

SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE
NOTE STOp 1/2009

**GUIDANCE FOR CONTINGENCY PLANNING AND
OPERATION OF THE TECHNICAL TEAM WASTE
MANAGEMENT SUB GROUP WITHIN A NATIONAL
CONTINGENCY PLAN SHORELINE RESPONSE
CENTRE IN ENGLAND AND WALES**

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To be read in conjunction with MCA documents:

STOp 2/2009 SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE
NOTE - Maritime Pollution Response in the UK - The Environment Group

STOp 3/2009 SCIENTIFIC, TECHNICAL AND OPERATIONAL ADVICE
NOTE THE ESTABLISHMENT, MANAGEMENT STRUCTURE, ROLES AND RESPONSIBILITIES OF A SHORELINE RESPONSE CENTRE DURING A MARITIME POLLUTION INCIDENT IN THE UNITED KINGDOM

RP 549: DEVELOPMENT OF A PROTOCOL FOR THE TREATMENT AND DISPOSAL OF OILY WASTE IN THE UK

And the:

NATIONAL CONTINGENCY PLAN FOR MARINE POLLUTION FROM SHIPPING AND OFFSHORE INSTALLATIONS

All available on the MCA website

1. Introduction

This guidance has been prepared in relation to oily waste, but the principles should also be applied to the management of hazardous and noxious substances (HNS) and large quantities of non-polluting waste (e.g. timber/plastics) resulting from maritime incidents.

The clean-up activity following major maritime pollution incidents may produce large amounts of oily or HNS waste.

This note provides information on the operation of the waste management sub group to support STOp notice 3/2009. This guidance has been produced jointly by the Environment Agency (EA), the Emergency Planning Society (EPS) and the Maritime and Coastguard Agency (MCA.)

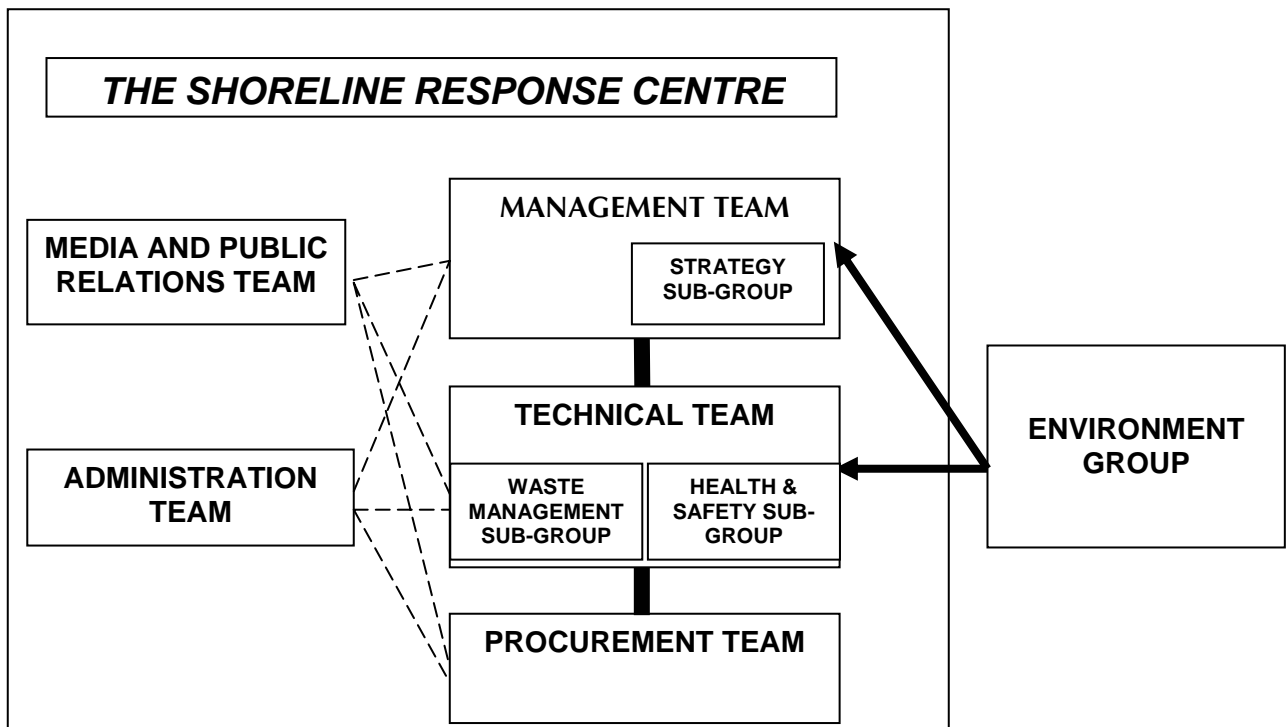


Fig. 1 The Shoreline Response Centre structure – where the Waste Management Sub-group fits in

The waste management sub group is chaired by a Local Authority representative and sits within the Technical team structure. It's role is to manage and direct waste operations in close consultation with the regulator. This guide does not deal with health and safety issues. Health and Safety is dealt with by the Health and Safety Sub Group of the Technical Team.

The group has the following key tasks as identified in the National Contingency Plan:

- Development of a waste disposal strategy.

- Advising on waste minimisation and segregation.
- Preparing a plan for temporary storage of collected oily waste both from shoreline and at sea.
- Provision of technical advice on the location and format of temporary storage and treatment areas and disposal options for the oily waste.
- Ensure that all waste regulations are followed by the technical team and fully understood by the forward control centres and beachmasters.
- Ensuring oily waste is transported by registered carriers and in compliance with the Hazardous Waste Regulations.
- Management of the final disposal options and identification of sites for oily waste.

2. Tasks identified in the National Contingency Plan

2.1 Waste disposal strategy

The agreed waste disposal strategy must complement the clean up strategy. Waste minimisation, recycling, recovery and treatment to reduce the hazardous nature of the waste will be the principles that inform the development of the strategy. It is paramount that the disposal strategy is integrated with the response overall and is not developed in isolation... The strategy will include bulk waste removal and decontamination.

2.2 Waste minimisation and segregation

For each shoreline clean-up sector the technical team will develop a clean up strategy. These strategies will require input from the Environment Group and Waste Management sub group. No instruction should be issued to the beachmaster until the contributions for both groups are received and documented.

The waste management sub group should be represented when Beachmaster and SCAT teams are briefed to emphasise the importance of adhering to agreed clean-up plans.

The removal of beach debris before any contamination should be discussed with the Environment Group.

Advice must be given to the technical team to ensure that waste production is minimised. For each shoreline sector consideration should be given to the potential for in-situ treatment at the shoreline, beachhead or nearby, to minimise the production or storage of waste. Potential treatments and facilities should be identified in the onshore contingency plans, and could typically include decanting, screening or washing. For compliance with the EU Landfill Directive (1999/31/EC) the sub group will need to ensure that the treatment carried out will be a physical, biological or thermal process. The process must change the characteristics of the waste to reduce its mass, or reduce its hazardous nature or facilitate its handling, or enhance its recovery. For oily wastes to be landfilled into hazardous waste landfills, this treatment must reduce the total organic content to less than 6%.

Best endeavours should be employed to allow segregation to facilitate subsequent selection of the best practicable environmental option for each waste type. Storage while an assessment is made of waste is particularly important where complex containerised cargoes are involved. The bunded areas as set up during the NAPOLI operations at Portland Port in 2007 is an example of good practice.

2.3 Preparing a plan for temporary storage of collected oily waste both from shoreline and at sea

Best practice requires that waste storage facilities be identified and procured or constructed before clean up operations get underway. These should be identified in contingency plans along with a description of likely waste types produced from the shoreline type for a range of spill scenarios. Wastes should be segregated by physical state: liquid or solid, and also as type (e.g. organic, plastic/combustible or mineral.)

An incident severe enough to require the activation of the National Contingency Plan may require large-scale, remedial actions. These actions may produce large amounts of contaminated waste. The existing, permitted infrastructure of the waste management industry may not have the resources to accept waste generated during the incident; or to recover, treat or dispose of the waste at permitted facilities.

Temporary sites may be required to store the waste temporarily, pending a decision on the best way to process each type of waste (including identifying how to recover or dispose of the waste at properly permitted facilities); recover or treat some of the contaminated waste.

“Temporary sites” refers to sites used for the temporary storage, recovery and treatment of contaminated waste from major marine pollution incidents, required either near or away from the site of the clean-up operation. This note applies only to temporary sites. It does not apply to the final recovery or disposal of contaminated waste.

The diverse nature of incidents and coastal zones and infrastructure means that how long temporary sites may be required for or their proximity to the shore cannot be prescribed. However, local authority contingency plans developed with other stakeholders can identify constraints, potential sites and transport routes. The plan should stipulate that collected oily waste is dealt with quickly and the site returned to its original state as soon as possible thereafter. Emergency plans should identify areas close to the shoreline needed to support clean up, potential in situ treatments, and initial bulking up of waste streams for transport to more secure and strategically placed areas. It is likely for a large scale incident that waste management will cross administrative boundaries and collaboration at the emergency planning stage is essential. The regulators’ approval should be sought in planning potential sites.

An estimate of the anticipated quantities and types of wastes to be produced in relation to the capacity of the waste industry to deal with the waste generated should be calculated.

Equipment provision to beachmasters should include facilities to store all anticipated waste types matched to anticipated clean up rates. If the logistics of collection and onward clearance fail, the waste management strategy fails. Waste quantity and type estimates must be kept under constant review in consultation with beachmasters, and staff from the technical and procurement teams. It is recommended the collection of waste arisings data is a specific task allocated to a designated waste sub group member.

2.4 Provision of technical advice on the location and format of temporary storage and treatment areas and disposal options for the oily waste

Response to a Tier 3 incident will likely require large scale storage facilities. It would be unusual for a waste management option to be available for direct beach head transfer of waste.

It will be necessary to seek early identification of waste industry options available including:

- Oil/water separation
- Liquid/solid separation
- Composting/ biological treatment facilities
- Incinerators
- Landfill

It will also be necessary to identify other treatment options available such as washing/ thermal remediation / other mobile plant including a technical brief on logistics, setting up time, loading rates, resource requirements, manpower etc. In liaison with the procurement team, identify costs and loading rates.

A Management Team brief on estimates of wastes to be generated and the infrastructure required to support the waste management strategy will need to be prepared. Significant costs may be involved , it is essential that early notification is given to the Management team. Do not underestimate waste arising and liaise with best available expertise for validation of assumptions.

Waste storage and treatment must be managed by technically competent people. The waste management sub group will advise on the level of competence required depending on the risk associated with the management operation. Some operations may require professionally qualified managers.

Implementing the advice would typically involve:

- Bringing together engineering team to implement design and construction of temporary stores.
- Setting up treatment areas.

- In liaison with the Health and Safety team, and regulator identify and appoint proficient managers.
- Confirming treatment and disposal options.
- Putting a system in place to monitor clean up and storage and inform review.
- Putting a system in place to monitor interim storage construction.
- Putting a waste recording system in place.
- Providing update reports for feedback to beachmasters based on daily monitoring reports.
- Collating feedback from beachmasters on quantities and storage requirements.
- Producing waste management report for following morning Management Team. Revising quantities in storage, quantities treated on site, at treatment centres through waste chain.
- Instigating and maintaining a rigorous record keeping system covering all of the above, and costing of all activities.
- Updating waste sitrep boards.
- Reviewing strategies and actions.

It is for the SRC technical team to decide in liaison with the waste management sub group where these activities are best carried out.

Further guidance can be found in Research Project 549: Development of a Protocol for the Treatment and Disposal of Oily Waste in the UK, available on the MCA website -

http://www.mcga.gov.uk/c4mca/final_report_rp_549_march_2007_task_4-2.pdf

2.5 Waste regulations

The regulation of waste management is complex.

The Environment Agency recognises that when dealing with an incident where there is a likelihood of serious environmental damage the situation should be controlled first. This action does not preclude any subsequent enforcement response. Whether any acts that would normally require permits, carried out in an emergency would result in enforcement action would be considered in the light of their enforcement policy.

There is a defence for actions taken in an emergency under Regulation 40 of the Environmental Permitting (England and Wales) Regulations 2007. The Environment Agency would not normally take enforcement action in case of such an emergency. An emergency only applies if it is proven that the acts were carried out in order to avoid danger to public health and:

- steps are taken to minimise pollution, and
- the EA are notified of the acts as soon as reasonably practicable.

The measures required to protect public health and the extent to which they apply to recovery plans and returning communities to normality will be decided

in conjunction with the relevant health bodies and local authorities comprising the Shoreline Response Centre and Environment Group.

The appropriate duration of, and therefore the EA response to, a temporary site will be reviewed on a case by case basis and with consideration of public interest factors.

As the response progresses, regulatory positions can change. This could be where the scale of the activities at the temporary site goes beyond what was agreed; the activity has caused, or is likely to cause, pollution or harm to health or; otherwise consideration of the public interest factors no longer justifies it.

If any of the conditions above apply then the EA liaison officer would tell the site's operator or Shoreline Response Centre (or equivalent) that the previous enforcement position no longer applies and specify a deadline by which the temporary site must be permitted, registered exempt, removed or mitigated as appropriate.

2.6 Compliance with the Hazardous Waste Regulations 2005.

Additional regulations apply where waste arising from a clean up is hazardous.

There is a defence for actions taken in an emergency or where there is a risk of grave danger under the Hazardous Waste Regulations 2005. An emergency or risk of grave danger is defined under the Regulations as:

‘a present or threatened situation arising from a substance or object which is, or which there are reasonable grounds to believe is, hazardous waste, and the situation constitutes a threat to the population or the environment in any place.’ The EA will not normally take enforcement action in these circumstances.

Under section 62 of the 2005 Regulations holders of hazardous waste must take steps to avert an emergency or danger.

The measures required to avert the emergency or grave danger and the extent to which they apply to recovery plans and returning communities to normality will, where possible, be decided in conjunction with the relevant health bodies and local authorities identified in the relevant emergency plan.

The regulations require notification to the regulator of steps taken as soon as reasonably practicable. This notification would normally be received by the Environment Agency Liaison Officer.

Again, regulatory positions will be regularly reviewed, particularly if the steps proposed are no longer required to mitigate or avert danger or otherwise consideration of the public interest factors no longer justifies it.

In such a case the Environment Agency will tell the site's operator or Shoreline Response Centre (or equivalent) that the previous enforcement position no longer applies and specify a deadline by which the breaches of the regulations must be remedied.

The Environment Agency would require the maintenance of records of hazardous waste. The records allow the audit of the movements of all hazardous wastes from the clean-up area.

The Environment Agency would expect any movements of waste to comply with the Control of Pollution (Amendment) Act 1989 and the Duty of Care under the Environmental Protection Act 1990 and the Environmental Protection (Duty of Care) Regulations 1991.

Clean up operations have the potential to cause environmental harm. The Environment Agency will normally take enforcement action where they consider pollution or harm has arisen either due to reckless, negligent or careless actions or where all reasonable, practical steps were not taken.

2.7 Management of the final disposal options and identification of sites for oily waste

In the event of a large scale incident it is very likely that there will be a need for a facility for large scale storage and treatment.

The MCA has established that no such strategic capacity exists in the UK for hazardous waste disposal.

The waste management sub group will probably have sufficient time to research and develop detailed proposals for the long term disposal and treatment of stored waste. This may involve installations with existing permits or novel technologies.

Since the earlier actions will have been taken to protect public health and the environment, the final treatment and disposal of the waste is likely to require full planning permission and environmental permitting.

When a waste operation has ceased an inspection must be carried out to ensure that all material has been removed, the site is safe and an assessment made of whether contamination from the waste operation has occurred and further remediation required.

Annex 1 - Layout of first SRC report brief for waste management strategy - suggested format

Policy statement

Waste Management Strategy:

To facilitate the recovery and removal of bulk oil and contaminated material from the environment with reference to the principles of sustainable waste management.

This will be achieved by:-

- Ensuring that advice is available to the technical team to ensure that clean up operations are planned to minimise waste production
- Measures are put in place to segregate waste types at the shoreline to facilitate the assessment of the best practicable environmental option for each waste stream
- Estimate and anticipate quantities and types of wastes to be produced
- Identifying the capacity of the waste industry to deal with the waste generated
- Plan and develop interim storage and treatment areas
- Identify disposal routes and manage the production, storage and transport of waste to the final options

Suggested headings:-

- Number and location of potential clean up sites
- Potential waste streams
- Production rates short and medium term (1-3 days)
- Beach head storage
- Waste options decision-making statement including costs
- Interim storage requirements
- Site restoration and clean-up
- Audit of process overall
- Regulator comments
- Recommendations

Annex 2 – SRC Waste Disposal Sub Group Daily Report

Daily report is to provide running account of progress for:

- What type and quantity of waste is going where.
- Proposed and actual treatment processes.
- Regulation of process
- Costings

To be produced by the Waste Disposal sub group of the Technical Team, Shoreline Response Centre, in consultation with:

- The Environmental Regulator
- SRC Technical Team and Management Team
- Beach Masters
- Local Authority Waste Officers/Finance Officers

This information will feed into main incident waste report and will provide data for audit reporting.

Suggested headings:-

- Number of clean up sites/ in situ treatments
- Waste streams
- Quantities in waste stream storage
- Quantities in waste stream treated/ disposed
- Revised cost figures
- Regulatory statement
- Projected production short to medium term
- Ongoing cost estimate
- Strategy revisions
- Data and Information - to include:
 - Tonnage of waste by EWC code
 - Waste collation
 - Pre and post treatment processes
 - Onward movement of waste
 - Registered carriers
 - Transfer notes
 - Consignment note numbers