

The Management of Oily Waste

Introduction

- Background
- Waste management considerations
 - Minimisation, storage, treatment, disposal
- The Contingency Plan
- Legal aspects
 - Relevant regulations
 - Licensing requirements
- Conclusions

Background

- Significant risk of marine oil pollution in UK waters
- Marine oil pollution and wastes produced during clean-up can lead to significant impact on environment and human health -
 - in the marine environment
 - on shoreline
 - in-land
- Significant quantities of waste are produced
- Detailed contingency planning will reduce impact on the environment and reduce costs of clean-up
- Waste management must be considered in detail at contingency planning stage

Waste Management

- Waste must be managed in accordance with the waste hierarchy
- Variety of waste streams-
 - PPE, oiled seaweed, sand, oiled sorbent materials, oily waters, recovered oil etc
- Waste must be managed to minimise risk to environment and human health
- Oily waste handling is usually a 2 or 3 stage operation -
 - temporary storage site (near shore?)
 - intermediate storage site (central site?)
 - final disposal or recovery site (e.g. landfill/incineration)



Waste Minimisation

- Source segregation
 - separate liquid and solid wastes
 - separate wastes with high and low levels of contaminants
 - recover oil from sand/pebbles/water
- Minimise rainwater infiltration
- Reuse PPE where possible (e.g. rubber boots)
- Use sorbents sparingly and effectively
- Prevent secondary contamination
- Regularly check all pumps and hoses
- Consider waste minimisation at contingency planning stage!

Waste Storage

- Locate above high water, spring tide and storm wave limits
- Locate on firm ground
- Consider access requirements
- Appropriate containment
 - Compatible with type of waste
 - Prevent rainwater ingress
 - Secondary containment
 - Skips, collapsible tanks, lagoons
- Prevent run-off from storage areas
- Labelling of storage areas- type/source of waste
- Security arrangements
- Licensing requirements
- Consider storage requirements and potential locations at contingency planning stage!

Waste Treatment and Disposal

- Similar considerations as storage-
 - Minimise harm to environment and human health
- Treatment or disposal method will depend on waste types and quantities
 - Most best practicable environmental option should be chosen
- Pre-treatment to reduce quantity of waste for disposal
- Transfer between sites must be in suitable vehicles (sealed trucks, tankers)
- Correct paperwork required for transport
- Licensing requirements
- Consider treatment and disposal requirements at contingency planning stage!

Key Waste Aspects of Contingency Plan

- Consider storage, transfer and potential final disposal options
- Detail practical measures to minimise or reduce oily waste
- Identify appropriate locations for temporary storage of waste based on risk assessments
- Identify mitigation measures required to prevent secondary pollution from waste storage or treatment
- Prepare design standards and method statements for construction of storage lagoons
- Identify legal requirements for storage, treatment, disposal and movement of waste

Legal Aspects of Waste Management

- **EU Directives:**
 - Waste Framework Directive
 - Hazardous Waste Directive
 - Landfill Directive
 - IPPC Directive
- **Transposed into Scottish and UK Legislation by various Acts and Regulations-** Environmental Protection Act 1990, Waste Management Licensing Regulations 1994, Special Waste Regulations 1996 etc



The Definition of Waste

- **The definition of waste is given in the Waste Framework Directive as:**
 - “any substance or object in the categories set out in Annex I which the holder discards or intends or is required to discard”
- **Legislation applies from place of production – e.g. where landed on the shore. (land above the low water mark of ordinary spring tides)**

Overview of Legal Requirements

- A license is required for keeping, treating, deposit and disposal of waste
- It is an offence to cause pollution of the environment or harm to human health by keeping, treating, or disposing of waste
- Exemptions from licensing for storage of waste
- Everyone dealing with waste has a 'Duty of Care'
- Additional controls for 'Special Waste'
- Statutory defenses exist where *all reasonable precautions* were taken

Waste Management Licensing

- Environmental Protection Act (section 33)
- Storage treatment and disposal of oily waste requires a license
- Two types of license- site license and mobile license
- COTC may be required (>5 te capacity)
- Associated fees and charges
- 4 month determination period for licenses
- Statutory defence for breach of section 33 where-
 - actions were taken in an emergency to avoid danger to the public and
 - all possible steps taken to minimise pollution of the environment and harm to human health and
 - particulars of actions furnished to SEPA as soon as reasonably practicable after they were done

Waste Management Exemptions

- Waste Management Licensing Regulations 1994
- Certain activities listed in Schedule 3 are exempt from licensing requirements
- Paragraph 41 exemption for storage of waste at place of production
 - can store for up to a year
 - 80m³ max
 - must be secure storage
- Secure storage means covered, leak-proof containers or skips
- May have more than one exempt site along shoreline
- Direct onward shipment of waste possible from shore?
- Must meet relevant objectives
 - Not cause pollution of the environment or form a risk to human health

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PPC Permit

- PPC (Scotland) Regulations 2000
- Permit instead of licence required for certain waste activities
 - >10 t/day hazardous waste (for disposal)
 - >50 t/day non-hazardous waste
- May require higher technical standards than WML
- If oil in waste >0.1% v/v, it is hazardous waste
- Storage = Disposal when the waste will eventually be disposed of after storage or treatment
- SEPA given 4 months to determine PPC Permit
- Unlike WML no statutory defence under PPC Regulations!

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Special Waste Regulations

- Special Waste Regulations 1996
- >0.1% oil (Class I and II carcinogens)
- Consignment (SWC) note needed for movements of special waste
- Costs associated with SWC notes (£15)
- 72 hours pre notification of movement of first load
- Statutory defence for failure to comply with requirements-
 - In case of emergency or grave danger and
 - All steps taken to minimise threat to public or environment and
 - Ensure that provisions in question complied with as soon as possible after event
- Only initial movement to temporary storage facility
SWC note **not** needed

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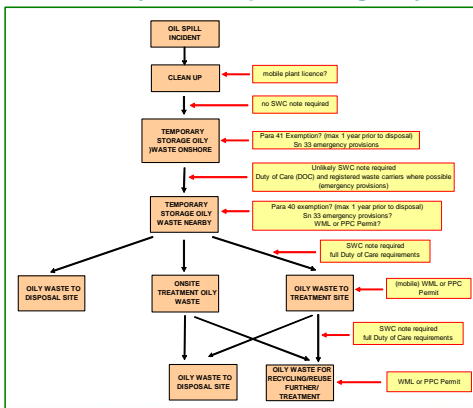
Duty of Care

- Environmental Protection Act 1990
- Waste must be properly controlled when kept or transported (no pollution / windblow)
- Waste must be accompanied by paperwork
- Vehicles must be suitable for purpose Use Registered Carriers only (SEPA has (online) lists)
- Statutory defence for emergency movements where notice given as soon as possible afterwards
 - Use of non-registered waste carriers if unavoidable in emergencies

Landfill Regulations

- Landfill (Scotland) Regulations 2003
- Landfills include:
 - Waste storage site >1 year prior to final disposal
 - Waste storage sites >3 years prior to recovery
- Establishes strict technical requirements for landfills
- Liquid wastes are banned
- Only one hazardous waste site in Scotland (nr Falkirk)
- Pre-treatment requirement prior to landfilling
 - definable process (e.g. physical / chemical separation);
 - must change characteristics of waste
 - must reduce mass or hazardous nature or facilitate handling
- No emergency provisions in landfill regulations

Summary of Oil Spill Emergency



Conclusions

- Detailed contingency planning is key to preventing further pollution of environment, harm to human health and may reduce costs of clean up
- Include waste management considerations as part of contingency plan
- Identify potential storage locations and include design considerations
- Identify measures to minimise secondary pollution from storage and treatment
- Segregation and Waste Hierarchy!
- Be aware of many legal requirements and not all regulations have statutory defences
- Statutory defences exist, but take all reasonable precautions to avoid committing an offence and ensure no further pollution of environment or harm to human health
- Consult SEPA at contingency planning stage and early on in emergency. We are there to help.
