

## CHAPTER 9

### OIL MANAGEMENT ASHORE

#### 9-1 Scope

**9-1.1** This chapter identifies requirements and responsibilities applicable to the prevention of oil pollution and the collection, reclamation, and disposal of oily wastes and used oils ashore. Requirements apply in all areas within the United States, Commonwealth of Puerto Rico, Virgin Islands, Guam, American Samoa, and the Trust Territory of the Pacific Islands. Navy policy with respect to activities in foreign countries is provided in Chapter 18.

**9-1.2** Navy response to oil spills under the National Contingency Plan (NCP) is given in Chapter 10. The management of petroleum products, residues, or other mixtures that meet the reference (d) definition of hazardous waste (HW) is addressed in Chapter 12. Management of storage tanks is addressed in Chapter 16, and shipboard oil pollution abatement is addressed in Chapter 19.

**9-1.3 References.** Relevant references are:

- a. 33 CFR 154, Oil Pollution Prevention Regulations for Marine Oil Transfer Facilities;
- b. 40 CFR 110, Discharge of Oil;
- c. 40 CFR 112, Oil Pollution Prevention;
- d. 40 CFR 260-266, Hazardous Waste Management System;
- e. 40 CFR 270, Standards for Used Oil Processors and Refiners;
- f. 40 CFR 279, Standards for the Management of Used Oil;
- g. 49 CFR 110, Hazardous Materials Public Sector Training and Planning Grants;

h. 49 CFR 171 (Subchapter C), Hazardous Materials Regulations;

i. 49 CFR 174, Carriage by Rail;

j. 49 CFR 176, Carriage by Vessel;

k. 49 CFR 194, Response Plans for Onshore Oil Pipelines;

l. 49 CFR 195, Transportation of Hazardous Liquids by Pipeline;

m. NFESC 7-03, Oil Spill Prevention Control and Countermeasures Planning Manual (NOTAL).

#### 9-2 Legislation

**9-2.1 Federal Water Pollution Control Act as amended by the Clean Water Act of 1977 (CWA).** Requires Federal activity compliance with applicable requirements concerning the control of oil pollution. Prohibits the discharge of oil into any surface waters of the U.S., if the discharge violates applicable water quality standards or effluent standards or causes a sheen on, or film upon, or discoloration of the surface of the water or adjoining shorelines, or causes a sludge or emulsion to be deposited beneath the surface of the water, or upon the shoreline.

**9-2.2 Military Construction Codification Act, Section 6.** Contains a provision that allows net proceeds from the sale of recyclable materials (including used oil) to be used by Navy activities for certain purposes.

**9-2.3 Oil Pollution Act of 1990 (OPA 90).** Amends Section 311 of the CWA to clarify Federal response authority, increase penalties for spills, establish United States Coast Guard (USCG) response organizations, require tank vessel and facility response plans, and provide for contingency planning in

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designated areas. The OPA 90 provides new contingency planning requirements for both government and industry and establishes new construction, manning, and licensing requirements for tank vessels. The OPA 90 also increases penalties for regulatory noncompliance, broadens the response and enforcement authorities of the Federal government, and preserves State authority to establish laws governing oil spill prevention, response, and periodic drills and exercises.

### 9-3 Terms and Definitions

**9-3.1 Boiler.** An enclosed device using controlled flame combustion and having the following characteristics:

a. The unit must have physical provisions for recovering and exporting thermal energy in the form of steam, heated fluids, or heated gases; and

b. The unit's combustion chamber and primary energy recovery section(s) must be of integral design, i.e., the combustion chamber and primary energy recovery section(s) must be physically formed into one manufactured or assembled unit. A unit in which the combustion chamber and the primary energy recovery section(s) are joined only by ducts or connections carrying flue gas is not integrally designed; however, secondary energy recovery equipment (such as economizers or air preheaters) need not be physically formed into the same unit as the combustion chamber and the primary energy recovery section(s). The following units are not precluded from being boilers: process heaters (units that directly transfer energy to a process stream), and fluidized bed combustion units; and

c. While in operation, the unit must maintain a thermal energy recovery efficiency of at least 60 percent, calculated in terms of the recovered energy compared with the thermal value of the fuel; and

d. The unit must export and utilize at least 75 percent of the recovered energy calculated on an annual basis. In this calculation, no credit shall be

given for recovered heat used internally in the same unit. (For example, preheating fuel or combustion air, driving induced or forced draft fans or feeding water pumps); or

e. The unit is one that the Environmental Protection Agency (EPA) Regional Administrator has determined on a case-by-case basis, to be a boiler, after considering the standards in reference (d), Subpart C, Part 260.32, Variances To Be Classified As A Boiler.

**9-3.2 Bulk-oil Tank.** Any permanent, stationary container designed to store an accumulation of, or process oil that is constructed of non-earthen materials that provide structural support.

**9-3.3 Industrial Furnace.** Any of the following enclosed devices that are integral components of manufacturing processes and use controlled flame devices to accomplish recovery of materials or energy:

a. Cement kilns

b. Lime kilns

c. Aggregate kilns

d. Phosphate kilns

e. Coke ovens

f. Blast furnaces

g. Smelting, melting and refining furnaces (including pyrometallurgical devices such as cupolas, reverberator furnaces, sintering machines, roasters, and foundry furnaces)

h. Titanium dioxide chloride process oxidation reactors

i. Methane reforming furnaces

j. Pulping liquor recovery furnaces

k. Combustion devices used in the recovery of sulfur values from spent sulfuric acid

l. Such other devices as the EPA Administrator may, after notice and comment, add to this list on the basis of one or more of the factors described in reference (d), Subpart B, Part 260.10.

**9-3.4 Lubricating (Lube) Oil.** Crankcase oil, cutting oil, gear lubricant, metal-working lubricant, hydraulic oil, and transmission fluid.

**9-3.5 Navigable Waters.** As defined in reference (b), Section 110.1, "*Navigable Waters*" means the waters of the United States, including the territorial seas. The term includes:

a. All waters that are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide.

b. Interstate waters, including interstate wetlands.

c. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, and wetlands, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

(1) That are or could be used by interstate or foreign travelers for recreational or other purposes.

(2) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce.

(3) That are used or could be used for industrial purposes by industries in interstate commerce.

d. All impoundments of waters otherwise defined as navigable waters under this section.

e. Tributaries of waters identified in paragraphs a-d of this section, including adjacent wetlands.

f. Wetlands adjacent to waters identified in paragraphs a-e of this section: Provided, "That waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States...."

**9-3.6 Off Specification Used Oil.** Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that exceed the specified limits set in Table 1, reference (f).

**9-3.7 Oil.** As defined by OPA 90, Section 1001, "oil" means oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, that is specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of Section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. 9601) and which is subject to the provisions of that Act.

**NOTE:**

This definition includes vegetable oil.

**9-3.8 On Specification Used Oil.** Used oil that is not mixed with HW and that has constituents and properties, as determined by tests, that do not exceed the specified limits set in Table 1, reference (f).

**9-3.9 Processing.** Any chemical or physical operations designed to produce from used oil, or to make used oil more amenable for production of, fuel oils, lubricants, or other used oil-derived products. Processing includes, but is not limited to: blending used oil with virgin petroleum products, blending used oil to meet the fuel specification, filtration, simple distillation, chemical or physical separation and re-refining.

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**9-3.10 Reclaimed.** A material is reclaimed if it is processed to recover a usable product, or if it is regenerated.

**9-3.11 Recycled.** A material is recycled if it is used, reused, or reclaimed.

**9-3.12 Transportation or Non-Transportation Related Oil Storage Facilities.** Shore activities with oil storage facilities are classified as either transportation-related or non-transportation-related. Transportation-related facilities are primarily involved with bulk oil transfer. Bulk oil transfer includes transferring oil from stationary storage tanks to tanker ships, highway tankers, and railroad tank cars for transport to off-site locations. Non-transportation-related facilities are primarily involved in fuel storage for on site use.

**9-3.13 Used Oil.** Any oil that has been refined from crude oil, or any synthetic oil, that has been used and as a result of such use is contaminated by physical or chemical impurities.

**9-3.14 Used Oil Generator.** Any person, by site, whose act or process produces used oil or whose act first causes used oil to become subject to regulation.

**9-3.15 Used Oil Management Plan.** A document that identifies sources of used oils, primary used oil segregation groups, recycling options, and detailed operational requirements for a specific Navy facility or facilities. (May be incorporated into or referenced in installation Hazardous Material Management Plan, or Pollution Prevention Plan.)

**9-3.16 Used Oil Processor.** A facility that processes used oil.

**9-3.17 Used Oil Transfer Facility.** Any transportation-related facility including loading docks, parking areas, storage areas and other areas where shipments of used oil are held for more than 24 hours and not longer than 35 days during the normal course of transportation, or prior to an activity performed under reference (f), Section 279.20(b)(2). Transfer

facilities that store used oil for more than 35 days are subject to regulation under reference (e).

**9-3.18 Used Oil Transporter.** Any person who transports used oil, any person who collects used oil from more than one generator and transports the collected oil, and owners and operators of used oil transfer facilities. Used oil transporters may consolidate or aggregate loads of used oil for purposes of transportation but, with the following exception, may not process used oil. Transporters may conduct incidental processing operations that occur in the normal course of used oil transportation (e.g., settling and water separation), but are not designed to produce (or make more amenable for production of) used oil derived products or used oil fuel.

## **9-4 Requirements**

**9-4.1 Oil Storage Facilities.** Transportation-related facilities serving vessels are subject to current USCG regulations. Through reference (a), the USCG requires facility operation manuals for applicable marine transportation-related facilities. These regulations, which apply to all components of DoD, address aspects of the design and operation of on-shore and off-shore facilities that are engaged in the transfer of bulk oil to and from vessels.

EPA, through reference (c), requires spill prevention plans for applicable onshore non-transportation-related facilities.

The Research and Special Programs Administration (RSPA), under reference (k) requires response plans for onshore transportation-related facilities, namely pipelines and tank trucks that leave naval facilities. See 10-4.1.

### **9-4.2 Spill Prevention Control and Countermeasure (SPCC) Plans**

**9-4.2.1** Non-transportation-related facilities will have a SPCC Plan that provides a history of oil spill events, the potential for discharge of oil, as well as containment procedures and equipment to prevent oil

spills into or upon a navigable waterway or shoreline of the U.S. SPCC plans must initially be certified by a registered professional engineer in the State with jurisdiction, and must be reviewed and evaluated. Based on the review and evaluation, facilities will amend SPCC plans within 6 months of the review. SPCC plans must be updated on a triennial basis and signed by a registered professional engineer (PE); except foreign-based activities that, according to the Overseas Baseline Guidance Document (OEBGD), must be updated and reviewed every 5 years and signed by a registered Professional Engineer (PE).

**9-4.2.2** SPCC plans are not required if the facility has an aggregate unburied storage capacity of 1,320 gallons or less of oil, (provided no single container capacity exceeds 660 gallons) has a total underground storage capacity of 42,000 gallons or less, or could not reasonably be expected to discharge oil into or upon the navigable waters of the U.S. or adjoining shorelines because of the location of the facility. Facilities that have experienced a spill into navigable waters of 1,000 gallons, or two reportable spills into navigable waters in any 12-month period, are required to submit SPCC plans to the EPA Regional Administrator under reference (c) within 60 days following such a spill.

**9-4.2.3** New shore activities will prepare SPCC plans within 6 months of first operation and implement SPCC plans no later than 1 year after beginning operations. SPCC plans will be reviewed and implemented within 6 months of a change in facility design, operation or maintenance, or the construction, completion and acceptance of a new facility that materially effects the facility's potential for the discharge of oil to navigable waters or adjoining shoreline.

**9-4.2.4** SPCC plans will be maintained at the facility and be available to EPA Regional Administrators or their designated representatives, and State and local agencies for on-site review during normal working hours.

**9-4.3 Used Oil Recycling.** DoD policy memorandum direct military departments to maximize the

segregation, recycling and reuse of used oils, and to comply with Resource Conservation and Recovery Act (RCRA) regulations.

#### **9-4.4 Used Oil Fuels Burned for Energy Recovery**

**9-4.4.1** Used oil to be burned for energy recovery must be tested. The used oil will be subject to regulation under reference (f) unless it is shown that the constituents and properties of the used oil do not exceed the allowable limits specified in Part 279.11. Used oil that does not have constituents and properties that exceed specification, i.e., the allowable limits set by Table 1 in Part 279.11, is not regulated under Part 279. However, the specification standard does not apply to mixtures of used oil and HW that continue to be regulated as HW according to Part 279. Also, used oil containing more than 1,000 parts per million total halogens is presumed to be a HW under Part 279.10(b)(1) unless it can be shown that the used oil does not contain HW using acceptable analytical methods.

**9-4.4.2** Included in Part 279 are standards for used oil generators, transporters, transfer facilities, processors, marketers, and burners burning off-specification used oil for energy recovery. Part 279 also contains specific spill prevention and contingency planning requirements for used oil storage, transfer and processing facilities.

**9-4.4.3** Used oil that is mixed with a HW or HWs identified as such under reference (d), Subpart C, Characteristics of Hazardous Waste or under Subpart D, Lists of Hazardous Wastes, is subject to regulation as a HW (under reference (d)) if the mixture exhibits any characteristics of HW as identified in Subpart C. Reference (f) prescribes specific provisions as to the applicability of the RCRA regulations to the management and use of used oil. Burning used oil that is a HW solely because it exhibits a characteristic of HW is subject to standards set forth in reference (f). The management and use of used oil, whether or not the used oil exhibits any characteristics of a HW, are regulated under reference (f).

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**9-4.4.4** Synthetic oils, fluids, and lubricants must be segregated from the crude-oil-derived used oil.

**9-4.4.5** EPA must be notified by persons marketing or burning HW fuel, specification used oil fuel and off specifications used oil fuel. The sale of regulated fuels by the Defense Reutilization and Marketing Office (DRMO) is marketing; the transfer of regulated fuels between the various DoD components and activities is not.

**9-4.5 Prohibited Uses of Used Oil.** Used oils will not be used for environmentally unacceptable purposes such as weed control, insect control, road surfacing, dust control, or open pit burning.

## **9-5 Navy Policy**

**9-5.1 Navy Shore Facilities OPA 90 Compliance.** Naval facilities shall use EPA regulation reference (c) in developing non-transportation-related facility response plans. USCG interim final regulation, reference (a) shall be used to develop response plans for marine transportation-related facilities. RSPA regulations references (h), (i) and (k) shall be used to develop response plans for off-base transportation pipelines and bulk packagings. Normally one response plan shall be developed to address the requirements of all applicable response planning requirements, since most naval facilities are "complex" facilities under the OPA 90 regulations. The SPCC plan shall be a separate document. See Chapter 10 for specific details on developing facility response plans.

**9-5.2 Oil Storage Facilities.** Navy policy shall be to meet USCG and EPA oil pollution prevention regulations pertaining to transportation-related and non-transportation-related facilities and to exceed those regulations wherever practicable.

**9-5.3 Used Oil Recycling.** Oil shall be recycled and reused within the Navy whenever technically and environmentally feasible and when environmentally

acceptable. Navy policy is to recycle used oil per Federal, State and local regulations.

**9-5.3.1** Military personnel and civilian employees shall be encouraged to collect used lube (crankcase) oil from personal vehicles for recycling via Navy installation, local, or regional used oil recycling programs.

**9-5.3.2** If recycling of used lube oil is not feasible for economic reasons, the lube oil may be burned as a fuel or fuel supplement, provided appropriate chemical and economic analyses are made to determine suitability of burning as well as compliance with air pollution control requirements (Chapter 5) and HW regulations (Chapter 12).

**9-5.3.3** When allowed by military used oil specifications, large installations or complexes shall consider closed loop used lube oil re-refining by commercial re-refiners.

**9-5.3.4** Net proceeds from the sale of used oil shall be used by a Navy generating installation that has a qualified recycling program (QRP) for certain purposes as specified in Chapter 14.

**9-5.4** SPCC plans shall be developed as described in paragraph 9-4.2 and shall be prepared per Federal, State, and local requirements.

## **9-6 Responsibilities**

**9-6.1 COMNAVFACENGCOM shall:**

a. Provide technical advice and prepare revisions to reference (m) to assist shore activities in the preparation of SPCC plans.

b. Provide technical and administrative guidance associated with the collection, segregation, re-refining and disposal of used lubricating oil.

c. Provide technical and administrative guidance associated with the collection, segregation, re-refining and disposal of used contaminated fuels.

d. Provide technical advice and prepare appropriate manuals or other forms of guidance for used oil management.

**9-6.2 COMNAVSUPSYSCOM** shall provide technical and administrative guidance to Navy shore activities concerning USCG and EPA regulations.

**9-6.3 Major claimants** shall ensure that shore activities meet EPA requirements related to the prevention of oil spills and the preparation and review of SPCC plans.

**9-6.4 Commanding officers of shore activities** shall:

a. Ensure that activity SPCC plans are prepared per Federal, State, and local requirements, and that such plans are implemented, and reviewed within prescribed time frames.

b. Identify and submit, under Chapter 1, environmental compliance projects required for implementation of the activity SPCC plan.

c. Comply with Federal, State, and local requirements concerning oil pollution and used oil fuels for energy recovery.

d. Establish and maintain a used oil recycling program.

e. Comply with USCG and Research and Special Projects Office (RSPA) regulations for transportation-related oil storage facilities and EPA for non-transportation-related facilities.

f. Ensure that facility operations manuals are prepared, maintained, and submitted per USCG guidance reference (a).

g. Comply with OPA 90 requirements to prepare facility response plans, as discussed in Chapter 10.