

Site Details

Permit Holder: FM Conway Ltd

Duty Holder: Katie Lynas, Northington Depot, Main Road, Northington SO24 9TZ

1.0 Purpose

To meet the requirements of Schedule 9 of the Environmental Permitting Regulations 2016 (as amended) for a bespoke permit and the Waste Framework Directive 2008.

2.0 Objectives

To achieve the legal requirements of a waste operation the activities will comply with the contents of this Waste Management Plan.

The objectives of this document are:

1. To manage gully waste treatment without endangering human health.
2. To manage gully waste treatment without harming the environment.
3. To comply with the waste hierarchy.
4. To monitor manage and control waste acceptance at site in compliance with this management plan.

3.0 Introduction

FM Conway Ltd (“FMC”) established over 60 years ago provides water and drainage management service which can be employed independently or as part of an integrated infrastructure services programme. The company has a wide range of market exposure operating across a broad range of facilities from the entire highways network, power stations, airports, housing associations, construction sector, the retail and manufacturing sector, rail infrastructure, major water companies, and ports and harbours.

The Site is managed on behalf of Hampshire Highways providing an essential service of maintaining strategic road infrastructure in the region with gully waste services.

The process will accept, store and treat raw gully waste from highways for separation into solids and liquid waste before offsite disposal to a permitted third-party facility.

3.1 Scope of the Management Plan

The management plan has been developed to meet the requirements of;

- Schedule 9 waste operations and materials facilities, Part 1 waste operations, Environmental Permitting regulations 2016 (as amended) and
- Article 4, 13, 18 and 23 of the Waste Framework Directive, 2008.

4.0 Site Operations

The operation already serves as an existing waste depot facility (“Site”) for the management of gully waste vehicles on behalf of Hampshire Highways. The wider Site has space for car parking and approximately 15 commercial vehicles and gully truck, welfare cabins.

The Site is secured by palisade fencing and 24/7 security to prevent the uncontrolled access from third parties.

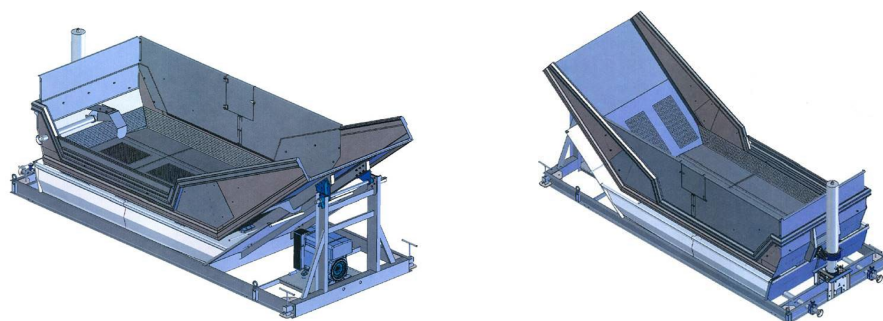
Operations follow a twenty-four hour, seven days a week (24/7) shift pattern split into a day and night shift. The day shift operates between the hours of 06:00hrs and 16:30hrs and the night shift 17:00hrs and 03:00hrs.

Gully waste is generated at remote highway locations and transported back to the Site. On arrival the waste will undergo pre-acceptance checks. On acceptance the gully waste vehicles (“GWV”) will move to the treatment area to offload. If the waste is rejected the GWV is sent to a separate facility which can accept a wider range of EWC waste streams e.g., hazardous waste.

The treatment plant (“high tip”) and tipping area is located on a concrete pad to provide an impermeable layer preventing spillages of waste contaminating the ground. An Aco drain will run along the perimeter of the concrete pad to a sump collecting rainwater from the pad. The overland flow from rainwater will be collected in the sump and then pumped into a 25m³ storage tank (see section 4.1 for details) to avoid cross contamination with wider clean rainwater drainage. The 25m³ storage tank is the same tank which collects the waste liquids from high tip.

The high tip is a gravity separation device with a sieve/screen (sized at 8-10mm) circular holes between an upper receiving skip and lower liquid tank. The high tip has hydraulically operated arm(s) to lift the upper receiving skip. The dimension of the high tip is approx. 7m long by 3m wide and 2.5m highest point

Figure 1: High tip illustration drawing



The GWV will back up to the high tip via a ramp and unload into the primary receiving skip (the upper layer). The primary receiving skip capacity is approx. 8m³. The high tip begins to separate the liquids and solids immediately. The liquid waste drops into a secondary lower tank, approx. 6.5m³ capacity, and the solids remain in the upper receiving skip unable to decant through the sieve/screen.

4.1 Liquid Waste

As more waste is transferred into the treatment plant, to prevent overflowing a high-level marker will be placed within the secondary lower tank which when reached, will suspend any further tipping until the tank is emptied. The liquid waste is pumped into a separate ~25m³ (6000 gallons) double skin water storage tank for storage. Connection points will have drip trays underneath to capture leaks.

A contingency option also exists where the secondary lower tank can be emptied directly via a suction pipe direct from tank to tanker or via a valved pipe connection.

The stored 25m³ liquid waste will be available for transfer via a vacuum tanker and subsequent disposal to a third-party permitted facility.

4.2 Solid Waste

The solid waste which remains at the primary receiving skip is removed by the high tip hydraulically operated arm(s) lifting the top section of the treatment plant, see figure 2 photos. As the high tip extends to maximum height, the collected solid waste is tipped (via gravity) into a receiving bay or skip located adjacent to the high tip waste treatment plant. The skip/bay area is located on the concrete base preventing contamination of the ground. Once the solid waste is tipped, the arm(s) is lowered until the body of the high tip rests above the secondary tank. Solid waste collected in the bay area or skip will be removed from Site to a third party permitted waste facility.

The process will be repeated on a variable basis subject to waste composition and volumes. The operation will be available 24/7.

The below photos provide visual guidance of how the process works and the context of the operation.

Figure 2: Photo of example operations including tipping



Gully waste transfer into High Tip treatment plant.

Source: <https://www.rampionoffshore.com/community/business/case-studies/sweeptech-environmental-services/>

Example tipping operation for solid waste



Source: <https://www.sweeptech.co.uk/service/road-sweeper-gully-waste-recycling/>

4.3 Maintenance

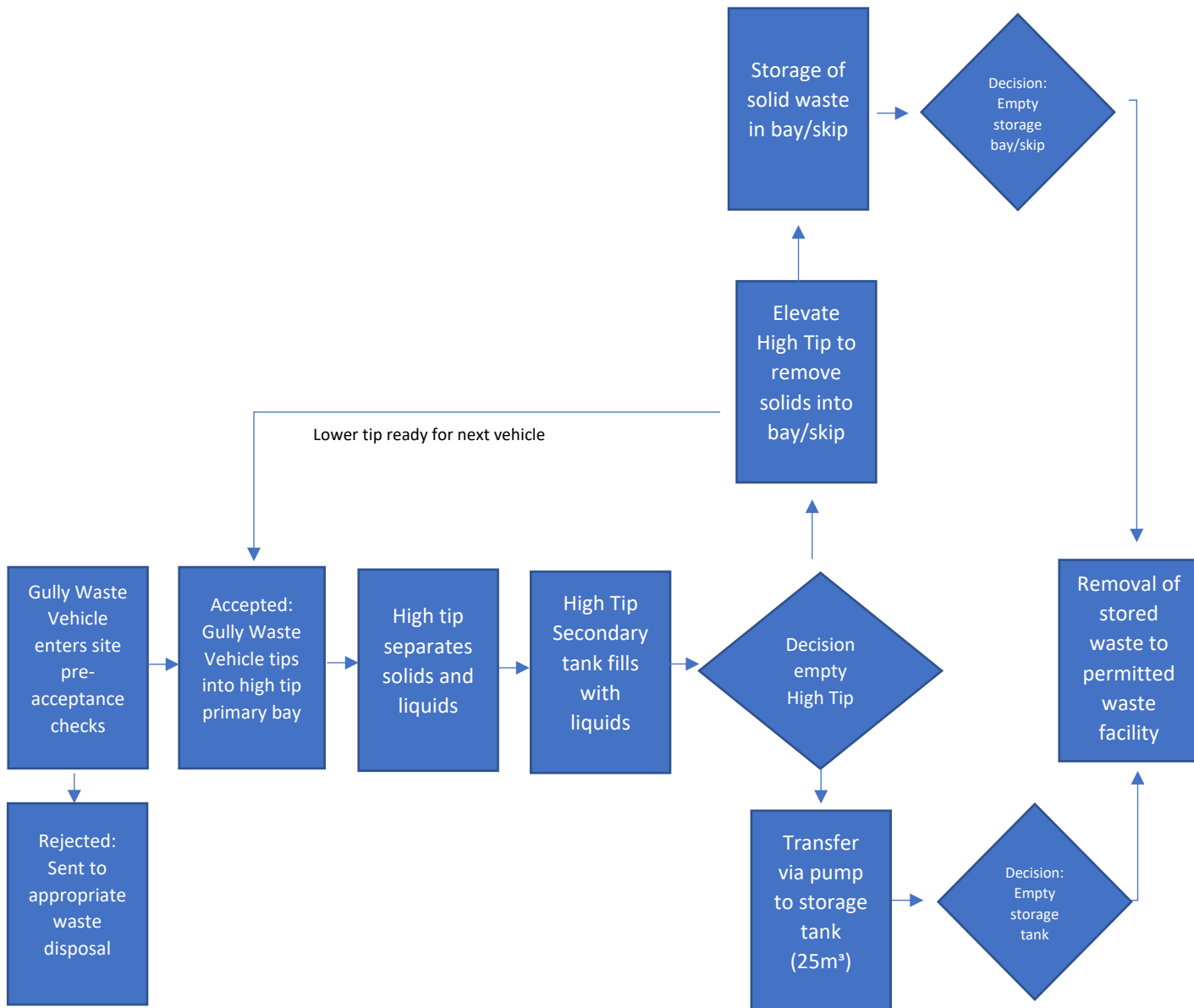
The high tip will be maintained on a weekly basis by removing residual sludge from the tanks preventing reduction in capacity. The sludges will be transferred to an offsite permitted facility for disposal.

General maintenance of the high tip will be carried out in accordance with the manufacturers guidance to prevent nuisance noise being generated and efficiency of the process.

4.4 Process Flow

The following block diagram provides a process flow of transfer of gully waste into treatment plant, storage, and then off-site transfer.

Figure 3: PFD – Waste Treatment Process



4.5 Process Monitoring

The treatment plant is a low technical process. The key process risk which requires monitoring are levels in the tanks and prevention of hazardous substances cross contaminating the treatment plant.

During summer periods dust may be a risk with the solid waste drying out at surface skip/ bay area.

4.5.1 Levels

To prevent overfilling of the secondary lower tank and the storage tank daily visual inspection will be undertaken to monitor liquid levels. A high-level marker will be placed within the secondary lower tank which when reached, will suspend any further tipping until the tank is emptied.

The 25m³ storage tank will have a level alarm to detect and alert site operatives of the volumes in the tank and instruction to empty.

Due to variability of the waste material, it is expected that on average the storage tank will be emptied between 5-6 times per week.

The solid storage skips or bay will also be monitored visually daily to arrange for waste to remove from Site. This is expected to be a weekly collection. The maximum duration for solid waste to remain in the bay/skip area is up to 4 weeks.

4.5.2 Competency

The site will have a competent person(s) (e.g. WAMITAB certification) and the wider site team will operate the high tip treatment plant in accordance with process and procedures.

The Contract Manager is currently participating in the training to act as the Technically Competent Person, but this will be covered by an already qualified TCP until completion of the qualification has been achieved.

Each person who operates the high tip will do so in accordance with this management plan. Each person must be briefed via toolbox talks or equivalent in their key responsibilities, risks and what to do in the event of a spill. Toolbox Talk records are maintained by our Learning and Development Team.

All operators of the High Tip will be trained via the equipment manufacturer and supplier and records of such training will be maintained. This will cover operational requirements and include control of incidents.

Further training will be identified and provided as identified via incidents, innovation, new equipment or via auditing and inspections.

It will be the responsibility of the Management Team in conjunction with the Learning and Development Team to maintain competencies. This will be achieved via the provision of a Competency Profile and a Training Matrix. The matrix will include current status of all competencies as identified within the profile.

4.5.3 Incident Management

The main risks identified from the process Environmental Risk Assessment (NP-003) is overfilling the process and/or spillages combined with heavy rainfall (storm event).

Process overfilling is assessed as unlikely due to tipping of waste being a supervised process. The site team will manage the levels in the high tip tanks and when necessary, transfer waste to the required storage areas for collection. The high tip is located on a concrete pad preventing overflowing of waste harming the environment.

To manage the process during storms or predicted heavy rainfall the Aco drain will be inspected to remove any debris or blockages which could prevent the flow to the sump area.

The storage of solid waste in a by or skip should be removed from the site to the waste facility to keep inventory to levels as low as possible.

The liquid storage tank should be emptied prior to a storm event to enable maximum capacity for gully vehicles tipping post storm from the highways and to ensure maximum storage available at the Site.

In the unlikely event of a spillage on the concrete pad, the waste will be cleared up and controlled, if necessary, with spill kits. Spillages of waste require an immediate response following the assess, stop, control report methodology.

FM Conway Ltd, by the nature of their contract capabilities, have the necessary equipment, knowledge and experience to be able to deal with any incident.

All incidents shall be reported to the Environment Agency in accordance with the permit requirements.

A basic Spill Procedure shall be adopted for minor and major spillages within the yard. A copy of the procedure is attached as Appendix C.

An information board shall be located at the Site Entrance which will provide information and instruction on the Environmental Permit with contact information for enquiries or reporting of complaints or incidents.

4.5.4 Complaints

Any complaints received at the Site in relation to the operations will be immediately investigated by the site management team and where appropriate, remedial action taken. The complaint will be reported immediately using the incident management procedure. This will contain details of the reporter, summary of complaint including date, time. This will require investigation and close out by the environmental advisor. The site will respond to the complainant immediately and follow up within 48 hours.

The risk of environmental complaints is considered to be low due to the remote and rural location of the depot.

4.5.5 Contingency Management

In the unlikely event the high tip is unavailable due to a breakdown, the site will not accept waste and will redirect gully vehicles to alternative disposal or treatment facilities.

5.0 Waste Management

5.1 Description of Waste to be Accepted

Street cleaning residues: 20-03-03

All gully waste emptying's are classified as 20-03-03; street cleaning residues. This is a code for non-hazardous waste although it is accepted that hazardous waste properties may exist depending on the variability of the waste sources.

The Environment Agency position is that dewatering alone does not alter the waste code.

5.2 Waste Acceptance Criteria

The site will operate a risk-based waste pre-acceptance procedure to ensure that the following is understood before treatment of the waste stream.

The procedure will cover the following details:

- Document information including unique reference code and waste transfer note code
 - o The reason is to cross reference waste transfer notes with pre-acceptance checks
- The sources and nature of the waste
 - o the reason is to identify non-compliant or potentially hazardous waste streams or sources which are not from gully waste management and do not comply with the list of wastes accepted under the permit.
- Potential risks associated with the management and treatment of the gully waste
 - o The reason is to assess potential odour or cross contamination. Sources of gully waste which could have been used to clean up post hazardous spills on highways may cause localise impact due to the waste content.
- Waste holder details
 - o To track and establish a recorded history of waste being accepted at the site including vehicles details, times, dates, estimated quantities of accepting the waste to the site.
- Checks
 - o To assess whether the waste stream is compliant with the codes by visual, physical or olfactory check.
- Acceptance decision
 - o To show the waste is acceptable under the list of waste EWC code 20-03-03.
-

The pre-acceptance checks will follow a checklist process flow (Appendix A) and records kept in accordance with the FMC document and record management procedure retention period.

Rejection of waste records will be kept along with acceptance if the waste stream does not conform to the waste description.

5.3 Waste Tracking

Records of waste tracking will provide detailed information to readily identify specific waste delivered to site and then subsequently despatched. The table below will provide minimum daily inventory of waste stock at site to ensure the limits conditioned by the permit are complied.

Table 1: Daily Waste Tracking

Requirement	Complete the parameter	Permitted Limits	Comments
Date/...../.....		
Number of waste deliveries			
Quantity delivered to site (T)			
Number of pre-acceptance checks per day			
Number Accepted			
Number Rejected			
Quantity stored prior to treatment (T)			
Post treatment quantity stored (Solid) (T)			
Post treatment quantity stored (Liquid) (T)			
Quantity Despatched off site (T)			
Quantity of quarantine waste (T)			
Date quarantine waste stored at site			

The table will be retained at site or via an electronic management system for a period of 2 years and will be readily available for inspection.

5.4 Waste Hierarchy

The high tip treatment process is designed to separate gully waste streams for efficient onward disposal or further treatment. By having a centralised treatment facility at the Site, where gully waste vehicles return, can reduce travel time and associated emissions of longer journey times.

It is, at present, unavailable to decouple the waste streams from the process.

5.5 Climate Change

Climate Change is considered to be a low risk in the current environment but further consideration will be given to the potential for: -

- Increased rainfall leading to potential flooding and a requirement to regularly maintain and empty the underground water storage tanks. This is currently protected by a high level warning alarm and is currently checked weekly and emptied as required;
- Wildfires are deemed a low risk although there is small areas of trees that could be effected.

5.6 Working Plan

On receipt of the approved permit, a full Working Plan will be developed to align with the requirements of the permit conditions.

The 'Contents Page' of a typical Working Plan has been included as Appendix D.

5.7 Drainage

The waste facility has an integrated linear drainage system to prevent water seepage from the tipped waste streams from breaching the tipping area. Please refer to Facility Construction Drawing Ref 5101193-MIL-SBR-ZZ-DR-CB-0010 (SITE PLAN LAYOUT).

The Waste Facility is also further protected by linear drainage leading to an interceptor on the outer side of the facility. This was installed at the same time as the Waste Facility Pad.

5.8 Utiities

Electricity – There is currently no electricity supply to the facility. Offices, welfare and the facility are currently supplied by a diesel generator. Consideration is being given to the installation of Temporary Mobile Solar Panels. Electrical supply has been quoted and agreed and awaiting final approval.

Gas – There is currently no gas supply and no intention to install.

Water – There is currently no water supply but initial discussions are ongoing for the installation of a water supply to the yard. A Water Bowser is used to provide water to the site.

5.9 Auditing and Inspections

Daily Checks shall be conducted by the Plant Operator. These will cover: -

- Cleanliness of site;
- Levels of waste;
- Water storage levels;
- Plant condition;

- Drain condition;
- Storage Bay condition;

The Contracts Manager or Competent Person shall conduct a weekly inspection recorded on a digital platform. These will also review the above requirements and confirm that the Daily Checks are being conducted.

6.0 Environmental Risk Management

The Site is set in a rural and agricultural location with the nearest residential receptor approx. 480 (NW). Directly adjacent to the Site is an ancient and semi natural broadleaved woodland, Hassock Copse.

The site has operated next to the Copse for several years and the permitted activity is not expected to change the risks profile of the Site.

6.1 Odour

The specific waste stream is not deemed a high risk of odour. Olfactory pre acceptance test will be undertaken before allowing the waste stream to be tipped into the high tip treatment plant. The pre-acceptance check can reject loads based on olfactory test and the potential for non-compliant waste stream.

Site operatives will be made aware as part of the briefings to report smells and odour to the site management. Due to the agricultural setting odour may originate from outside sources e.g. muck spreading and chemical spraying. Records of odour should be maintained to correspond with the sources in case of a complaint.

If odour complaints are received, they will be investigated immediately in accordance with the company environmental management system procedure.

6.2 Noise

The Site has operated for 24/7 for several years and the proposed operation of the high tip during night-time hours will increase the risk of potential disturbance.

With the nearest residential receptor over 450m from the Site edge it is assessed unlikely that noise presents a high or medium risk to the operations. The distance is further mitigated with the location of the high tip operation being located to the west side of the Site, increasing the distance to the residential receptor to 550m.

Bangs and clangs will be reduced by preventing metal on metal impacts at night and site operatives trained in observing noise levels being kept to low levels.

Pumps and generator engines will be insulated to reduce noise levels.

6.3 Air Quality/ Dust Management

Due to the remote nature of the Site and the location, the nearest air quality station is located at Chilbolton Observatory. Details of the baseline air quality are provided in the site condition report.

During the summer months dust from the storage of solid waste will be dampened down to prevent wind whipping.

Dust from the concrete surface will be watered down during prolonged dry periods or brushed to further minimise the impact to the local surrounding area.

A diesel generator will be used to provide power to the pumps to transfer fluid. Emissions from the generator have been assessed as low/ negligible.

6.4 Hydrogeological and Hydrology

The location of the Site rests above superficial deposits as a secondary undifferentiated aquifer of low to no productivity. Below the superficial deposits is a principal bedrock aquifer of high intergranular and/or fracture permeability, usually providing a high level of water storage and may support water supply/river base flow on a strategic scale.

The Site is located in a highly vulnerable groundwater area to pollution. Therefore, spills and leaks must be prevented from entering the groundwater body.

The high tip plant is located on a concrete pad with drip trays, spill kits and a Aco drain to prevent the transboundary movement of waste. The risk is deemed low due to the inherent properties of the mitigation measures in place which could impact the groundwater.

Furthermore, the Site has a natural protection afford by the superficial deposits forming a layer of clay above the Principal bedrock aquifer.

There is no surface water feature within 500m of the site. Therefore, the risk to surface water is not credible or assessed.

6.5 Soil

The high tip plant is located on a concrete pad with drip trays, spill kits available underneath key connection points. An Aco drain runs along the perimeter of the concrete pad to prevent the overland flow of waste to contaminate the localised soil. The risk is deemed low due to the inherent properties of the mitigation measures in place.

7.0 Record Management

Record of the following will be kept in accordance with the document and record management procedure for the following duration:

- Pre-acceptance checks – 12 months
- Waste Transfer Notes – 2 years
- Waste Tracking sheet – 2 years
- Complaints – 2 years
- Environmental monitoring data – 12 months

Appendix A – Example Waste Acceptance Checklist



QUALITY & ENVIRONMENTAL MANUAL - DOCUMENTS

D01

WASTE ACCEPTANCE CRITERIA FORM

This document is to be completed for all wastes disposed of at the Gully Waste Recycling Facility at the address detailed below and as permitted under the Pollution Prevention and Control (England and Wales) Regulations 2000 and as allowed by Permit Number BX2213IV.

Section 1 – To Be Completed by Customer/Internal Delivery Operator/Driver

Name (Print):		Date:	
Customer Name:		Vehicle Registration:	
Description of Waste:		EWC Code	
Type of Waste Containment:		The Waste was Collected From:	

Acknowledgement – I hereby declare that to the best of my knowledge that the waste being disposed of is as described above and in particular does not contain Petrol, Solvents, any quantities of unknown chemicals or excessive engine/hydraulic/transmission/diesel oil in quantities of more than 25ltrs. Where previously containing the above, the vehicle has been sufficiently 'Washed Out' to remove any contaminants.

Signature:		Date:	
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Section 2 – Weighbridge Details – Weighbridge Tickets can only be provided once this WAC Form has been returned to the Weighbridge Operator.

Laden Weight		Unladen Weight:	
Weigh Bridge Operator Name (Print):		Weighbridge Ticket Number:	

Section 3 – Inspection and Acceptance Details –

Visual Inspection Acceptable:	Yes <input type="checkbox"/> No <input type="checkbox"/>	Odour Check Acceptable:	Yes <input type="checkbox"/> No <input type="checkbox"/>
PH Check	PH Level .	EWC Code Acceptable:	Yes <input type="checkbox"/> No <input type="checkbox"/>
Waste Transfer Note Reference:		Consignment Note Reference:	
FMC Cost Code or External Job Code:		FMC Operator Name (Print):	


Acknowledgement – I hereby declare that to the best of my knowledge that the waste being disposed of is as described above and acceptable for disposal at this facility.


Signature:		Date:	
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Acceptable EWC Codes

Appendix B – Site Plan



Generator 

1000Ltr Fuel Bowser 

Appendix C – Spill Response Procedure



INTEGRATED MANAGEMENT SYSTEM - DOCUMENTS

C55

SPILL RESPONSE

WHAT TO DO IN THE EVENT OF A SPILLAGE OF ANY SUBSTANCES ON SITE

STOP – CONTAIN -NOTIFY

STOP Work immediately and prevent any further potential pollution or hazard by dealing with the cause.

Right an oil drum



Close Valves.



Plant Shutdown



Eliminate Sources of Ignition



CONTAIN The spillage and **DO NOT** allow it to enter: -

~~Watercourses~~



~~Drains~~



~~Soil/Land~~



Emergency Spill Kit



Example Methods of Containment
 Absorbent Granules



Sand



Always ensure you wear the correct Personal Protective Equipment

NOTIFY The relevant personnel including immediate Supervisor, Manager and the SHEQ Department.

Provide them with relevant information including: -

- How much quantity of the material/substance is involved
- Whether material has entered a watercourse, etc.
- The specific material/substance involved.
- The exact location of the spillage.
- The cause of the incident.
- Major or Minor

Spillage Type (Major) – Cannot be controlled, pollution has entered, or could enter a drain or watercourse.

Spillage Type (Minor) – Can be controlled, pollution has not entered and cannot enter a drain or watercourse.

Contact Details – F M Conway Ltd Head Office **01732 600700**





INTEGRATED MANAGEMENT SYSTEM - DOCUMENTS

C55

SPILL RESPONSE

CLEAN UP OPERATIONS

Once the spillage has been contained and the threat to the environment minimised, clean up operations should commence.

ENSURE THAT YOU HAVE THE CORRECT EQUIPMENT FOR THE CLEAN UP OPERATIONS



Wear the relevant **Personal Protective Equipment (PPE)** as determined by the Risk Assessments and COSHH Assessments and available within the Health and Safety Site Packs.

Relevant PPE may include a specific type of glove, safety glasses or goggles, dust masks or respirators. Standard site PPE such as Safety Boots, Hi-Visibility Vests and Hard Hats where applicable should also be worn.

Spill Kit equipment used during the clean up operations will become contaminated with the polluting substance. These items now become waste.



THIS WASTE MAY BE DEEMED AS HAZARDOUS

- Double bag the waste and secure on a hard surface away from drains or watercourses.
 - Provide, if required, a secondary containment.
 - Identify the waste and determine the appropriate EWC Code.
- Determine a suitable and authorised disposal route. The Dartford Drainage Treatment Plant can take some waste streams including hazardous. Contact the DTP to determine suitability.
- External disposal routes must be authorised by the Safety, Health, Environmental and Quality Department.
- Transfer the waste under a Waste Transfer Note. Ensure the Waste Transfer Note is adequately completed and acknowledged.
- If categorised as Hazardous, then a Hazardous Waste Consignment Note may be required.

GUIDANCE	Pollutants				
	Concrete - Cement	Paints	Oils	Silt	Detergents
Spill On Ground					
Sand	✓	✓	✓	✗	✓
Straw Bales	✗	✗	✓	✓	✗
Absorbent Granules	✗	✗	✓	✗	✗
Geotextile Fence	✓	✗	✗	✓	✗
Drip Trays	✗	✓	✓	✗	✗
Pads/Rolls	✗	✗	✓	✗	✗
Drain Seal	✓	✓	✓	✓	✓
Earth Bunds	✓	✓	✓	✓	✓
Spill On Water					
Straw Bales	✗	✗	✓	✓	✗
Pads/Rolls	✗	✗	✓	✗	✗
Booms	✗	✗	✓	✗	✗
Stop Further Spill, Contain and Inform Regulator Immediately	✓	✓	✓	✓	✓



Appendix D – Contents Page from a Typical Working Plan



WP 01 WORKING PLAN – DARTFORD PERMITTED FACILITY

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