waste transfer station at their site in Heysham.

The Site is located at The Oil Depot, Field Road, Heysham, Lancashire, LA3 2XU (Grid Reference SD 40788 60625). The site is in an established industrial area near to Heysham Ferry Port and is not in close proximity to any human receptors. There are ecological receptors in close proximity but there are no point source emissions from the facility. The site setting is therefore not considered to be in an area sensitive to nuisance impacts such as noise or odour.

The hazardous waste transfer station will accept, repackage / bulk and temporarily store waste oils and garage wastes. The site will accept bulk transfers of liquid waste oils as well as drummed waste from several contracted third parties, prior to transfer offsite to other licensed waste management facilities for further processing or disposal.

The site comprises a bunded area containing nine dedicated tanks (six at present, three to be introduced in future), as well as a number of storage areas upon good quality hard standing. All storage of waste is external, apart from a covered drum storage area adjacent to the laboratory and workshop.

All storage and management are in accordance with the Hazardous Waste Regulations 2005, EA Oil storage regulations 2020, and the Environment Agency Guidance S5.06.

The proposed repackaging / bulking activities at the hazardous waste transfer station meet the definition of an installation as defined in the Environmental Permitting Regulations by virtue of Schedule 1:

- **Section 5.3 'Disposal or recovery of hazardous waste' Part A(1)(a)** *Disposal or recovery of hazardous waste with a capacity exceeding 10 tonnes per day involving one or more of the following activities-*  
*(iv) repackaging prior to submission to any of the other activities listed in this section or section 5.1.*

In addition, the storage activities will meet the definition of an installation as defined by:

- **Section 5.6 'Temporary or underground storage of hazardous waste' Part A(1)(a)** *Temporary storage of hazardous wastes with a total capacity exceeding 50 tonnes pending any of the activities listed in Sections 5.1, 5.2, 5.3 and paragraph (b) of this section except –*



*(i) temporary storage, pending collection, on the site where the waste is generated, or (ii) activities falling within Section 5.2.*

The facility will be permitted by the Environment Agency as a Section 5.3 Part A(1)(iv) and Section 5.6 Part A(1)(a) Installation and will be operated in accordance with the Environmental Permitting Regulations 2016 (as amended).

The remainder of this application support document is structured accordingly:

- *Section 2:* Provides specific nature of the proposed operations associated with the New Bespoke Installation Permit Application;
- *Section 3:* Provides specific nature and detailed description of the emissions to air and water associated with the site;
- *Section 4:* Provides details of all environmental monitoring associated with the site;
- *Section 5:* Provides a BAT assessment of the sites activities; and
- *Section 6:* Provides an Environmental Impact and Assessment of the site.

All technical appendices associated with the site comprise the following:

- *Annex A:* Figures
- *Annex B:* Environmental Risk Assessment
- *Annex C:* Site Condition Report
- *Annex D:* EMS Summary and example procedures
- *Annex E:* Accident Management Plan
- *Annex F:* Operator Competence

The site location is provided in Figure 1.1 and the layout and boundary of the installation is provided in Figure 1.2.

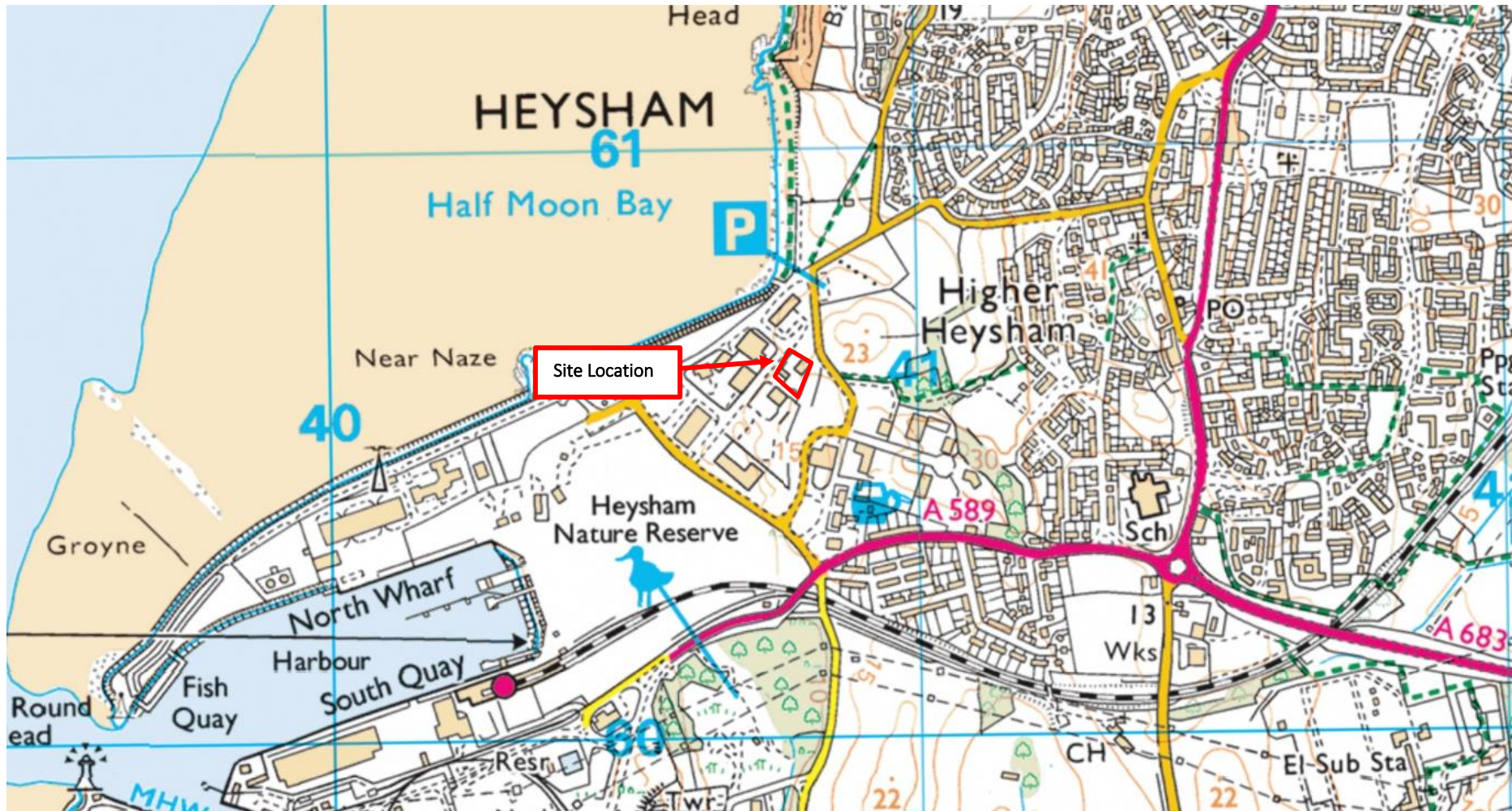


Figure 1.1: Site Location

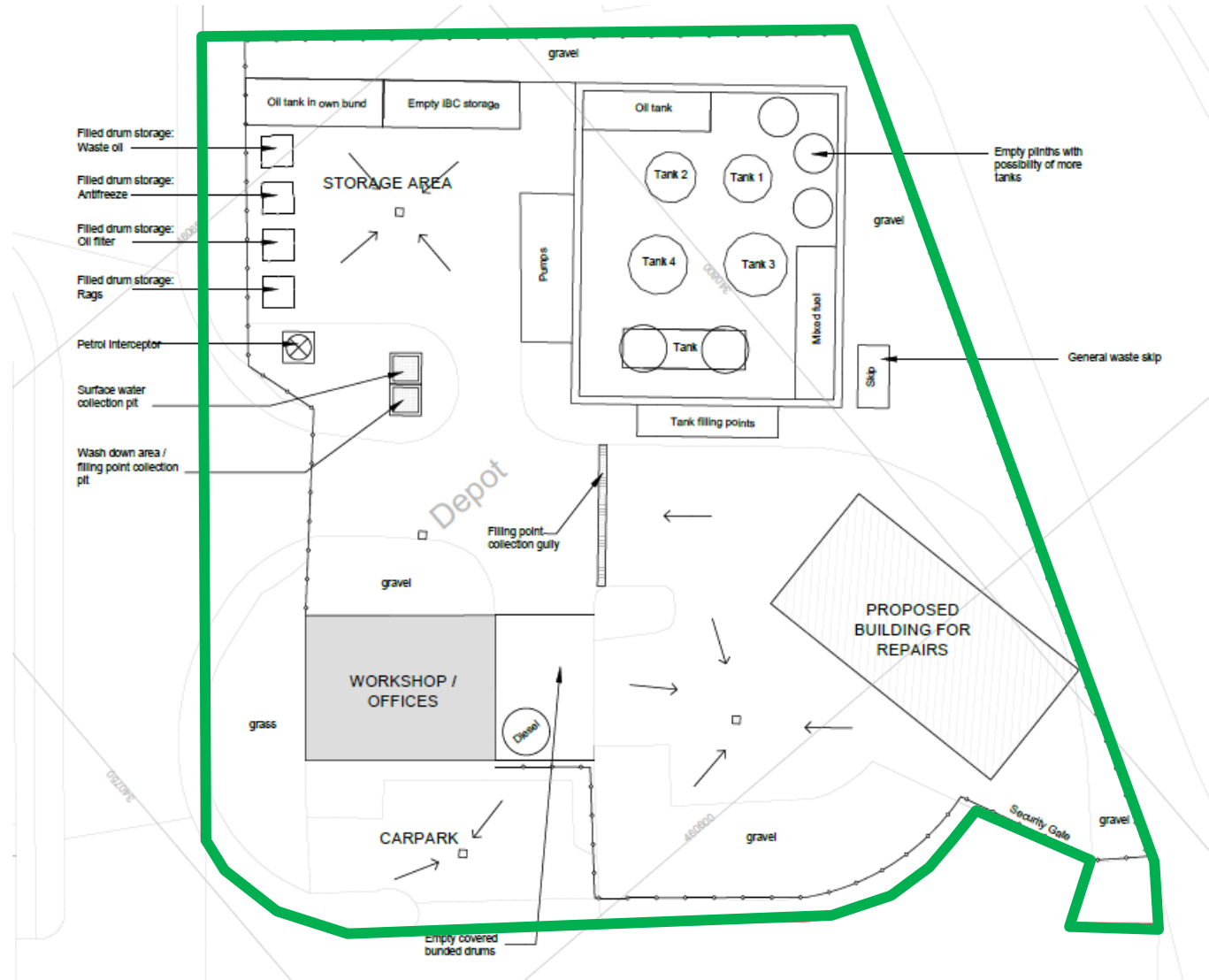


Figure 1.2: Installation Boundary & Site Layout

## 2 PROPOSED ACTIVITIES

### 2.1 Type of Permit

GED is making a Bespoke Installation Permit Application for the proposed operation of a hazardous waste transfer station at their site on Field Road, Heysham.

The site will accept approximately 35,200 tonnes per annum of hazardous waste, namely waste oils garage wastes and associated materials<sup>1</sup>. The site operations will consist of receiving, bulking and storage of both liquid and solid waste materials prior to recovery or disposal off site. It is anticipated that over 10 tonnes per day will be accepted at the site which has a maximum capacity to store 509 tonnes of liquid mixed fuels within static tanks, 63.3 tonnes within mobile tanks and approximately 50 drums / IBCs at any one time.

All waste arriving at the facility will be accepted in accordance with stringent waste acceptance procedures and subject to verification testing.

All waste accepted by the facility will be exported off site for treatment, recovery or recycling. There will be no onsite treatment or use for the waste in any capacity.

The facility will be regulated as an Installation under the Environmental Permitting Regulations 2016 (as amended).

The applicant is making an application to carry out the following listed activities:

Table 2.1 Activities

Activity listed in Schedule 1 of the EP Regulations 2016	Description of specified activity	Limits of specified activity
<b>Disposal or recovery of hazardous waste</b> – Section 5.3 Part A(1)(a)(iv) Disposal or recovery of hazardous waste in a facility with a capacity exceeding 10 tonnes per day involving physico-chemical treatment - repackaging prior to submission to any of the other activities listed in this section or section 5.1.	R12 – exchange of wastes for submission to any of the operations numbered R1 to R11  D13 – blending or mixing prior to submission to any of the operations numbered D1 to D12  D14 – Repackaging prior to submission of any of the	Waste types to be as specified in Schedule 3 Tables S3.2 from receipt to dispatch

<sup>1</sup> This figure is based on a weekly throughput of 572 tonnes of liquid waste oils (total rounded up to 30,000t) and 100 tonnes of drummed wastes for a period of 52 weeks per year.

	operations numbered D1 o D13	
<b>Temporary or underground storage of hazardous waste</b> -Section 5.6 Part A(1)(a) Temporary storage of hazardous waste in a facility with a total capacity exceeding 50 tonnes	R13 – storage of wastes pending any of the operations numbered R1 to R12	Waste types to be as specified in Schedule 3 Tables S3.2 from receipt to dispatch of waste oil

The technical guidance notes used in the preparation of this application document are:

- EPR – The Treatment and Disposal of Non-Hazardous Waste (reference EPR 5.06); and
- EPR – How to Comply with your Environmental Permit (reference EPR 1.00).
- IED 2010/75/EU – BREF/BAT Reference Document for Waste Treatment (IPPC).

The main environmental issues identified within this guidance document and the relevant Best Available Techniques have been built into the site operation procedures that will form the management systems and operating procedures for the site.



## 2.2 Details of the Site

### 2.2.1 Site Location and Setting

The location of the subject Site is shown on Figure A1, Annex A and centred at approximate National Grid Reference OS X (Eastings) 340794, OS Y (Northings) 460637. The proposed site layout is shown in Section 1, Figure 1.2.

### 2.2.2 Installation Boundary

All proposed operations will be contained within the Installation boundary denoted in Section 1, Figure 1.2.

A Site Condition Report that provides a detailed site setting and baseline conceptual model for the site has been completed and included within *Annex C*.

The previous site uses and contamination history have been fully described and detailed within the Site Condition Report as required by the Environment Agency Guidance.

It is concluded that although the site handles potentially contaminative materials, due to the control measures and infrastructure in place, the site does not present a significant contamination or pollution risk to the environment.

All aspects of the site have been designed in accordance with the relevant Environment Agency Oil storage regulations for businesses.

### 2.2.3 Infrastructure and Design

#### *Proposed Infrastructure*

There is minimal proposed infrastructure to be constructed in relation to this permit application as most structures all currently exist and are considered fit for purpose. The current infrastructure comprises:

- Tank Bund – contains 4 permanent upright tanks, 1 permanent square tank and 1 additionally self-contained / bunded tank;
- IBC Storage Yard;
- Reception Area;
- Wash Down Area;
- Covered Drum Storage Area;
- Laboratory / Office Building;
- Workshop; and
- Staff Car Park.

The additional three tanks would be installed within the existing tank bund on existing plinths. The bund surrounding all the tanks has a capacity which is significantly greater than both 25% of the aggregate tank capacity and over 110% of the largest tank within the bund.

All tanks are within bunded secondary containment and are appropriately labelled and alarmed. The site itself is additionally contained via kerbs and drainage gullies providing tertiary containment for the tanks. All aspects of the site are impermeable and constructed with fully sealed drainage systems.

#### *Site Drainage Arrangements*

There are no process effluents produced from the site's activities.

Surface water run-off from the sites yard areas is directed into central drainage gullies within each area and into the sealed drainage system, ultimately discharging to sewer via dedicated Class 1 oil interceptors (S1 and S2). Run-off from the washdown area and tank unloading / loading area is directed to two blind sumps prior to being periodically pumped to the existing drainage system under supervision and discharged via interceptor to foul sewer. Run-off from the staff car park and access road is discharged to storm sewer (S3).

Any spillages, leaks or incidents arising onsite will be effectively contained and captured in accordance with the sites spill response procedure, utilising spill kits which will be strategically located around the site. The sites drainage system can be isolated in the event of a major spill, and anything captured within the interceptors.

Bunds, drainage gullies and interceptors are checked daily to ensure integrity and effective use.

Foul drainage from the workshop / offices will be discharged directly to sewer.

In the event of a fire, the drainage system can be isolated, thereby containing firewater onsite in the short term. There is also the ability to pump firewater to company owned tankers during firefighting.

#### *Tanks and Bunds*

All storage tanks are installed with secondary containment and designed to comply with the following standards and guidance requirements;

- Oil storage regulations for businesses, Environment Agency, 2015;
- Oil Storage Regulations Guidance, Environment Agency and Defra 2016;
- CIRIA C598: Chemical Storage Tank Systems – Good Practice; and
- CIRIA 736: Design of Containment Systems for the Prevention of Pollution.

All storage tanks associated with the site are detailed within *Section 2.3.4*.

#### *Plant & Equipment*

GED operate a suite of collection vehicles and mobile plant including:

- 1 x curtain sided HGV for the collection of mixed fuel;
- 2 x 6 legger oil tanker;
- 3 x oil tankers; and
- 1 x small oil tanker.

In addition, a small fleet of flatbed collection vehicles, an onsite unarticulated vacuum tanker and forklift truck are utilized by the company for local and on-site handling of small volume containers and barrels.

#### 2.2.4 Site Design and Layout

The layout of the site is provided in Figure 1.2.

#### 2.2.5 Roadways and External Areas

A one-way internal roadway system has been designed to give safe access to the storage tanks / areas during deliveries and collections.

Separate segregated pedestrian walkways and car parking areas have been provided to allow for safe access and egress of all personnel at site.

The layout is provided in Figure 1.2.

### 2.3 Description of the Process

A summary description of the proposed waste management facility is provided below:

- *Waste Reception:* All vehicles will enter the site via the main entrance and report to the site office. All wastes being received by the site will be inspected and placed within the temporary waste reception area where it will be sampled to ensure compliance with the pre-acceptance criteria prior to being accepted and stored within the appropriate tank / area of site.
- *Waste Sampling:* All sampling of waste will be undertaken by an appropriately trained site operative to ensure a representative sample of the waste is taken. Bulk liquid wastes are sampled on arrival. Containerised waste arriving on site is stored in the designated area and sampled within 5 days. Analysis of waste at the onsite laboratory includes testing for water content. After sampling waste is either accepted or rejected in accordance with EMS procedures.
- *Waste Storage:* Following testing, if the waste is accepted onsite it is stored in either the dedicated liquid waste oil storage tanks, the drummed waste storage area or the yard storage area (for IBC's). Waste is stored for a maximum of 14 days prior to export offsite.
- *Export off Site:* Wastes will be exported offsite for recovery or disposal. All potential sites to which waste will be exported will be audited by the company to ensure the correct management and controls are in place and they are appropriately authorized to accept the waste before waste transfer is initiated.

A simplified process flow is provided in Figure 2.1 overleaf.



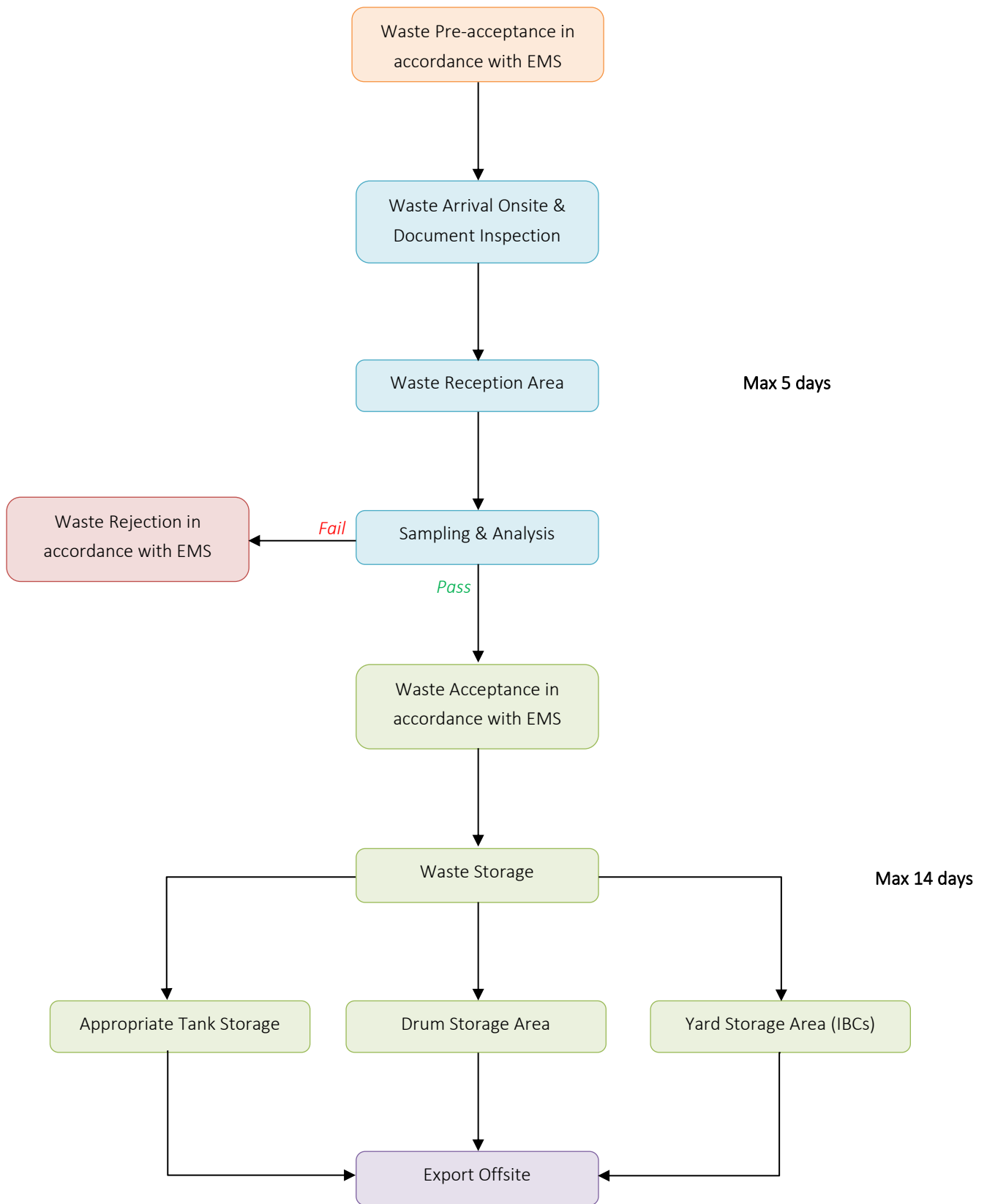


Figure 2.1: Simplified Process Schematic

### 2.3.1 Raw Materials

#### Waste

The site will be permitted to accept a maximum of 35,200 tonnes of waste per year.

Prior to arrival, all wastes accepted on site are subjected to stringent waste acceptance criteria in accordance with the site’s Environmental Management System and associated procedures:

- Waste Pre-Acceptance;
- Waste Acceptance; and
- Waste Rejection.

The predominant waste type accepted at site shall be waste oils and oily wastes. A detailed list of European Waste Catalogue (EWC) codes of wastes that will be accepted by the site is provided in Table 2.2 below.

Table 2.2: Proposed EWC Codes and Types	
Waste Codes	Description
<b>05</b>	<b>WASTES FROM PETROLEUM / GAS PRODUCTION</b>
<b>05 01</b>	<b>wastes from the Petroleum refining</b>
05 01 05*	oil spills
05 01 06*	oily sludges from maintenance operations of plant or equipment
<b>08</b>	<b>WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE OF COATINGS, ADHESIVES, SEALINANTS AND PRINTING INKS</b>
<b>08 01</b>	<b>wastes from MFSU and removal of paint and varnish</b>
08 01 19*	aqueous suspensions containing paint or varnish containing organic solvents or other hazardous substances
<b>08 03</b>	<b>wastes from MFSU of printing inks</b>
08 03 19*	disperse oil
<b>11</b>	<b>WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO METALLURGY</b>
<b>11 01</b>	<b>wastes from chemical surface treatment and coating of metals and other materials</b>
11 01 11*	aqueous rinsing liquids containing hazardous substances
11 01 13*	degreasing wastes containing hazardous substances
<b>12</b>	<b>WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS</b>
<b>12 01</b>	<b>wastes from shaping and physical and mechanical surface treatment of metals and plastics</b>
12 01 07*	mineral based machining oils free of halogens (except emulsions and solutions)
12 01 09*	machining emulsions and solutions free of halogens
12 01 10*	synthetic machining oils
12 01 18*	metal sludge (grinding, honing and lapping sludge) containing oil
<b>12 03</b>	<b>wastes from water and steam degreasing processes</b>
12 03 01*	aqueous washing liquids
<b>13</b>	<b>OIL WASTES AND WASTES OF LIQUID FUELS</b>
<b>13 01</b>	<b>waste hydraulic oils</b>
13 01 05*	non-chlorinated emulsions
13 01 10*	mineral based non-chlorinated hydraulic oils
13 01 11*	synthetic hydraulic oils
13 01 12*	readily biodegradable hydraulic oils

13 01 13*	other hydraulic oils
<b>13 02</b>	<b>waste engine, gear and lubricating oils</b>
13 02 04*	mineral-based chlorinated engine, gear and lubricating oils
13 02 05*	mineral-based non-chlorinated engine, gear and lubricating oils
13 02 06*	synthetic engine, gear and lubricating oils
13 02 07*	readily biodegradable engine, gear and lubricating oils
13 02 08*	other engine, gear and lubricating oils
<b>13 03</b>	<b>waste insulating and transmission oils</b>
13 03 07*	mineral-based non-chlorinated insulating and heat transmission oils
13 03 08*	synthetic insulating and heat transmission oils
13 03 09*	readily biodegradable insulating and heat transmission oils
13 03 10*	other insulating and heat transmission oils
<b>13 04</b>	<b>bilge oils</b>
13 04 01*	bilge oils from inland navigation
13 04 03*	bilge oils from other navigation
<b>13 05</b>	<b>oil/water separator contents</b>
13 05 02*	sludges from oil / water separators
13 05 03*	interceptor sludges
13 05 06*	oil from oil/water separators
13 05 07*	oily water from oil/water separators
13 05 08*	mixtures of wastes from grit chambers and oil/water separators
<b>13 07</b>	<b>wastes of liquid fuels</b>
13 07 01*	fuel oil and diesel
13 07 03*	other fuels (including mixtures)
<b>13 08</b>	<b>oil wastes not otherwise specified</b>
13 08 01*	desalter sludges or emulsions
13 08 02*	other emulsions
<b>14</b>	<b>WASTE ORGANIC SOLVENTS, REFRIDGERANTS AND PROPELLANTS</b>
<b>14 06</b>	<b>waste organic solvents, refrigerants and foam / aerosol propellants</b>
14 06 02*	other halogenated solvents and solvent mixtures
14 06 03*	other solvents and solvent mixtures
<b>15</b>	<b>WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED</b>
<b>15 01</b>	<b>packaging (including separately collected municipal packaging waste)</b>
15 01 02	plastic packaging
15 01 04	metallic packaging
15 01 10*	packaging containing residues of or contaminated by hazardous substances
<b>15 02</b>	<b>absorbents, filter materials, wiping cloths and protective clothing</b>
15 02 02*	absorbents, filter materials (including oil filters not otherwise specified), wiping cloths and protective clothing contaminated by hazardous substances
15 02 03	absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02*
<b>16</b>	<b>WASTES NOT OTHERWISE SPECIFIED IN THE LIST</b>
<b>16 01</b>	<b>end-of-life vehicles from different means of transport (including off-road machinery) and wastes from dismantling of end-of-life vehicles and vehicle maintenance</b>
16 01 07*	oil filters
16 01 14*	antifreeze fluids containing hazardous substances
<b>16 05</b>	<b>gases in pressure containers and discarded chemicals</b>
16 05 04*	gases in pressure containers (including halons) containing hazardous substance
16 05 05	gases in pressure containers other than those mentioned in 16 05 04

<b>16 06</b>	<b>batteries and accumulators</b>
16 06 01*	lead batteries
16 06 04	alkaline batteries (except 16 06 03)
<b>16 07</b>	<b>wastes from transport tank, storage tank and barrel cleaning</b>
16 07 08*	waste containing oil
<b>19</b>	<b>WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTEWATER TREATMENT PLANTS AND PREPARATION OF WATER INTENDED FOR HUMAN CONSUMPTION AND WATER FOR INDUSTRIAL USE</b>
<b>19 02</b>	<b>wastes from physico/chemical treatments of waste</b>
19 02 07*	oil and concentrates from separation
<b>19 11</b>	<b>wastes from oil regeneration</b>
19 11 03*	aqueous liquid wastes
<b>19 12</b>	<b>wastes from the mechanical treatment of waste not otherwise specified</b>
19 12 11*	other wastes (including mixtures of materials) from mechanical treatment of waste containing hazardous substances
<b>20</b>	<b>MUNICIPAL WASTES INCLUDING SEPARATELY COLLECTED FRACTIONS</b>
<b>20 01</b>	<b>separately collected fractions</b>
20 01 13*	solvents
20 01 33*	batteries and accumulators included in 16 06 01, 16 06 02 or 16 06 03 and unsorted batteries and accumulators containing these batteries
20 01 34	batteries and accumulators other than those mentioned in 20 01 33
20 01 39	plastics
<b>Total</b>	<b><i>Aggregate Quantity of all wastes listed above will be less than 35,200 tonnes per annum</i></b>

Notwithstanding the EWC's codes stipulated in Table 2.2 above, waste shall not be accepted at the site which has any of the following characteristics;

- No excessively malodorous waste;
- No biodegradable waste;
- Waste showing evidence of charring, elevated temperatures or fire damage; and
- No explosives.

*Chemical / Waste Inventory*

The waste operations at site do not require large volumes of additional chemicals other than the stored hazardous wastes. Only small volumes of chemicals will be required for sampling at the onsite laboratory. The key hazardous substances accepted and stored onsite are listed in Table 2.3 below:

Table 2.3: Chemical / Waste Summary

Material	Approximate Quantity	Storage Arrangements	Location	Fate
Liquid Waste Oil / Mixed Fuels	30,000 tpa	Tanks 1, 2, 3, 4, 5, 6, 7, 8 and 9 Double skinned steel tanks with alarmed level gauges within tertiary bund designed to conform to EA Oil storage regulations. OR IBCs within dedicated bays in IBC yard	External bund or Storage Yard	Exported offsite for recovery or disposal
Drummed garage wastes	5,200 tpa	On pallets within the covered drum storage area or external yard, stacked no greater than 2 high	Storage: Within external yards and covered areas	Exported offsite for recovery or disposal
Laboratory Chemicals	< 0.2 tpa	Stored within a secured cupboard within the laboratory	Internal	Used in sample analysis

### 2.3.2 Waste Reception

Vehicles will enter the site via the main entrance and report to the site office, in accordance with the Environmental Management System (Waste Acceptance). All documentation accompanying the waste shall be checked to ensure the waste is as expected and has been pre-accepted prior to arrival. Any waste that does not meet the waste acceptance criteria will be refused entry to site in accordance with site Waste Rejection procedures.

Bulk tanker delivery vehicles will be directed to the temporary waiting area while samples of the material are taken and analysed at the onsite laboratory to ensure the waste is as described within the pre-acceptance documentation. There shall be no storage of tankered wastes pending sampling.

Deliveries of wastes in containers i.e., IBCs or drums, may be offloaded into the dedicated waste reception area pending verification sampling. Containers shall be visually inspected during offloading. Any damaged or unlabelled containers shall be rejected from site and immediately reloaded onto the delivery vehicle for removal. Sampling will be undertaken within 5 days of the contained wastes arrival onsite. During this time, no bulking up, mixing of drums or decanting of these wastes will be permitted. Any containerised waste that does not pass the verification testing shall be deemed rejected and will be removed from site and returned to the supplier in accordance with the Waste Rejection procedure.

### 2.3.3 Waste Sampling

Verification sampling will be undertaken upon arrival of the waste at site for every waste load. A representative sample of the waste will be taken by the trained site operative. For contained wastes, a sample from each drum / IBC within the load shall be obtained to form a composite sample for analysis. Samples of bulk liquid wastes will be taken from a cross section of the tanker to account for potential partitioning of the waste.

Samples will then be subjected to testing for water content through use of the Dean-Stark distillation method. This will be undertaken by a suitably trained operative. Any loads with a water percentage of greater than 12% will be rejected from site.

Upon completion of the analysis, the waste will either be accepted as in line with the expected composition or rejected from site. Rejected loads will be removed from site immediately in accordance with procedure Waste Rejection procedures.

Bulk tanker deliveries will be directed to the appropriate tank filling point where the waste will be delivered into the tank via a sealed system. Hose points are located within the bund, colour coded, and all delivery activities will be overseen by a trained site operative.

Deliveries comprising drummed waste will be directed to the covered drum storage area or relevant yard area to offload and deliveries comprising IBCs will be directed to the appropriate storage bay within the external yard. Any bulking / decanting or mixing of containerised wastes will be undertaken prior to storage and by a trained site operative.

### 2.3.4 Waste Storage

Wastes shall be stored in segregated areas of site dependent on their composition. All storage is upon impermeable concrete hardstanding.

#### *Bulk Liquid Wastes*

There will be nine storage tanks onsite located within the bund. The tank details are as follows:

- *Tank 1:* 100 tonne vertical steel tank for the storage of waste oil;
- *Tank 2:* 100 tonne vertical steel tank for the storage of oil/water mix;
- *Tank 3:* 47.5 tonne vertical steel tank for the storage of waste oil;
- *Tank 4:* 47.5 tonne vertical steel tank for the storage of antifreeze; and
- *Tank 5:* 15 tonne horizontal self-bunded polyethylene tank for the storage of diesel;
- *Tank 6:* 19 tonne square steel tank for the storage of waste oil;
- *Tank 7:* To be confirmed but likely 60 tonne vertical steel tank for the storage of waste oil;
- *Tank 8:* To be confirmed but likely 60 tonne vertical steel tank for the storage of waste oil; and
- *Tank 9:* To be confirmed but likely 60 tonne vertical steel tank for the storage of waste oil.

Each tank is self-bunded, has an alarmed level gauge and shall be labelled with the following:

- Content composition;
- Capacity; and
- Waste input load tracking numbers.

The bund surrounding these tanks has a capacity of 24,779 litres, which is significantly greater than both 25% of the total tank capacity and over 110% of the largest tank within the bund.

#### *Contained Waste*

Waste within IBC's is stored within labelled rows externally in the Storage Yard. IBCs are stacked no higher than 2 high and 2 wide and there will be sufficient space between rows for access via forklift.

Drums shall be stored within the covered drum storage area or external yard, 4 to a pallet and stacked no higher than 2 high. The covered area has an open wall to the yard providing sufficient ventilation and meeting the requirements of HSG71.

All containers will be clearly labelled with the following:

- Date of arrival;
- Content description;
- Relevant hazard codes;
- Chemical composition;
- Unique Reference Code (relevant to pre-acceptance and acceptance paperwork).

Wastes shall be managed to ensure minimum storage times onsite, typically 7 days. Maximum storage times onsite will be no more than 14 days (to account for holidays).

All areas of the site, including storage areas, bunds, individual containers, drainage gullies, interceptors, blind sumps and hardstanding will be inspected during the daily site walkover, in accordance with Waste Reception and Storage procedures.

### **2.3.5 Waste Export**

Wastes will be exported offsite for recovery or disposal. All potential sites to which waste will be exported will be audited by the company or a competent third-party assessor to ensure the correct management and controls are in place and they are appropriately authorised to accept the waste.

### **2.3.6 Environmental Management**

GED will operate the site in accordance with an Environmental Management System which is structured to meet the requirements of Environment Agency Guidance Develop a Management System: Environmental Permits and the Waste Treatment BREF BAT 1.

The EMS is designed to ensure:

- The identification of all foreseeable environmental impacts and risk that GED's activities pose to the environment.
- Prevention or minimisation of any identified risks to practical minimum.
- Legal Compliance assurance.
- Identification of risks of pollution including those arising from operations, maintenance, accidents, incidents, non-conformances and complaints, and how these will be minimised.
- Activities at the site will be managed in accordance with the management system, which will be subject to continuous review, audit and improvement. Specific detailed management system reviews will take place if there is a significant change to the activities, following an accident or if a non-compliance is found.
- The key aspects of the EMS for the site will include:
  - Preventative maintenance;
  - Operator requirements;
  - Training and Competence;
  - Emergency response and incident management; and
  - Monitoring, measurement and reporting.

The Environmental Management System and procedures have been written to ensure that the environmental risk and impact of the normal running of the site activities are documented and minimised.

The company will establish a third-party compliance assurance process that will as a minimum provide the following:

- All contractors and third-party processors hold the appropriate licenses and environmental permits to receive and process the wastes transferred from site;
- GED Environmental are compliant with their own internal Management Systems, testing and record keeping;
- All personnel working for the company are suitably competent and trained;
- The requirements and conditions of the Environmental Permit are met and complied with.



### *Summary EMS*

GED have developed a summary EMS for the operation of the site. This summary EMS defines the management of the site and provides the management controls for all aspects of the site. The basic structure of the operational procedures has been designed around the best practice requirements of the EA guidance notes.

The company will operate a suite of procedures for each of the key activities on site. An EMS Summary of these procedures has been included in *Annex D* and includes the following:

- Risks and opportunities
- Management of the EMS
- Pollution prevention planning
- Competence and awareness
- Communication
- Control of documents and data
- Operational planning and control
- Emergency preparedness and response
- Monitoring and measurement
- Internal audit
- Management review
- Improvement

### *Site Maintenance*

All maintenance activities on site will be carried out in accordance with the manufacturers' recommendations and are integrated within the company's Environmental Management System.

The key aspects of the maintenance management programme will include:

- A programme of Planned Preventative Maintenance (PPM) is undertaken, to ensure ongoing management and replacement of key plant and equipment rather than waiting for equipment to fail.
- The inspection and maintenance schedules that the manufacturer recommends are adhered to.
- Predictive maintenance is carried out to prevent any catastrophic breakdown.

The detailed Management System operated by the site will include procedures for ensuring that adequate maintenance is undertaken at the site.

The maintenance programme will ensure that all equipment or infrastructure that is deemed essential in the prevention of pollution to the environment (e.g., hard-standing, bunds etc.) or the prevention of local nuisance impacts (e.g., odour abatement) or fire prevention (e.g., plant cleaning, prevention of build-up of dusts etc.) is maintained and kept in good operating condition.

### 2.3.7 Operator Competence

The site will be fully staffed during all operations.

The primary role of site staff is to ensure and oversee waste delivery and unloading operations, material transfers and management.

Additional activities will include general site housekeeping and administration activities. Additional staff attending the site will be visiting engineers from the equipment manufacturers who are adequately trained to perform their duties at the site. The site will maintain written operation instructions all for the plant and monitoring equipment present on site.

All personnel working at the facility will be trained in the necessary sections of the Environmental Management System and associated Procedures.

All staff working for and on the behalf of the site, will be suitably trained and competent (e.g., professional maintenance engineers, electricians, equipment operators etc.).

All operations on the site will be managed by the Site Manager, who will act as both the competent person at the facility and the main process supervisor.

The Site Managers will be deemed competent through qualification and will hold the necessary Level 4 WAMITAB qualifications as required by the WAMITAB competency scheme. Both James Clegg and Claire Clegg have registered with the appropriate WAMITAB training scheme, confirmation of which is provided in Annex F.

Third party support will be provided by suitably qualified contractors.

### 2.3.8 Site security

Site security measures include:

- Secure fencing provided along site boundaries;
- Site is in operation 24/7;
- Site access via secure gates at the main site entrance which will be locked in the absence of GED operators;
- CCTV operations; and
- Daily inspection of both the site fencing and gates will be undertaken and recorded.

### 2.3.9 Hours of Operation

The site will operate 24/7, with most deliveries and collections taking place between 05:00 – 21:00.

### 2.3.10 Accidents and Emergencies

*Accident Management Plan*

GED have developed their own Accident Management Plan based around the specific risks associated with the site operations.

The key aspects of the sites Accident Management Plan are:

- Reviewed by Site Management annually, and as soon as practicable after an accident.
- Considers hazards presented by
  - actions in case of fire;
  - actions in case of emergencies;
  - contaminated firewater;
  - spillages and uncontrolled releases;
  - plant or equipment failure (e.g., over-pressure of vessels and pipework, blocked drains);
  - vandalism;
  - flooding;
- Identify events or failures that could damage the environment.
- Assesses the likelihood and the potential environmental consequences from accidents at the site.
- Proposes action to minimise the potential causes and consequences of accidents.

GED's Accident Management Plan has been included in *Annex E*.

#### *Incident Reporting*

The reporting of incidents and non-conformities forms a key component of the companies Environmental Management System. Identified non-conformities under the system include, but are not limited to the following:

- Uncontrolled leaks and spillages of any materials with the potential to cause pollution to the environment (waste oils, laboratory chemicals);
- Non-compliance to any permitted condition or consent limit (emissions excursions, missing of reporting deadlines, breach of any permitted consent limits);
- Internal Audit findings (legal non-compliances, EMS procedural breaches, system non-compliances);
- External and Internal Complaints; and
- Whenever a plant malfunction, breakdown or failure, or any near miss occurs.

The EMS requires that all identified incidents and non-conformities will be investigated and closed out.

#### *Fire Risk*

GED have designed the site in accordance with all relevant health and safety legislation for the prevention of fires. They have incorporated several control measures into site operation and management for the prevention of fires onsite including (but not limited to):

- Smoking is prohibited anywhere onsite;
- All electrical equipment onsite is required to have up to date PAT testing;
- All buildings onsite are fitted with smoke alarms;

- Fire extinguishers are located around the site in strategic locations;
- Equipment is fitted with emergency stop buttons;
- The diesel tank has its own power source which is isolated when not in use;
- Mobile phones are prohibited when handling fuels; and
- The vehicles utilised for the collection of mixed fuels must be to ADR specification and be fitted with earth cables.

## 3 EMISSIONS & THEIR ABATEMENT

### 3.1 Emissions to Air

There are no point source emissions to air from the site.

However, there is the potential for fugitive releases of VOC's including benzene from the bulking and storage activities. GED have several measures in place to mitigate and monitor this potential emission, including the following:

- Compatibility testing prior to bulking activities to minimise potential for adverse reactions;
- Tank vents are fitted with pressure / vacuum valves to minimise breathing losses;
- Adsorption abatement (carbon pack filtration) is fitted to tank vents containing odorous, VOC or hydrocarbon containing liquids;
- Tanks are painted white in order to minimise warming of the stored bulk liquid wastes;
- All drums and IBCs are lidded and sealed;
- All transfer systems (pipework and valves) for offloading / loading of liquid wastes are sealed; and
- Regular maintenance checks to ensure integrity of storage vessels and connections.

### 3.2 Emissions to Controlled Water

There are no process emissions to controlled water from the site. None of the processes on site create or release any effluent emissions.

### 3.3 Emissions to Sewer

There are no process water emissions from the site.

Surface water run-off from the yard areas discharges via two dedicated Class 1 oil/water interceptors to sewer (S1 and S2). Run-off from the washdown area and tank unloading / loading area is directed to two blind sumps prior to being pumped to the existing drainage system under supervision for discharge via interceptor to foul sewer. Run-off from the staff car park and access road is discharged to storm sewer (S3).

All discharges to sewer are under Trade Effluent Consent from United Utilities (pending).

### 3.4 Emissions to Land

There will be no emissions to land arising from the site.

### 3.5 Odour

It is accepted that the bulking up and storage of waste oils may be an intermittent and occasional source of odour at the site. Where possible, no malodorous material will be accepted on site. This is ensured

by the detailed waste acceptance criteria which ensures rejection of waste immediately if any excessive odour emissions are apparent from the incoming waste. In addition, all storage of wastes is enclosed (containers or tanks) and as such odour emissions are likely only during the transfer of wastes.

Odour shall be monitored daily during the perimeter walkover around the boundary of the site in accordance with Environmental Management and Monitoring site procedure and BAT 10 of the Waste Treatment BREF.

An overview of the measures has been provided in Table 3.1 below.

Table 3.1: Odour Management Summary		
Tier	Reference	Description
1	Inventory Control	<p>The Installation will accept a maximum of 35,200 tonnes of hazardous waste per annum. The waste accepted on site has the potential for odorous emissions.</p> <p>All wastes accepted on site will be required to be pre-declared and be deemed acceptable by a trained site operative prior to the transportation and delivery to site. All waste accepted on site will be inspected on arrival to ensure compliance with the agreed 'Waste Declaration Form' and do not have any excessive malodourous properties.</p> <p>Waste Acceptance and inventory controls are covered within the site EMS Procedures for Pre-Acceptance, Waste Acceptance, Waste Rejection, Off Site Waste Transfer and Waste Reception and Storage.</p>
2	Enclosed Storage	<p>All storage of waste on site is within enclosed containers, namely IBCs, drums or tanks.</p> <p>Tanks are painted white to prevent heating of the waste and vents on the site's tanks are fitted with adsorption abatement thereby minimizing fugitive releases of VOCs and odorous compounds.</p>
3	Sealed Transfer Systems	<p>All transfer systems including valves and pipework is sealed to prevent emissions during delivery and collection of liquid wastes.</p> <p>In addition, deliveries and collections are only permitted during daylight hours to minimise local nuisance.</p>
4	Management Control	<p>The site has mitigations in place, as included in the Environmental Management and Monitoring procedure, that will be carried out on site in the unlikely event that odour is detected.</p>

As there are no expected or substantiated claims of odour nuisance from this facility, it has been deemed implementing a full Odour Management Plan is not necessary, in line with BAT 10 and 12 of the Waste Treatment BREF. However, the measures described above will reduce the risk of any odour nuisance arising from GED's site.

### **3.6 Noise Impacts**

The site is located within a wider industrial estate in the Heysham Ferry Port area and is therefore not considered to be situated in an area highly sensitive to noise.

Site operations, namely the delivery and collection of wastes, onsite movement of mobile plant (i.e., forklifts) and onsite pump have the potential to cause noise. As such the site has implemented the following measures to minimise any potential impacts:

- All new company vehicles will be fitted with white noise reversing signals rather than beepers;
- Any vehicles arriving onsite during evening / night-time hours will not be allowed to reverse or unload;
- All vehicles will be operated by experienced staff;
- The pump onsite is electrically operated and won't be operational overnight;
- All plant and vehicles will be turned off when not in use; and
- An earthen bund along the sites eastern boundary provides noise attenuation between the site and the town of Heysham.

Therefore, the site does not have any potential to create a significant adverse noise impact or night-time disturbance.

### **3.7 Fugitive Emissions**

The proposed facility will not result in any fugitive releases of emissions of dust or litter.

However, as noted in Section 3.1 above, the site has the potential for the release of fugitive emissions of VOCs including benzene. These will be minimized through the control measures outlined above and within the Environmental Management and Monitoring procedure.

### **3.8 Waste Generation and Management**

#### **3.8.1 Types and Amounts of Waste**

The site will not produce any significant quantities of waste as there are limited process operations. However, as a hazardous waste transfer station, significant quantities of waste will move through the site.

In addition, a small amount of interceptor sediment and spent laboratory chemicals will be generated by the site.

Table 3.2 below shows a tabular summary of the estimated waste streams that will be accepted, generated and exported from site.

**Table 3.2: Waste Summary**

Waste	EWC Code	Approx. Annual Quant	Source	R / D Code	Environmental Fate
Liquid Waste Oils	Various	30,000 tonnes	HWTS	R9 (Off site Treatment)	Reclaimed and reused
Oily solid wastes	Various	5,200 tonnes	HWTS	R9 (Off site Treatment)	Reclaimed and reused
Spent Laboratory Chemicals	Various	0.2 kgs	Waste testing and analysis	D1	Disposal
Interceptor wastes / sediments	16 10 01* 16 10 02	10 tonnes	Surface water Interceptors	R9 (Off site treatment)	Physico-chemical Treatment and disposal

### 3.8.2 Waste Storage

Wastes shall be stored in segregated areas of site dependent on their composition. Bulk liquid wastes are stored within the appropriate tank within the tank bund, drums are stored within the canopied drum storage area or external yard and IBCs are stored within the appropriate bay in the external yard.

All storage is upon impermeable concrete hardstanding.

**Table 3.3: BAT Justification for Storage on Site**

Indicative BAT	Justification
Subsurface structures	There are no subsurface structures on the site. All tanks, pipework and drainage systems are above ground.
Appropriate surfacing and containment or drainage facilities for all storage areas, taking into consideration collection capacities, surface thicknesses, strength/reinforcement; falls, materials of construction, permeability, resistance to chemical attack, and inspection and maintenance procedures; <ul style="list-style-type: none"> <li>• have an inspection and maintenance programme for impervious surfaces and containment facilities;</li> <li>• unless the risk is negligible, have improvement plans in place where operational areas have not been equipped with:                             <ul style="list-style-type: none"> <li>– an impervious surface</li> <li>– spill containment kerbs</li> <li>– sealed construction joints</li> <li>– connection to a sealed drainage system</li> </ul> </li> </ul>	<p>The site is covered by good quality re-enforced concrete hardstanding. All joints are sealed.</p> <p>All external yard areas are kerbed and fall to a central drainage gully directing surface water run-off through a sealed drainage system to dedicated interceptors.</p> <p>The site will have an extensive maintenance programme in place which will include provision for the inspection of all appropriate plant and structures.</p> <p>The detailed inspection of the impervious concrete surfaces and containment will be in line with the construction engineer’s recommendations.</p> <p>Routine inspections will be undertaken daily by site personnel as part of the daily site checks.</p>
Above-ground tanks	<ul style="list-style-type: none"> <li>• Above ground bulk storage tanks containing liquids will be appropriately constructed to ensure they are impermeable.</li> </ul>



**Table 3.3: BAT Justification for Storage on Site**

Indicative BAT	Justification
<p>Storage areas (IBCs, drums, bags etc.)</p> <p>Storage areas should be located away from watercourses and sensitive boundaries, (e.g., those with public access) and should be protected against vandalism.</p> <p>Storage areas should have appropriate signs and notices and be clearly marked out, and all containers and packages should be clearly labelled.</p> <p>Where spillage of any stored substance could be harmful to the environment, the area should be appropriately kerbed or bunded.</p> <p>The maximum storage capacity of storage areas should be stated and not exceeded, and the maximum storage period for containers should be specified and adhered to.</p> <p>Appropriate storage facilities should be provided for substances with special requirements (e.g., flammable, sensitive to heat or light) and formal arrangements should be in hand to keep separate packages containing incompatible substances (both “pure” and waste).</p> <p>Containers should be stored with lids, caps and valves secured and in place - and this also applies to emptied containers.</p> <p>All stocks of containers, drums and small packages should be regularly inspected (at least weekly).</p> <p>Procedures should be in place to deal with damaged or leaking containers.</p>	<ul style="list-style-type: none"> <li>Supervised deliveries will ensure that the risk of contamination of surface water is negligible.</li> </ul> <p>All tanks and facilities will be installed with secondary containment and be designed to comply with the following standards and guidance requirements;</p> <ul style="list-style-type: none"> <li>EA Oil storage regulations.</li> <li>CIRIA C598: Chemical Storage Tank Systems – Good Practice.</li> <li>CIRIA C736: Design of Containment Systems for the Prevention of Pollution.</li> </ul>
<p>Storage areas (IBCs, drums, bags etc.)</p> <p>Storage areas should be located away from watercourses and sensitive boundaries, (e.g., those with public access) and should be protected against vandalism.</p> <p>Storage areas should have appropriate signs and notices and be clearly marked out, and all containers and packages should be clearly labelled.</p> <p>Where spillage of any stored substance could be harmful to the environment, the area should be appropriately kerbed or bunded.</p> <p>The maximum storage capacity of storage areas should be stated and not exceeded, and the maximum storage period for containers should be specified and adhered to.</p> <p>Appropriate storage facilities should be provided for substances with special requirements (e.g., flammable, sensitive to heat or light) and formal arrangements should be in hand to keep separate packages containing incompatible substances (both “pure” and waste).</p> <p>Containers should be stored with lids, caps and valves secured and in place - and this also applies to emptied containers.</p> <p>All stocks of containers, drums and small packages should be regularly inspected (at least weekly).</p> <p>Procedures should be in place to deal with damaged or leaking containers.</p>	<p>All storage of liquid and hazardous materials carried out on site in both bulk and contained form will meet BAT requirements.</p>

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## 4 ENVIRONMENTAL MONITORING

### 4.1 Emissions to Air

There are no point source emissions to air from the site, therefore no monitoring is required.

As the site does not process waste oils nor store significantly large volumes of liquid wastes and as a result of the control measures, it is not anticipated that fugitive emissions monitoring from the tanks will be required. Should the Environment Agency wish for annual fugitive emissions monitoring to be undertaken, this will be implemented via calculation on an annual basis where required.

### 4.2 Emissions to Controlled Water

There are no process emissions to controlled water from the site, therefore no monitoring is required.

### 4.3 Emissions to Sewer

There are no process emissions to sewer from the site, therefore no monitoring is required.

However, periodic sampling of surface water run-off prior to discharge to sewer, in line with the Trade Effluent Consent will be taken.

### 4.4 Odour Monitoring

Odour is monitored daily during the site walkover and formally once a month during delivery activities in accordance with the site the Environmental Management and Monitoring procedure.

## 5 BAT APPRAISAL

### 5.1 Best Available Technology (BAT) Compliance

The following BAT demonstration is based on the BREF documents for Waste Treatment (April 2018) and Emissions from Storage (July 2006) and the sector guidance S5.06 for the storage and treatment of hazardous and non-hazardous wastes. The BAT demonstration is summarised in the following table.

Table 5.1: BAT Justification	
Indicative Requirement	BAT justification
<b>Waste Acceptance</b>	
Load Arrival & Inspection	<p>The site has stringent waste pre-acceptance and acceptance procedures in place as part of their Environmental Management System.</p> <p>BAT requirements relating to the arrival and inspection of waste loads shall be met. This includes:</p> <ul style="list-style-type: none"> <li>• Being weighed</li> <li>• Acceptance only if sufficient storage capacity exists</li> <li>• Correct labelling</li> <li>• Document checks &amp; visual inspection</li> <li>• Input into waste tracking system</li> <li>• Receipt of hazardous wastes under the supervision of a suitably qualified person</li> <li>• Offloading into a dedicated reception area</li> </ul>
Verification sampling	<p>The site has stringent waste acceptance and rejection procedures in place as part of their Environmental Management System (Waste Acceptance &amp; Waste Rejection Procedures).</p> <p>All wastes loads are sampled to determine composition. Wastes are kept within the dedicated reception area pending results of testing, for no longer than 5 days.</p> <p>BAT requirements relating to the verification sampling of all waste loads shall be met.</p>
Sampling of bulk liquid and contained wastes	<p>The site has stringent waste acceptance procedures in place as part of their Environmental Management System (Waste Acceptance) which include measures to be taken in the sampling of bulk liquid wastes and contained wastes.</p> <p>BAT requirements regarding sampling of wastes shall be met including:                      Ensuring representative samples are taken and all containers in a waste load are sampled – though composite samples are acceptable.</p>
Drum/IBC labelling	<p>Following acceptance each drum/IBC is given a unique label to record:</p> <ul style="list-style-type: none"> <li>• date of arrival</li> <li>• unique reference number</li> <li>• the location of each drum</li> <li>• the duration of storage</li> <li>• the chemical identity of the drums' contents</li> <li>• previous waste holder</li> <li>• the hazard classification for each drum</li> </ul>

**Table 5.1: BAT Justification**

Indicative Requirement	BAT justification
	Drums will be handled and stored so that the label is readily visible.
Record Keeping	<p>The site operates an internal tracking system to log and track the waste during its time on site.</p> <p>All Duty of Care requirements of the Waste Regulations 2011 are met.</p> <p>Copies of Waste Transfer Notes and Duty of Care Documentation are kept for a minimum of 3 years for hazardous wastes.</p>
<b>Offloading / Discharge of Waste</b>	
Discharge Points	<p>All delivery and collection operations taking place at the site are overseen by the appropriately trained site manager.</p> <p>Hoses and fittings are colour coded to ensure the correct discharge points are used.</p> <p>The site operates a preventative maintenance programme to ensure all plant and equipment is kept in good repair and there is no possibility of damaged hoses/connections</p> <p>The entire site is covered by good quality hardstanding with self-contained drainage gullies in all external yards.</p> <p>Tanks for bulk liquid storage are located within a bund which includes the filling points to ensure capture of any spillages during offloading operations.</p> <p>All site infrastructure is visually inspected daily during the site walkover.</p>
Prevention of Overfill	The site has stringent operation procedures in place to prevent overfill during waste discharge including all waste offloading to be overseen by the Site Manager and level alarms fitted to the tanks.
Piping	<p>All piping onsite for the transfer of liquid wastes is above ground.</p> <p>The site will operate a system of planned improvements including the replacement of existing flanges with welded connection to minimise fugitive emissions where appropriate.</p> <p>All pipes not of plastic or stainless-steel construction will be coated with a minimum of two layers to prevent corrosion.</p>
<b>General Storage Requirements</b>	
Tank Design	<p>Tanks will be vertical fixed roof or horizontal tank which is considered BAT for the type of wastes stored at the installation.</p> <p>All tanks will be fitted with level meters and fitted with high level alarms.</p>
Tank Colour	Tanks will be painted white or similar colour with a reflectivity of thermal or light radiation of at least 70%.
VOC Emissions	<p>Emissions of VOCs from the tanks will be minimised through use of carbon abatement.</p> <p>There will be no open uncontrolled venting to atmosphere from the tanks.</p> <p>All contained wastes will be appropriately sealed in lidded IBC's and drums.</p> <p>Due to the scale of the site, ongoing monitoring of fugitive VOC emissions is not considered necessary.</p>
Corrosion Prevention	<p>The site employs the following measures to prevent corrosion of the tanks onsite:</p> <ul style="list-style-type: none"> <li>• removal of rainwater from the bund on a regular basis</li> <li>• preventative maintenance programme</li> </ul>

**Table 5.1: BAT Justification**

Indicative Requirement	BAT justification
	<ul style="list-style-type: none"> <li>ensuring the construction of the tank is appropriate for the stored material.</li> </ul> <p>Periodic integrity testing of the tanks is undertaken to ensure thickness of the tank walls is maintained with records kept in the site office.</p>
Containment	<p>The entire site is covered in impermeable concrete hard standing with a sealed drainage system.</p> <p>Secondary containment for the above ground tanks is provided through the concrete tank farm bund. The bunded area has a capacity of at least 110% of the largest vessel or 25% of the total tankage volume, whichever is the greater.</p> <p>All tanks are designed to comply with the following standards and guidance requirements;</p> <ul style="list-style-type: none"> <li>EA Oil storage regulations.</li> <li>CIRIA C598: Chemical Storage Tank Systems – Good Practice.</li> <li>CIRIA C736: Design of Containment Systems for the Prevention of Pollution.</li> </ul>
Handling	<p>Handling and transfer of waste will be carried out by competent staff and duly validated and verified prior to, and post, execution.</p>
Double handling	<p>Site will endeavour to minimise double handling onsite where possible. The dedicated reception area is located adjacent to the laboratory.</p>
Signage	<p>All storage areas are clearly marked and signed regarding the quantity and hazardous characteristics of the wastes stored in that area.</p>
Capacity	<p>The total maximum storage capacity of the site is clearly and unambiguously stated in writing on the sites permit and in the site office.</p> <p>The stated maximum capacity of storage areas will not be exceeded at any time.</p> <p>Storage of wastes shall be such that there is always vehicular access to contained wastes.</p>
Labelling	<p>All containers onsite (IBC's / drums) are clearly labelled with the date of arrival, relevant hazard code(s), chemical identity and composition of the waste and a unique reference number as part of the sites internal tracking system to enable cross-referencing to pre-acceptance and acceptance records.</p> <p>All labelling will be resilient enough to stay attached and legible throughout the whole time of storage at the installation. This will constitute part of the daily site inspection procedures.</p>
Drainage	<p>The site has a dedicated drainage system to capture surface water run-off from the storage area. Concrete fall direction in each yard to a central gully and dedicated interceptor or sump. This ensures that drainage from incompatible wastes cannot encounter each other, and that fire cannot spread between storage / treatment areas via the drainage system</p>
Daily Inspections	<p>The site is visually inspected daily in accordance with the Infrastructure Management and Monitoring procedure.</p> <p>Any issues are immediately rectified. Any issue resulting in the compromise of containment will result in the removal of waste from that area / vessel until the repair is complete. Over-drumming will only be undertaken as an emergency measure and take place in a designated area.</p> <p>All spillages of hazardous wastes will be logged in the site diary with the EA notified of any spillage over 200 litres.</p>

**Table 5.1: BAT Justification**

Indicative Requirement	BAT justification
	Records are kept for a minimum of 2 years detailing inspections and any actions taken.
Drum Storage	<p>Drums will be stored within the covered Drum Storage Area or external yard on pallets no more than two high in rows and stored in order to allow access for inspection on all sides.</p> <p>The covered area has three walls and roof vents, thereby providing ventilation.</p>
Storage Times	<p>Wastes will be stored within the reception area for a maximum of five working days.</p> <p>Following receipt, wastes will be removed off-site as soon as possible and within 14 days (typically 7 days).</p> <p>This rapid turnover of wastes will avoid accumulation and container deterioration.</p>
Segregation of wastes	<p>All wastes will be segregated based upon their composition to prevent storage of incompatible wastes in proximity to each other.</p> <p>Incompatible substances will not be stored within the same drum.</p>
Emissions monitoring	Monitoring of emissions is conducted in accordance with EMS procedures.
Accidents and incidents	Accident Management Plan in place to minimise the risk of an accident occurring and any emissions or impacts arising from incidents.
<b>Bulk Transfer of Wastes</b>	
Compatibility testing	<p>Prior to transfer of wastes (e.g., bulking into drums/IBCs or transfer from container to bulk tank) compatibility testing will be undertaken in order to prevent any adverse or unexpected reactions and releases.</p> <p>A representative sample of the receiving tank/vessel/container will be mixed in a proportional ratio with a sample of incoming waste stream that it is proposed to add to the tank/ vessel/container. The test parameters will be driven by the wastes being bulked. Records of testing will be kept including any reaction giving rise to:</p> <ul style="list-style-type: none"> <li>• increase in temperature</li> <li>• viscosity change</li> <li>• separation or precipitation of solids</li> <li>• evolution of gases</li> <li>• evolution of odours</li> </ul> <p>The Site Manager will hold responsibility for determining whether bulking is appropriate following compatibility testing.</p>
Transfer	<p>Bulking / mixing will only take place under supervision of the Site Manager.</p> <p>Liquid wastes in containers will be transferred into storage vessels by dip pipe to minimise splash, fume and odour.</p> <p>During bulking to tankers, vapour balance lines connected to appropriate abatement equipment will be used.</p> <p>Malodourous materials will neither be accepted on site nor be bulked up.</p> <p>Gravity dispensing will be avoided, unless physical protective devices are provided to prevent loss of the whole tanker contents.</p> <p>If tankers are discharged to drums, this will be undertaken by a minimum of two site operatives in order to ensure effective valve control.</p> <p>Overflow pipes will be directed to the relevant bunded area, or to another vessel provided suitable control measures are in place.</p>

Table 5.1: BAT Justification

Indicative Requirement	BAT justification
	Liquid wastes will not be added to solid wastes.

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## 6 IMPACT TO THE ENVIRONMENT

### 6.1 Impacts to Air

There are no impacts to air relating to the proposed site.

### 6.2 Impacts to Land

There are no impacts to land relating to the proposed site.

### 6.3 Impacts to Controlled Waters

There are no impacts to controlled waters relating to the proposed site.

### 6.4 Impacts to Sewer

There are no impacts to sewer relating to the proposed site. All discharges to sewer are uncontaminated surface water run-off and in accordance with the sites Trade Effluent Consent (pending).

### 6.5 Odour Impacts

Due to the proposed control measures it is considered that there will be no significant impact to nearby sensitive receptors as a result of operation of the installation.