

HEALTH AND SAFETY– OPERATING PROCEDURE

Frog Island Bio Mrf

Clearing compactor spillage

This document is deemed to be an official Training Record and all affected personnel must sign to acknowledge induction on its contents. It is the responsibility of the “Nominated Manager” to ensure that the induction is undertaken.

PURPOSE

To ensure the correct and safe operation and maintenance of all mobile plant.

To minimise one of the highest risks posed on most waste management sites and one of the, potentially, most serious types of accident likely to occur – a vehicle/human collision and to comply with the Workplace (Health Safety and Welfare) Regulations with respect to traffic management.

RESPONSIBILITY

The Nominated Manager is responsible for ensuring that the provisions of this operating procedure are carried out.

TRAINING

Only Shanks approved drivers or CITB qualified operatives may operate any items of mobile plant.

PROCEDURE

- When the Compactor box has been removed and a spillage occurs doorman is to use a broom to sweep the debris in to the compactor box area.
- The driver of the loadall will then make sure the area is clear of all operatives then using the toe plate of the bucket, push the waste all together against the bottom of the compactor box.
- The Loadall driver will then using the bucket pick up the spillage and put it in the bin allocated.
- All operatives are to be more than 5 meters away from the operation at all times.
- If an operative comes closer than this all operations are to stop immediately until all operatives are removed from the area.

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THE FOLLOWING INDIVIDUALS HAVE BEEN INDUCTED ON AND UNDERSTAND THE CONTENTS OF THIS DOCUMENT

PROCEDURE; Clearing compactor spillage

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LIQUID SPILLAGE

INCIDENT CONTROLLER'S ACTIONS

In the event of site staff discovering a leak or spill, site management shall be informed and the scale of the spill determined. If the spill is minor (less than 5 L) it shall be promptly cleaned and the contaminated material correctly disposed of at a suitably licensed facility. If the spill is medium (5-20 L) or major (>20 L) the emergency procedures detailed below shall be followed:

- ✓ Site management or a nominated representative shall isolate the affected area
- ✓ The source of the spill shall be identified and, if possible, stopped (note – an assessment should be made as to whether the spill was of a volatile liquid which may produce vapour – if this is the case the above actions as for a vapour release should also be taken)
- ✓ The spill shall be contained using absorbent material to prevent further spreading. Every effort should be made to prevent pollution from entering the foul and surface water drainage system
- ✓ If required any drains or similar should be blocked using drain covers and/or the spill contained using a mobile bund or similar
- ✓ If a spill has entered a drainage system the site drainage plan must be consulted to establish where the spill will travel to. SHE Department should be contacted to advise on any actions which may be required dependant on which drainage system a spill may have entered and where it is likely to travel to
- ✓ Once the spill is contained the affected area shall be coned or taped off where necessary by site management or a nominated representative
- ✓ The affected area shall be cleaned and the contaminated material disposed at a suitably licensed facility
- ✓ The Environment Agency shall be informed of the incident as soon as it is practical to do so
- ✓ The area shall not be reopened until it has been inspected and approved by site management or a nominated representative
- ✓ All leaks and spills and the remedial measures taken shall be entered into the site's Environmental Log

Spillage awareness

Environmental protection



Eco-toxic

**Environmental
presentation**

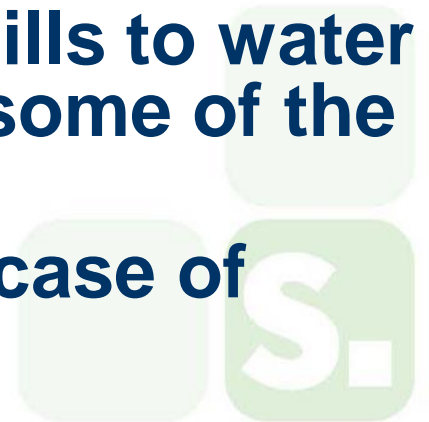
Supporting documents
Shanks Drainage Standard (SHE650STN)
Oil Storage Company Standard (SHE750STN)
Site Emergency Plan

Introduction

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All of Shanks sites have the potential to cause significant environmental harm through spills, however the vast majority are avoidable:

- Careful planning of facilities and operational procedures can reduce the risk of a spillage occurring
- Following planned procedures can prevent a spill turning into a pollution incident
- Despite the number of incidents of spills to water decreasing year on year, they remain some of the most damaging
- Damage can be long term and, in the case of groundwater, can persist for decades



Introduction

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Pollution prevention is always preferred to remediation once the damage is done...

- **Environmental damage:** Such as pollution
- **Time:** Such as required for clean-up
- **Cost:** Such as the cost of clean-up
- **Risk of prosecution:** Obvious and costly
- **Negative publicity:** We are probably unpopular enough already

Because of all the above, sites must have contingency plans in place should control measures fail resulting in a spill...



Legal framework

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The Environment Agency (EA) and SEPA are responsible for the *protection of controlled waters from pollution*:

- It is an offence to pollute such waters, either deliberately or by accident
- Controlled waters include all watercourses, canals and groundwater

Plus, your sewage undertaker will not appreciate you 'knocking-out' their sewage treatment plant:

- Civil action can cost if a plant is knocked-out

Risk assessment

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Environmental Risk Assessment is based upon the **Source- Pathway- Receptor** model

- For effective pollution prevention it is important to identify all **Sources**, **Pathways** and **Receptors** related to a site
- Once identified, mitigation measures can be implemented to avoid pollutant linkages
- Common pollutant pathways include
 - Site's surface water drainage system
 - Direct run-off into watercourses or groundwater
 - Foul drainage system with undeclared pollutants passing through a Sewage Treatment Works
 - Porous ground



Site drainage

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The majority of Shanks sites will contain two main types of drainage: Surface water and foul water

1. Surface Water (typically two types):

- **Uncontaminated** rainwater from roofs, yards and roads to be discharged to a watercourse or soakaway
- **Potentially contaminated** water from bale storage yards and vehicle parking areas may require pre-treatment before discharge e.g. interceptor or gravity separator

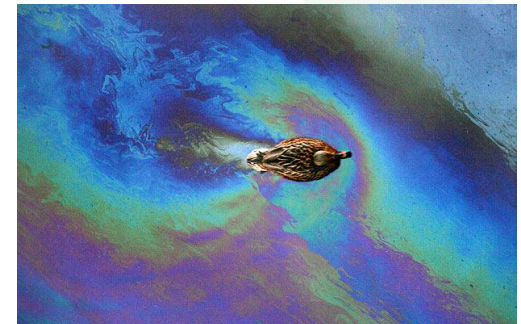
Site drainage

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2. Foul water (again typically two types):

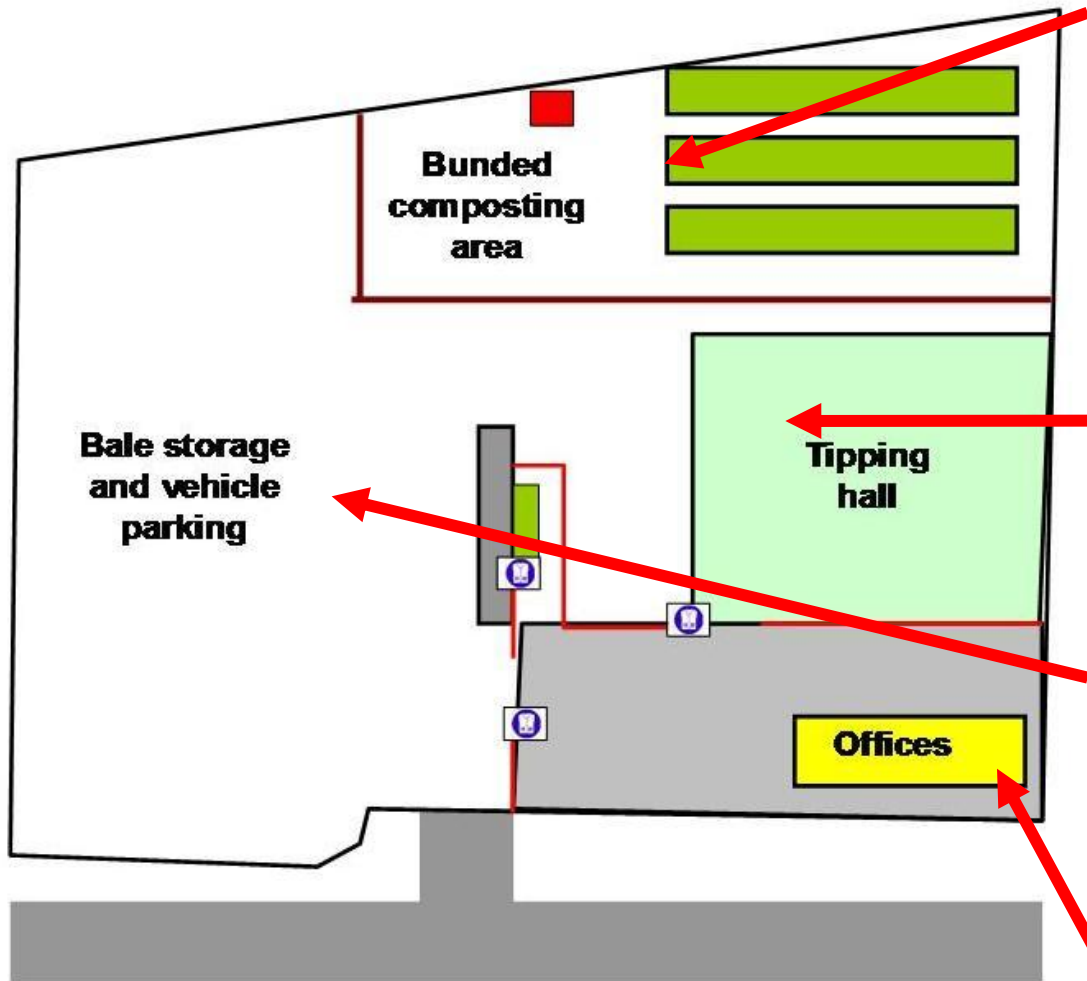
- **Contaminated water** from waste processing areas and sewage, discharged to sewer potentially via an interceptor
- **Effluent** - leachate emitted from industrial processes such as a BIOMRF or landfill. Effluent can be directed through a treatment system (e.g. reed beds at landfill), stored in a tank/sump prior to being collected & disposed at a specialist treatment plant

Wrongly directed drainage can cause severe pollution problems



Site drainage e.g.

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Contaminated water – from processing: To sump, tanker off site

Surface water – uncontaminated: rain water from *roof* direct to stream

Potentially contaminated - bale and vehicle storage: Interceptor and discharge

Effluent - domestic sewage: To sewer

Drainage standard

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Shanks has implemented a company wide drainage standard detailing good practice for drainage systems on site:

- This aims to ensure that the discharge of all water from site meets relevant legislative standards, as well as promoting good practice, to prevent environmental damage
- The standard requires:
 - Accurate up to date drainage plans to be easily accessible (in case of spillage)
 - Risk assessments to include spillage incidents
 - Regular drain inspections should be undertaken
 - Suitably registered contractors should regularly clean/empty drains, gullies and interceptors

Drainage standard

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- **The standard requires (continued):**
 - Drain covers and grids should be colour coded red and blue to differentiate between fresh and foul water, respectively
 - Potential pollutants such as fuel, oils and chemicals should be stored and handled in areas where potential spills will be contained
 - Storage of pollutants undertaken in accordance with the law, such as the oil storage regulations
 - Tanks should be clearly labelled with their contents and storage capacity
 - A pollution incident response procedure for dealing with spillages should be in place

Further information can be found within the drainage standard available on the Intranet



Oil storage

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All oil storage is covered by the oil storage regulations, regardless of volume

- In accordance with the regulations, any oil storage **over 200 litres** must be in a suitable tank and include secondary containment (bund etc)
- Fixed tanks should be housed within a bund or drip tray with a capacity of **110%** of the product
- Drip trays used for storing drums should be able to hold **25%** of the total volume of product
- As with all containment systems they are only effective when properly maintained
- Rain water will reduce any secondary containment capacity
- Further details can be found in the oil storage Company Standard

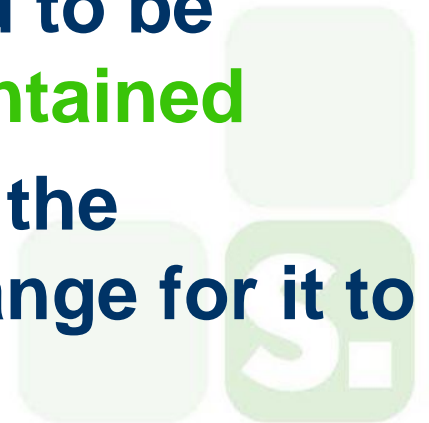


Interceptors

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Interceptors are in place as a last resort and as such should only be utilised when all other containment methods fail:

- Interceptors can be fitted to both foul and surface water drainage systems
- They are designed to separate any fugitive oil from water to allow for its safe disposal
- To remain effective, interceptors need to be correctly designed, installed AND maintained
- Experienced personnel should check the interceptor on a regular basis and arrange for it to be emptied when necessary



Incident response

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A planned response to spillages should be in site emergency plans. The procedure will vary between sites, but in general:

- Incident controller should be informed as soon as a spill is discovered
- If the spill has the potential to enter drains / controlled waters actions should be taken to divert the flow of the liquid utilising any spillage control equipment available
- Absorbent materials should be used to mop up the spill
- Contact SHE dept for advice
- Permit/licence will state when EA/SEPA should be informed



Spill kits

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Sites with the potential to spill polluting liquids should have spill kits in place:

- Spill kits should be properly stocked and placed in suitable locations near to potential spills
- Although specialised spill kits are preferred, in the event of a spillage suitable waste materials or sand can be used if spill kits are unavailable
- After use spill kits must be disposed of in the correct manner, i.e. bagged and contained within a sealed drum. **Used materials to be treated as hazardous waste until proved otherwise**



Summary

Prevention is far better than cure:

- Shanks drainage standard should be implemented at all sites
- Containment and drainage systems (bunds, interceptors, gullies, drains etc) should be maintained in order to remain fully operational

Plus, it is essential that sites are prepared in the event of a spillage:

- Emergency plan should include spills, be clear, accurate, up to date and contain contact details
- Spill kits should be fully stocked and located in high risk areas



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