

ACCIDENT MANAGEMENT PLAN

GED Environmental Services Heysham Hazardous Waste Transfer Station

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1 INTRODUCTION

This document has been prepared by Sol Environment Ltd on the behalf of GED Environmental Services Limited (hereafter referred to as “GED” or “the applicant”) in support of a permit application for the proposed operation of a hazardous waste transfer station at their site in Heysham, Lancashire.

This document represents the Accident Management Plan (AMP) submitted as part of the Application package to the Environment Agency (EA) (Sol Environment Ref. SOL1812GED01).

The proposed development is located at Field Road, Heysham, Lancashire, LA3 2XU (Grid Reference SD 40788 60625).

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 a number of contracted third parties, prior to transfer offsite to other licensed waste management facilities for further processing or disposal.

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 2018.

This Accident Management Plan has been produced in accordance with EA Guidance documents ‘*How to comply with your Environmental Permit*’ and *Develop a Management System: Environmental Permits – Accident Prevention and Management Plan*.

It is stipulated under this guidance document that the Accident Management Plan fulfils the following four key requirements:

- Identifies events or failures that could damage the environment;
- Assesses how likely they are to happen and the potential environmental consequences;
- Actions to minimise the potential causes and consequences of accidents; and
- The actions that are required to be carried out if an accident happens.

This Accident Management Plan will be implemented and maintained at the site as part of the company’s Environmental Management System and will ensure the site and all operatives within are fully prepared for such incidents.

A number of the control measures cited within this document refer the operator’s proposed suite of Environmental Procedures which have been drafted in response to the proposed operations at the site.

These documents should be referred to for detailed actions in relation to emergency response and control.

- Waste Pre-Acceptance;

- Waste Acceptance;
- Waste Rejection;
- Off Site Waste Transfers;
- Waste Reception and Storage;
- Environmental Records;
- Environmental Management and Monitoring;
- Infrastructure Management and Monitoring; and
- Accident Management Plan.

The Accident Management Plan and all associated procedures will be reviewed at least every four years or as soon as practicable after an incident, with changes made accordingly to minimise the risk of occurrence / recurrence.

2 RISK MAGNITUDE ESTIMATIONS

The Accident Management Plan (Table 2.2 overleaf) has adopted a risk assessment approach to each potential hazard by combining the probability and magnitude of the potential risk to give an estimation of the risk prior to any mitigation measures. The risk management measures, which are designed to reduce the likelihood of occurrence, are then detailed followed by an estimation of the actual risk post-mitigation (Residual Risk Rating).

The DEFRA guide to risk assessment¹ indicates the approach of subjectively classifying the magnitude of potential consequences into four categories depending upon the degree of the impact that the potential risk could have and the context in which the risk is being assessed. The classification is used as a guide in this Risk Assessment.

The four categories are as follows:

- **Severe:** Possible irreparable damage to environmental resources;
- **Moderate:** Possible damage to environmental resources which are limited within a regional context;
- **Mild:** Possible effects might be transient damage to environmental resources which are commonplace on a regional basis and alternative sources are readily available;
- **Negligible:** The effects are negligible or might cause very slight temporary deterioration in the current environmental resource quality.

The matrix shown below considers the probability of the potential risk against the magnitude of the potential impact, thereby giving an estimation of the resulting likelihood of the risk occurring.

Probability of potential Risk	Magnitude of Potential Impact			
	Severe	Moderate	Mild	Negligible
High	High	High	Medium/Low	Near Zero
Medium	High	Medium	Low	Near Zero
Low	Medium	Medium	Low	Near Zero
Negligible	Medium	Medium/Low	Low	Near Zero

The qualitative risk assessment for the Accident Management Plan has been based on the matrix outlined above.

The final stage of the risk assessment is the judgment of the severity of the residual risk following implementation of the mitigation measures.

¹ A Guide to Risk Assessment and the Risk Management for Environmental Protection, 1995.

Table 2.2: Accident Management Plan

Accident Scenario	Probability of Accident Occurring	Magnitude of Potential Impact	Risk Rating before mitigation	Risk Management	Residual Risk Rating (following Mitigation)
1 - Spills and Leaks / Loss of containment / transfer of Substances / Overfilling of Vessels	Medium	<p>Moderate to Severe</p> <p>Spillage and leakage could occur during waste oil deliveries, vehicle refueling, vehicle breakdowns/ accidents and or damage to tanks, drums, IBCs or bunds</p> <p>Loss of containment could result in potentially polluting materials (including oils and chemicals) being discharged in surface water drainage systems</p>	Medium	<ul style="list-style-type: none"> The site is entirely surfaced in impermeable concrete hardstanding and therefore considered to have a low potential for impacts to groundwater; All external yard areas drain via fall direction to a gully in the center of each yard prior to discharge via dedicated interceptors to foul sewer under consent. The sites waste oil storage tanks are located within a concrete bund with a blind sump; Additionally, the sites horizontal tank is self-bunded; All tank filling points are located within the tank bund; Tank connection points and hoses are colour coded; All deliveries are supervised by the site manager; The sites tanks are fitted with level gauges and alarms to prevent overfilling; All storage vessels have been constructed to the appropriate British Standard; Daily site inspections include a visual inspection to determine any damaged drums/IBC's and ensure all containers are securely lidded; Tanks are inspected visually on a regular basis by site staff and thickness tested periodically to ensure continued integrity and identify any necessary remedial action; Minor spills to be cleaned up immediately, using spill kits. Resultant materials to be placed in container for off-site disposal to appropriate facility, if necessary; Immediate action to be taken in event of major spill which is likely to cause polluting emissions to the environment to prevent liquid from entering surface water drains or any adjacent unsurfaced ground. Spillage to be cleared immediately and placed in containers for offsite disposal. EA to be informed. 	Low

2 - Vandalism	Low	Moderate The site could be subject to intentional vandalism and damage by intruders/ trespassers who could cause damage or harm to the plant and equipment, spills and leaks to tanks or cause fires.	Low	<ul style="list-style-type: none"> • On-site security measures: • CCTV security cameras are installed at key areas of the site; • Security fencing extends around the site perimeter; <ul style="list-style-type: none"> – 2m palisade or equivalent; • Lockable gates are located at the site entrance; • Gates will be locked whenever the site is closed; • Fencing is inspected daily during the perimeter walk around by operations staff to identify deterioration and damage and the need for repair; • Fencing and gates are maintained and repaired to ensure their continued integrity. If damage is sustained, repair will be made within the same working day. If this is not possible, suitable measures will be taken to prevent unauthorised access to the site and permanent repairs will be affected as soon as is practicable; • All visitors to the site are required to register in the visitor's book and sign out again on exit, thereby minimising the risk of unauthorised visitors on the site; • Operational procedures have been implemented including regular inspections, ensuring continual monitoring of security provision at the site. 	Low
3 - Flooding	Low: The site is located in an area of low risk from flooding from rivers / sea.	Severe	Low	<ul style="list-style-type: none"> • Flood warning sites to be monitored to allow preparations prior to flooding. • In the event of a flood warning, site to initiate preparations such as sand bags and removal of loose hazardous wastes (i.e. drums / IBC's) from site. 	Low
4 - Fire onsite. Electrical equipment that could provide an ignition source; Waste products that may support combustion.	Medium	Severe	Medium	<ul style="list-style-type: none"> • All infrastructure, plant and vehicles are subject to a planned preventative maintenance schedule (Infrastructure Monitoring and Management Programme); • All aspects of the buildings are constructed of non-combustible materials; • Fire detecting and monitoring systems have been installed where necessary; • Segregation of wastes onsite; • In the event of a fire, the following actions will be taken: <ul style="list-style-type: none"> – The fire brigade will be notified immediately. 	Low

				<ul style="list-style-type: none"> – The site will be immediately evacuated. • All plant is regularly inspected and cleaned down to enable inspection and check for oil leaks etc; • A number of fire extinguishers are placed at strategic locations around the plant. • The risk of damaged or exposed electrical cables is controlled via the regular inspection and maintenance programme. • Records of fire incidences will be kept on site together with a summary of remedial action taken. • EA will be advised of all incidents of fire as soon as is practicable; • Smoking will not be permitted on site. • Firewater will be contained within the sites drainage system which will be isolated. The company owned vacuum tankers will be employed to remove firewater. 	
5 – Failure of Mains Services: Failure in the mains services, water or electricity.	Medium	Low	Low	<p>In the event that mains services of water and electricity supplied to the site are unavailable, the following actions will occur:</p> <ul style="list-style-type: none"> • In the event of sudden disconnection of the grid the electronic level gauges and alarms will cease to operate, in this instance, bulk deliveries of liquid waste will cease to be accepted at the site until such time as the alarm systems were back online; • If there is sufficient internal storage space containerized waste deliveries would still be accepted, however if storage capacity is exceeded this will require the ceasing of waste deliveries to the site to prevent large volumes of waste accumulating on site. 	Negligible
5 - Incompatible Wastes/ Unwanted Reactions: Some of the waste inputs at the site could be incompatible with each other and cause unwanted reactions / emissions.	Low	Moderate / Severe	Low	<p>The following methods will be implemented to ensure that incompatible wastes do not compromise the safe operation of the transfer station or cause unwanted emissions:</p> <ul style="list-style-type: none"> • All wastes accepted onto site have been subject to ‘pre-acceptance’ in accordance to established procedure; • All incoming wastes are inspected and sampled in accordance with established procedure; • When in the waste reception area, any non conforming waste will be removed prior to acceptance in accordance with established procedure; • All wastes will be stored in designated separate areas of the site; • Records of incidents involving incompatible wastes will be kept on site together with a summary of the remedial action taken. 	Low

<p>6. Operator Error / Failure of Equipment:</p> <p>The result of operator error could result in the acceptance of incompatible waste streams.</p> <p>Breakdown of any sampling / analysis equipment could lead to acceptance of incompatible waste streams / build up of waste in the Reception Area.</p>	<p>Medium</p>	<p>Low</p>	<p>Low</p>	<ul style="list-style-type: none"> • All equipment is subject to a Planned and Preventative Maintenance Programme (PPM), to minimise unplanned failures (Infrastructure Monitoring and Cleaning Programme) • Should the facilities storage capacities be exceeded, incoming waste will be diverted to a nearby waste transfer sites. • Activities carried out within the site are relatively simple. The tanks include an automatic alarm system to alert the operator of potential overflowing problems and where relevant will be triggered with sufficient safety margin to permit operator intervention to prevent an actual problem occurring. • All staff will be fully trained against the site operating procedures. • Training will include awareness raising of key plant parameters and the potential implications of failure to control operations as designed and the associated potential impact on the environment. • Should incompatible wastes be unintentionally accepted at site, these will be temporarily quarantined and removed from site as soon as possible. • All incidents will be recorded and investigated appropriately according to the site incident procedure. 	<p>Negligible</p>
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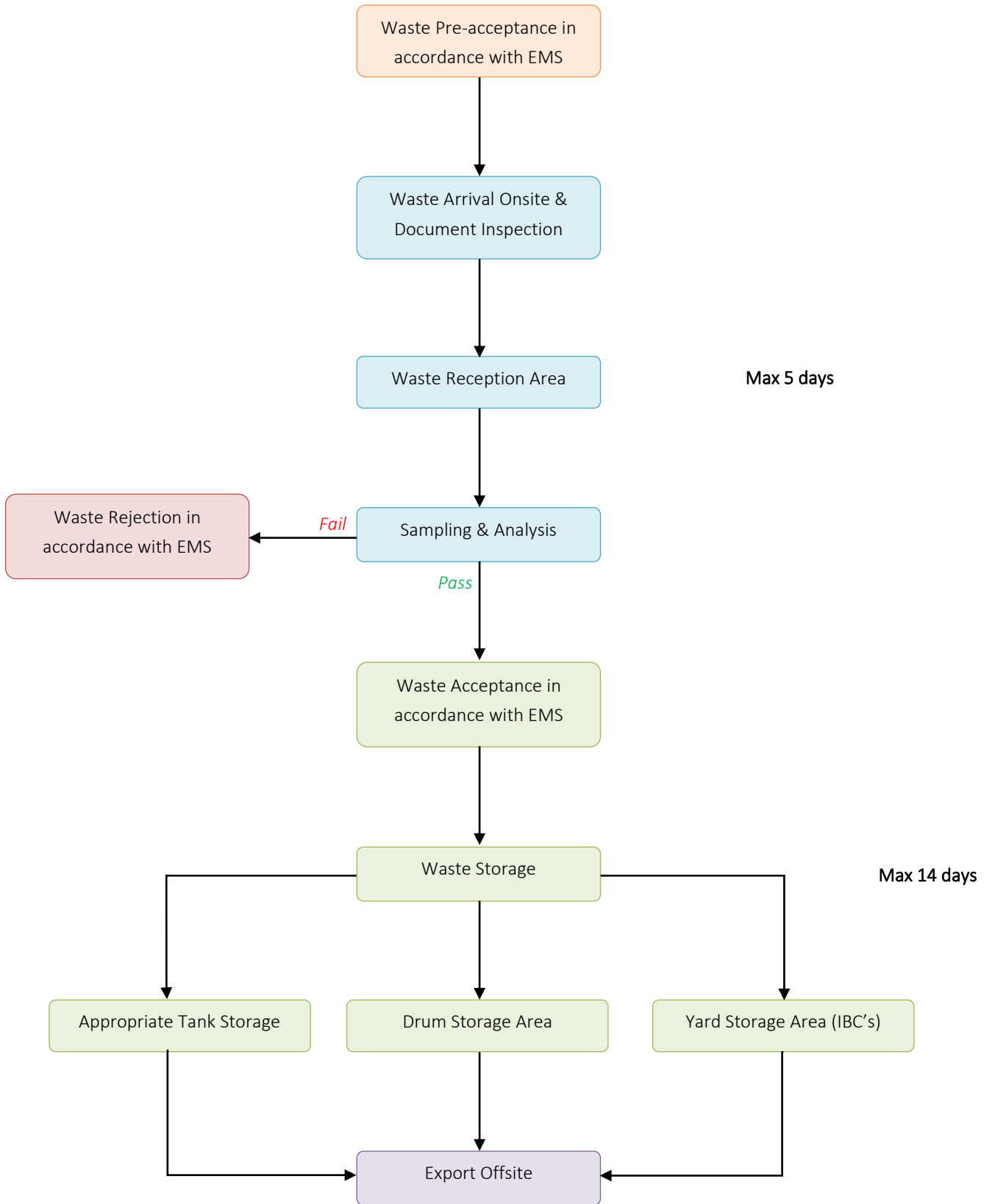
3 SUMMARY & CONCLUSION

This document has been prepared to meet the requirements pertaining to Accident Management Plans within the Environment Agency guidance documents *'How to Comply with your Permit'* and *Develop a Management System: Environmental Permits – Accident Prevention and Management Plan*.

It is concluded that despite the Installation having the potential for a low-moderate environmental impact to the environment, the mitigation measures incorporated into the design of the plant and the site infrastructure are sufficient to mitigate the risks.

The company operates and continues to operate using an established suite of procedures for the control and management of all materials and plant in use on their site. These procedures detail the required actions to be taken in the event of an emergency and should be used in the first instance for any accident and emergency at site.

A simplified process flow is provided overleaf.



ANNEX 1: EMS Procedures

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Reference No:	Title	Purpose
GED-E01	Waste Pre-Acceptance	This procedure defines the upstream screening, checking and pre-acceptance of all incoming waste prior to its arrival on site.
GED-E02	Waste Acceptance	This procedure outlines the onsite controls and considerations that need to be applied when waste materials arrive on site for processing.
GED-E03	Waste Rejection	This procedure outlines the waste rejection process for all non-conforming wastes that cannot be processed on site. Acceptance of non-conforming wastes will be a direct breach of the permitted conditions of the sites Environmental Permit.
GED-E04	Off Site Waste Transfers	This procedure provides the necessary information to enable the assessment and off site transfer of non-conforming or untreatable waste streams.
GED-E05	Waste Reception and Storage	This procedure outlines the waste reception, storage processes for all incoming waste.
GED-E06	Environmental Records	This procedure defines the necessary Environmental Permit and Waste Records that are required to be managed by the site to ensure compliance.
GED-E07	Environmental Management and Monitoring Programme	This procedure provides an overview of all of the necessary environmental monitoring, management procedures and controls to ensure compliance with the Permit.
GED-E08	Infrastructure Management and Monitoring Programme	This procedure provides an outline of the inspection and cleaning requirements for the site.
GED-E09	Accident Management Plan	This plan refers to the site's accident management requirements.
GED-E10	Odour Management Plan	This plan refers to the sites odour management measures.