

Maryland National
Capital Region
Contingency Plan
(MNCR-ACP)

Disposal Plan

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1000 Introduction

It is the responsibility of the OSC to ensure that any spilled oil or hazardous substance is disposed of properly once cleanup has occurred. The Resource, Conservation and Recovery Act (RCRA) and its implementing regulations contained in Title 40, Code of Federal Regulations are quite specific in defining what is hazardous waste and how it should be handled and disposed. [40 CFR 261, Subpart C](#) lists the characteristics a substance must exhibit to be considered hazardous.

2000 Considerations and Challenges Waste Disposal

In dealing with oil spills, one of the main problems encountered is what to do with the waste materials once the cleanup has begun. When dealing with the method of disposal, there are three main areas of concern; ecology, logistics, and finance.

Some considerations for disposal are:

- What further effects or risks are going to occur due to relocation of the waste material? Ideally, the goal is to dispose of the material without any further hazard generated or further impacts to the environment, including air, surface water, ground water, and soils.
- How can waste be safely moved from the site to the disposal and /or treatment area?
- What is the availability of the machinery needed for removal?
- What is the capacity of the disposal and/or treatment facility?
- How much is it going to cost to dispose of the waste?
- What are the possibilities of recycling the wastes into a useful product to help offset the disposal cost?
- State and Local disposal approvals and permits.
- Procedures for obtaining waivers, exemptions, and authorizations associated with handling or transporting waste material.

Waste material generally fall into one of the following categories:

- Recovered liquids (oil/water mixtures)
- Contaminated absorbents and debris
- Contaminated soil/sand

Liquid waste is probably the easiest form of waste to deal with because it is easily handled, moved, or sometimes can be processed into a useful product. Absorbents are the most widely used products for oil spill cleanup. Organic absorbents, mainly made of straw, are biodegradable. Many new absorbents are synthetic and their biodegradability is greatly reduced. The best absorbent would be one that could be reused, much like a sponge, leaving only liquid waste, which is easily disposed of, thereby reducing cleanup costs and the amount of solid waste generated.

3000 Potential Disposal Methods

3100 Recovered Waste Types

3110 Recovered Liquid Waste

- Disposal in accordance with [40 C.F.R. 262.20-23](#) for RCRA wastes.
- Recycling (recovery in settling tanks, used oil recyclers).
- High temperature incineration.

- Evaporation of light ends.
- Oxidation.
- Biodegradation.
- Open burning where permitted.
- Use as fuel.

3120 Recovered Liquid Waste

- Disposal in accordance with [40 C.F.R. 262.20-23](#) for RCRA wastes.
- Incineration at waste-to-energy facilities.
- Soil thermal treatment facilities (special conditions apply).
- Class I permitted municipal waste landfill.

3130 Contaminated Soils

- Disposal in accordance with [40 C.F.R. 262.20-26](#) for RCRA wastes.
- Soil thermal treatment facilities.
- Incineration at waste-to-energy facilities.

3200 Waste Disposal Site Selection

Maryland Department of the Environmental (MDE) is responsible for determining the eligibility of facilities to use general permits for soil thermal treatment and used oil recycling. MDE also issues permits for landfilling, air pollutant emissions, hazardous waste treatment, storage and disposal, and for the registration and/or certification of used oil transporters, collection facilities and recyclers. The MDE Waste Management Division regulates the handling, storage, and testing of petroleum contaminated soil, solid waste, and hazardous waste. Oil spill wastes may be disposed of at permitted facilities (federal, state and local) authorized by the EPA and MDE. During federalized spills, it is the responsibility of the FOSC to ensure that waste resulting from a spill is handled properly.

For information on regulatory requirements associated with hazardous waste, call the Hazardous Waste Program at (410) 537-3345.

3300 Waste Characterization

The first step in determining which method(s) of disposal will be utilized is to characterize the waste and determine if it is subject to the requirements of the Resource Conservation and Recovery Act (RCRA), 40 C.F.R. The RP's knowledge of the material and/or laboratory analysis, and the intended use of the recovered material, must be used to determine if the material meets the criteria for hazardous waste set forth in [40 C.F.R 261](#).

3400 RCRA Regulated Waste

If the material meets the criteria for RCRA regulated wastes, it can only be disposed of at an approved hazardous waste treatment/disposal facility. If the spill is not a hazardous waste listed in [40 C.F.R 261](#) Subpart D, but exhibits a characteristic of hazardous waste per 40 C.F.R 261 Subpart C, it is possible to treat the waste on-site to render it non-hazardous prior to off-site disposal. The waste generator shall treat hazardous waste in tanks or containers only, provide a waste analysis

plan to document treatment, and ensure compliance with [40 C.F.R. 264](#) requirements while accumulating and treating the waste. This kind of treatment would include stabilization of soils with cement, neutralization, and other simple forms of non-thermal treatment. Evaporation of organics and dilution are not permissible.

3500 Non-RCRA Regulated Wastes

Several options exist for disposal, treatment or recycling of wastes and recovered products that are not subject to RCRA requirements. Following is a brief summary of each option and recommended procedures.

3510 Used Oil Recyclers

Used oil recyclers can process recovered oil and oil/water mixtures into reusable products. Used oil recycle facilities must possess an MDE Oil Operations Permit. For specific requirements, see [Section 26.10.15 of the Code of Maryland Regulations](#).

3520 Waste-to-Energy Incinerators

Waste-to-Energy (WTE) Incinerators produce energy from the incineration of municipal solid wastes. Depending on the nature of the material to be disposed of, WTE facilities may be a viable option for disposal of oil debris and/or soils. WTE facilities must have a permit from MDE. For specific requirements, see [Section 26.04.07.25 of the Code of Maryland Regulations](#).

3530 Soil Treatment Facilities (STF's)

Soil Treatment Facilities (STF's) remove petroleum contaminants from soil, resulting in clean soil for various uses. STF's are an option for petroleum contaminated soils, provided that the soils are not classified as a hazardous waste as defined in [40 CFR 261](#). STF's must have a MDE Oil Operations Permit. For specific requirements, see [Section 26.10.13 of the Code of Maryland Regulations](#).

3540 Land Filling

Land filling of soil and debris, which is non-hazardous and non-saturated in a lined Class I landfill in an acceptable disposal option. Landfills must be permitted by the MDE. Decisions regarding acceptance of wastes are at the discretion of the landfill operator. Laboratory analysis of waste may be required prior to acceptance. For specific requirements, see [Section 26.04.07 of the Code of Maryland Regulations](#). In some cases, treatment of petroleum-contaminated soil may include "land farming." This process involves spreading the soil in a thin layer over an impermeable liner or surface. The contaminant reduction is caused by a combination of volatilization, biodegradation, and photo degradation.

3550 Contact Water

Contact water is any water that has come in contact or is contaminated with oil. While the RP is expected to provide sufficient containment, collection, and storage resources, the disposal of excess contact water may become necessary if a lack of storage capacity is available in order to ensure an efficient response. The OSC/UC should consider the disposal of contact water as a last resort. The RRT has guidance and checklists to assist the OSC/UC in deciding upon procedures, standards, and monitoring protocols. RRT approval is not required for the disposal of contact water, but State approval is required.

3560 Decanting Policy

The Unified Command must approve any request for decanting that arises during a response. Large quantities of oily fluids are typically generated during an oil spill response. These fluids include the products of skimming and vacuuming operations, and are usually mostly water. Oil recovery operations can continue only as long as there is some place to store the recovered fluids. Once the field storage capacity is reached, skimming operations must terminate until additional storage is provided.

Recovered oil and water mixtures will typically separate into distinct phases when left in a quiescent state. When separation occurs the relatively clean water phase can be siphoned or decanted back to the recovery point with minimal, if any impact. Decanting therefore increases the effective on-site storage capacity and equipment operating time.

Because this process risks discharge of oil already recovered, it must be done carefully. Typically decanting water is discharged into a secondary storage container or into a boomed area where any accidentally discharged oil can be contained and recovered. In addition to vacuum trucks, recovered oil may be temporarily stored and decanted in the field using other containers including:

- Tank trucks
- Portable tanks
- Portable bladders
- Oil field fractionation tanks
- Lined pits
- Rail Cars

Decanting oil within the Commonwealth of Virginia requires a permit from the Department of Environmental Quality. The responsible party and UC/IC should work closely with the DEQ representative to ensure all requirements are met.

Decanting oil within the State of Maryland requires approval from the Maryland Department of the Environment. The responsible party and UC/IC should work closely with the MDE representative to ensure all requirements are met.

Refer to Regional Response Team III for decanting guidance in [Appendix 6](#) of the RRT3 RCP.

4000 Waste Management and Temporary Storage Options

Several factors must be taken into account when oily debris/waste begins to accumulate at a spill site:

- Amount of room to store waste containers
- Proximity to waterway, in the event a container leaks
- Accessibility to roads and highways
- Proximity to spill site, to minimize travel for responders

Also, when a waste storage location is set up and used, particularly during a lengthy incident response, extra steps may need to be taken. There must be routine monitoring to ensure that the

container size is appropriate, that the containers are leak free, that the plastic liners are secure, and that materials are removed promptly on a regular basis.

4100 Waste Management Plan

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