Disclaimer

The environmental screening checklist and workbook are tools to be used to help you evaluate compliance at your facility. They do not contain an exhaustive list or description of all federal environmental regulations that may apply to your facility. In addition, your facility is responsible for knowing and complying with all applicable tribal, state, and local requirements.

TABLE OF CONTENTS

INTRODUCTION

The United States Environmental Protection Agency (EPA) is providing the *Environmental Screening Checklist and Workbook for the Water Transportation Industry* as a public service to the water transportation facilities. EPA's Office of Compliance, through various meetings with industry representatives, facility owners, and technicians, determined there is a lack of information available to facilities to help them be in or remain in compliance with applicable federal environmental regulations. The checklist and workbook highlight important or key environmental requirements as they apply to the various federal environmental programs.

HOW CAN I USE THE CHECKLIST AND WORKBOOK?

You can use the checklist and workbook to evaluate your facility's compliance with the federal environmental regulations which are applicable to the water transportation industry. The term ***facility*** refers to, but not limited to shipping port, shipping sites, terminals, ships, towboats and barges, etc. overseen by owners/operators, tenants, managers, field personnel, etc. who engage in water transportation operations. If problems with compliance are discovered while completing the checklist, you may want to conduct a more comprehensive self-audit.

NOTE: If you are the owner of a water transportation facility, you must ensure that your contractors comply with all environmental rules and regulations. Remember: As the owner, you are ultimately responsible for compliance at your facility, even for those activities conducted by your contractors.

You can use the checklist and workbook to evaluate the compliance of either specific activities or areas of your facility, or your entire facility. Specific areas of your facility that you may want to review are shown in Exhibit 1. This exhibit, "Index of Activities and Requirements for the Water Transportation Industry," is a pictorial representation of specific activities that are regulated or specific environmental requirements at a water transportation facility. A page reference is included next to each activity/requirement which takes you to the appropriate section of the workbook where this topic is discussed. In addition, this exhibit also includes hotlines that you can contact to obtain more information on applicable environmental requirements. As indicated on the exhibit, one good source of environmental information for the transportation sector is the Transportation Environmental Resource Center (TERC). You can reach TERC to request more information on environmental issues or get answers to your transportation-related environmental questions by phone or on the world wide web:

TERC Toll-Free Info-Line: 1-888-459-0656
TERC Website Address: http://www.transource.org

Please remember that all of these materials are a beginning, not the final word, on environmental compliance requirements. While federal environmental requirements are highlighted in the checklist and workbook, a comprehensive discussion of all requirements is NOT included. In addition to federal requirements, you may be subject to state, tribal, and/or local requirements. You can use these materials to build a basic understanding or increase your knowledge of federal environmental requirements, and then seek additional assistance from various federal, state, tribal, and local agencies.

This page reserved for

Exhibit 1. Index of Activities and Requirements for the Water Transportation Industry

HOW ARE THE CHECKLIST AND WORKBOOK ORGANIZED?

What Is Included? Following this introductory section are the **checklist** and **workbook**. These materials include the following sections:

- Section 1.0 Waste Management
- Section 2.0 Wastewater and Storm Water Management
- Section 3.0 Dockside Maintenance and Repair Activities
- Section 4.0 Storage Tanks and Spill Prevention, Control, and Countermeasures (SPCC)
- Section 5.0 Planning and Accidental Release Reporting
- Section 6.0 Vessels and Underway Activities

Section 6.0 *Vessels and Underway Activities* includes requirements for vessel activities, such as marine pollution, ocean dumping, and discharging on shore to marine facilities. While these operations are not necessarily applicable to water transportation facilities, they may be of interest as vessel activities have the potential to impact water transportation industries. Following these six sections, a **glossary** is provided for your use.

Where Do I Start? You may first want to become familiar with the workbook because it is more comprehensive than the checklist in terms of environmental compliance information and issues. Once you have become familiar with the workbook, you can use the checklist by itself to conduct a compliance evaluation of your facility.

The two page checklist, located after this introductory text, is basically a streamlined version of the workbook and has been included to help make the evaluation of your facility's compliance as easy and efficient as possible. **Because the checklist was designed to evaluate specific activities and requirements at your operation, it does NOT include all of the questions or activities found in the workbook.**

WHAT DOES THE "✔" MEAN?

A "✔" next to a response in the guide indicates that is the preferred response in terms of **environmental compliance**. If you select a response without a "✔", you may still be in compliance. However, you should verify that you are in compliance by contacting the appropriate federal or state regulatory agency and discussing your activity with them.

Each checklist question will ask you about key environmental requirements that are applicable to a water transportation facility (not limited to ships, barges etc.). After reading each question, pick the most appropriate response for your facility. If you are unsure of what is being asked by the question or what a response means when using the checklist, refer to the same question in the workbook. The workbook includes some general explanatory text for each question, as well as explanations of each response. A "✔" next to a response in the workbook indicates that it is a preferred response in terms of environmental compliance (see box). The use of the workbook is encouraged as it will help you and others at your facility conducting evaluations to consistently and accurately respond to the compliance questions.

Can the checklist be personalized? The checklist can be personalized to fit the needs of your facility. When evaluating environmental compliance, you or the person conducting the evaluation should record certain information on the checklist, including the date, name of the facility, name of the person conducting the evaluation, and any comments or questions regarding the compliance evaluation. Such information will help you monitor your facility's continued progress towards environmental compliance.

WHERE CAN I GET HELP?

During the evaluation and everyday operation of your facility, you may need to obtain additional information on specific environmental requirements. Many resources are available to you which can provide valuable information on federal environmental requirements, pollution prevention, and other topics. Some of these resources, which can be contacted by telephone or accessed through the Internet, include publications, hotlines and information lines, EPA Headquarters and regional offices, financial assistance information, and pollution prevention websites.

EMERGENCY RESPONSE & ASSISTANCE

! National Response Center (NRC) - U.S. Coast Guard Oil & Hazardous Material Spills (800-424-8802)

! CHEMTREC operated by Chemical Manufacturers Association on Health and Safety (800-424-9300)

! Environmental Health Effects: (National Institute of Health) Information on chemicals in ground and surface water, hazardous wastes (800-643-4794)

! Local Emergency Number: 911

Publications

- *Sector Notebooks*. The following sector notebooks, which may be of interest to the water transportation industry, can be downloaded electronically at: **http://es.epa.gov/oeca/sector/index.html**. Also copies can be ordered from GPO at (202) 512-1800.

  S *Profile of the Water Transportation Industry (Shipping and Barging)*, EPA/310-R-97-003 (95 pages)

  S *Profile of the Transportation Equipment Cleaning Industry*, EPA/310-R-95-018 (81 pages)

- *Transportation Equipment Cleaning Industry Effluent Guidelines and Standards - Proposed Rule*. EPA is proposing a regulation that will establish technology-based effluent limitations guidelines for the discharge of pollutants into waters of the U.S. and into publicly owned treatment works by existing and new facilities that perform transportation equipment cleaning operations. For more information, call (202) 260-4992 or check website: http://www.epa.gov/OST/guide/tecifs22.html

- *Code of Federal Regulation (CFR) References*. Website: **http://www.access.gpo.gov/nara/cfr/index.html**

Hotlines and Information Lines

- *Transportation Environmental Resource Center (TERC) Information Line*

Telephone: (888) 459-0656
Website: **http://www.transource.org**

This resource center is designed to help transportation industries stay on top of environmental requirements and technologies.

- *U.S. Coast Guard, Office of Boating Safety*
  Telephone: 1-800-368-5647
  Website: **http://www.uscg.mil/**

  This office provides information regarding marine safety, operations, and environmental protection.

- *Air Risk Information Support Center Hotline*
  Telephone: (919) 541-0888
  Fax: (919) 541-0245

  This hotline provides technical assistance and information in areas of health, risk, and exposure assessment for toxic and air pollutants.

- *Emergency and Remedial Response Fax-On Demand Service*
  Telephone: (202) 651-2062

  This service offers one-way fax documents about Emergency and Remedial Response programs.

- *Emergency and Remedial Response Information*
  Telephone: (703) 603-8960 or (800) 424-9346 (RCRA/UST, Superfund, and EPCRA Hotline below)

- *Environmental Justice Hotline*
  Telephone: (800) 962-6215

  This hotline provides environmental assistance and information relating to environmental justice issues, including brownfields. See “Brownfields” listing under *Pollution Prevention Websites* below for more information.

- *Hazardous Waste Generator and Recycling*
  Telephone: (703) 308-8850

  This office provides information regarding regulations and guidance concerning hazardous waste generators, including RCRA manifest and the definitions.

- *Hazardous Waste - Permits and State Programs*
  Telephone: (703) 308-8404

  This office provides outreach and coordination of RCRA hazardous waste programs implementation, including permitting, clean up and technical approach.

- *Hazardous Waste - Risk Assessment and Economic Analysis*
  Telephone: (703) 308-8855

This office provides toxicology and exposure data; health and ecological risk assessment; and sampling, statistical, and analytical methods.

- *Hazardous Waste Information*
  Telephone: (703) 308-8482

  This office provides a RCRA coordination program information collection outreach and guidance. For additional information on waste minimization, go to website: **http://www.epa.gov/wastemin**

- *Maritime Administration, DOT*

  This website provides links and information on the Maritime Administration's environmental program.
  Website: **http://www.marad.dot.gov/offices/environmental_activities.html**

- *National Pesticides Information Line*
  Telephone: (800) 858-7378

  This service provides information relating to pesticide usage, including label information, incident investigations, emergency human and animal treatment safety practices, clean-up and disposal, laboratory analyses, and regulations.

- *National Response Center Hotline/Oil and Hazardous Material Spills*
  Telephone: (800) 424-8802 or (202) 267-2675
  Fax: (202) 267-2165

  This hotline can be used to report oil and hazardous material spills that (1) violate applicable water quality standards, (2) cause a film or "sheen" upon surface waters or adjoining shorelines, or (3) cause a sludge or emulsion to be deposited beneath surface waters or upon adjoining shorelines. This hotline is staffed 24 hours a day, 7 days a week, by U.S. Coast Guard officers and marine science technicians.

- *Pollution Prevention Information Clearinghouse (PPIC)*
  Telephone: (202) 260-1023
  Fax: (202) 260-4659
  Website: **http://www.epa.gov/opptintr/library/libppic.htm**

  PPIC is a free, non-regulatory service of EPA that provides answers and referrals in response to questions from the public concerning pollution prevention.

- *RCRA/Underground Storage Tanks (RCRA/UST), Superfund, and Emergency Planning and Community Right-to-Know (EPCRA) Hotline*
  Telephone: (800) 424-9346 or (703) 412-9810

  This hotline provides information about the RCRA/UST, Superfund, and EPCRA programs. Specifically, the hotline responds to inquiries about waste minimization programs required under RCRA, source reduction and hazardous waste combustion, and other components of the waste management regulatory programs.

- *Safe Drinking Water Hotline*
  Telephone: (800) 426-4791 or (703) 285-1093
  Fax: (703) 285-1101
  E-mail: hotline-sdwa@epamail.epa.gov

  This hotline provides information about EPA's drinking water regulations and other related drinking water and groundwater topics. Technicians are available to get details on legislation and regulations or provide important contacts for water resources and information on drinking water and groundwater.

- *Small Business Ombudsman Clearinghouse/Hotline*
  Telephone: (800) 368-5888 or (703) 305-5938
  Fax: (703) 305-6462

  This hotline provides regulatory and other environmental information concerning small business assistance to enhance voluntary regulatory compliance and pollution abatement and control. It also addresses questions covering all media programs within EPA.

- *Stratospheric Ozone Information Hotline*
  Telephone: (800) 296-1996 or (301) 614-3376
  Fax: (301) 614-3395

  This information hotline provides in-depth information on ozone protection regulations and requirements under Title VI of the Clean Air Act Amendments of 1990. In addition, the hotline serves as a distribution center and point of referral for an array of information pertaining to other general aspects of stratospheric ozone protection and depletion.

- *Storm Water Hotline*
  Telephone: (800) 245-6510

  This hotline serves as a clearinghouse for information concerning EPA's storm water general permits. Information specialists are available to answer technical questions concerning permit eligibility, specific permit requirements, and provide guidance materials.

- *Toxic Substances Control Act (TSCA) Assistance Information Service*
  Telephone: (202) 554-1404
  Fax: (202) 554-5603

  The information service provides technical assistance and general information about programs implemented under TSCA, including inquiries about import/export of chemicals under the regulatory program.

- *Underground Storage Tanks*
  Telephone: (703) 603-9900
  Website: **http://www.epa.gov/OUST/**

  This office directs callers on where to obtain information regarding underground storage tanks.

- *Used Filter Hotline*
  Telephone: (800) 99-FILTER (993-4583)

Website: **http://www.filtercouncil.org**

This hotline, sponsored by the Filter Manufacturers Council, provides commercial generators of used oil filters with a summary of the state's filter management regulations, referrals to companies that provide filter management services, referrals to state agencies, and a brochure entitled "How to Choose a Filter Management Service."

- *Wetlands Information Hotline*
  Telephone: (800) 832-7828 or (703) 748-1304

  This information line answers questions concerning the value and function of wetlands and options for their protection, and accepts requests for certain wetlands publications.

EPA Headquarters and Regional Office Information

- *EPA Headquarters*
  Telephone: (202) 260-1090
  Fax: (202) 260-0279
  Website: **http://www.epa.gov/**

- *Region 1 (CT, MA, ME, NH, RI, VT)*
  Telephone: (617) 918-1111
  Toll-free: (888) 372-7341
  Website: **http://www.epa.gov/region1/**

- *Region 2 (NJ, NY, PR, VI)*
  Telephone: (212) 637-3000
  Website: **http://www.epa.gov/region2/**

- *Region 3 (DC, DE, MD, PA, VA, WV)*
  Telephone: (215) 814-5000
  Toll-free: (800) 438-2474
  Website: **http://www.epa.gov/region3/**

- *Region 4 (AL, FL, GA, KY, MS, NC, SC, TN)*
  Telephone: (404) 562-9900
  Toll-free: (800) 241-1754
  Website: **http://www.epa.gov/region4/**

- *Region 5 (IL, IN, MI, MN, OH, WI)*
  Telephone: (312) 353-2000
  Toll-free: (800) 621-8431
  Website: **http://www.epa.gov/region5/**

- *Region 6 (AR, LA, NM, OK, TX)*
  Telephone: (214) 665-2200
  Toll- free: (800) 887-6063
  Website: **http://www.epa.gov/region6/**

- *Region 7 (IA, KS, MO, NE)*
  Telephone: (913) 551-7003
  Toll- free: (800) 223-0425

Website: **http://www.epa.gov/region7/**

- *Region 8 (CO, MT, ND, SD, UT, WY)*
  Telephone: (303) 312-6312
  Toll-free: (800) 227-8917
  Website: **http://www.epa.gov/region8/**

- *Region 9 (AZ, CA, HI, NV)*
  Telephone: (415) 744-1305
  Website: **http://www.epa.gov/region9/**

- *Region 10 (AK, ID, OR, WA)*
  Telephone: (206) 553-1200
  Toll-free: (800) 424-4372
  Website: **http://www.epa.gov/region10/**

Financial Assistance Information

- *Small Business Improvement Loans*
  Website: **http://www.GetSmart.com**

  GetSmart.com is a leading financial search engine allowing consumers to compare different loan products from multiple lenders in a single location. The website's search engine matches the borrower's financing preferences with lenders who are pre-screened and ready to fulfill their requests.

Pollution Prevention Websites

- *EPA's Home Page*
  Website: **http://www.epa.gov**

  This site provides information about EPA offices, programs and initiatives, and regulations.

- *EPA's Compliance Assistance Centers*
  Website: **http://es.epa.gov/oeca/mfcac.html**

  This site provides links to EPA's Compliance Assistance Centers.

- *EPA's Pollution Prevention*
  Website: **http://www.epa.gov/opptintr/p2home/**

  EPA's pollution prevention (P2) site includes general P2 information and publications, information on P2 in the regulations, the definition of P2 as defined under the Pollution Prevention Act of 1990, and information about voluntary P2 programs. There are also links to EPA and non-EPA P2 sites.

- *EPA's Office of Pollution Prevention and Toxics (OPPT)*
  Website: **http://www.epa.gov/opptintr/index.html**

  This site provides access to federal publications, OPPT programs and initiatives, and other information sources related to pollution prevention.

- *EPA's Office of Underground Storage Tanks*
  Website: **http://www.epa.gov/OUST/**

  This site provides access to federal publications and links to other resources about preventing pollution from underground storage tanks containing petroleum or hazardous substances.

- *EPA's Oil Program*
  Website: **http://www.epa.gov/oilspill**

  This site contains comprehensive information on oil spill prevention, preparedness, and response.

- *EPA's Brownfields*
  Website: **http://www.epa.gov/swerosps/bf/index.html#info**

  EPA's Office of Solid Waste and Emergency Response's *Brownfields* site provides information about projects and initiatives, tools, contacts, publications, and other information regarding Brownfields.

- Chemical Emergency Preparedness and Prevention Office
  Website: **http://www.epa.gov/ceppo/**

  This site provides information regarding hazardous and extremely hazardous substances, including planning and reporting requirements.

- *EPA's Enviroene*
  Website: **http://es.epa.gov**

  This site provides P2 information, as well as a link to the National P2 Roundtable described below.

- *National Fire Protection Association*
  Website: **http://www.nfpa.org**

  This site contains information on the National Fire Protection Association codes and standards.

- *National Pollution Prevention Roundtable Home Page*
  Website: **http://www.p2.org/**

  This site provides access to the latest information on legislative and regulatory P2 developments, National Roundtable publications, state P2 program websites, and a directory of industrial P2 publications.

- *Pollution Prevention Information Clearinghouse*
  Website: **http://www.epa.gov/opptintr/library/libppic.htm**

  Operated by EPA's Office of Pollution Prevention and Toxics, this clearinghouse is a free, non-regulatory service that provides telephone reference and referral, document distribution for selected EPA documents, and a special collection available for interlibrary loan.

- *Pollution Prevention Cooperatives*

  Coordinated with EPA's Enviroene program, these cooperatives provide easy access to pollution prevention and cleaner production resources around the Internet.

  - *U.S. Federal Agency Pollution Prevention Cooperative*
    Website: **http://es.epa.gov/cooperative/federal/**

  - *State and Local Government/Business Assistance Cooperative*
    Website: **http://es.epa.gov/cooperative/stateandlocal/**

- *Solvents Alternative Guide (SAGE)*
  Website: **http://clean.rti.org/**

  This on-line guide provides pollution prevention information on solvent and process alternatives for parts cleaning and degreasing. It also provides access to EPA's Air Pollution Prevention and Control Division website.

- *EPA's Small Business and Self Assessment Policies*
  Website: **http://es.epa.gov/oeca/finalpolstate.pdf**

  This website contains information on how a facility might qualify for penalty reductions through self-disclosure.

  Website: **http://es.epa.gov/oeca/sbcp2000.pdf**

  This website contains information on the Small Business Compliance Policy.

ENVIRONMENTAL SCREENING CHECKLIST FOR THE WATER TRANSPORTATION INDUSTRY

Facility Name: **Site Reviewer:**
Facility Location: **Date:**

1.0 WASTE MANAGEMENT		
Hazardous Waste Management*	How much hazardous waste does the facility generate a month? (p. W-5)	1) No more than 220 lbs (CESQG) 2) Between 220 and 2,200 lbs (SQG) 3) Over 2,200 lbs (LQG)
	Does the facility have an EPA hazardous waste generator ID number? (p. W-6)	Y N NA
	Does the facility store hazardous waste in appropriate storage containers? (p. W -6)	Y N NA
	How does the facility dispose of its hazardous waste? (p. W-7)	Ships hazardous waste off site/Disposes of hazardous waste on site and is RCRA-permitted/Other/NA
Used Oil and Used Filters*	Are used oil containers/tanks and associated piping labeled "used oil"? (p. W-10) Are used oil containers/tanks and associated piping leak free ? (p. W-10)	Y N NA Y N NA
	Does the facility prevent the mixing of used oil with hazardous waste ? (p. W-10)	Y N NA
	How does the facility manage/dispose of used oil? (p. W-11)	Sent off site for recycling/Burned in an on-site space heater/Burned off site/Other/NA
	How does the facility manage/dispose of oil filters? (p. W-13)	Recycle / Service company / Other / NA
	How does the facility manage/dispose of fuel filters? (p. W-13)	Recycle / Service company / Hazardous waste / Other / NA
Used Rags/Shop Towels*	How does the facility manage used rags and shop towels? (p. W-15)	Laundry service/Burned for heat/Hazardous waste transporter/ Trash/Other/NA
Absorbents*	Does the facility determine if used absorbents are hazardous before disposal? (p. W-16)	Y N NA
Used Batteries*	If storing used batteries, does the facility protect them from storm water contact? (p. W-18)	Y N NA
	How does the facility manage/dispose of used batteries? (p. W-18)	Return to supplier/Recycle/Service company/ Universal waste handler/Hazardous waste landfill/Other/NA
Metal Scraps*	How does the facility manage/dispose of scrap metal? (p. W-20)	Recycle/Reuse/Sale/Other/NA
Used Antifreeze*	In terms of storage, does the facility keep used antifreeze segregated and in labeled containers? (p. W-21)	Y N NA
	Has the facility determined if it generates any antifreeze that is a hazardous waste? (p. W-21)	Y N NA
2.0 WASTEWATER AND STORM WATER MANAGEMENT		
Wastewater and Storm Water Management at Water Transportation Facilities*	Can the facility identify the final destination of all its drains? (p. W-28)	Y N NA
	Does the facility have an NPDES permit for direct discharges? (p. W-30)	Y N NA
	Does the facility submit its monitoring results for wastewater discharges on a discharge monitoring report (DMR) form to its permitting agency? (p. W-30)	Y N NA
	Does the facility keep accurate records of monitoring information for the minimum requirement of 3 years? (p. W-31)	Y N NA
	Does the facility have a storm water permit? If Yes, does the facility have a storm water pollution prevention plan (SWPPP)? (p. W-32)	Y N NA Y N NA
	If discharging to a municipal sanitary sewer, has the facility notified the publicly-owned treatment works (POTW) and received approval for discharges? (p. W-32)	Y N NA
Activities Generating Wastewater and/or Storm Water*	How does the facility clean the floors and surrounding areas? (p. W-34)	Dry Cleanup / Water
	If the facility stores materials outside, are they protected from contact with storm water? (p. W-35)	Y N NA
Sludge Management*	How does the facility manage the sludge from an oil/water separator? (p. W-36)	Off-site disposal as hazardous sludge / Off-site disposal to other facility / On-site disposal / Other / NA

3.0 DOCKSIDE MAINTENANCE AND REPAIR ACTIVITIES		
Cargo Loading and Off Loading*	If hazardous materials are loaded at the facility, are containers inspected for : (1) proper labeling/placarding, (2) signs of leakage, and (3) compatibility with other hazardous materials? (p. W-39)	 Y N NA Y N NA Y N NA
	Is the facility familiar with requirements under the Final Rule for Marine Tank Vessel Loading Operations? (p. W-40)	Y N NA
Painting and Paint Removal Operations*	How does the facility manage/dispose of paint stripping wastes and baghouse dusts? (p. W-43)	Recycling/ Hazardous waste landfill / Other /NA
	When not in use, does the facility manage/dispose of paints in labeled containers? (p. W-44)	Y N NA
	How does the facility manage/dispose of used paints and painting waste products? (p. W-44)	Return to supplier/ Reuse/ Recycle/ Other/ NA
Air Conditioning Maintenance*	Are CFC-containing equipment maintained by certified technicians? (p. W-48)	Y N NA
	Does the facility have documentation that refrigerants from recovery equipment are sent to an EPA-approved reclaimer? (p. W-50)	Y N NA
Fueling Operations	Does the facility use overfill protection measures, spill containment methods, and spill response equipment used during fueling? (p. W-52)	Y N NA
Equipment Cleaning and Spent Solvents*	If halogenated solvents are used in cleaning equipment, has the facility submitted a notification report to the air permitting agency? (p. W-54)	Y N NA
	How does the facility manage/dispose of its spent solvents? (p. W-55)	Third party vendor/ Permitted discharge to storm sewer or surface waters/ Sanitary sewer/ Other / NA
	Does the facility store spent solvents in labeled containers ? (p. W-55)	Y N NA
Pesticides *	Are restricted use pesticides (RUPs) applied only by a certified commercial applicator? (p. W-59)	Y N NA
4.0 STORAGE TANKS AND SPILL PREVENTION, CONTROL, AND COUNTERMEASURES		
Underground Storage Tanks (USTs)*	Has the facility notify State/Tribe UST program office of any USTs located on site? (p. W-61)	Y N NA
	Does the facility conduct leak detection for tank and piping of all on-site USTs? (p. W-61)	Y N NA
	Do USTs at the facility meet requirements for spill, overfill, and corrosion protection? (p. W-62)	Y N NA
	Does the facility maintain records of leak detection; spill, overfill, and corrosion protection; corrective actions; closure; and financial responsibility? (p. W-62)	Y N NA
Aboveground Storage Tanks (ASTs)	Does the facility inspect ASTs on a periodic basis for leaks or other hazardous conditions? (p. W-65)	Y N NA
Spill Prevention, Control, and Countermeasures (SPCC)*	Does the facility have an SPCC plan signed by a professional engineer? (p. W-67)	Y N NA
5.0 PLANNING AND ACCIDENTAL RELEASE REPORTING		
EPCRA Planning and Reporting Requirements*	If the facility has extremely hazardous substances (EHSs) in excess of their threshold planning quantities (TPQs) has the facility notified its state emergency response commission (SERC) and local emergency planning committee (LEPC)? (p. W-70)	Y N NA
RCRA Contingency Plan*	If the facility qualifies as a large quantity generator (LQG), does it have a written contingency plan in place for responding to spills and releases of hazardous substances? (p. W-73)	Y N NA
	If the facility is a small quantity generator (SQG), does it have basic contingency procedures in place for responding to spills and releases of hazardous substances? (p. W-74)	Y N NA
Facility Response Plan (FRP)*	Does the facility have an FRP? (p. W-74)	Y N NA
Risk Mgmt Plan (RMP)*	Does the facility have an RMP? (p-76)	Y N NA

* For additional questions regarding these environmental compliance issues refer to the workbook.

Note: Refer to the workbook for ***Section 6.0 Vessels and Underway Activities***, including *marine pollution* (p. W-79), *ocean dumping* (p. W-86), *discharging on shore to water transportation facilities* (p. W-87), and *pollution prevention* (p. W-88). In addition, the workbook includes environmental compliance information and questions regarding: *PCB-containing equipment* (p. W-23), *facility renovation/demolition - asbestos concerns* (p. W-46), and *disposal of dredge and fill material* (p. W-56).

SECTION 1.0 WASTE MANAGEMENT

1.1 Hazardous Waste Management

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility exam its operations relating to *hazardous waste generation, storage, and transport* for compliance with environmental requirements:

a. *Does the facility generate hazardous wastes? (p. W-3)*

b. How much hazardous waste does the facility generate a month? (p. W-5)

c. Does the facility have an EPA hazardous waste generator ID number? (p. W-6)

d. Does the facility store hazardous wastes in appropriate storage containers? (p. W-6)

e. *Does the facility meet all hazardous waste storage (quantity and time) requirements? (p. W-7)*

f. How does the facility manage/dispose of its hazardous waste? *(p. W-7)*

g. *Does the facility have hazardous waste manifests or DOT shipping papers on file? (p. W-8)*

h. *Does the facility keep copies of its manifests for the 3 year minimum requirement? (p. W-8)*

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Identifying Hazardous Waste

If the facility is unsure of whether or not its waste is hazardous call the **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346**, or the **Chemical Referral Service Hotline** at **1-800-262-8200**, which is maintained by the National Chemical Manufacturers Association.

A water transportation facility may produce wastes that are hazardous. Therefore, it is important that the facility identify and manage them properly to protect facility's employees and others in the community, as well as the environment. As a waste generator, the facility is responsible for all steps in hazardous waste management, from generation to final disposal. **The facility can be held liable for any mismanagement of its wastes, even after they leave the facility.** Therefore, it is important to know the facts. Some of these hazardous wastes are listed in Exhibit 2.

What is Hazardous Waste

To be considered "hazardous waste," materials must first meet EPA's definition of "solid waste." Solid waste is discarded material, including garbage, refuse, and sludge (solids, semisolids, liquids, or contained gaseous materials). Solid wastes that meet the following criteria are hazardous and subject to regulations under Resource Conservation and Recovery Act (RCRA) (40 CFR Part 261):

- ***Listed waste.*** Waste is considered hazardous if it appears on one of four lists of hazardous wastes published in 40 CFR Part 261 Subpart D. Currently, more than 400 wastes are listed. Wastes are listed as hazardous because they are known to be harmful to human health and the environment when not properly managed. Even when properly managed, some listed wastes are so dangerous that they are called "acutely hazardous wastes." Examples of acutely hazardous wastes include wastes generated from some pesticides that can be fatal to humans even in low doses.

- ***Characteristic waste***. If the waste does not appear on one of the hazardous waste lists, it still might be considered hazardous if it demonstrates one or more of the following characteristics:

  - ***Ignitable*****:** Ignitable wastes can create fire under certain conditions (e.g., temperature, pressure) or are spontaneously combustible (40 CFR 261.21). Examples include certain used paints, degreasers, oils and solvents.

  - ***Corrosive:*** Corrosive wastes are acids or bases that are capable of corroding metal, such as storage tanks, containers, drums, and barrels (40 CFR 261.22). Examples include rust removers, acid or alkaline cleaning fluids, and battery acid.

  - ***Reactive:*** Reactive wastes are unstable and explode or produce toxic fumes, gases, and vapors when mixed with water (40 CFR 261.23). Examples include lithium-sulfide batteries and explosives.

  - ***Toxic:*** Toxic wastes are harmful or fatal when ingested or absorbed, or it leaches toxic chemicals into the soil or groundwater when disposed of on land (40 CFR 261.24). Examples are wastes that contain high concentrations of heavy metals, such as cadmium, lead, or mercury.

    The facility can determine if its waste is toxic by having it tested using the **Toxicity Characteristic Leaching Procedure (TCLP)**, or by **process knowledge**. **TCLP** can be done at the laboratory. It is designed to replicate the leaching process and other effects that occur when wastes are buried in a typical municipal landfill. If the leachate from the waste contains any of the regulated contaminants at concentrations equal to or greater than the regulatory levels, then the waste exhibits the toxicity characteristic. **Process knowledge** is detailed information on wastes obtained from existing published or documented waste analysis data or studies on hazardous wastes generated by similar processes. For example, EPA's lists of hazardous wastes in 40 CFR Part 261 (as discussed above) can be used as process knowledge.

Universal Waste Rule

Universal Waste Rule
On July 6, 1999, EPA issued a final rule called the universal waste rule. This rule provides alternative, less stringent procedures for several types of wastes such as batteries, pesticides, mercury thermostats and lamps including fluorescent. Copies of the rule and corresponding fact sheet can be obtained from the **RCRA/UST, Superfund, EPCRA Hotline** at **1-800-424-9346**.

In 1995, EPA issued the **Universal Waste Rule** as an amendment to RCRA to reduce the regulatory burden on businesses by providing an alternative and less stringent set of management standards for three types of waste that potentially would be regulated as hazardous: (1) batteries (e.g., nickel cadmium, small sealed lead acid) that are spent (i.e., will not be reclaimed or regenerated at a battery recycling/reclamation facility); (2) pesticides that have been suspended or canceled, including those that are part of a voluntary or mandatory recall under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) or by the registrant; and (3) mercury thermostats including temperature control devices containing metallic mercury. *Check with the state regulatory agency to see if it has adopted the Universal Waste Rule.*

1.1a Does the facility generate hazardous wastes?

Note: *Under RCRA,* ***vessels*** *are not considered hazardous waste generators. Rather, the generators of on-board vessel wastes, such as bilge water and used oil, are the facilities that remove the wastes from the ships and manage it on shore.*

Yes	Facility has gone through the waste determination process or used process knowledge and determined that it does generate hazardous waste. See **Exhibit 2** for common hazardous wastes generated by water transportation facilities.
No	Facility has determined that it does not generate hazardous waste.
NA / Not determined	Facility has not gone through this process. ***Note: Facility must immediately conduct this process to determine if it is generating a hazardous waste*****.**

Exhibit 2. Typical Wastes Generated at Water Transportation Facilities and Typical Category by Waste Management Method[1]

Waste Stream	*Typical Category If Not Mixed With Other Hazardous Waste*	*Typical Category If Recycled*	*Typical Category If Disposed in Landfill and Not Mixed With a Hazardous Waste [2,3]*
Used Oil (and Shop Rags for Used Oil)	Used oil	Used oil	Hazardous Waste
Used Oil Filters [4]	Nonhazardous solid waste **If No Free Flowing Used Oil**	Used oil if not drained	Nonhazardous Solid Waste **If No Free Flowing Used Oil**
Oil Spill Absorbent Material	Used oil	Used oil	Depends on used oil characterization
Used Transmission Fluid	Used oil	Used oil	Hazardous waste
Used Brake Fluid	Used oil	Used oil	Hazardous waste
Used Antifreeze	Depending on characterization	Depends on characterization	Depends on characterization
Used Solvents	Hazardous waste	Hazardous waste	Hazardous waste
Used Citric Solvents	Nonhazardous solid waste	Nonhazardous solid waste	Nonhazardous solid waste
Used Cleaning Agents and Shop Rags for Parts Cleaning	Depends on characterization of cleaning agent	Depends on characterization of cleaning agent	Depends on characterization of cleaning agent
Shop Rags and Spill Material Used for Chemical Solvent and Gasoline	Hazardous waste	Hazardous waste	Hazardous waste
Spilled or Unused Fuels	Hazardous waste	Hazardous waste	Hazardous waste
Spilled or Unusable Paints and Thinners	Hazardous waste	Hazardous waste	Hazardous waste
Abrasive grit blast media	Depends on material or paint being blasted (e.g., latex vs. lead paint)	Depends on material or paint being blasted	Depends on material or paint being blasted
Batteries (1) Lead acid, Ni/Cd, Ni/Fe (2) Alkaline	(1) If hazardous, universal waste (2) Typically a nonhazardous waste	(1) If hazardous, universal waste (2) Nonhazardous waste	(1) If hazardous, universal waste (2) Typically a nonhazardous waste
Used Tires	Nonhazardous solid waste	Nonhazardous solid waste	Nonhazardous solid waste

1 Disclaimer: This list is not an actual regulatory determination. It is a list that identifies specific materials at water transportation facilities and how they could be classified. These restrictions on how the waste may be disposed of may change based on the generator status (i.e., CESQG, SQG, or LQG).
2 Municipal landfills are not permitted to accept hazardous waste from SQGs or LQGs; however, they may accept waste from CESQGs.
3 If any solid waste is mixed with a hazardous waste, then the mixture becomes a hazardous waste.
4 Used fuel filters are regulated separately from used oil filters, and are regulated depending on the type of fuel.

1.1b How much hazardous waste does the facility generate a month?

Generation occurs when a substance becomes a waste. When determining the volumes of waste generated, only waste that is in a container or other unit waiting to be disposed of is considered "generated." Thus, solvent stored in a drum waiting for disposal or recycling is "generated," while solvent in a parts cleaner that is currently in use is not yet a waste and has not yet been generated.

The facility generates: (*Pick one*)

No more than 220 lbs (*100 kg*) of hazardous waste per month. This is approximately ½ of a 55-gallon drum or less of hazardous waste in any month. In this case, the facility is a ***conditionally exempt small quantity generator (CESQG)*** and an EPA identification (ID) number is not required.

Between 220 lbs (*100 kg*) and 2,200 lbs (*1,000 kg*) of hazardous waste per month. In this case, the facility generates more than ½ of a 55 gallon drum of hazardous waste, but less than 5 (five) 55-gallon drums of hazardous waste in any month. In this case, the facility is a ***small quantity generator (SQG)*** and must have an EPA ID number.

Note: If the facility is a CESQG and generates no more than 2.2 lbs (*1 kg*) of *acutely hazardous waste* (or 220 lbs [*100 kg*] of acutely hazardous waste spill residues) in a calendar month, and never store more than that amount for any period of time, the facility may manage the acutely hazardous waste according to the CESQG requirements. If the facility generates more than 2.2 lbs (*1 kg*) of *acutely hazardous waste*, it must be managed according to the LQG requirements.

Over 2,200 lbs (*1,000 kg*) of hazardous waste per month. In this case, the facility generates approximately 5 (five) 55-gallon drums or more of hazardous waste in any month. In this case, the facility is a ***large quantity generator (LQG)*** and must have an EPA ID number.

The total weight of hazardous waste generated includes only waste (1) defined as hazardous by EPA regulations, (2) determined to be hazardous by the facility, and (3) not otherwise exempt from counting. For example, used oil that has not been mixed with anything and is destined for recycling does not have to be counted.

Generators who periodically exceed or fall below their normal generation limits in any given calendar month are called ***episodic generators***. If the amount of waste generated in a given calendar month places the generator in a different category, the generator is responsible for complying with all applicable requirements of that category for all waste generated during that calendar month. For example, if a generator produces 300 kg of hazardous waste in March, that waste is subject to SQG requirements; if the same generator produces 1,500 kg of hazardous waste in April, that waste is subject to LQG requirements.

1.1c Does the facility have an EPA hazardous waste generator ID number?

If the facility is an SQG or LQG (as discussed in *Question 1.1b*), it must have an EPA hazardous waste generator ID number. This requirement applies even for ***episodic generators*** who may fall into the SQG or LQG categories for one month only. This number must be entered on all hazardous waste manifests. It is usually placed near the top of the form under the heading, "Generator ID #." If the state issues the number, the number will start with the state abbreviation followed by the number (e.g., NY-12345678). CESQGs do not need an identification number under federal law. Contact the state or EPA regulatory agency to obtain a copy of EPA form 8700-12 "Notification of Hazardous Waste Activity." For additional help, call the **RCRA/UST, Superfund, EPCRA Hotline** at **1-800-424-9346.**

Yes Facility is an SQG or an LQG and has obtained an identification number from EPA or the state regulatory agency. ✔

No Facility is an SQG or an LQG and has not obtained an EPA identification number.

NA Facility does not generate hazardous waste or is a CESQG. ✔

1.1d Does the facility store hazardous waste in appropriate storage containers?

Containers must meet the following requirements (40 CFR 262.34):

- Clearly marked with the words **"Hazardous Waste"** and the date when waste accumulation began. *Labels for this purpose may be available from the waste hauler*.
- Kept in good condition and stored in a manner that minimizes risks of ruptures, leaks, or corrosion.
- Kept closed except when being filled or emptied, except if volatile explosion is possible and emergency ventilation is needed.
- Inspected at least once per week for leaks or corrosion. ***Note:*** *Some states may require facilities to keep a written record of these inspections. Any problems should be corrected immediately. If any corrections are made, they should be noted in a permanent record and kept on file for at least 3 years.*
- Stored in a manner that minimizes the potential for accidental mixing of incompatible materials.

Yes Facility stores waste in containers that meet the above requirements. ✔

No Facility stores waste in containers that do not meet the above requirements.

NA Facility does not generate hazardous waste***.***

1.1e Does the facility meet all hazardous waste storage (quantity and time) requirements?

Hazardous waste generators must store hazardous waste according to the following requirements:

- **LQGs** may accumulate any amount of hazardous waste for no more than 90 days.
- **SQGs** can accumulate no more than 13,228 lbs (6,000 kg) of hazardous waste on site for up to 180 days without permit (or up to 270 days if the facility must transport the hazardous waste more than 200 miles away for recovery, treatment, or disposal). If these limits are exceeded, the facility is a treatment, storage, and disposal facility (TSDF) and must obtain an operating permit.
- **CESQGs** have no maximum on-site time limits for storage*, but cannot accumulate more than 2,200 lbs (1,000 kg) of hazardous wastes or 2.2 lbs (1 kg) of acutely hazardous waste, or 220 lbs (100 kg) of acutely hazardous waste spill residues, at any time.*

Yes Facility complies with all hazardous waste storage quantity and time requirements. ✔

No Facility does not comply with all hazardous waste storage quantity and time requirements.

NA Facility does not generate hazardous waste.

1.1f How does the facility manage/dispose of its hazardous waste?

Ships hazardous waste off site to:

- A RCRA-permitted TSDF ✔
- A recycling facility ✔
- An interim status facility or ✔
- An exempt facility. ✔

Disposes of hazardous waste on site and is a RCRA-permitted TSDF. ✔

Other ***Note:*** *If not managing hazardous waste by one of the above options, facility is out of compliance and must rectify the situation immediately*.

NA Facility does not generate hazardous waste.

1.1g Does the facility have hazardous waste manifests or DOT shipping papers on file?

For SQGs and LQGs, a **Uniform Hazardous Waste Manifest** must accompany each hazardous waste shipment. [Exception: SQGs do not need manifests for certain recyclable materials such as solvents, and there are some hazardous materials (e.g., scrap metal) which do not have to be manifested.] Contact the state regulatory agency for a Uniform Hazardous Waste Manifest form. CESQGs do not need to use manifests.

A hazardous waste transporter should be able to assist in completing the manifest. Additionally, **DOT shipping papers** may need to accompany each hazardous waste shipment. These papers document the shipment type, quantity, origin, and destination, and must accompany each hazardous waste shipment. For more information, contact the **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346**, or the state regulatory agency.

Yes Facility has manifests and/or shipping papers on file for hazardous wastes transported. ✔

No Facility does not have manifests and/or shipping papers for hazardous wastes shipments.

NA Facility does not ship hazardous waste off site.

1.1h Does the facility keep copies of its manifests for the 3 year minimum requirement?

The facility must meet various recordkeeping requirements as part of hazardous waste management obligations. The Uniform Hazardous Waste Manifest Form is a multi-copy shipping document that reports the contents of its shipment, the transport company used, and the treatment/disposal facility receiving the wastes. The hazardous waste generator, the transporter, and the treatment/disposal facility must each sign this document and keep a copy. The waste disposal/treatment facility also must send a copy back to the hazardous waste generator, so that the generator can be sure that its shipment was received. A copy of the manifest is required to be kept at the facility for 3 years.

Yes Facility maintains a copy of its manifest for a minimum of 3 years. ✔

No Facility has not maintained a copy of its manifest for a minimum of 3 years.

NA Facility does not generate hazardous waste.

1.2 Used Oil and Used Filters

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *used oil and used filters* for compliance with environmental requirements:

a. Are used oil containers/tanks and associated piping leak free and labeled "used oil"? (p. W-10)

b. Does the facility prevent the mixing of used oil with hazardous waste? (p. W-10)

c. How does the facility manage/dispose of used oil? (p. W-11)

d. If the facility transports more than 55 gallons of used oil off site at one time, (1) does it have an EPA ID number, and (2) is it licensed as a used oil transporter? (p. W-11)

e. Does the facility completely drain used oil filters and/or fuel filters before disposal? (p. W-12)

f. How does the facility manage/dispose of its used oil filters? (p. W-13)

g. Has the facility determined if its used fuel filters are hazardous? (p. W-13)

h. How does the facility manage/dispose of its used fuel filters? (p. W-13)

i. Does the facility inspect used oil filter storage areas for spills and leaks? (p. W-14)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Used Oil

Under the Used Oil Standards (40 CFR Part 279), ***Used oil produced on vessels*** from normal shipboard operations is considered to be generated at the time it is transported ashore. The owner or operator of the vessel and the person(s) removing or accepting used oil from the vessel are co-generators of the used oil and are both responsible for managing the waste. Once the used oil is transported on shore, the co-generators may decide among them which party will fulfill the requirements.

Facilities should consider several environmental issues when performing any oil handling activities such as oil changes or oil/fuel filter replacement to motor vehicles, maintenance equipment, and other motors. Most facilities recycle or reclaim used oil. Used oils are regulated under the **Used Oil Standards** (40 CFR Part 279), and are typically not classified as hazardous wastes at the federal level. However, some states may have stricter disposal requirements. *In addition, used oil generators are also subject to all applicable Spill Prevention, Control and Countermeasures (SPCC) and underground storage tank (UST) standards.* Contact the state regulatory agency to determine the used oil disposal requirements. Facilities should maintain all records on their used oil storage and recycling activities.

1.2a Are used oil containers/tanks and associated piping leak free and labeled "used oil"?

Facilities must store used oil in leak free containers that have labels with the words **"used oil."** No special labels are necessary, provided that the words "used oil" are visible at all times. Spray painting, crayon, or handwritten (preferably not in pencil) labels are okay. One can mix used motor oil with other used oils (hydraulic oils, transmission fluids, brake fluids) and stored in the same tank.

> ***Note:*** *If a facility uses storage tanks to store waste oil, such tanks may be regulated under underground storage tank (UST) or aboveground storage tank (AST) regulations.*

Some facilities have *pipes* that connect to the used oil storage tank. Piping runs from the inside of the building to the outside disposal point (i.e., tank). This way, technicians can pour their oil in a funnel or small bucket which is attached to the piping, and the oil goes directly to the tank. In this case, the funnel/bucket or piping should also be labeled with the words **"used oil."**

Yes Used oil is in a leak free container(s) labeled with the words "used oil." ✔

No Used oil is not in a leak free container(s) and/or is not labeled "used oil."

NA Facility does not generate used oil.

1.2b Does the facility prevent the mixing of used oil with hazardous waste?

You should not mix hazardous waste fluids, such as used solvent, gasoline, or other hazardous substances, with used oil, or the entire volume may be classified as hazardous waste. For example, while mixing a *listed hazardous waste* with used oil will result in a hazardous waste, mixing a *characteristic hazardous waste* with used oil will not result in a hazardous waste, *unless it exhibits a hazardous characteristic (see Section 1.1)*. Used motor oil may be mixed with other used oils (e.g., transmission fluid or brake fluid) and stored in the same container/tank. For questions about which specific products may be mixed with used oil, call the **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346.**

Yes Hazardous wastes are not mixed with used oil. ✔

No Hazardous wastes are mixed with used oil.

NA Facility does not generate "used oil."

1.2c How does the facility manage/dispose of its used oil?

Recycling and burning (for energy recovery) of used oil that has not been mixed with any other waste are the most environmentally protective, and often the most economical approaches to handling used oil.

Under Used Oil Management Standards, generators can burn used oil as long as:
! The used oil is generated on-site.
! Space heaters with maximum heating capacity of 0.5 million BTUs per hour or less are used to burn the used oil.
! The gases from the space heater are vented outside.

The facility can handle and dispose of used hydraulic oils as used oil and it can be blended with other used oils, such as engine and lube oils. Recycling and reclamation are preferred over disposal.

Sent off site for recycling	Facility has a regular hauler who takes the used oil to a recycling facility. ✔
Burned in an on-site space heater	Facility burns its used oil in an on-site heater with maximum heating capacity of 0.5 million BTUs used to heat the facility or heat hot water. ***Note:*** *There may be Clean Air Act (CAA) requirements that apply when burning used oil. Contact the state or local air pollution control agency for more information.* ✔
Burned off site	Facility has a hauler or takes its own oil to a used oil burner. ✔
Other	Facility does not use any of the methods described above. ***Note:*** *Used oil should not be disposed of in sewers, drains, dumpsters, or on the ground, or used as a dust suppressant or control.*
NA	Facility does not generate used oil.

1.2d If the facility transports more than 55 gallons of used oil off site at one time, (1) does it have an EPA ID number, and (2) is it licensed as a used oil transporter?

If the facility transports *more than 55 gallons* of used oil off site, it is required to (1) have an EPA ID number and (2) be licensed as a used oil transporter when transporting used oil to an approved used oil collection center.

Yes	Facility has an EPA ID number and is licensed as a used oil transporter. ✔
No	Facility does not have an EPA ID number, or is not licensed as a used oil transporter.
NA	Facility *does not transport more than 55 gallons* of used oil off site at one time.

Used Filters

Used Oil Filters: Used oil filters are exempt from federal hazardous waste requirements as long as the filters:

- Are not terne-plated. (Terne is an alloy of tin and lead. The lead in the terne-plating makes the filters hazardous.)

- Have been properly drained (i.e., hot-drained) of used oil.

According to federal regulations, facilities can dispose of filters as solid waste (in some states) provided that the filter has been **hot-drained** to remove residual used oil. This means that no matter what draining option is used, one should remove the filter from a warm engine and drained immediately. Four distinct methods of **hot-draining** can be used:

- Gravity Draining: When the filter is removed from the engine, place the filter with its gasket side down in a drain pan. If the filter has an anti-drain valve, the "dome end" of the filter should be punctured with a screwdriver (or similar device) so that oil can flow freely. Drain the filter for 12 to 14 hours.

- Crushing: Crush filter by a mechanical, pneumatic, or hydraulic device to squeeze out the used oil/fuel and compact the remaining filter materials.

- Disassembly: Separate filter into its different parts using a mechanical device. This allows most of the used oil/fuel to be removed from the filter, and the metal, rubber, and paper parts of the filter to be recycled separately.

- Air Pressure: Place filter in a device where air pressure forces the used oil/fuel out of the filter.

Protect storage containers designated for used oil filters from storm water with a cover. In addition, assure the container is capable of holding any used oil that seeps from the filters.

Used fuel filters: Used fuel filters should be properly drained (using the same procedure as used oil filters) and then tested to determine if they are hazardous. If the fuel filters are hazardous, they must count toward the facility's generator status (see *Section 1.1* for more information). Store used fuel filters in a separate, marked, fireproof container. If the facility is a CESQG, it may dispose of used fuel filters in a licensed landfill or give them to a hazardous waste hauler. If the facility is an SQG or LQG, then it must use a hazardous waste hauler with an approved EPA ID number. Metal filters may be managed as scrap metal if properly drained.

Note: *Since disposal requirements of used filters may vary by state, a facility should consult the state regulatory agency to assure proper disposal*. For more information regarding state filter management regulations, and referrals to state agencies and companies that provide filter management services, refer to the **Used Filter Hotline** at **1-800-993-4583**. This hotline is sponsored by the Filter Manufacturers Council.

1.2e Does the facility completely drain used oil filters and/or used fuel filters before disposal?

Yes Facility completely drains filters (i.e., no visible signs of free-flowing oil

remains) prior to disposal. ✔

No Facility does not completely drain filters prior to disposal.

NA Facility does not generate used oil or fuel filters.

1.2f How does the facility manage/dispose its used oil filters?

Recycle Filters are recycled for scrap metal. ✔

Service Facility contracts with a service which takes filters. ✔

Trash Filters are disposed of in the dumpster (e.g., not segregated from other waste such as paper, plastics, food, etc.).

Other Method of disposal is not listed above. ***Note:*** *The facility may be out of compliance. Contact the state regulatory agency for assistance.*

NA Facility does not generate used oil filters.

1.2g Has the facility determined if its used fuel filters are hazardous?

Yes Facility has determined through testing or process knowledge whether its used fuel filters are hazardous. ✔

No Facility has not determined if its used fuel filters are hazardous.

NA Facility does not generate used fuel filters.

1.2h How does the facility manage/dispose its used fuel filters?

Note: *If you determine used fuel filters to be hazardous waste, they must be counted towards the facility's generator status and managed accordingly. See Section 1.1 for more information on hazardous waste management.*

Recycle Facility recycles used fuel filters. ✔

Service Facility contracts with a service which takes used fuel filters as they are. ✔

Managed as hazardous waste Facility manages used fuel filters as hazardous waste. ✔

Trash Filters are discarded in the dumpster (e.g., not segregated from other waste such as paper, plastics, food, etc.).

Other Method of disposal is not listed above. ***Note:*** *The facility may be out of compliance. Contact the state regulatory agency for assistance.*

NA Facility does not generate used fuel filters.

1.2i Does the facility inspect used oil filter storage areas for oil spills and leaks?

Shop Rag/Towel Laundering
Many states do not consider rags going for laundering to be hazardous waste (although laundering could generate hazardous waste). This is because the rag/towel, even if contaminated with hazardous waste, is not discarded and therefore, the hazardous waste requirements do not apply. Keep in mind that some states may consider these rags/towels to be solid wastes, even if they go to a laundry. Check with the state regulatory agency on requirements for managing shop rags/towels.

Engine oil can enter the environment when one changes and stores oil filters and when engines drip crankcase and lube oils. Take preventive measures to minimize oil dripping by regular maintenance of vessels and support vehicles. Take care not to store used oil and used oil filters near floor drains. Many facilities keep absorbent materials close to oil drums or oil handling locations in order to protect nearby areas from contamination.

All areas where oils are received, stored, used, changed, and potentially spilled need regular inspections for spills. Use one of the following indicators to identify oil spills: (1) sheen on water, (2) stained soil, (3) lack of vegetation, or (4) visible leaks. Contain all spills and clean up immediately after detection. The facility should consult the Spill Prevention, Control, and Countermeasures (SPCC) plan in the event of a spill or leak. The SPCC plan contains detailed information on spill cleanup and remediation. In addition, if any oil enters surface waterways and produces a sheen, notify the **National Response Center** (1-800-424-8802) and state emergency response agency *immediately.*

Yes Facility inspects storage areas for oil spills. ✔

No Facility does not inspect storage areas for oil spills.

NA Facility does not have storage areas for used oil and filters.

1.3 Used Rags/Shop Towels

NOTE: The following questions, one of which is included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *used rags and used shop towels* for compliance with environmental requirements:

a. How does the facility manage used rags and shop towels? *(p. W-15)*

b. How are used rags and shop towels stored while on site? (p. W-15)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Used Shop Rags and Towels

A facility must manage used shop rags and towels as **hazardous waste** if they are contaminated with a hazardous waste or display a hazardous characteristic due to the presence of gasoline or metal-contaminated antifreeze. EPA allows facilities to manage these used rags and towels by using a laundry service, or disposing of them through an EPA-licensed hazardous waste transporter and disposal facility.

You can recycle used shop rags and towels contaminated with **used oil** only. You can burn them for energy recovery under the same Used Oil Management Standards existing for burning used oil. (See page W-12, question 1.2c) According to the used oil regulations, you should handle oil-contaminated rags and towels as used oil until the oil is removed from them (40 CFR Part 279). EPA considers used oil satisfactorily removed when *no visible sign of free flowing oil* remains in the rags/towels. ***Note:*** *After used oil has been removed, handle the material as a hazardous waste if it contains a hazardous waste or exhibits any property of hazardous waste. See Section 1.1 for more information regarding hazardous wastes. Many facilities avoid the hazardous waste determination process by sending rags to a laundering facility for washing, rather than disposal.*

1.3a How does the facility manage used rags and shop towels?

Laundry service	Facility sends used rags/towels off site to be laundered, often with technicians' uniforms. ✔
Burned for heat	Facility mixes used rags/towels with used oil and burned in a shop space heater with maximum heating capacity of 0.5 million BTU per hour or sent to a used oil burner. This does not include burning in a barrel simply for disposal. ✔
Hazardous waste transporter	Facility mixes used rags/towels with hazardous waste and disposes them through an EPA-licensed hazardous waste transporter and disposal facility.
Trash	Facility disposes used rags/towels with trash (in a dumpster) and not segregated. *If rags/towels are contaminated with hazardous waste, they should not be disposed of with trash, but managed according to one of the above options*.
Other	Method of disposal is not listed.
NA	Facility does not generate used rags or shop towels.

1.3b How are used rags and shop towels stored on site?

Separate container	In a container (e.g., bucket, can, barrel, on a shelf or bench, etc.) that only contains rags. ✔
Stored as hazardous waste	Store used rags/towels contaminated with hazardous waste according to hazardous waste requirements (see *Section 1.1*). ✔

Shop trash can	Can/dumpster that contains all shop waste (not segregated).
Floor	On the floor, in a pile, or simply scattered.
Other	Method of storage is not listed.
NA	Facility does not generate used shop rags or towels.

1.4 Absorbents

NOTE: The following questions, one of which is included in the accompanying checklist (highlighted in bold), will help the facility examine its operations relating to *absorbents* for compliance with environmental requirements:

a. Does the facility determine if used absorbents are hazardous before disposal? (p. W-16)

b. How does the facility manage/dispose of absorbents used for oil spills? (p. W-17)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Absorbents

Cleaning up spills and releases of chemicals and petroleum products generally involves the use of materials such as kitty litter type substances (known as "quick dry", "speedi-dry", "oil dry"), clay absorbent, pads, pillows, booms, towels, and other such absorbent materials. Facilities use sawdust sometimes as an absorbent in rural areas. Use proper absorbent for the type of chemical spilled. Once used in a cleanup, dispose of these materials properly.

1.4a Does the facility determine if used absorbents are hazardous before disposal?

Absorbents are considered hazardous waste if: (1) they are contaminated with a hazardous material (e.g., solvents or gasoline), or (2) they are characterized as hazardous by the facility.

Although used oil is not considered a hazardous waste if it is recycled, it is a hazardous waste if it is disposed of in a landfill and has hazardous characteristics. Thus, anything that absorbs used oil and is thrown in the trash could be considered a hazardous waste (if it exhibits a hazardous characteristic), even if it is not mixed with a hazardous waste. *For more information regarding used oil regulatory requirements, refer to 40 CFR Part 279.*

Yes Facility has determined whether used absorbents are considered hazardous before disposal. ✔

No Facility does not characterize its absorbents.

NA Facility does not use absorbents.

1.4b How does the facility manage/dispose of absorbents used for oil spills?

Sent to supplier or Service company	Facility returns used absorbents to its supplier or pays service company to pick up used absorbents. ✔
Burned for energy	Facility burns absorbents used to soak up used oil for energy recovery in a space heater with maximum heating capacity of less than 0.5 million BTU per hour. ✔
Disposed of as hazardous waste	Facility puts hazardous absorbents in drums, labeled as "Hazardous Waste," and disposes of them by a hazardous waste hauler. ✔
Nonhazardous and landfilled	Facility has determined that the absorbents are a nonhazardous solid waste and disposes of them with regular trash. ✔
Other	Method of management is not listed here.
NA	Facility does not use absorbents..

1.5 Used Batteries

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *used batteries* for compliance with environmental requirements:

a. *Has the facility determined whether its batteries should be regulated as universal waste or hazardous waste? (p. W-17)*

b. ***If storing used batteries, does the facility protect them from storm water contact? (p. W-18)***

c. ***How does the facility manage/dispose of used batteries? (p. W-18)***

These questions are repeated in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

1.5a Has the facility determined whether its batteries should be regulated as universal waste or hazardous waste?

There are many types of used batteries with different disposal requirements. Some of these batteries may be hazardous waste (see *Section 1.1*) if they are not properly handled.

> For more information on how batteries are covered under the Universal Waste Rule, contact the **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346.** Note: Because the Universal Waste Rule is less stringent than RCRA, some states have not adopted it. Check with the state regulatory agency to see if it has adopted the Universal Waste Rule.

Under the Universal Waste Rule (40 CFR Part 273), if batteries do not exhibit hazardous waste characteristics (see *Section 1.1*), they may be under **universal wastes** rules and subject to less stringent requirements than other hazardous wastes. For example, many small sealed lead acid batteries (used for electronic equipment and mobile telephones) and nickel-cadmium batteries are universal wastes. Most alkaline batteries are not considered hazardous waste under RCRA and one can dispose of as general trash. *Check with the local waste authority to see if they have a battery collection program in place.*

Yes Facility has gone through the waste determination process *(as discussed in Section 1.1)* to determine whether its batteries should be regulated as universal or hazardous waste. ✔

No Facility has not determined whether its batteries should be regulated as universal or hazardous waste.

NA Facility does not generate used batteries.

1.5b If storing used batteries, does the facility protect them from storm water contact?

When placed out-of-service, transport batteries to an accumulation area specifically designed for storage prior to removal from the site. The storage accumulation area should protect the batteries from weather and storms. It should have (1) secondary containment to prevent any spillage or leakage from contaminating the soil or surface waters; and (2) no floor drains that could receive spills and deliver them to the storm sewer, sanitary sewer, surface water, or injection well. Store batteries inside or outside under a tarp or roof. They can be in a pan or other device so that any leakage cannot enter floor drains or spill onto the ground. Improper storage results in batteries being considered "abandoned."

Yes Facility protects used batteries from storm water discharges. ✔

No Facility does not protect used batteries from storm water discharges.

NA Facility does not store used batteries.

1.5c How does the facility manage/dispose of used batteries?

Return to supplier Facility returns used batteries to supplier. ✔

Recycle Facility sends batteries to a recycling facility. ✔

Service	Facility pays service company to pick up used batteries. ✔
Universal waste handler	Facility sends used batteries classified as universal waste to a universal waste handler. ✔
Hazardous waste landfill	Facility sends used batteries to a hazardous waste landfill. Facility has records of where and how many batteries were sent. ✔
Other	Method of disposal is not listed here.
NA	Facility does not generate used batteries.

1.6 Metal Scraps

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *metal scraps* for compliance with environmental requirements:

a. Are scrap metals stored in a covered and contained area? (p. W-19)

b. How does the facility manage/dispose of scrap metal? *(p. W-20)*

c. How does the facility manage waste cutting oils and degreasing solvents used in its metal machining processes? (p. W-20)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Metal Scraps

Metal scraps may contain cutting oils, lubricating oils, and grease. Most metal scraps have economic value and you can recycle or reclaim them. During storage of scrap metal, place the materials in containers and cover to prevent the release of pollutants to the ground and storm water. There must be no free liquids present.

Tip: *The local scrap metal recycling plant may accept scrap metal if sorted and properly stored*.

The major hazardous wastes from metal machining are waste cutting oils, spent machine coolant, and degreasing solvents. However, scrap metal also can be a component of hazardous waste produced at a machine shop. Material substitution and recycling are the two best means to reduce the volume of these wastes. Facilities should attempt to substitute the oils and solvents with water-soluble cutting oils whenever possible. They should also segregate wastes carefully to facilitate reuse and recycling.

1.6a Are scrap metals stored in a covered and contained area?

The facility should store scrap metals in a covered and contained area to prevent soil and water contamination.

Yes Facility stores metal scraps in a covered and contained area. ✔

No Facility does not store metal scraps in a covered and contained area.

NA Facility does not have any metal scraps.

1.6b How does the facility manage/dispose of scrap metal?

Recycle Facility recycles metal scraps. ✔

Reuse Facility reuses metal scraps. ✔

Sale Facility collects metal scraps and sells these to metal recyclers. ✔

Other Facility does not use one of the methods listed above to manage metal scraps.

NA Facility does not have any metal scraps.

1.6c How does the facility manage waste cutting oils and degreasing solvents used in its metal machining processes?

Recycling Facility recycles waste cutting oils if nonwater-soluble oils must be used. ✔

Reuse Facility reuses and recycles solvents whenever possible. ✔

Disposed of as hazardous waste Facility keeps waste cutting oils and degreasing solvents in separate drums, labeled as "Hazardous Waste," and disposes of them by a hazardous waste hauler. ✔

Other Facility does not use one of the methods listed above.

NA Facility does not have any metal scraps.

1.7 Used Antifreeze

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in bold), will help the facility examine its operations relating to *used antifreeze* for compliance with environmental requirements:

a. In terms of storage, does the facility keep used antifreeze segregated and in labeled containers? (p. W-21)

b. Has the facility determined if it generates any antifreeze that is a hazardous waste? (p. W-21)

c. Does the facility reclaim used antifreeze on site in a closed loop system? (p. W-22)

d. If not reclaimed in a closed loop system, is the waste antifreeze counted toward the facility generator status? (p. W-22)

e. If used antifreeze is not reclaimed on site in a closed loop system, how is it

managed? (p. W-22)

These questions are repeated in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Used Antifreeze

Water transportation support vehicles require regular changing of coolants, such as antifreeze. To minimize releases to the environment, the facility should drain and replace antifreeze in areas where there are no connections to storm drains or municipal sewers. Minor spills should be cleaned prior to reaching drains. Collect used antifreeze and store in separate containers.

1.7a In terms of storage, does the facility keep used antifreeze segregated and in labeled containers?

Contained. Containers are closed (e.g., lids are on, caps are screwed on tight, except when actually adding or removing liquid).

Segregated. Used antifreeze is in its own container and not mixed with other liquids.

Labeled. Labels or color coding indicates that the container holds only antifreeze. In contrast to used oil, there are no specific labels for antifreeze. To be considered properly labeled, the drum/container/tank should simply have the words "used antifreeze," or "waste antifreeze," or "antifreeze only," or similar wording that distinguishes antifreeze storage from oil and solvent storage. One can spray paint, crayon, stencil words or more formally labeled.

Yes Used antifreeze is segregated and in labeled containers. ✔

No Used antifreeze is not in segregated, labeled containers.

NA Facility does not generate used antifreeze.

1.7b Has the facility determined if it generates any antifreeze that is a hazardous waste?

One may characterized used antifreeze as hazardous waste through testing or by process knowledge.

- If a facility makes the hazardous/nonhazardous determination solely by testing, it must test each batch of antifreeze changed from each vehicle serviced.

- If a facility uses process knowledge, the determination must involve a demonstrated understanding of the potentially hazardous constituents in antifreeze. Such a demonstrated understanding could include a combination of the information on the MSDS for the type of antifreeze used, a referral to a previous test that demonstrated that antifreeze from new vehicles does not contain metals, and/or having a procedure to ensure that any suspect antifreeze is segregated from antifreeze known not to be hazardous. *See Section 1.1 for more information about process knowledge.*

In addition to testing and process knowledge, there are two functional indicators that show the antifreeze is (or is likely to be) a hazardous waste. First, antifreeze is considered hazardous if it is mixed with a hazardous waste such as certain spent solvents. Second, antifreeze could also be hazardous if it comes from a vehicle where the antifreeze may have picked up enough metals (primarily lead) to be

characterized as hazardous for metals content.

Yes Facility has determined whether its used antifreeze is hazardous by testing or from process knowledge**.** ✔

No Facility has not determined whether its used antifreeze is hazardous.

NA Facility does not generate used antifreeze.

1.7c Does the facility reclaim used antifreeze on site in a closed loop system?

To avoid having to manage and dispose of used antifreeze as a hazardous waste, a facility can reclaim used antifreeze in a **closed loop system** that connects directly to the radiator, filters the antifreeze and returns the antifreeze directly back into the vehicle. EPA does not consider such reclaimed material to be a solid waste. Thus, even though the antifreeze may be hazardous, it is not considered to be a hazardous waste because the antifreeze is returned to its original use as a coolant.

Non-closed systems are available that connect to a used antifreeze storage drum. However, because these are not closed loop systems, the antifreeze in the drum may be considered a hazardous waste and must be stored according to the hazardous waste provisions of RCRA. Although closed loop systems are preferred for reclaiming/recycling antifreeze, non-closed loop systems are also used in maintenance shops.

Yes Used antifreeze is reclaimed in a “closed loop” system. ✔

No Used antifreeze is not reclaimed in a “closed loop” system.

NA Facility does not generate used antifreeze.

1.7d If not reclaimed in a closed loop system, is waste antifreeze counted toward the facility generator status?

Waste antifreeze that is a hazardous waste and not reclaimed in a closed loop system is included as part of the total volume of hazardous waste generated in any month.

Yes Hazardous waste antifreeze that is not reclaimed in a closed loop system is included in the total volume of hazardous waste generated. ✔

No Hazardous waste antifreeze is not included.

NA Facility does not generate used antifreeze.

1.7e If used antifreeze is not reclaimed on site in a closed loop system, how is it managed?

Recycled in a non-closed system on site	Facility manages used antifreeze in a non-closed system on site according to RCRA hazardous waste requirements. ✔
Recycled off site	Used antifreeze is recycled off site. *Facility has the EPA ID number of the recycler (see the shipping papers).* ✔
Landfill	Used antifreeze is disposed of at a landfill. Many landfills have a tank designated for used antifreeze. "Landfill" does not include antifreeze that is dumped in the trash.
Mixed with other fluids	Facility mixes antifreeze with used oil, solvents, or other fluid.
UIC well	Used antifreeze is discharged into an underground injection control (UIC) well. ***Note:*** *The facility should immediately stop this method of disposal and notify the EPA regional and/or state UIC authority for assistance.*
Other	Method of disposal is not listed here.
NA	Facility does not generate used antifreeze.

1.8 PCB-Containing Equipment

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the facility's operations for environmental compliance:

a. *Does electrical equipment contain PCBs? (p. W-24)*

b. *Does the facility inspect labeled PCB-containing equipment quarterly? (p. W-24)*

c. *Does the facility store all out-of-service PCB-containing equipment in a designated area? (p. W-25)*

d. *Do trained personnel initiate cleanup of PCB leaks and spills within 24 hours? (p. W-25)*

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Many water transportation facilities have electrical equipment, such as **electrical light ballasts**. An electrical light ballast is the primary component of fluorescent light fixtures. These items generally are located within the fixture under a metal cover plate. The function of a light ballast is to accumulate and hold a charge of electricity. According to EPA, all small light ballasts manufactured through 1979 contain **PCBs**. Ballasts manufactured after 1979 that do not contain PCBs are labeled, "**No PCBs**." Light ballasts for which no information is known must be assumed to be **PCB-contaminated**.

PCB-Containing Equipment

1.8a Does electrical equipment contain PCBs?

Electrical equipment, such as electrical light ballasts, transformers, and capacitors, containing insulating or dielectric oils, may contain polychlorinated biphenyls (PCBs). Equipment manufactured before 1978 should be assumed to contain PCBs unless proven otherwise by analytical testing or other records. If PCBs are present, the equipment classification depends on the concentration of PCBs in the oil. The following are the three classifications:

- Non-PCB equipment (less than 50 ppm)
- PCB contaminated equipment (50- 499 ppm)
- PCB (500 ppm or greater).

Facilities must assess all electrical equipment for their potential to contain PCBs. If all the electrical equipment is free of PCBs, then label all equipment as PCB-free.

Yes Facility has electrical equipment that contains PCBs.

No Facility does not have electrical equipment that contains PCBs.

Don't know Facility has assessed electrical equipment for its potential to contain PCBs, and is unsure.

1.8b Is PCB-containing equipment labeled and inspected quarterly?

Facilities must label all electrical equipment (e.g., transformers and capacitors) containing PCBs with the appropriate PCB classification. Inspect this equipment quarterly for leaks and to assure the labels are in place.

Yes Facility has labeled all equipment and inspects it quarterly. ✔

No Facility has not labeled all equipment or does not inspect it quarterly.

NA Facility does not have equipment that contains PCBs.

1.8c Does the facility store all out-of-service PCB-containing equipment in a designated area?

Store all PCB-containing equipment not in service and awaiting disposal in a designated area with protection from the rain and 100-year floods and with complete containment. The floor or pad of the designated area should be relatively impervious with a 6-inch high curb and no drains. Place a 6" x 6" sign in the area indicating **"Caution: Contains PCBs."** Also, place signs on all items and doorways.

Store all leaking equipment in an over-pack or suitable non-leaking container filled with enough sorbent material to soak up all the fluid if released. Move any transformers and other equipment with PCBs found outside of the designated area to a proper storage area immediately.

Yes Facility stores all out-of-service PCB-containing equipment in a designated area. ✔

No Facility does not store out-of-service equipment in a designated area.

NA Facility does not have out-of-service PCB-containing equipment.

1.8d Do trained personnel initiate cleanup of PCB leaks and spills within 24 hours?

Assume all electrical equipment involved in spill or leaks to have PCBs unless sampled and labeled to indicate otherwise. If a spill occurs, initiate a cleanup within 24 hours. Complete your cleanups within 48 hours, regardless of the regular business hours. Only trained person can perform all cleanups and the recordkeeping requirements must be met.

If you observe transformer spillage and leaks, initiate a cleanup immediately. The facility must develop a program and procedures to ensure that PCB equipment and transformers are inspected for leaks. Clean up when leak occurs. The program should detail the specific actions to be taken regarding response, notifications, cleanup, personal protective equipment, storage, and disposal.

Yes Facility cleans up all PCB leaks properly. ✔

No Facility does not clean up PCB leaks properly.

NA Facility does not have equipment that contains PCBs.

SECTION 2.0 WASTEWATER AND STORM WATER MANAGEMENT

2.1 Wastewater and Storm Water Management at Water Transportation Facilities

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *wastewater and storm water management* for compliance with environmental requirements.

a. Can the facility identify the final destination of all its drains? (p. W-28)

b. How is wastewater managed? (p. W-29)

c. How is storm water managed? (p. W-29)

d. Does the facility have an NPDES permit for direct discharges? (p. W-30)

e. Does the facility submit its monitoring results for wastewater discharges on a Discharge Monitoring Report (DMR) form to its permitting agency? (p. W-30)

f. Does the facility keep accurate records of monitoring information for the minimum requirement of 3 years? (p. W-31)

g. Has the facility followed all of the reporting requirements specified by its NPDES permit? (p. W-31)

h. Does the facility have a storm water pollution prevention plan (SWPPP)? (p. W-32)

I. Is a certification included in the SWPPP? (p. W-32)

j. If discharging to a municipal sanitary sewer, has the facility notified the POTW and received approval for discharges? (p. W-32)

k. If discharging to a UIC well, does the facility comply with UIC program requirements? (p. W-33)

These questions appear in the following text and may be accompanied with a discussion of the preferred answer (indicated with a "✔") for environmental compliance.

Wastewater and Storm Water Management

Water transportation facilities generate a significant amount of wastewater and storm water. Activities which may generate wastewater include the following:

- Repair and maintenance of on site vehicles and vessels
- Vehicle and equipment cleaning
- Vessel cleaning
- Building and grounds maintenance
- Chemical storage and handling
- Fueling of on-site vehicles and vessels
- Painting and paint stripping
- Discharges from vessel tanks storing bilge slops and sanitary wastes into on-shore holding tanks.

In June 1998, EPA proposed a rule applicable to specific categories of barges and tankers called the ***Transportation Equipment Cleaning Industry Effluent Guidelines and Standards - Proposed Rule.*** It establishes technology-based effluent limitations and pretreatment standards for the discharge of pollutants into waters of the U.S. and into publicly-owned treatment works by existing and new facilities that perform tank interior cleaning. The final rule will be published on August 14, 2000. For more information call (202) 260-4992.

Facilities that discharge wastewater must have a **National Pollutant Discharge Elimination System (NPDES)** permit and/or state permit if the wastewater is collected and discharged off site through a distinct pipe, ditch, etc. to waters of the United States. NPDES permits can be issued by either EPA or an authorized state. As of September 1999, EPA authorized 43 states and one territory to administer the NPDES program.

Persons responsible for wastewater discharges requiring an NPDES permit must apply for an individual permit or seek coverage under a general permit (if available) at least 180 days before discharge of wastewater is scheduled to begin. Some states do not allow certain discharges into the environment.

Storm Water Discharges

Under the Clean Water Act, it is illegal to discharge any pollutants into navigable waters of the United States from a point source unless the discharge is authorized by a National Pollutants Discharge Elimination System (NPDES) permit. Storm water regulations have identified eleven major categories that are associated with industrial activity (40 CFR § 122.26 (b) (14) (i - x)). Those facilities identified under these eleven categories must apply for NPDES permit for storm water discharge. Transportation facilities are classified as category (viii) which includes activities such as vehicle maintenance shops, equipment cleaning operations, painting, fueling operations or airport deicing operations. *Contact the state or federal permitting agency for more information regarding NPDES discharge permitting requirements.*

The following discharges do NOT require NPDES permits:

- Introduction of sewage, industrial wastes or other pollutants into a publicly owned treatment works (POTW) by indirect discharges. (Although not federally required, a POTW may require a permit. A facility should contact the local sewer authority to find out more about these requirements).

- Discharges of dredged or fill material into waters of the United States. (These discharges are regulated under CWA Section 404 permits.)

- Discharges of storm water/wastewater into an underground injection well. [These discharges are regulated under the Safe Drinking Water Act (SDWA) Underground Injection Control (UIC)] program. *For more information, contact the* ***Safe Drinking Water Hotline*** *at* ***1-800-426-4791***].
-

Discharges to Publicly Owned Treatment Works (POTW)

POTWs are treatment plants that receive and treat wastewater through municipal sanitary sewers prior to discharge to receiving waters (e.g., streams, lakes, rivers). They may also be referred to as municipal wastewater treatment plants (WWTPs). POTWs may implement a pretreatment program and regulate discharges to the sanitary sewer through prohibitions on certain discharges, discharge limits, and discharge permits. Facilities should contact their local POTW to see if any pretreatment requirements or limits apply to them. Although contacting the POTW is not a federal requirements, the facility could be liable if it discharges a significant amount of oil, or other fluid, and those discharges cause the POTW to violate its own NPDES permit.

2.1a Can the facility identify the final destination of all its drains?

The facility may have interior and/or exterior drains (e.g., painting booths, waste storage areas, service areas, fueling areas, etc.). The facility should identify the final destination of all drains located at the facility.

- If a drain discharges to a UIC well and the well is not on the inventory (in a non-primacy state), the facility must submit an inventory to EPA. If a drain and/or injection well is located in or near loading docks, storage areas, or service areas, such that it could receive contaminants, the facility may need a UIC well permit.

- If a drain discharges to storm water or surface water, obtain an NPDES permit.

- If a drain discharges to a municipal sanitary sewer, the facility may need a permit from the publicly-owned treatment works (POTW), and general pretreatment requirements may apply.

- If an interior drain that may receive contaminants discharges to the ground surface, the facility must contact the state agency for applicable permitting requirements.

Yes Facility can certify the final destination of all drains (e.g., storm sewer drains, floor drains, and sanitary sewer drains). ✔

No Facility cannot certify the final destination of all drains.

NA Facility does not have drains.

2.1b How is wastewater managed?

There are several methods a facility can use to manage its wastewater. Wastewater may contain pollutants (e.g., chemical solvents used for large scale equipment cleaning). Prior to discharging wastewater, a facility may "treat" the wastewater using an oil-water separator or some other method of treatment to reduce pollutant concentrations. Wastewater may go to floor drains inside the facility and then drain to an oil-water separator prior to discharge either (1) directly to surface waters, or (2) to a sanitary sewer or combined sewer leading to a POTW. Wastewater treatment may be required by an NPDES permit or by the POTW.

Surface water	Facility discharges effluent directly to surface waters (in accordance with an NPDES storm water permit (see *Question 2.1d*). ✔
Sanitary sewer	Facility discharges to a municipal sanitary sewer or combined sewer with permission of the POTW (see *Question 2.1j*). ✔
UIC well	Facility discharges to a UIC well, generally via a floor drain (see *Question 2.1k*). *Although there are some exceptions, as a general rule, discharging industrial wastewater to a UIC well is NOT appropriate.*
Ground	Facility discharges onto the ground. Wastewater may affect groundwater or may flow into storm sewers and surface waterways. Caution: Many states forbid the disposal of washwater/rinsewater onto the ground.
Other	Method of disposal is not listed.
NA	Facility does not discharge wastewater.

2.1c How is storm water managed?

Storm water is a potential source of wastewater at a facility. Storm water discharges begin when rain comes in contact with potential contaminants, such as spills, waste containers, or spilled liquids related to vehicle or mechanical parts maintenance. The pollutants in storm water will be dependent on the type of material(s) the rain comes in contact with prior to discharge. A facility may "treat" storm water using an oil-water separator or some other method of treatment to reduce pollutant concentrations prior to discharge either (1) directly to surface waters, or (2) to a sanitary sewer or combined sewer leading to a POTW. Wastewater treatment may be required by an NPDES permit (see *Question 2.1d*) or by the POTW (see *Question 2.1k*).

Surface water	Storm water discharges go directly to surface waters (in accordance with an NPDES storm water permit). ✔
Sanitary sewer	Storm water discharges are directed to a municipal sanitary sewer or combined sewer with permission of the POTW. ✔

UIC well Storm water discharges are sent to a UIC well (via a floor drain). *Although there are some exceptions, as a general rule, discharging industrial wastewater to a UIC well is NOT appropriate.*

Other Method of storm water management is not listed.

NA Facility does not discharge wastewater.

2.1d Does the facility have an NPDES permit for direct discharges?

NPDES permits are required in order to discharge industrial wastewater which may include storm water through a storm sewer or directly into surface waters. The facility may need to treat the wastewater on site to reduce pollutant concentrations prior to discharge to be in compliance with NPDES permit limits. ***Note:*** *Some NPDES permits may include both wastewater and storm water discharge requirements. Other facilities have a separate permit for each type of discharge*.

Yes Facility has an NPDES permit. ✔

No Facility does not have an NPDES permit.

NA Facility does not discharge wastewater directly from the facility to a body of water.

2.1e Does the facility submit its monitoring results for wastewater discharges on a Discharge Monitoring Report (DMR) form to its permitting agency?

Facilities must report monitoring results for wastewater discharges and sludge analysis on a Discharge Monitoring Report (DMR) to the permitting authority (state or EPA). ***Note:*** *Permitting authority may provide separate forms for reporting results of monitoring of sludge use or disposal practices.*

Yes Facility has submitted its monitoring results for wastewater and sludge analysis. ✔

No Facility has not reported its monitoring results for wastewater and sludge analysis.

NA Facility does not discharge wastewater or is not required to monitor its wastewater discharges.

2.1f Does the facility keep accurate records of monitoring information for the minimum requirement of 3 years?

It is extremely important to keep accurate records of monitoring information. Records of monitoring information generated under the NPDES program must include:

- The date, exact place, and time of sampling or measurements
- The individual(s) who performed the sampling or measurements
- The date(s) analyses were performed
- The individual(s) who performed the analyses
- The analytical techniques or methods used
- The results of such analyses (40 CFR 122.41).

NPDES permits require that all records related to monitoring must be maintained at the facility for at least 3 years. ***Note:*** *Many states require these records to be maintained for at least 5 years.*

Yes Facility keeps monitoring records that include all of the information listed above and maintains them for at least 3 years. ✔

No Facility does not keep monitoring records that include all of the information listed above and/or does not maintain them for a minimum of 3 years.

NA Facility does not discharge wastewater, or is not required to conduct monitoring.

2.1g Has the facility followed all of the reporting requirements specified by its NPDES permit?

There are some reporting requirements that apply to all facilities. These requirements are summarized below:

Event	Reporting Time Frame
Any noncompliance with the permit that may endanger health or the environment	Within 24 hours of becoming aware of violation; written submission within 5 days
Other noncompliance	At the time the facility's monitoring reports are submitted.
Any planned physical alterations or additions to the facility	As soon as possible
Any planned changes in the discharge that may result in noncompliance	In advance of changes
Notify the permitting authority of the transfer of the facility to a new owner	As soon as possible

Yes Facility has complied with the above reporting requirements within the required time frame. ✔

No Facility has not reported the above events within required time frame.

NA None of the above requirements apply to the facility.

2.1h Does the facility have a storm water pollution prevention plan (SWPPP)?

If a facility must obtain an NPDES storm water permit, it will likely be required to prepare and implement an SWPPP. Facilities must develop SWPPPs to prevent storm water from coming in contact with potential contaminants.

Yes Facility has an SWPPP. ✔

No Facility does not have an SWPPP.

NA Facility is not required to have an SWPPP.

2.1i Is a certification included in the SWPPP?

Each SWPPP must include a **certification**, signed by an authorized individual, stating that discharges from the site have been tested or evaluated for the presence of non-storm water discharges. The certification must include the following:

- Description of possible significant sources of non-storm water,
- Results of any test and/or evaluation conducted to detect such discharges,
- The test method or evaluation criteria used, the dates on which tests or evaluations were performed, and the on site drainage points directly observed during the test or evaluation.

If certification is not feasible, the SWPPP must describe why (e.g., no access to discharge sites).

Yes Facility's SWPPP includes a certification. ✔

No Facility's SWPPP does not include a certification, or certification is not feasible and facility has included an explanation in the SWPPP.

NA Facility is not required to have an SWPPP.

2.1j If discharging to a municipal sanitary sewer, has the facility notified the POTW and received approval for discharges?

Facilities should contact the POTW to see if any pretreatment requirements apply to them. Although contacting the POTW is not a federal requirements, the facility could be liable if it discharges a significant amount of oil or other material and those discharge causes the POTW to violate its own NPDES permit.

Yes Facility has contacted POTW and has received approval for its wastewater discharges. ✔

No Facility has not contacted POTW or has not received approval for its wastewater discharges.

NA Facility does not discharge to a POTW.

2.1k If discharging to a UIC well, does the facility comply with UIC program requirements?

Note: As a general rule, the discharge of industrial wastewater to UIC wells is NOT appropriate.

Facilities that discharge industrial wastewater to underground injection control (UIC) wells must comply with the rules established under the UIC program. Water transportation facilities may typically use Class V UIC wells. Generally, Class V wells include shallow non-hazardous industrial waste injection wells, septic systems and storm water drainage wells. Class V UIC wells (e.g., septic systems, storm water drainage wells) are authorized by rule provided they do not endanger underground sources of drinking water and meet certain minimum requirements. UIC program requirements stipulate that facilities must submit basic inventory information about a Class V well to the EPA or the primacy state agency. In addition, many UIC primacy state programs have additional prohibitions or permitting requirements. However, the fluids released by certain types of Class V wells have a high potential to contain elevated concentrations of contaminants that may endanger drinking water. Therefore, New requirements went into effect December 7, 1999, which further regulate two (2) types of Class V wells, Large Capacity Cesspools and Motor Vehicle Waste Disposal Wells. ***Note:*** *See below for information relating to EPA's New rule regarding Class V wells.*

Yes Facility complies with UIC program requirements. ✔

No Facility does not comply with UIC program requirements.

NA Facility does not discharge industrial wastewater to UIC wells.

New Rule for Regulating Class V Wells

EPA is further regulating two (2) types of **UIC Class V wells** in Source Water Protection Areas for community and non-transient non-community water systems that use groundwater as follows:

- **Large-Capacity Cesspools**. New cesspools are prohibited nationwide as of April 5, 2000 and existing cesspools will be phased out nationwide by April 5, 2005.
- **Motor Vehicle Waste Disposal Wells.** New wells are prohibited nationwide as of April 5, 2000. Existing wells in regulated areas will be phased out, but owners and operators can seek a waiver and obtain a permit. *For more information about this New rule, contact the* ***SDWA Hotline*** *at* ***1-800-426-4791****.*

2.2 Activities Generating Wastewater and/or Storm Water

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold)**, will help the facility examine its operations relating to *activities generating wastewater and/or storm water* for compliance with environmental requirements:

a. How does the facility clean the floors and surrounding areas? (p. W-34)

b. If the facility stores materials outside, are they protected from contact with storm water? (p. W-35)

c. Does the facility have activities (e.g., metal finishing) that are subject to categorical pretreatment standards? (p. W-35)

d. If yes, is the facility in compliance with the categorical standards for the processes? (p. W-36)

These questions appear in the following text and may be accompanied with discussions of the preferred answer (indicated with a "✔") for environmental compliance.

Activities Generating Wastewater and Storm Water

Many facilities wash vessel and equipment at water transportation facilities, including the cleaning of vehicles. Various cleaning agents can be used, including steam/pressure water, surfactants (soap), and chemical solvents.

All states have requirements for washwater. Waste washwater may contain pollutants depending on the type of materials being washed and the washing agents used. Be sure to check with the state and/or federal regulatory agency for more information.

2.2a How does the facility clean the floors and surrounding areas?

Dry Cleanup	Facility uses "dry methods" such as dry mop, broom, rags, absorbents, etc., thus reducing generation of contaminated wastewater. ✔ *See box below.*
Water	Facility uses a hose or wet mop, thus generating wastewater.

Suggested Dry Cleanup Methods

***Small Spills*:** Use shop towels which are sent to an industrial laundry. Avoid paper towels! If paper towels are used to pick up hazardous waste, they become hazardous waste.

***Medium-Sized Spills*:** Use absorbent, portable berms as temporary holding areas to contain a liquid while cleaning. Soak up the liquid and containerize. Then wipe with a shop towel.

***Oil and Water/Antifreeze Spills*:**

1. Use a hydrophobic mop for cleaning up spills containing oil and recycle recovered oil in a mop bucket labeled "waste oil."
2. Use a regular mop for cleaning up antifreeze and recycle recovered antifreeze in a mop bucket labeled "waste antifreeze."
3. If there is a slight film on the ground after steps 1 and 2, use a shop towel to clean it up. Use an industrial laundry to clean shop towels.
4. Finally, if there is something still on the floor, clean it up with soap and water.

2.2b If the facility stores materials outside, are they protected from contact with storm water?

A facility may need to store materials, including drums, trash, and parts, outside of facility buildings. It should protect these materials from contact with storm water (including rain or snow) or other forms of water (e.g., washing overspray). To prevent contact with storm water, materials can be stored on pallets (or something else that keeps them off the ground) and covered them by a tarp or roof. Close dumpsters so that storm water will not enter or exit the dumpster. Store used oil (in some states), hazardous waste, and batteries in an area with secondary containment, and in a manner that will protect them from storm water.

Yes Materials are protected from rain/snow. ✔

No Materials are not protected from rain/snow.

NA Facility does not store materials outside.

2.2c Does the facility have activities (e.g., metal finishing) that are subject to categorical pretreatment standards?

Under the Clean Water Act, categorical standards (also known as effluent limitation guidelines) are established for specific types of categories of industries or processes. For example, if a trucking facility conducts processes such as electroplating or coating, that facility may be subject to the metal finishing categorical standards.

Proposed Categorical Standards: EPA is proposing a regulation that will establish technology-based effluent limitations guidelines for the discharge of pollutants into waters of the U.S. and into publicly owned treatment works by existing and new facilities that perform transportation equipment cleaning operations. For more information, call (202) 260-4992.

The categorical standards for facilities that conduct these and other operations that are described in the metal finishing categorical regulations include limits for certain pollutants in the facility's process discharge. (Specific categorical limits apply to the facility's discharge whether it goes directly to surface water or to a municipal wastewater treatment plant.) For more information, contact the POTW or state permitting agency.

Yes Facility has determined whether it has activities that make it subject to categorical pretreatment standards. ✔

No Facility has not determined whether it has activities that make it subject to categorical pretreatment standards.

2.2d If yes, is the facility in compliance with the categorical standards for the processes?

A state or POTW permitting agency will incorporate applicable categorical standards into the facility's NPDES or POTW permit.

Yes Facility is in compliance with applicable categorical standards. ✔

No Facility is not in compliance with applicable categorical standards.

NA Facility does not conduct any operations or processes that are subject to categorical standards.

2.3 Sludge Management

NOTE: The following question is included in the accompanying checklist to help the facility examine its operations relating to *sludge management* for compliance with environmental requirements:

How does the facility manage the sludge from an oil/water separator? (p. W-36)

This question appears in the following text and is accompanied with a discussion of the preferred answers (indicated with a "✔") for environmental compliance.

2.3 How does the facility manage the sludge from an oil/water separator?

Oil/water separators, which are typically connected to floor drains or wash racks, remove metals and other pollutants (e.g., oil) from wastewater. Oil-water separators require periodic servicing to maintain their performance. Prior to cleaning an oil/water separator, test the contents of the grit chamber and the oily sludge for hazardous constituent. If the sludge exhibits any characteristic of a hazardous waste, it should be handled as such. If the sludge is nonhazardous, managed it as a used oil. On-site disposal of nonhazardous sludge is not allowed unless covered by state and/or local permits.

Off-site disposal as hazardous waste Facility disposes of <u>hazardous</u> sludge off site. It is stored, manifested, transported, and disposed of in compliance with all provisions of RCRA, including using a permitted TSDF. ✔

Off-site disposal to other facility Facility disposes of <u>nonhazardous sludge</u> off site. Disposal is arranged using an approved transportation, treatment, and disposal facility. ✔

On-site disposal	Facility disposes of nonhazardous sludge on site and has the required state and/or local permits. ✔
Landfill	Facility improperly landfills its oil/water separator sludge.
Other	Method of management is not listed.
NA	No sludge is produced.

SECTION 3.0 DOCKSIDE MAINTENANCE AND REPAIR ACTIVITIES

Vessel maintenance is one of the maritime industry's major environmental concerns. The major waste streams are chemical paint stripping wastes, abrasive blast and surface preparation wastes, painting and painting equipment cleaning wastes, solvent wastes, and engine overhauling and repair wastes.

Engine repairs and other types of vessel repairs are usually done while ships or barges are tied up to a pier or are in a dry dock, unless, of course, they are done at sea. Engine repairs may vary from small automotive-type engines of smaller vessels to repairs on large boilers and turbines of tankers or other cargo vessels. Typical wastes from engine repair shops include solvents, waste turbine oils, and batteries. Other repairs may include sheet metal work, metal finishing, or other specialty operations.

3.1 Cargo Loading and Off Loading

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in bold), will help the facility examine its operations relating to *cargo loading and off loading* for compliance with environmental requirements.

a. If hazardous materials are loaded at the facility, are containers inspected for (1) proper labeling/placarding, (2) signs of leakage, and (3) compatibility with other hazardous materials? (p. W-39)

b. Does the facility immediately respond to leaks and spills of hazardous materials during loading and off-loading activities? (p. W-39)

c. Has the facility taken steps to control dust and air emissions? (p. W-39)

d. Is the facility familiar with requirements under the Final Rule for Marine Tank Vessel Loading Operations? (p. W-40)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Cargo Loading and Off Loading

Cargo loading and off loading includes all activities associated with the movement of materials, items and people in and out of vessels. Cargo loads may consist of several different items, including but not limited to passengers, baggage, live animals, dangerous goods (including hazardous materials) and wet cargo (e.g., fresh fish, seafood, meat, casings, etc).

The primary loading and off loading activity with a potentially significant impact on human health and the environment is the loading and off loading of hazardous materials.

3.1a If hazardous materials are loaded at the water transportation facility, are containers inspected for (1) proper labeling/placarding, (2) signs of leakage, and (3) compatibility with other hazardous materials?

Transport of hazardous *material* is under the Department of Transportation (DOT) rules. Hazardous *waste* transportation is jointly regulated by DOT and EPA. It is important to ensure that you use proper labeling, valve cover placement, stenciling, and shipping papers are used when transporting hazardous materials and hazardous wastes. Routine inspections should include examination for spills and leaks of hazardous materials. Report all spills and leaks promptly to the dispatcher.

Yes During loading, Facility inspects containers and all required paperwork is completed. ✔

No Facility does not inspect hazardous material containers on a regular basis.

NA Facility does not handle hazardous cargo.

3.1b Does the facility immediately respond to leaks or spills of hazardous materials during loading and off-loading activities?

Though a rare occurrence, leaks or spills that occur during loading/offloading activities have the potential to contaminate soil, groundwater, or surface water. Facilities minimize and control these impacts through development and implementation of emergency response programs. *See Section 5.0 for more information about emergency response programs.*

Yes Facility takes immediate action. ✔

No Facility does not take Immediate action.

NA No spills of hazardous materials have occurred.

3.1c Has the facility taken steps to control dust and air emissions?

Both dry and liquid bulk-transfer operations generate hazardous air emissions either as dust generated when cargo is transferred or hydrocarbon emissions which are readily converted into photochemical smog by ultraviolet radiation from the sun. A facility can reduce dust emissions by pneumatic conveyors and slurry pipelines. Additional steps to control air emissions include enclosing the conveyor transfer points in the buildings, using steam or spray as a sealant over the open end of the hopper, placing the loading chute as close as possible to the cargo pile in the hold, and installing telescoping chutes which eliminate the need for slingers.

Yes Facility has taken steps to control dust and air emissions. ✔

No Facility has not taken steps to control dust and air emissions.

NA Facility does not handle cargo.

3.1d Is the facility familiar with requirements under the Final Rule for Marine Tank Vessel Loading Operations?

Under authority of the Clean Air Act Amendments (CAAA), EPA issued a final rule to reduce emissions of air toxics and volatile organic compounds (VOC) that result from marine tank vessel loading operations (40 CFR Part 63, Subpart Y). Specifically, the rule requires that:

- Terminals with an annual marine bulk loading throughput greater than or equal to 10 million barrels per year of gasoline or 200 million barrels of crude oil apply reasonably available control technology (RACT) to control emissions of VOCs and HAPs resulting from the loading of gasoline or crude oil;

- Facilities not subject to RACT but which have HAP emissions exceeding 10 tons of one or 25 tons or more of aggregate HAPs be subject to the NESHAP and required to apply maximum achievable control technology (MACT);

- Facilities controlling loading emissions under RACT or MACT using a combustion device operate the device at 98% efficiency; and

- Facilities controlling loading emissions under RACT using a recovery device operate the device at 95% efficiency or, for gasoline vapors, reduce the control device outlet concentration to 1,000 parts per million or less. In addition, vessels which load at a facility affected by this provision must pass one or two vapor tightness tests or be loaded at less than atmospheric pressure.

The rule also contains specific monitoring, recordkeeping and reporting requirements.

Yes Facility is aware of the requirements under the rule. ✔

No Facility is not aware of the requirements under the rule

NA Facility does not meet any of the criteria listed above.

3.2 Painting and Paint Removal Operations

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold)**, will help the facility examine its operations relating to *painting and paint removal operations* for compliance with environmental requirements.

a. Does the facility conduct painting/paint removal operations? (p. W-41)

b. Does the facility have any air permits? (p. W-41)

c. Does the facility meet air permit conditions? (p. W-42)

d. Does the facility prepare surfaces to be painted by shot or grit blasting, grinding, or sanding? (p. W-42)

e. If yes, are surfaces and paints tested for asbestos and lead? (p. W-42)

f. Does the facility collect paint chips and metal dusts? (p. W-43)

g. How does the facility manage/dispose of paint stripping wastes and baghouse dusts? (p. W-43)

h. Does the facility use low VOC paints in its painting operations? (p. W-43)

I. Does the facility mix paint amounts according to need? (p. W-44)

j. Does the facility take measures to minimize overspray? (p. W-44)

k. When not in use, does the facility store paints in labeled containers? (p. W-44)

l. How does the facility manage/dispose of used paints and painting waste products? (p. W-44)

m. How does the facility dispose of spray paint booth air filters? (p. W-46)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Painting and Paint Removal Operations

Painting a vessel and dockside facilities to improve appearance and performance and to prevent corrosion and marine organism growth is an important maintenance practice. Prior to applying new paint, however the facility must clean the surface and remove old paint. Facility usually use chemical paint stripper to remove the old paint. The most common strippers are based on methylene chloride, although the industry increasingly is using less toxic agents such as dibasic esters, semi-aqueous terpene-based products, aqueous solutions of caustic soda, and detergent-based strippers that are currently available on the market. Another option is abrasive blasting. Blasting is used primarily because the blasting medium is not hazardous; it may be garnet flint grit, or steel shot.

3.2a Does the facility conduct painting/paint removal operations?

Facility may do their painting in specific areas such as paint booths. ***Note:*** *The facility should verify that there are no drains in the areas where painting occurs.*

Yes Facility conducts painting/paint removal operations.

No Facility does not conduct painting/paint removal operations.

3.2b Does the facility have air permits?

States typically issue air pollution permits for certain operations such as **painting** and surface preparation if certain state regulatory criteria are met. Generally if air pollution control equipment is used, such as a baghouse or scrubber, a state requires a permit. Check with the state for specific criteria and requirements.

Yes Facility has air permits and they are current. ✔
Permit No(s).: _____

No Facility has not obtained air permits.

NA Permits are not required.

3.2c Does the facility meet air permit conditions?

Yes Facility is meeting all air permit conditions. ✔

No Facility is not meeting air permit conditions.

NA Permits are not required.

3.2d Does the facility prepare surfaces to be painted by shot or grit blasting, grinding, or sanding?

In preparation for painting, a facility may remove old paint on vessels and support vehicles by shot or grit blasting. Grinding and sanding are often used to prepare the surface to be painted.

Tip: If using chemical strippers containing hazardous pollutants, be sure the facility is meeting air quality standards. Contact the local air pollution control agency for more information about air quality requirements.

Yes Facility uses one of the above methods.

No Facility does not use one of the above methods.

NA Facility is not preparing surfaces for painting at this time.

3.2e If yes, are surfaces and paints tested for asbestos and lead?

If a facility uses shot or grit blasting, grinding, or sanding to remove old paint, then test the surfaces and paints for asbestos and lead.

Yes Facility tests surfaces and paints for asbestos and lead. ✔

No Facility does not test surfaces and paints for asbestos and lead.

NA Facility does not prepare surfaces by shot/grit blasting, grinding, or sanding.

3.2f Does the facility collect paint chips and metal dusts?

An effective practice to assure the optimum collection of paint dusts and chips is to blast and sand within a booth or enclosure designed with dust collection ventilation and air pollution control devices (e.g., baghouse). Conducting operations indoors without dust collection and air pollution controls may expose employees to levels of airborne dust in excess of the OSHA permissible limits for personal exposure to metals, such as lead and cadmium. Conducting operations outdoors can allow dusts and paint debris to be dispersed into the environment but local and state air pollution regulations may not allow this. *Check with state and local agencies and obtain the required air pollution permits.*

Yes Facility collects paint chips and metal dusts. ✔

No Facility does not collect paint chips and metal dusts.

NA Facility does not conduct paint removal operations.

3.2g How does the facility manage/dispose of paint stripping wastes and baghouse dusts?

All materials collected from shot and grit blasting and sanding/grinding operations may potentially be hazardous waste, depending on the previous paint coatings. If the previous paints contained lead or chromium, the waste chips and dusts may be hazardous waste, depending on Toxicity Characteristic Leaching Procedure (TCLP) test results. *See Section 1.0 for information on TCLP tests.*

Recycling	Facility recycles paint stripping wastes and baghouse dusts on site or ships them to a recycling facility. ✔
Landfill	Based on characterization, facility disposes materials at a municipal or hazardous waste landfill. ✔
On-site disposal	Facility disposes of paint wastes and residues on site (e.g., landfill).
Other	Method of disposal is not listed here.
NA	Facility does not have paint stripping wastes and/or baghouse dusts.

3.2h Does the facility use low VOC paints in its painting operations?

Paint labels or product data sheets (or material safety data sheets [MSDSs]) should contain the VOC content of the paint. In general, VOC content greater than or equal to 5 lbs/gallon is high, between 4 and 5 lbs/gallon is low, and below 4 lbs/gallon is very low.

Yes Facility uses paints with VOC content less than 5 lbs/gallon. ✔

No Facility uses paints with VOC content of 5 lbs/gallon or higher.

NA Facility does not have painting operations.

3.2i Does the facility mix paint amounts according to need?

Mix paint by the job, as opposed to in large batches, thus reducing potential paint waste.

Yes Facility mixes paint by the job. ✔

No Facility mixes paints in large batches.

NA Facility does not have painting operations.

3.2j Does the facility take measures to minimize overspray?

Facilities may take various measures, such as air-assisted; airless, high-volume, low pressure turbine; air atomized electrostatic; and airless, electrostatic application techniques to minimize overspray. Another technique is the use of high transfer efficiency spray applicators. High efficiency sprayers should be labeled 'HVLP' on the gun. This is not yet a federal regulatory requirement. (*Note: Required in some states*.)

Yes Facility takes measures to minimize overspray. ✔

No Facility does not take measures to minimize overspray.

NA Facility does not have painting operations.

3.2k When not in use, does the facility store paints in labeled containers?

Facilities must ensure that paints that are not in use are in properly labeled containers. Paint containers must be closed with tight-fitting lids, and stored so that a spill would not reach a drain or otherwise leave the facility. Container labels must indicate contents.

Yes Facility contains and labels paints as described above. ✔

No Facility does not contain and/or label paints as described above.

NA Facility does not store paints.

3.2l How does the facility manage/dispose of used paints and painting waste products?

Facilities should not bury or discard waste paint cans, residuals, or unused paint products on site. Organic solvent-based paints and residuals may be hazardous waste and may require manifesting, storage, transportation, and disposal in full compliance with RCRA. Recycle paint cans (that once contained hazardous waste) that are classified as "empty" by the RCRA definition. Recycle latex paints or dispose of them off site at an approved facility as nonhazardous waste.

A container is considered "empty" if all wastes or hazardous residues have been removed that can be removed using a common practice for that type of container (e.g., pouring, pumping, etc.), AND

- No more than 2.5 centimeters (i.e., one inch) of hazardous waste residue remains on the bottom of the container or inner liner, OR
- (A) If the container is ≤ 110 gallons in size, no more than 3 percent by weight of the total capacity of the container remains in the container or inner liner, OR

  (B) If the container is greater than 110 gallons in size, no more than 0.3 percent by weight of the total capacity of the container remains in the container or inner liner.

Aerosol cans may be hazardous waste and may require manifesting, storage, transportation, and disposal in full compliance with RCRA. Aerosol cans that are empty and depressurized (i.e., all propellant is discharged) may be nonhazardous solid waste for off-site disposal.

Return to supplier	Facility returns all unused paints and thinners to the supplier. ✔
Reuse	Facility gives away leftover paints and thinners to customers, employees, or at "paint swaps." ✔
Recycle	Facility sends items to a paint, solvent, or thinner recycler. (Generally this will apply to solvents or thinners.) ✔
On-site disposal	Facility disposes of paint wastes and residues on site.
Mix with other fluids	Facility mixes materials with other fluids (solvent, used oil).
Landfill	Based on characterization, facility disposes materials at a municipal or hazardous waste landfill.
Drain	Facility pours leftover paint down the drain. ***Warning:*** *This practice must be stopped immediately.*
Other	Method of disposal is not listed here.
NA	Facility does not generate used paints and waste paint products.

3.2m How does the facility dispose of spray paint booth air filters?

Facility must dispose of filters containing hazardous paints using a hazardous waste hauler. Facility must maintain records indicating where hazardous filters are sent. Filters containing nonhazardous paints can be disposed of in a landfill or recycled.

Dispose as hazardous waste	Facility disposes of filters containing *hazardous paints* as hazardous waste. ✔
Recycle	Facility sends *nonhazardous filters* to a recycling facility. ✔
Landfill	Facility sends *nonhazardous filters* to a landfill. ✔
Other	Method of disposal is not listed.
NA	Facility does not use filters.

3.3 Facility Renovation/Demolition - Asbestos Concerns

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the facility's operations for compliance with environmental requirements:

a. *Has the facility assessed all buildings and structures built prior to 1980 for their potential for containing asbestos and treated accordingly? (p. W-46)*

b. *Does the facility document demolition procedures? (p. W-47)*

c. *Has the facility inform employees of buildings and structures containing asbestos and trained them to work on asbestos-containing material (ACM)? (p. W-47)*

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

3.3a Has the facility assessed all buildings and structures built prior to 1980 for their potential for containing asbestos and treated accordingly?

A new OSHA standard issued in 1995 modified the way one assesses asbestos in buildings. It was once possible to make subjective judgments ruling out the presence of asbestos based on the assessor's knowledge. Now, for buildings built prior to 1980, one must assume the materials potentially containing asbestos unless bulk sampling reveals otherwise. A certified inspector must perform the asbestos inspections according to AHERA guidelines.

NOTE: EPA's asbestos NESHAP (40 CFR Part 61 subpart M) requires a thorough inspection for the presence of asbestos prior to a demolition or renovation. It is generally expected that this inspection will require sampling regardless of the date of construction of the facility. The definition of facility includes ships.

A facility must use state-licensed contractors, transporters, and disposal sites. If demolition is planned, assure that the asbestos materials are removed prior to start of the demolition. In addition, notify local, state, and federal agencies ***at least 10 days before the abatement, demolition, or certain renovation activities begin***.

Yes Facility has assessed all buildings built prior to 1980 for asbestos. ✔

No Facility has not assessed all buildings built prior to 1980 for asbestos.

NA Facility has no buildings built prior to 1980.

3.3b Does the facility document demolition procedures?

Yes Facility documents all demolition procedures. ✔

No Facility does not document demolition procedures.

NA Facility has determined that asbestos is not present in any of the buildings.

3.3c Has the facility inform employees of buildings and structures containing asbestos and trained to work with asbestos-containing material (ACM)?

Inform all employees that may encounter asbestos-containing materials (ACM) of its existence. In particular, inform all employees who perform repairs, maintenance, and custodial activities. In addition, train employees on how to follow proper procedures on the proper use of protective equipment, and the use of control measures if their work can disturb asbestos-containing material and release fibers.

Yes Facility has informed and trained all employees as described above. ✔

No Facility has not informed all employees or trained them as described above.

NA Facility has determined that asbestos is not present in any of the buildings.

3.4 Air Conditioning Maintenance

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *air conditioning maintenance* for compliance with environmental requirements.

a. Does the facility maintain and/or repair CFC-containing equipment? (p. W-48)

b. Are CFC-containing equipment maintain by certified technicians? (p. W-48)

c. Are certificates on file? (p. W-48)

d. Does the facility remove all CFCs from equipment prior to maintenance activities? (p. W-49)

e. Is CFC recovery and/or recycling equipment EPA approved? (p. W-49)

f. Does the facility have documentation that refrigerants from recovery equipment are sent to an EPA-approved reclaimer? (p. W-50)

g. Does the facility repair leaks of appliances containing ozone-depleting refrigerants in a timely manner? (p. W-50)

h. How does the facility manage appliances containing ozone-depleting refrigerants? (p. W-50)

I. Has the facility ensured that its CFCs have been legally purchased? (p. W-51)

These questions are repeated in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Air Conditioning Maintenance

As of July 1, 1992, it became unlawful for any person maintaining, servicing, repairing, or disposing of any appliance or industrial refrigeration to knowingly vent, release, or dispose of any ozone-depleting substance [e.g., chlorofluorocarbons (CFCs)] to the environment. For a list of ozone-depleting substances, contact the **Stratospheric Ozone Information Hotline at 1-800-296-1996.**

3.4a Does the facility maintain and/or repair CFC-containing equipment?

The most common CFC-containing equipment maintained and repaired at a water transportation facility includes building and vehicle air conditioners, refrigeration equipment, and ice machines.

Yes Facility maintains and/or repairs CFC-containing equipment.

No Facility does not maintain and/or repair CFC-containing equipment.

3.4b Is CFC-containing equipment maintained by certified technicians?

Technicians that perform a service that may release refrigerant must have EPA approved training and certification. Each technician must have his/her own certification. Certificates must be posted at the place of business (40 CFR Part 82).

Yes Technicians are certified. ✔

No Technicians are not certified.

NA Facility does not maintain CFC-containing equipment.

3.4c Are certificates on file?

Yes Technicians' certificates are on the wall, in a file, or in their wallet. ✔

No Technicians' certificates are not on file.

NA Facility does not maintain CFC-containing equipment.

3.4d Are all CFCs removed from equipment prior to maintenance activities?

Certified technicians should perform equipment repairs that would release CFCs only after the refrigerants are removed and collected.

Yes Facility removes and collects CFCs from equipment prior to maintenance activities. ✔

No Facility does not remove or collect CFCs from equipment prior to maintenance activities.

NA Facility does not maintain and/or repair CFC-containing equipment.

3.4e Is CFC recovery and/or recycling equipment EPA approved?

Technicians repairing or servicing air conditioners and other CFC-containing equipment can only use recovery and/or recycling equipment that is approved by EPA. Currently, EPA has approved both the Air-Conditioning and Refrigeration Institute (ARI) and Underwriters Laboratories (UL) to certify recycling and recovery equipment. Certified equipment can be identified by a label reading: "This equipment has been certified by ARI/UL to meet EPA's minimum requirements for recycling and/ or recovery equipment intended for use with [appropriate category of appliance--e.g., small appliances, HCFC appliances containing less than 200 pounds of refrigerant, all high-pressure appliances, etc.]." Lists of certified equipment may be obtained by contacting ARI at 703-524-8800 and UL at 708-272-8800 ext. 42371.

To demonstrate EPA approval, the equipment must have a label stating one of the following:

1) “THIS EQUIPMENT HAS BEEN CERTIFIED BY [APPROVED EQUIPMENT TESTING ORGANIZATION] TO MEET EPA’S MINIMUM REQUIREMENTS FOR RECYCLING OR RECOVERY EQUIPMENT FOR USE WITH [WHATEVER PROCESS THE EQUIPMENT IS BEING USED FOR];” or

2) “UL approved” or “ARI approved.”

Yes Equipment has the “ARI / UL approval”, and it has the appropriate labels . ✔

No Equipment does not have “ARI / UL approval”.

NA Facility does not maintain and/or repair CFC-containing equipment.

3.4f Does the facility have documentation that refrigerants from recovery equipment are sent to an EPA-approved reclaimer?

Facilities that use recovery equipment must provide documentation that they send the refrigerant to an EPA-approved reclaimer.

Yes Facility maintains documentation that they send refrigerants to an EPA approved reclaimer. ✔

No Facility does not maintain documentation where they send refrigerants.

NA Facility does not maintain and/or repair CFC-containing equipment.

3.4g Does the facility repair leaks of appliances containing ozone-depleting refrigerants in a timely manner?

If the facility's appliances (e.g., air conditioners, refrigerators) contain 50 or more pounds of refrigerant, the facility must repair leaks in a timely manner and maintain records of those repairs. *See Question 5.2b for recordkeeping requirements.*

Yes Facility repairs leaks of appliances containing 50 pounds or more of refrigerant in a timely manner. ✔

No Facility does not repair leaks of appliances containing 50 pounds or more of refrigerant in a timely manner.

NA Facility does not have appliances that contains 50 pounds or more of refrigerant.

3.4h How does the facility manage appliances containing ozone-depleting refrigerants?

Landfill Facility disposes of appliances containing ozone-depleting refrigerants in a landfill that contains refrigerant-recovery equipment. ✔

Waste hauler Facility has waste hauler pick up appliances. Waste hauler has refrigerant-recovery equipment. ✔

Scrap metal recycler Facility sends appliances to scrap metal recycler that has refrigerant-recovery equipment. ✔

Other Method of disposal is not listed.

3.4i Has the facility ensured that its CFCs have been legally purchased?

When purchasing legal CFCs, the facility should know where the specific brand was produced and the name of the manufacturer. Before purchasing CFCs, ask the seller for documents of prior ownership of the product (and a laboratory analysis of the quality).

Warning: If an individual knowingly buys or possesses CFCs smuggled into the United States, that person is committing a punishable, criminal offense and could face severe penalties. For more information regarding CFCs and enforcement actions under the Clean Air Act (CAA), all EPA's **Stratospheric Ozone Protection Hotline** at **1-800-296-1996**.

Investigating the source of the material and the chain of ownership is the facility's responsibility. If the material was imported, the facility should know when, where, and from whom it was imported. The facility should also ensure that the packaging for the material is appropriate. Illegally imported refrigerant is sometimes packaged in wrong size containers or fixed with improper values. Remember, if an individual purchases or possesses CFCs that entered the United States illegally, the U.S. Customs Service can confiscate the product. Other potential consequences of purchasing or possessing illegal CFCs include becoming the subject of an investigation by the Customs Service, EPA, and the Internal Revenue Service (IRS) (e.g., to audit the facility regarding payment of excess taxes on CFCs).

Yes Facility has ensured that CFCs have been legally purchased. ✔

No Facility has not ensured that CFCs have been legally purchased.

NA Facility has not purchased CFCs.

3.5 Fueling Operations

NOTE: The following question is included in the accompanying checklist to help the facility examine its *fueling operations* for compliance with environmental requirements:

Does the facility use overfill protection measures, spill containment methods, and spill response equipment during fueling? (p. W-52)

This question appears in the following text and is accompanied with a discussion of the preferred answer (indicated with a "✔") for environmental compliance.

Fueling Operations

Air and water pollution resulting from fuel spillage are the major environmental concerns associated with water transportation facility fueling operations. Fueling vessel of any size can discharge oil and petroleum wastes into water bodies through spills. Fuel emissions from this type of fueling introduces pollutants into the air. However, one can substantially reduce possible accidental spillage by maintaining fuel tanks, lines, and fueling systems.

3.5 Does the facility use overfill protection measures, spill containment methods, and spill response equipment during fueling?

When fueling vehicles, facilities should use overfill protection, spill containment, and spill response equipment to prevent overflows and spills.

- **Overfill protection.** Facilities can prevent fuel overflows during tank filling by installing preventive measures, such as self-locking fuel measures and regularly monitoring transfers. In addition, a facility can prevent spills that result from "topping off" tanks by training employees on proper fueling techniques.

- **Spill containment.** Facilities should clean leaks and spills immediately using dry methods such as absorbent wipes.

- **Spill response.** Portable absorbent booms should be readily available for a quick response to spills. Use dry absorbent materials such as kitty litter or organic-based absorbents to absorb oil and grease. *Dispose of used absorbent properly in accordance with federal and state regulations.*

Yes Facility uses the measures, methods, and equipment described above. ✔

No Facility does not use the measures, methods, or equipment described above.

NA Facility does not have fueling operations.

3.6 Equipment Cleaning and Spent Solvents

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *equipment cleaning and spent solvents* for compliance with environmental requirements.

a. Does the facility clean equipment? (p. W-53)

b. What kind of cleaning agents does the facility use to conduct equipment cleaning? (p. W-53)

c. Does the facility keep the lids of solvent cleaning equipment closed? (p. W-54)

d. If halogenated solvents are used in cleaning equipment, has the facility submitted a notification report to the air permitting agency? (p. W-54)

e. Does the facility store spent solvents in labeled containers? (p. W-55)

f. How does the facility manage/dispose of its spent solvents? (p. W-55)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Equipment Cleaning and Spent Solvents

A facility may conduct various kinds of equipment cleaning using solvents. Wastes generated from equipment cleaning include sludge, wastewater, and spent chemical solvents. A facility may generate hazardous waste depending on the cleaning agents used to clean tools, equipment parts, and other small items, and on the nature of the material being cleaned.

Facilities must follow EPA waste management regulations for "waste" or "spent" solvents (i.e., those that have been generated as wastes). Solvents that are *currently being used*, such as in a parts cleaning sink, may be under EPA air regulations, but are not regulated under RCRA since they are not yet a waste.

Note: EPA is proposing a regulation, the ***Transportation Equipment Cleaning Industry Effluent Guidelines and Standards - Proposed Rule***, that will establish technology-based effluent limitation guidelines for the discharge of pollutants into waters of the U.S. and into POTWs by existing and new facilities that perform transportation equipment cleaning operations.

3.6a Does the facility clean equipment?

A water transportation facility may conduct different kinds of equipment cleaning.

- Large scale equipment cleaning typically involves the cleaning of vessels and support vehicles.
- Small scale equipment cleaning, commonly referred to as **parts cleaning**, typically involves the cleaning of engine parts, tools, and other small items. The facility may conduct parts cleaning using some type of solvent cleaning equipment, such as a parts washer or a dip tank.

Yes Facility conducts equipment cleaning.

No Facility does not conduct equipment cleaning.

3.6b What kind of cleaning agents does the facility use to conduct equipment cleaning?

A facility can use various cleaning agents for equipment cleaning, including steam/pressure water, surfactants (soap), and chemical solvents. If using chemical solvents that are hazardous, care should be taken to wear protective safety gear and follow good housekeeping practices (e.g., clear, easy to read labeling of all chemicals and wastes to avoid misuse and potential injury or contamination).

The facility uses one or more of the following cleaning agents:

Water	Steam
Surfactants	Chemical solvents
Other _____	

3.6c Does the facility keep the lids of solvent cleaning equipment closed?

Facilities should keep the lids or covers of solvent cleaning equipment (e.g., parts washers, dip tanks) closed except when actually cleaning parts or adding or removing liquid to prevent evaporation of solvents.

Yes Facility keeps lids of solvent cleaning equipment closed. ✔

No Facility does not keep lids of solvent cleaning equipment closed.

NA Facility does not conduct parts cleaning using solvent cleaning equipment.

3.6d If halogenated solvents are used in cleaning equipment, has the facility submitted a notification report to the air permitting agency?

Although most water transportation facilities use soap and water for parts cleaning, some facilities use halogenated solvents. On December 2, 1994, EPA issued national emission standards for hazardous air pollutants (NESHAP) to control toxic air pollutant emissions from solvent cleaning equipment (including dip tanks and parts washers) that use any of six halogenated solvents. These halogenated solvents include:

Tip: A facility can tell if these chemicals are contained in the solvent by reading the label on the container or reading a Material Safety Data Sheet (MSDS) that should accompany any hazardous material the facility has on site. If the facility does not have an MSDS, one may be requested from its vendor.

- Methylene chloride
- 1,1,1-Trichloroethane
- Chloroform
- Perchloroethylene
- Trichloroethylene
- Carbon tetrachloride.

All owners and operators of solvent cleaning equipment that use these solvents must submit an initial **notification report** to its permitting agency. This report must include information on each solvent cleaning machine and control equipment, and the yearly estimated consumption of each halogenated solvent used. Additional NESHAP requirements depend on the type of solvent cleaning machine (e.g., batch vapor, in-line) that a facility uses. Contact the state/local air pollution control agency for more information.

Yes Facility has submitted a notification report. ✔

No Facility has not submitted a notification report.

NA Facility does not use halogenated solvents to conduct equipment cleaning.

3.6e Does the facility store spent solvents in labeled containers?

Stored in containers. Containers must be compatible with the substance they are storing, and have no signs of leaks or significant damage due to major dents or rust. Containers must also be closed (e.g., lids are on, caps are screwed on tight) except when actually adding or removing liquid.

Labeled*.** A facility must use labeled containers for spent solvents that are hazardous and are transported for disposal. ***Note: *Solvents that are in a parts washer do not require labels.*

Yes	Facility stores spent solvents in labeled containers. ✔
No	Facility does not store spent solvents in labeled containers.
NA	Facility does not use solvents at the facility.

3.6f How does the facility manage/dispose of its spent solvents?

If a facility does not use a vendor for disposal, the facility must classify the spent materials and sludges as either nonhazardous or hazardous waste. If the spent materials are hazardous, they should be in separate container and not mixed in with nonhazardous wastes such as used oils. All hazardous waste should be stored, manifested, transported and disposed of in full compliance with RCRA. Use treatment, storage, and disposal facilities (TSDFs) for disposal of hazardous waste.

Third party vendor	Facility uses a third party vendor. Many facilities elect to use third party vendors providing "turn key" assistance. These vendors typically provide the solvents and parts washers, and collect the spent solvents, provide transportation, and recycle or dispose of the waste. ✔
Storm sewers or surface waters	Facility has obtained an NPDES permit to discharge nonhazardous waste to storm sewers or to surface waters. ✔
Sanitary sewer	Facility has obtained approval from the POTW to discharge nonhazardous waste to sanitary sewers. Discharge may require pretreatment. ✔
UIC well	Facility discharges nonhazardous waste to an underground injection control (UIC) well. The facility complies with UIC program requirements (40 CFR Part 144).
Ground	Facility discards spent solvents on the ground which may affect groundwater or may flow with storm water into storm sewers and surface waterways. ***Caution****: Many states forbid the disposal of hazardous spent solvents on the ground.*
Other	Method of disposal is not listed.
NA	Facility does not generate spent solvents or sludge.

3.7 Disposal of Dredge and Fill Material

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the facility's operations for compliance with environmental requirements.

a. *Is the facility performing any construction activities that may generate dredge and fill materials? (p. W-56)*

b. *If yes, are dredge and fill materials being disposed of or placed in waters of the United States, which include wetlands? (p. W-57)*

c. *If yes, is the facility in compliance with Section 404 permit requirements? (p. W-57)*

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Dredge and Fill Material

The construction of new water transportation facilities often involves dredging (i.e., the removal of materials such as sand, silt, and clays) in an existing navigation channel. Maintenance dredging is performed periodically to remove bottom sediment that has been naturally deposited through time. Activities such as soil remediation, demolitions, and new building, pier, road, or utility construction generally produce large amounts of dredged or fill material. If the placement or disposal of dredged material takes place in waters of the United States, including wetlands, the facility needs to apply for a Section 404 permit.

Section 404 Permit Program. Dredged and fill material discharged into waters of the United States, including wetlands, are regulated under Section 404 of the Clean Water Act (if into inland waters) and under Section 103 of the Marine Protection, Research, and Sanctuaries Act (if into the ocean). Section 404 of the Clean Water Act establishes a permit program to prevent discharge of fill material from regulated activities if a practicable alternative exists. The U.S. Army Corps of Engineers (Corps) is the federal agency responsible for administering and enforcing the program including individual permit decisions and jurisdictional determinations. However, some States have approved Section 404 programs and issue these permits themselves. The EPA establishes guidelines used in evaluating activities regulated under Section 404 and also enforces its provisions. Jointly, the EPA and the Corps designate areas for the placement or disposal of dredged and fill materials.

Note: If discharging dredge and fill material into the ocean, see Section 6.2 for more information about the *Marine Protection, Research, and Sanctuaries Act*.

3.7a Is the facility performing any construction activities that may generate dredge and fill materials?

Yes Facility is performing construction activities that may generate dredge and fill materials.

No Facility is not performing construction activities that generate dredge and fill

materials.

3.7b If yes, are dredge and fill materials being disposed of or placed in waters of the United States, which include wetlands?

Yes Facility generates dredged or fill materials, and they are disposed of or placed in waters of the United States, which include wetlands.

No Facility generates dredged or fill materials, and they are not disposed of or placed in waters of the United States, which include wetlands.

NA Facility discharges dredge and fill materials to the ocean.

3.7c If yes, is the facility in compliance with Section 404 permit requirements?

The facility can comply with Section 404 permit requirements by doing the following:

1. **If discharging dredged or fill material to a wetland, identify if the wetland is subject to the Section 404 permit program.** The EPA and the Corps use a guidance manual, the 1987 *Corps of Engineers Wetlands Delineation Manual*, and a 1992 technical supplement to identify wetlands subject to the Section 404 program. *Contact the Corps for a wetland delineation if there are any questions regarding whether an activity is within a regulated wetland area.*

2. **Apply for an *individual* or *general* Section 404 permit.** *If the facility is carrying out a major project, contact the Corps district office closest to the facility or the state regulatory agency (if Section 404 permit program has been delegated to the state) for a pre-application consultation and complete an individual permit.* A Section 404 permit application is processed at the same time by federal, state and local agencies, and a permit will not be granted without a certification from the affected state(s). General Section 404 permits are issued on a nationwide, regional, or statewide basis to facilities whose discharge of dredged or fill materials is determined to have minimal adverse environmental effects. This latter permit is issued for particular categories of activities (e.g., minor road crossings, utility line backfill and bedding) and expedites the permitting process.

Yes Facility is in compliance with Section 404 permitting requirements. ✔

No Facility is not in compliance with Section 404 permitting requirements.

3.8 Pesticides

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the facility's operations for compliance with environmental requirements:

a. Does the facility use pesticides only as directed by their labels? (p. W-58)

b. Are restricted use pesticides (RUPs) applied only by a certified commercial applicator? (p. W-59)

This questions appear in the following text and may be accompanied with a discussion of the preferred answers (indicated with a "✔") for environmental compliance.

Pesticides

Pesticides for non-restricted use (e.g., herbicides, fungicides, rodenticides, insecticides and disinfectants / antimicrobials) may be used on site for pest control. Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), EPA register all pesticides used in the United States. Registered pesticides are properly labeled and if used in accordance with the label, they will not cause unreasonable harm to the environment. Pesticides *can only be applied in a manner consistent with the label*. Do not repackage. Store in original containers, and keep them out of reach of children.

Most pesticides are classified as non-restricted use and anyone can apply them. Only commercial certified applicators or under direct supervision can purchase and apply **restricted use pesticides (RUPs)**. Pesticide labels will clearly state whether a particular pesticide is classified as restricted use only. For a list of state FIFRA/Pesticide contacts, refer to EPA's website at **http://www.transource.org/Shared_Files/fifrah1.html.**

3.8a Does the facility apply pesticides only as directed by their labels?

Yes Facility applies all pesticides in accordance with the directions on the pesticide labels. ✔

No Facility does not apply pesticides as directed by pesticide labels.

NA Facility does not use any pesticides.

3.8b Are restricted use pesticides (RUPs) applied only by a certified commercial applicator?

Only a certified applicator or someone under the direct supervision of a certified applicator can apply RUPs. States oversee the program for certification of commercial (and private) applicators of restricted use pesticides. Facilities that are interested in having their staff become certified applicators should contact their state. Facilities should ensure that all vendors and employees applying RUPs are properly certified and trained.

Yes Facility uses certified applicators to apply RUPs. ✔

No Facility does not use certified applicators to apply RUPs.

NA Facility does not apply RUPs.

SECTION 4.0 STORAGE TANKS AND SPILL PREVENTION CONTROL AND COUNTERMEASURES

4.1 Underground Storage Tanks (USTs)

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *underground storage tanks* for compliance with environmental requirements.

a. Has the facility notify State/Tribe UST program office of any USTs located on site? (p. W-61)

b. Does the facility conduct leak detection for tank and piping of all on site USTs? (p. W-61)

c. Do USTs at the facility meet requirements for spill, overfill, and corrosion protection? (p. W-62)

d. Does the facility maintain records of leak detection; spill, overfill, and corrosion protection; corrective actions; closure; and financial responsibility? (p. W-62)

e. Does the facility report suspected/actual leaks to its state/tribal UST regulatory authority? (p. W-63)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Underground Storage Tanks

Many water transportation facilities have **underground storage tanks** (USTs) to supply fuel for vessels, trucks, or other vehicles. Facilities use USTs to store used oil or fuel to run emergency power generators. A UST is a tank and any underground piping connected to the tank that has at least ten percent of its combined volume underground.

Note: USTs that store flammable and combustible liquids must meet provisions under the *National Fire Protection Association* (*NFPA) 30 Flammable and Combustible Liquids Code*. Requirements under *NFPA 30* include provisions for tank storage and piping systems. *See Question 4.1e for more information.*

To protect human health and the environment from dangerous releases, USTs must have leak detection and spill, overfill, and corrosion protection. Other UST requirements address notification, installation, corrective action, financial responsibility, and recordkeeping. Tanks installed after 1988 need to comply with all UST requirements upon installation. Tanks installed before 1988 had until December 1998 to comply with spill, overfill, and corrosion protection requirements, but these USTs should be in compliance with all requirements now. For more information on USTs, visit EPA's Office of Underground Storage Tanks website at **http://www.epa.gov/oust/.**

Federal regulations do not cover some USTs (e.g., tanks storing heating oil used on premises where it is stored, tanks on or above the floor of underground areas, such as basements or tunnels, emergency spill and overflow fill tanks); however, state, tribal, or local regulatory agency may regulate such USTs. Be sure to ask the state, tribal, or local regulatory agencies to find out if additional or more stringent requirements apply to the facility.

4.1a Has the facility notify State/Tribal UST program office of any USTs located on site?

Facilities with on site regulated UST systems must submit a notification form to the responsible state/tribal Underground Storage Tank (UST) program. The form includes certification of compliance with federal requirements for installation, cathodic protection, release detection, and financial responsibility for UST systems installed after December 22, 1988. For more information on how to obtain and complete the form, call EPA's **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346**.

Yes Facility has submitted a notification form to the responsible state/tribal UST program office. ✔

No Facility has not submitted a notification form to the responsible state/tribal UST program office.

NA Facility has no USTs.

4.1b Does the facility conduct leak detection for tanks and piping of all on-site USTs?

Facilities with federally regulated UST systems must conduct leak detection. A facility may use the **monthly monitoring methods** to conduct leak detection of tanks. They include the following:

- Automatic tank gauging
- Monitoring for vapors in soil.
- Interstitial monitoring
- Groundwater monitoring
- Statistical inventory reconciliation
- Other methods approved by the regulatory authority.

Note: Facilities with USTs may use inventory control and tank tightness testing instead of one of the monthly monitoring methods for a maximum of 10 years after the tank is installed or upgraded with corrosion protection (40 CFR 280.41). Call the **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346** for more information.

In addition, any pressurized piping must have: (1) monthly monitoring (as described above) or annual line testing, and (2) an automatic flow restrictor, an automatic shutoff device, or a continuous alarm system. *Check with the State/Tribal UST program to determine which leak detection methods the state accepts.*

Yes Facility conducts at least one leak detection methods described above. ✔

No Facility does not conduct leak detection.

NA Facility does not have any federally regulated USTs.

4.1c Do USTs at the facility meet requirements for spill, overfill, and corrosion protection?

> Now that the **December 22, 1998** deadline for all UST systems has passed, owners and operators of facilities that continue to operate UST systems not meeting the federal requirements for leak detection, and spill, overfill, and corrosion protection are **out of compliance**. Besides posing a threat to human health and the environment, such operation can subject the owner/operator to considerable fines.

Facilities must operate all USTs subject to federal regulations to ensure that spills or overflows do not cause releases into the environment. Facility owners and operators had until December 22, 1998, to make certain that all UST systems met the federal requirements for leak detection, and spill, overfill, and corrosion protection in accordance with the provisions of 40 CFR Part 280. Owners of noncompliant USTs may close the UST temporarily for up to 12 months (December 22, 1999), as long as (1) the facility continues to monitor for leaks by maintaining the UST's leak detection and corrosion protection system; and (2) if temporarily closed for more than 3 months, the UST must have vent lines open, but all other lines must be capped and secured. After 12 months of temporary closure, the facility must permanently close the UST. *To find out more about federal UST requirements, call **EPA's RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346.** Check with the state and local regulatory agencies to find out if there are additional or more stringent state and/or local UST requirements.*

Yes Facility has spill, overfill, and corrosion protection devices. ✔

No Facility does not have protection devices installed.

NA Facility does not have any federally regulated USTs.

Recordkeeping

4.1d Does the facility maintain records of leak detection; spill, overfill, and corrosion protection; corrective actions; closure; and financial responsibility?

If the facility has a federally regulated UST, it must keep records that prove it meets certain requirements. Keep these records to show the facility's recent compliance status in five major areas: (1) leak detection; (2) corrosion protection; (3) corrective actions; (4) closure; and (5) financial responsibility. The facility must submit appropriate notification information to EPA or the state regulatory agency. Check with the state or local regulatory agency about particular recordkeeping requirements. Generally, one should follow this useful rule of thumb for recordkeeping: When in doubt, keep it.

Yes Facility maintains all UST records as described above. ✔

No Facility does not maintain all UST records.

NA Facility does not have USTs.

4.1e Does the facility report suspected/actual leaks to its state/tribal UST regulatory authority?

The facility must report suspected and actual leaks to its state UST regulatory authority within 24 hours. After reporting a suspected release, the facility must immediately investigate and confirm such a release. *Check with the state/tribal regulatory agency for additional requirements.*

Yes Facility reports suspected/actual leaks to its state/tribal UST regulatory authority. ✔

No Facility does not report suspected/actual leaks to its state/tribal UST regulatory authority.

NA Facility does not have USTs.

4.2 Aboveground Storage Tanks

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in bold), will help the facility examine its operations relating to *aboveground storage tanks* for compliance with environmental requirements.

a. *Does the facility have aboveground storage tanks (ASTs)? (p. W-63)*

b. *Do ASTs meet or exceed NFPA 30A requirements? (p. W-64)*

c. Does the facility inspect ASTs on a periodic basis for leaks or other hazardous conditions? (p. W-65)

These questions appear in the following text, accompanied with a discussion of the preferred answer (indicated with a "✔") for environmental compliance.

Aboveground Storage Tanks (ASTs)

4.2a Does the facility have aboveground storage tanks (ASTs)?

Yes Facility has ASTs.

No Facility does not have ASTs.

4.2b Do ASTs meet or exceed NFPA 30A requirements?

If the facility has a marine service station, all ASTs at the facility must meet the National Fire Protection Association (NFPA) requirements under *NFPA 30A Automotive and Marine Service Station Code* and *NFPA 30 Flammable and Combustible Liquids Code*. NFPA defines a marine service station as " where liquids used as fuels are stored and dispensed from equipment on shore, piers, wharves, or floating docks into the fuel tanks of self-propelled craft..."

NFPA 30A Automotive and Marine Service Station Code requirements address the following:

- Tank location and capacity
- Control of spillage
- Vaults
- Fire-resistant tanks
- Piping and ancillary equipment
- Physical protection
- Corrosion protection
- Tank filling operations.

Requirements under *NFPA 30 Flammable and Combustible Liquids Code* include address the following:

- **Tanks**
  - **S** Design and construction
  - **S** Installation
  - **S** Storage tank buildings
  - **S** Supports, foundations, and anchorage for all tank locations
  - **S** Operating instructions
  - **S** Sources of ignition
  - **S** Testing and maintenance
  - **S** Fire protection and identification
  - **S** Prevention of overfilling of tanks
  - **S** Leak detection and inventory records for underground storage tanks.
- **Piping systems**
  - **S** Materials for piping, valves, and fittings
  - **S** Pipe joints
  - **S** Supports
  - **S** Protection against corrosion
  - **S** Underground piping
  - **S** Valves
  - **S** Testing
  - **S** Identification.

Note: *NFPA 30* also apply to USTs. For more information call NFPA at **617-770-3000** or access their website at **http://www.nfpa.org**.

Yes Tanks meet or exceed NFPA requirements. ✔

No Tanks do not meet NFPA requirements.

NA Facility does not have ASTs.

4.2c Does the facility inspect ASTs on a periodic basis for leaks or other hazardous conditions?

If regulated under the SPCC program, a facility must inspect ASTs on a periodic basis for evidence of leaks or other hazardous conditions (e.g., rust, structural deterioration, etc.). *(See Section 4.3 for additional information.)*

Yes	Facility periodically inspects ASTs. ✔
No	Facility does not inspect ASTs.
NA	Facility does not have aboveground storage tanks.

4.3 Spill Prevention, Control, and Countermeasures (SPCC) and Emergency Response

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in bold), will help the facility examine its operations relating to *spill prevention, control, and countermeasures (SPCC) and emergency response* for compliance with environmental requirements.

a. *Does the facility's total tank storage capacity make it subject to the Oil Pollution regulation? (p. W-66)*

b. *Could spilled oil reach navigable waters or adjoining shorelines? (p. W-66)*

c. ***Does the facility have a Spill Prevention, Control, and Countermeasures (SPCC) plan signed by a professional engineer? (p. W-67)***

d. *Is the phone number for the National Response Center available on site for immediate reporting of oil spills? (p. W-68)*

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Spill Prevention, Control, and Countermeasures Program

In 1973, EPA issued the Oil Pollution regulation (40 CFR Part 112) to address the oil spill prevention provisions contained in the Clean Water Act of 1972. The regulation forms the basis of EPA's oil spill prevention, control, and countermeasures (SPCC) program, which seeks to prevent oil spills from certain ASTs and USTs. In particular, the regulation applies to facilities that:

- Have an aboveground storage capacity of more than 660 gallons in a single AST or more than 1,320 gallons in multiple ASTs, or a total underground storage capacity of 42,000 gallons; and
- Has physical potential to discharge oil in harmful quantities into navigable waters of the United States.

On December 2, 1997, EPA proposed a rule called the ***Oil Pollution Prevention and Response; Non-Transportation Related On-shore and Off-shore Facilities - Proposed Rule.*** It eliminates the requirement of preparing an SPCC plan for those non-transportation related facilities having an aboveground capacity in excess of 660 gallons, as long as the facility stores 1,320 gallons or less of oil. This rule is expected to become final in September 2000. For more information, call **EPA's RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346**.

4.3a Does the facility's total tank storage make it subject to the Oil Pollution regulation?

If the facility has total gasoline, fuel oil, or lubricating oil storage capacity greater than 1,320 gallons (or greater than 660 gallons in any one tank) in aboveground storage tanks or total underground tank storage capacity greater than 42,000 gallons, then it is subject to the Oil Pollution regulation and is required to have an SPCC plan.

Note that the limits are different for above and below ground tanks. When adding totals, the capacity:

- Includes amount of oil that could be contained (e.g., 1,500-gallon tank with 350 gallons of oil would still count as 1,500 gallons toward the total).
- Includes oil stored in drums, buckets, etc. (e.g., 1,600-gallon aboveground tank, plus a 1,500-gallon aboveground tank, plus five 55-gallon drums would equal 3,375 gallons total storage).

Yes Facility exceeds capacity limits indicated above.

No Facility storage capacity is less than limits above.

NA Facility does not have storage tanks.

4.3b Could spilled oil reach navigable waters or adjoining shorelines?

The term *"navigable waters"* generally means *any* body of water. If a spill could get to groundwater, storm water, a creek, etc., it may be able to reach navigable waters. Spills are considered able to eventually reach navigable waters even if man-made structures (e.g., dikes, berms, storage containers) are present.

Yes A spill could reach navigable waters or adjoining shorelines.

No A spill could not reach navigable waters or adjoining shorelines.

NA Facility does not have storage tanks.

4.3c Does the facility have a Spill Prevention, Control, and Countermeasures (SPCC) plan signed by a professional engineer?

If the answer to *4.3a* and *4.3b* is "yes", then the facility must have an SPCC plan. The SPCC plan must be on site if the facility is normally manned for at least eight hours per day. Otherwise, it must be kept at the nearest field office. An SPCC plan is a written description of how a facility's operations comply with the prevention guidelines under the Oil Pollution Prevention regulation. Each SPCC plan, while unique to the facility it covers, must include certain elements to ensure compliance with the regulations. These elements include:

- Written descriptions of any spills occurring within the past year, corrective actions taken, and plans for preventing their recurrence.
- A prediction of the direction, rate of flow, and total quantity of oil that could discharge where experience indicates a potential equipment failure.
- A description of secondary containment and/or diversionary structures or equipment to prevent discharged oil from reaching navigable waters.
- If containment and/or diversionary equipment or structures are not practical, a strong oil spill contingency plan and a written commitment of manpower, equipment, and materials to quickly control and remove spilled oil.

Secondary Containment
Under SPCC guidelines, all storage tank installations should have secondary containment for the entire contents of the largest single tank plus sufficient freeboard to allow for precipitation. Diked areas should be sufficiently impervious to contain spilled oil. If dikes are not appropriate, then use an alternative system.

- A complete discussion of the spill prevention and control measures applicable to the facility and/or its operations.

Facilities must have an SPCC plan that has been signed by a professional engineer. This is not the same as a "hazardous materials plan," or an "emergency response plan." However, some facilities may combine the SPCC plan with another plan. If this is done, the plan should include wording such as "spill control and emergency response plan." For more information refer to EPA's website at **http://www.epa.gov/oerrpage/oilspill/spccplan.htm.**

Yes The facility has an SPCC that has been signed by a professional engineer. ✔

No The facility does not have an SPCC plan, or the plan is not signed by a Professional Engineer.

NA The facility is not required to have an SPCC plan.

Note: *Facilities required to have an SPCC Plan must also conduct an initial screening to determine whether they need to develop a facility response plan. See Section 6.3 for additional information about FRP requirements.*

4.3d Is the phone number for the National Response Center available on site for immediate reporting of oil spills?

In addition to an SPCC plan, EPA requires that if a facility has an accidental release of an oil spill that meets federal reporting requirements (e.g., a discharge of oil that causes a discoloration or "sheen" on the surface of water, violates water quality standards, or causes a sludge or emulsion to be deposited beneath the surface or on adjoining shorelines), the oil spill must be reported to the National Response Center (NRC) at **1-800-424-8802.**

Yes NRC phone number is available on site. ✔

No NRC phone number is not available.

SECTION 5.0 PLANNING AND ACCIDENTAL RELEASE REPORTING

5.1 EPCRA Planning and Reporting Requirements

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *EPCRA planning and reporting* for compliance with environmental requirements.

a. If the facility has extremely hazardous substances (EHSs) in excess of their threshold planning quantities (TPQs), has the facility notified its state emergency response commission (SERC) and local emergency planning committee (LEPC)? (p. W-70)

b. If the facility experienced an accidental release of a hazardous or extremely hazardous substance, did the facility immediately notify the proper authorities? (p. W-70)

c. After initial notification of any spills and releases, has the facility provided a written follow-up emergency notice(s) to the proper emergency agencies? (p. W-71)

d. Has the facility submitted copies of its MSDSs or a list of its MSDS chemicals to the LEPC, SERC, and local fire department? (p. W-71)

e. Does the facility meet its reporting requirement annually under Section 312 of EPCRA? (p. W-71)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

EPCRA Planning and Reporting Requirements

Title III of the Superfund Amendments and Reauthorization Act (SARA), also known as Emergency Planning and Community Right-to-Know Act (EPCRA) establishes requirements for federal, state, and local governments, and industry regarding emergency planning and "community right-to-know" reporting of hazardous and toxic chemicals. It requires industry to report detailed information concerning the use, generation, and release of hazardous and toxic materials.

EPCRA requires all facilities (no matter how small) to appoint an emergency response coordinator and participate in emergency planning activities. It also establishes reporting requirements for facilities that store and manage specific chemicals.

5.1a If the facility has extremely hazardous substances (EHSs) in excess of their threshold planning quantities (TPQs), has the facility notified its state emergency response commission (SERC) and local emergency planning committee (LEPC)?

Under Section 302 of EPCRA, if a facility has any of the 400 *extremely hazardous substances* (EHSs) (e.g., ammonia, chlorine, nitric acid, sulfuric acid) listed in 40 CFR Part 355 in excess of their threshold planning quantities (TPQs), the facility must notify its state emergency response commission (SERC) within 60 days that the facility is subject to emergency planning requirements. In addition, the facility must participate in the local emergency process and must provide any information to the local emergency planning committee (LEPC) deemed necessary for development or implementation of a local emergency plan.

A **threshold planning quantity (TPQ)** is the amount of an extremely hazardous substance (EHS) at a facility that triggers a reporting requirement. EHSs and their TPQs are listed in 40 CFR Part 355, Appendices A and B, or call EPA's **RCRA/UST, Superfund, and EPCRA Hotline** at **1-800-424-9346.**

Yes Facility notified its SERC and LEPC. ✔

No Facility did not notify its SERC and LEPC.

NA Facility does not have EHSs in excess of their TPQs.

5.1b If the facility experienced an accidental release of a hazardous or extremely hazardous substance, did the facility immediately notify the proper authorities?

Under Section 304 of EPCRA, a facility is required to immediately notify its LEPC and SERC likely to be affected if there is a release into the environment of an 1) "extremely hazardous substance" or a 2) "hazardous substance" under CERCLA Section 103 that exceeds its **reportable quantities**. Some of the substances are common to both lists.

The LEPC and SERC will coordinate response activity for the spill or accident, and prevent harmful effects to the public and community at large. In addition, if the facility releases a CERCLA hazardous substance, the facility is required to notify the ***National Response Center (NRC) at 1-800-424-8802***.

A **reportable quantity** (RQ) is the amount of an extremely hazardous substance (EHS) or CERCLA hazardous substance released to the environment which must be reported. EHSs and their RQs are listed in 40 CFR Part 355, Appendices A and B. CERCLA hazardous substances and their RQs are listed in 40 CFR Part 302, Table 302.4.

Yes Facility immediately notified the proper authorities. ✔

No Facility did not immediately notify the proper authorities.

NA Facility did not experience any accidental releases of CERCLA hazardous or extremely hazardous substances.

5.1c After initial notification of any spills and releases, has the facility provided a written follow-up emergency notice(s) to the proper emergency agencies?

After initial notification of spills and releases to the appropriate agencies, the facility must provide a written follow-up emergency notice(s), as soon as practicable after the release. The follow-up notice(s) must update information provided in the initial notice and provide information on actual response actions taken and advice regarding medical attention necessary for exposed individuals.

Yes Facility has submitted a written follow-up emergency notice(s) that included all of the information described above to the proper emergency agencies. ✔

No Facility did not submit a written follow-up emergency notice(s) ***or*** did not submit one that included all of the information described above to the proper emergency facilities.

NA Facility has not experienced any spills or releases.

5.1d Has the facility submitted copies of its MSDSs or a list of its MSDS chemicals to the LEPC, SERC, and local fire department?

EPCRA Section 311 requires facilities that must maintain material safety data sheets (MSDSs) under OSHA regulations to submit either copies of their MSDSs or a list of MSDS chemicals to the LEPC, SERC, and local fire department. This reporting is a one-time requirement unless new information becomes available that reveals a chemical has an additional hazard. This reporting requirement must be met within 90 days for any new chemical in excess of the reporting threshold handled on site (40 CFR 370.21).

Yes Facility has submitted copies of its MSDSs or a list of its MSDS chemicals to the LEPC, SERC, and local fire department. ✔

No Facility has not submitted copies of all of its MSDSs or a complete list of its MSDS chemicals to the LEPC, SERC, and local fire department.

NA Facility is not required to have MSDSs.

5.1e Does the facility meet its reporting requirement annually under Section 312 of EPCRA?

Under Section 312 of EPCRA, the facility must submit an **"Emergency and Hazardous Chemical Inventory Form"** to the LEPC, the SERC, and the local fire department for all OSHA **hazardous chemicals** that were present at the facility at any time during the previous calendar year above specified thresholds and which required an MSDS to be prepared.

The facility must submit the **Emergency and Hazardous Chemical Inventory Form** by March 1 of each year (for the preceding year). There are two formats for the Emergency and Hazardous Chemical Inventory Form: Tier I and Tier II. The Tier I form

provides aggregate information on hazardous chemicals and includes estimates of the maximum and average daily amounts present, and the location of the chemicals. Tier II information is similar to Tier I information, except that it must be chemical-specific, rather than aggregate information. Check with the state regulatory agency to find out which form is required.

Yes Facility submitted a Tier I or Tier II Form for all OSHA hazardous chemicals to the LEPC, SERC, and the fire department by March 1 of the following year. ✔

No Facility did not submit a Tier I or Tier II Form for all OSHA hazardous chemicals to the LEPC, SERC, and the fire department by March 1.

NA Facility is not required to submit an emergency and hazardous chemical inventory form.

5.2 RCRA Contingency Plan

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *RCRA contingency plans* for compliance with environmental requirements.

a. If the facility qualifies as an LQG, does it have a written contingency plan in place for responding to spills and releases of hazardous substances? (p. W-73)

b. Did the facility submit its written contingency plan to the appropriate authorities? (p. W-73)

c. If the facility is an SQG, does it have basic contingency procedures in place for responding to spills and releases of hazardous substances? (p. W-74)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

RCRA Contingency Plan

If the facility is a small or large quantity generator of hazardous waste, the emergency preparedness requirements under RCRA require that the facility develop a contingency plan for responding to spills or releases of hazardous wastes. If the facility is a **large quantity generator (LQG)**, it must have a written contingency plan. The facility is an LQG if it generates:

- 2,200 lbs or more of hazardous waste per month;
- 2.2 lbs or more of acutely hazardous waste per month.
- 220 lbs or more of spill residues from acutely hazardous waste per month.

What is hazardous waste?
Waste is considered hazardous if (1) it appears on one of four lists published in the hazardous waste regulations (40 CFR Part 261); (2) demonstrates one of the four hazardous waste characteristics of ignitability, corrosivity, reactivity, or toxicity; or (3) is a mixture of a listed hazardous waste and other wastes. *See Section 1.1 for more information.*

If the facility is a **small quantity generator (SQG)**, it must have basic contingency procedures in place. The facility is an SQG of hazardous waste if it generates more than 220 lbs but less than 2,200 lbs of hazardous waste per month. Although a written contingency plan is not federally required for SQGs or **conditionally exempt small quantity generators (CESQGs)**, it is strongly recommended. It is also important to check with the state and local authorities for any additional contingency plan or emergency preparedness requirements.

A contingency plan usually answers a set of "what if" questions such as "what if one of the vapor degreasers leaks," or "what if there is an explosion and/or fire at a hazardous waste storage area"?

5.2a If the facility qualifies as an LQG, does it have a written contingency plan in place for responding to spills and releases of hazardous substances?

A written contingency plan for an LQG must contain the following:

- Instructions on what to do in the event of a fire, explosion, or release
- The arrangements agreed to by local police and fire departments, hospitals, and State and local emergency response teams to provide emergency services
- An emergency coordinator (employee) who is responsible for assessing emergency situations and making decisions to respond
- The names, addresses, and phone numbers of all persons qualified to act as the emergency coordinator
- All emergency equipment at the facility
- An evacuation plan.

Yes Facility has a written contingency plan that addresses all of the requirements listed above. ✔

No Facility does not have a written contingency plan.

NA Facility does not qualify as an LQG, and so is not required to have a written contingency plan.

5.2b Did the facility submit its written contingency plan to the appropriate authorities?

The facility must submit copies of the written contingency plan to the local police and fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services. The facility should maintain documentation showing that local authorities have been notified.

Yes Facility submitted copies of the contingency plan to the appropriate authorities. ✔

No Facility has not submitted copies of the contingency to the appropriate authorities.

NA Facility is not required to have a written contingency plan.

5.2c If the facility is an SQG, does it have basic contingency procedures in place for responding to spills and releases of hazardous substances?

SQGs must have *basic contingency procedures* to follow in the event of an emergency. These procedures include the following:

- An *emergency coordinator* (employee) either at the facility or on call who is responsible for coordinating all emergency response measures;
- *Information posted next to the telephone*, including: (1) the name and number of the emergency coordinator; (2) the locations of the fire extinguishers and spill control material; and (3) the telephone number of the fire department.
- Ensure that all employees are thoroughly familiar with *proper waste handling and emergency procedures.*

Yes Facility has basic contingency procedures as described above. ✔

No Facility does not have the basic contingency procedures.

NA Facility is not an SQG, and so is not required to follow basic contingency procedures.

5.3 Oil Pollution Act's Facility Response Plan (FRP)

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *facility response plans* for compliance with environmental requirements.

a. Does the facility have an FRP? (p. W-74)

b. Does the facility's FRP include all required elements? (p. W-75)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

5.3a Does the facility have an FRP?

Under the Oil Pollution Act (OPA), a facility response plan (FRP) is required if the facility could cause "substantial harm" to the environment. A facility has the potential to cause substantial harm if (40 CFR 112.20(f)(1)):

(1) The facility transfers oil over water to or from vessels and has a total oil storage capacity, including both aboveground storage tanks (ASTs) and underground storage tanks (USTs), greater than or equal to 42,000 gallons; or

(2) The facility's total oil storage capacity, including both ASTs and USTs, is greater than or equal to one million gallons and one of the following is true:

- The facility does not have secondary containment for each aboveground storage area sufficient to contain the capacity of the largest AST within each storage area plus freeboard to allow for precipitation;

- The facility is located at a distance such that a discharge could cause injury to an environmentally sensitive area;

- The facility is located at a distance such that a discharge would shut down a public drinking-water intake; or

- The facility has had a reportable spill greater than or equal to 10,000 gallons within the last five years.

The determination as to whether the facility could cause substantial harm to the environment may be made through two methods:

(1) Through a self-selection process (EPA has established criteria located in 40 CFR Part 112, Appendix C, to assist facilities in making that determination).

(2) By determination of the EPA Regional Administrator (which is based on factors similar to the self-selection factors, and also type of transfer operations at the facility, the facility's oil storage capacity, lack of secondary containment, proximity to environmentally sensitive areas, or drinking-water intakes, and/or the facility's spill history).

Yes Facility has an FRP. ✔

No Facility does not have an FRP.

NA Facility is not required to have an FRP.

5.3b Does the facility's FRP include all required elements?

FRPs must address certain critical items. It must:

- Be consistent with the National Contingency Plan (NCP) and the Area Contingency Plan covering the facility's location
- Identify a qualified individual having full authority to implement removal actions, and require immediate communication between that person and the appropriate federal authorities and responders
- Identify and ensure availability of resources to remove, to the maximum extent practicable, a worst-case discharge
- Describe training, testing, unannounced drills, and response actions of persons at the facility
- Be updated periodically, and
- Be submitted for approval with each significant change.

Yes Facility's FRP addresses all of the critical items listed above. ✔

No Facility's FRP does not address all of the critical items listed above.

NA Facility is not required to have an FRP.

5.4 CAA Risk Management Plan

NOTE: The following questions, some of which are included in the accompanying checklist (highlighted in **bold**), will help the facility examine its operations relating to *risk management plans* for compliance with environmental requirements.

a. Does the facility have an RMP? (p. W-76)

b. Does the RMP include all of the required elements? (p. W-77)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Risk Management Plans (RMPs)

Under Section 112(r) of the CAA, EPA must establish a program to prevent accidental chemical releases (Chemical Accidental Release Rule). The main goal of this regulation is to communicate potential risks to the public and to ensure that facilities have implemented a baseline safety management program to reduce the possibility of a release. The primary tool to accomplish this goal is the Risk Management Plan (RMP).

The plan the facility submits to EPA summarizes the facility's program and it is available to the public. Once the plan is submitted, EPA reviews it for accuracy and completeness. EPA, state, or local officials may conduct a site visit at the facility to determine whether the plan accurately reflects the facility's risk management program in operation. For more information about risk management planning requirements, see EPA's Chemical Emergency Preparedness and Prevention Office's webpage at **http://www.epa.gov/ceppo/.**

5.4a Does the facility have an RMP?

The facility must develop an RMP if it stores any of the 140 regulated substances (e.g., propane) identified under the CAA's Section 112(r) at or above specific threshold quantities for those chemicals. Sources should have complied with the rule by June 20, 1999. If the facility does not already have an RMP, it should develop one as soon as possible.

Yes Facility has prepared an RMP. ✔

No Facility has not prepared an RMP.

NA Facility is not required to have an RMP.

5.4b Does the RMP include all of the required elements?

Under Section 112(r) of the CAA, the RMP must include the following:

- Documentation of process safety information
- Process hazard analysis of the off-site impact of an accident
- Documentation of operating procedures
- Training program
- Pre-startup reviews
- Maintenance program
- Management of Change Program
- Accident investigation
- Emergency response program
- Safety audits
- Registration with the Chemical Safety and Hazard Investigation Board
- A hazard assessment of a worst-case scenario
- Submission of RMP to EPA, SERC, LEPC, and available for public review.

Yes Facility's RMP includes all of the elements listed above. ✔

No Facility's RMP does not include all of the elements listed above.

NA Facility is not required to have an RMP.

SECTION 6.0 VESSELS AND UNDERWAY ACTIVITIES

Note: Section *6.0 Vessels and Underway Activities* applies to vessels and sea-related activities. The purpose of this section is to make the water transportation facility owner/operator aware of vessel activities that could potentially impact the environment surrounding on-shore facilities.

6.1 Marine Pollution

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the vessel's operations for compliance with environmental requirements.

a. Is the vessel operator familiar with requirements under Annex I of MARPOL? (p. W-79)

b. Does the vessel have a Shipboard Oil Pollution Emergency Plan? (p. W-80)

c. If transporting noxious liquid substances (NLSs), is the vessel operator familiar with requirements under Annex II of MARPOL? (p. W-81)

d. Does the vessel dispose of garbage at sea in accordance with Annex V of MARPOL? (p. W-81)

e. Are placards for MARPOL garbage dumping restrictions posted in prominent locations and in sufficient numbers so crew and passengers can read them? (p. W-82)

f. Does the vessel have a waste management plan and logbook? (p. W-83)

g. Does the vessel's waste management plan include all of the required elements? (p. W-83)

h. Does the vessel maintain records of garbage, including sewage, discharge or disposal operations? (p. W-83)

I. Is the vessel operator familiar with MARPOL reporting requirements? (p. W-84)

j. If the vessel intends to transport municipal or commercial waste, does the vessel have a conditional permit, with the permit number displayed on the vessel? (p. W-84)

k. For vessels that carry ballast water to U.S. waters after operating beyond the U.S. Exclusive Economic Zone, does the vessel employ ballast management practices? (p. W-85)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

Marine Pollution

While EPA has responsibility for regulating water transportation facilities, the U.S. Coast Guard regulates all sea-related activities of vessels. The Coast Guard ensures that all sea-going vessels comply with U.S. law and international treaties and conventions. The primary regulatory framework for vessels originates from the International Convention for Prevention of Pollution from Ships (enacted in 1973 and modified in 1978), which is also known as the Marine Pollution (MARPOL) Act. MARPOL is an international agreement designed to address the problem of marine pollution from vessels. It consists of five annexes, each of which addresses a different type of marine pollution:

Annex VI of MARPOL

The International Maritime Organization recently adopted a new Annex VI to MARPOL. This annex establishes **NOx emission limits** applicable to propulsion and auxiliary engines greater than 130kw installed in ships constructed on or after January 1, 2000. Although requirements of the Annex will not go into force until it is ratified by a certain number of states, it is expected that vessels constructed on or after January 1, 2000 will be equipped with engines that meet the NOx requirements.

- Annex I: Oil
- Annex II: Noxious liquids carried in bulk
- Annex III: Harmful substances in packaged form
- Annex IV: Sewage from ships.
- Annex V: Garbage from ships.

Annexes I and II are mandatory for all signatories, including the United States, to MARPOL. Annexes III, IV, and V are considered optional and not binding unless the signatory has specifically accepted those Annexes. The United States is party to Annexes III and V, but not to Annex IV. Congress enacted the Act for the Prevention of Pollution by Ships in 1980 to implement Annexes I and II, and the Marine Plastic Pollution Research and Control Act of 1987 to implement Annex V. The Hazardous Materials Transportation Act of 1974 was amended to incorporate the provisions of Annex III.

6.1a Is the vessel operator familiar with requirements under Annex I of MARPOL?

Annex I of MARPOL requirements includes the following:

- Forbids the discharge at sea of oil in certain “special areas” (e.g., Mediterranean Sea, Black Sea, Baltic, Sea, Red Sea) where threat to the marine environment is especially great and limits other discharges to 1/30,000 of the cargo.

- Discharges from machinery spaces (e.g., bilge water) must occur *more than 12 miles from land* and the oil content must be less than 100 ppm.

- Oil tankers must be constructed and equipped to retain oily residues on board until they can be discharged into shore reception facilities. New oil tankers of 70,000 deadweight tons and above must be provided with the segregated ballast tanks (SBTs) of sufficient capacity to enable them to operate safely on ballast voyages without recourse to the use of cargo tanks for ballast purposes (except in severe weather).

- All ships of 400 gross tons and above must be equipped with oily-water separating

equipment, or a filtering system for discharges from machinery space bilges, together with on-board tanks for retention of oily residues from separators and purifiers. Vessels in excess of 10,000 gross tons must be equipped with oil discharge monitoring and control systems.

- Tankers and other ships must carry and maintain an Oil Record Book in which all operations involving oil are recorded. Authorities of any State which is a Party to the Convention can inspect the book.

Yes Vessel operator is familiar with Annex I requirements under MARPOL. ✔

No Vessel operator is not familiar with Annex I requirements under MARPOL.

NA Annex I of MARPOL does not apply to the vessel.

6.1b Does the vessel have a Shipboard Oil Pollution Emergency Plan?

All vessels subject to MARPOL must have a Shipboard Oil Pollution Emergency Plan (SOPEP) available on board in English and in the working language of the master and officers of the ship, if other than English. The SOPEP must include numerous elements, such as the following:

- Ship's name, call sign, official number, International Maritime Organization (IMO) international number, and principal characteristics
- Reporting requirements and notification form
- Who to contact
- Steps to control oil discharges
- National and local coordination information.

For more information on shipboard oil pollution emergency plan requirements, refer to 33 CFR 151.26.

Yes Vessel has a shipboard oil pollution emergency plan that includes all elements listed above. ✔

No Vessel does not have a shipboard oil pollution emergency plan, or the emergency plan does not include all elements listed above.

NA Vessel is not required to have a shipboard oil pollution plan.

6.1c If transporting noxious liquid substances (NLSs), is the vessel operator familiar with requirements under Annex II of MARPOL?

Annex II of MARPOL contains regulations for discharges of noxious liquid substances (NLSs) (i.e., bulk liquid chemicals) listed in 33 CFR Parts 151 and 153. The substances are divided into four categories (i.e., A, B, C, D) according to the hazard they present to marine resources, human health, or amenities. To date, more than 250 NLSs have been evaluated and regulated. Such substances cannot be discharged to reception facilities, unless certain requirements are met. Because there are numerous regulations, refer to 33 CFR 151.31 for information regarding where to find regulations for the four categories of NLSs.

Yes	Vessel operator is familiar with requirements under Annex II of MARPOL. ✔
No	Vessel operator is not familiar with requirements under Annex II of MARPOL.
NA	Annex II of MARPOL does not apply to the vessel.

6.1d Does the vessel dispose of garbage at sea in accordance with Annex V of MARPOL?

Annex V establishes specific minimum distances for the disposal of garbage at sea. The most important component of this annex is the complete prohibition on the disposal of plastics into the sea. The Marine Plastic Pollution Research and Control Act (MPPRCA) of 1987 is the federal law implementing MARPOL Annex V in all U.S. waters. Under MPPRCA, it is illegal to throw plastic trash off any vessel within the U.S. Exclusive Economic Zone. It is also illegal to throw any other garbage, including food, paper plates, glass jars, and even monofilament fishing line, overboard while navigating in inland waters. *See table below.* Note that state and local regulations may have even stricter regulations.

Yes	Vessel disposes of garbage in accordance with requirements under Annex V. ✔
No	Vessel does not dispose of garbage in accordance with requirements under Annex V.
NA	Vessel does not dispose of garbage, including plastics, at sea.
Don't Know	Vessel operator is not familiar with Annex V requirements.

Summary of Garbage Discharge Restrictions for All Vessels (Except Fixed or Floating Platforms and Associated Vessels)

Garbage Type	Outside special areas [1]	In special areas
Plastics (including synthetic ropes, fishing nets, plastic bags)	Disposal prohibited.	Disposal prohibited.
Dunnage, lining and packing materials that float.	Disposal prohibited less than 25 miles from nearest land and in the navigable waters of the U.S.	Disposal prohibited.
Paper, rags, glass, etc. and similar refuse.	Disposal prohibited less than 12 miles from the nearest land and in the navigable waters of the U.S.	Disposal prohibited.
Paper, rags, glass, etc. comminuted or ground. [2]	Disposal prohibited less than 3 miles from nearest land and in the navigable waters of the U.S.	Disposal prohibited.
Victual (food) waste not comminuted or ground.	Disposal prohibited less than 12 miles from nearest land and in the navigable waters of the U.S.	Disposal prohibited.
Victual waste comminuted or ground.	Disposal prohibited less than 3 miles from nearest land and in the navigable waters of the U.S.	Disposal prohibited.

[1] Special areas under Annex V are the Mediterranean, Baltic, Black, Red, and North Seas areas and Gulfs areas.

[2] Comminuted or ground garbage must be able to pass through a screen with a mesh size no larger than 25mm (one inch).

6.1e Are placards for MARPOL garbage dumping restrictions posted in prominent locations and in sufficient numbers so crew and passengers can read them?

Boats 26 feet or longer must prominently post at least one MARPOL garbage dumping restrictions placard, a 9" x 4" sticker that explains dumping restrictions (33 CFR 151.59). *Placards may be obtained from the Office of Response, U.S. Coast Guard, 2100 Second Street, SW , Washington, DC 20593 or at website:* ***http://www.uscg.mil/hq/g-m/nmc/seapart.htm***

Yes Placards are prominently displayed. ✔

No Placards are not prominently displayed.

NA The vessel is not required to display garbage restrictions placards.

6.1f Does the vessel have a waste management plan and logbook?

Vessels 40 feet or longer must have a written waste management plan that describes the proper handling of refuse onboard as well as a waste logbook that details disposal and waste discharge operations.

Yes Vessel has a waste management plan and logbook. ✔

No Vessel does not have a waste management plan and logbook.

NA Vessel is not required to have a waste management plan and logbook.

6.1g Does the vessel's waste management plan include all of the required elements?

Written waste management plans need to include the following (40 CFR 151.57):

2) Procedures used for collecting, processing, storing and discharging the vessel's garbage properly (in accordance with MARPOL Annex V laws); and
3) Name of the person in charge of carrying out the plan.

It is also a good idea to mention how many of the crew and passengers are educated to the plan since MARPOL regulations say that the vessel shall not be operated unless each person handling garbage follows the waste management plan.

Yes Vessel's waste management plan includes all required elements. ✔

No Vessel's waste management plan does not include all required elements.

NA Vessel is not required to have a waste management plan.

6.1h Does the vessel maintain records of garbage, including sewage, discharge or disposal operations?

The person in charge of the vessel must ensure that a written record is maintained on the ship of each of the following garbage discharge or disposal operations (40 CFR 151.55):

- Discharge overboard
- Discharge to another ship
- Discharge to a reception facility
- Incineration on the ship
- Type, date, and time of operation
- If the operation was conducted at a port, the name of the port.
- If the operation was not conducted at a port, the latitude and longitude of the location where the operation happened and the estimated distance of that location from shore.
- If the location involved off-loading to another ship, the identity of the receiving ship by name and official number.
- Amount of garbage involved (in cubic meters).
- For discharges into the sea, a description of the contents of the garbage, described by the following categories: (1) plastic material; (2) floating dunnage, lining, or

packing material; (3) ground paper products, rags, glass, metal, bottles, crockery; (4) unground paper products, rags, glass, metal, bottles, crockery, or other similar garbage; (5) food wastes; (6) incinerated ash; (7) incinerated plastic residue.

As records are prepared, the person in charge of the vessel must certify them as correct and maintain them on the ship for two years following the operation.

Yes Vessel maintains records of garbage discharge operations. ✔

No Vessel does not maintain records of garbage discharge operations.

NA Vessel does not discharge garbage.

6.1i Is the vessel operator familiar with MARPOL reporting requirements?

The person in charge of the vessel must notify the port or terminal, at least 24 hours before entering the port or terminal, of (1) name of the ship and the estimated volume of garbage requiring disposal; and (2) if any of the following types of garbage are to be discharged:

- Garbage regulated by Animal and Plant Health Inspection Service
- Medical Wastes
- Hazardous wastes (as defined in 40 CFR 261.3).

Yes Vessel is familiar with MARPOL reporting requirements. ✔

No Vessel is not familiar with MARPOL reporting requirements.

NA Vessel does not have garbage requiring disposal.

6.1j If the vessel intends to transport municipal or commercial waste, does the vessel have a conditional permit, with the permit number displayed on the vessel?

Vessels intended to transport municipal or commercial waste must have (1) a conditional permit to transport municipal or commercial waste; and (2) must display its number under the following conditions (33 CFR 151.1009):

- Is clearly legible
- Has a contrasting background
- Is readily visible from either side of the vessel
- Is in block figures at least 18 inches in height.

Yes Vessel has a conditional permit, with the permit number displayed on the vessel. ✔

No Vessel does not have a conditional permit, and/or does not have its permit number displayed on the vessel.

NA Vessel is not transporting municipal or commercial waste.

6.1k For vessels that carry ballast water to U.S. waters after operating beyond the U.S. Exclusive Economic Zone, does the vessel employ ballast management practices?

Ballast water is seawater which is introduced into the vessel's ballast tanks to adjust a vessel's draft, buoyancy, trim, and list, and to improve stability under various operating conditions (e.g., to replace the weight of off-loaded cargo or expended fuel oil). Vessels that carry ballast water after operating beyond the Exclusive Economic Zone (EEZ) and then, at any point during its voyage, enters the Snell Lock at Massena, New York, or navigates north of the George Washington Bridge on the Hudson River, must employ one of the following ballast management practices:

Invasive Species

Ballast water has the potential to contain plants and animals, including microorganisms and pathogens. When ballast water is transported and discharged into another port or coastal area, the surviving organisms have the potential to threaten the local ecosystem. In attempt to reduce the risk of exotic species invasions, the *National Invasive Species Act (NISA) of 1996* requests that all ships arriving to U.S. ports from outside the exclusive economic zone (EEZ) follow voluntary guidelines for open-ocean exchange of ballast tanks that are to be discharged in U.S. waters.

(1) Carry out an exchange of ballast water on the waters beyond the EEZ, in a depth exceeding 2000 meters, prior to entry into the Snell Lock at Massena, New York, or prior to navigating on the Hudson River, north of the George Washington Bridge, such that, at the conclusion of the exchange, any tank from which ballast water will be discharged contains water with a minimum salinity level of 30 parts per thousand.

S Retain the vessel's ballast water on board the vessel. The Captain of the Port (COTP) may seal any tank or hold containing ballast water on board the vessel for the duration of the voyage within the waters of the Great Lakes or the Hudson River, north of the George Washington Bridge.

S Use an alternative environmentally sound method of ballast water management that has been submitted to, and approved by, the Commandant of the U.S. Coast Guard prior to the vessel's voyage. *Requests for approval of alternative ballast management must be sent to:*
Commandant (G-M)
U.S. Coast Guard Headquarters
2100 Second Street, SW
Washington, DC 20593-0001.

Yes Vessel employs ballast management practices. ✔

No Vessel does not employ ballast management practices.

NA Vessel is not required to employ ballast management practices.

6.2 Ocean Dumping

NOTE: The following question is not included in the accompanying checklist, however, it is still important to consider when examining the facility's operations for compliance with environmental requirements.

a. If permitted to dispose of materials into the ocean, does the vessel follow permit requirements? (p. W-87)

This question appears in the following text and is accompanied with a discussion of the preferred answer (indicated with a "✔") for environmental compliance.

Ocean Dumping

The Ocean Dumping Act regulates the intentional ocean disposal of materials. The act consists of the first two titles of the Marine Protection, Research, and Sanctuaries Act (MPRSA) of 1972. The act basically prohibits all ocean dumping (e.g, radiological, chemical, medical, sewage, and industrial wastes), except that allowed by permits, in U.S. ocean waters.

Under MPRSA, EPA's environmental criteria states no ocean dumping will be allowed if (1) the dumping will cause significant effects; or (2) the material proposed to be dumped is not adequately characterized (i.e., there is not enough information to make the above determination).

Dredged Material. Virtually all ocean dumping occurring today is dredged material of sediments removed from the bottom of waterbodies to maintain navigation channels and berthing areas. Ocean dumping of material cannot occur unless a permit is issued under MPRSA. In the case of dredged material, the US Army Corps of Engineers must decide whether or not to issue a permit, using EPA's environmental criteria and subject to EPA's concurrence. EPA is also responsible for designating recommended ocean disposal sites for use under such permits. *For more information about ocean dumping requirements, refer to 40 CFR Part 220.*

6.2a If permitted to dispose of materials into the ocean, does the vessel follow permit requirements?

Currently, all ocean disposal of wastes must occur at a site at least 106 miles offshore. Permits issued under the Ocean Dumping Act specify the following:

- Type of material to be dumped
- Amount to be transported for dumping
- Location of the dumpsite
- Length of time the permit is valid
- Any special provisions for surveillance.

Recently the act was amended giving the states authority to adopt dumping standards that are more stringent than federal requirements and to require that permits conform with long-term management plans for designated dumpsites to ensure permitted activities are consistent with expected uses of the site.

Yes Vessel is in compliance with all requirements of its ocean dumping permit. ✔

No Vessel is not in compliance with all requirements of its ocean dumping permit.

6.3 Discharging On shore to Water Transportation Facilities

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the facility's operations for compliance with environmental requirements.

a. Does the vessel discharge bilge and other vessel discharges to on-shore tanks supplied by the water transportation facility? (p. W-87)

b. Has the owner/operator cleaned all cargo tanks after unloading of cargo to remove any residue left by the cargo? (p. W-88)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

6.3a Does the vessel discharge bilge and other vessel discharges to on-shore tanks supplied by the water transportation facility?

The bilge, which is a collection area located at the bottom of any vessel, collects fuel, oil, on-board spills, and wash waters generated during the daily operation of any vessel. Bilge waste is pumped to a bilge waste holding tank on the vessel when the level in the bilge gets too high for safe operation. Once in port, a vessel must discharge all bilge and other vessel discharges (e.g., sewage, ballast water, cleaning wastes) to on-shore tanks usually supplied by the water transportation facility.

Yes Vessel discharges its bilge and other discharges to on-shore tanks. ✔

No Vessel does not discharge to on-shore tanks.

6.3b Has the owner/operator cleaned all cargo tanks after unloading of cargo to remove any residue left by the cargo?

After a vessel has unloaded its cargo, the owner/operator must clean all cargo tanks to remove any residue left by the cargo. The degree to which the tanks are cleaned usually depends on the nature of past and future cargos carried on the vessel. Cargos that are compatible (e.g., grains, ores, or petroleum products) may not require as strenuous a cleaning as those cargos that should not be mixed.

A high-pressure water spray is the primary method for tank cleaning. The pressurized water spray system is either operated by a person or some vessels are now equipped with automated systems. Upon completion of the high-pressure cleaning, the washwater is pumped into a "slop" tank where it is held until discharged on shore.

Yes All cargo tanks have been cleaned after unloading of cargo. ✔

No Not all cargo tanks have been cleaned after unloading of cargo.

NA Vessel is not carrying cargo.

6.4 Pollution Prevention

NOTE: The following questions are not included in the accompanying checklist, however, they are still important to consider when examining the facility's operations for compliance with environmental requirements.

a. Does the vessel have a fuel/air separator in the fuel tank's air vent line to prevent spills during and after fill up? (p. W-88)

b. Does the vessel operator routinely check for and fix fuel leaks? (p. W-89)

c. Does the vessel operator place a drop pan placed under the engine? (p. W-89)

d. Does the vessel minimize occurrences of contaminated bilge water discharges? (p. W-89)

These questions appear in the following text and may be accompanied with discussions of the preferred answers (indicated with a "✔") for environmental compliance.

6.4a Does the vessel have a fuel/air separator in the fuel tank's air vent line to prevent spills during and after fill up?

Yes Vessel has a fuel/air separator in the fuel tank's air vent line to prevent spills during and after fill up. ✔

No Vessel does not have a fuel/air separator in the fuel tank's air vent line to prevent spills during and after fill up.

6.4b Does the vessel operator routinely check for and fix fuel leaks?

Yes Vessel operator routinely checks for and fixes fuel leaks. ✔

No Vessel operator does not routinely check for and fix fuel leaks.

6.4c Does the vessel operator place a drop pan placed under the engine?

Yes Drop pan has been placed under the engine to catch fuel drips and leaks.

No Drop pan has not been placed under the engine to catch fuel drips and leaks.

6.4d Does the vessel minimize occurrences of contaminated bilge water discharges?

The lowest inner part of the hull where liquid drains from the interior spaces and the upper decks of the vessel is referred to as the bilge. The primary sources of drainage into the bilge are the main engine room(s) and the auxiliary machinery rooms(s), which house the vessel's propulsion system and auxiliary systems (i.e., steam boilers and water purification systems).

Oil and grease from operation and maintenance of inboard engines are sources of petroleum in bilges. Methods of minimizing occurrences of contaminated bilgewater discharges include the following:

Use oil/water separators in the bilge pump discharge line to prevent discharge of oily water.
Use a catch pan containing absorbent pads to use in bilges.
Fix leaks that allow fuel or oil to drip into the bilge; inspect lines and hoses for deterioration, and secure and prevent lines from chafing.

Yes Vessel minimizes occurrences of contaminated bilgewater discharges. ✔

No Vessel does not minimize occurrences of contaminated bilgewater discharges.

GLOSSARY OF TERMS

Aboveground storage tank: Any tank or other container that is aboveground, partially buried, bunkered, or in a subterranean vault. This includes floating fuel system.

Acute Hazardous Waste: Commercial chemical products and manufacturing intermediates having the generic names listed in 40 CFR 261.33; off-specification commercial chemical products and manufacturing chemical intermediates which, if they met specification, would have the generic names listed; any residue or contaminated soil, water, or other debris resulting from the cleanup of a spill of any of these substances; any residue remaining in containers that are not empty by RCRA standards (40 CFR 261.7)

Aquifer: A saturated water bearing formation of permeable rock, sand, or gravel.

Ambient Standards: Standards for the quality of outdoor air.

Asbestos: A naturally occurring fibrous mineral used in buildings for its heat retarding properties that may cause serious respiratory problems if inhaled. CAA regulates removal and disposal.

Caustic: Any substance which can burn, dissolve, corrode, or eat away by chemical reaction.

CERCLA Hazardous Substances: CERCLA Section 101(14), as amended, defines "hazardous substance" by referencing other environmental statutes, including: CWA Sections 311 and 307(a); CAA section 112; RCRA Section 3001; and TSCA Section 7. A list of over 600 CERCLA hazardous substances is provided in 40 CFR 302.4. EPA has the authority to designate additional hazardous substances not listed under the statutory provisions cited above.

CFR: Code of **F**ederal **R**egulations. A codification of the regulations published by federal government agencies.

Chlorofluorocarbons (CFCs): The chemical group found in refrigerants such as freon and in propellants for aerosol containers. These chemicals have been determined to be partially responsible for depletion of ozone levels in the upper atmosphere.

Civil Penalties: Monetary penalties which can be imposed on companies and individuals for violations of civil laws and regulations.

Clean Air Act (CAA): The federal law designed to improve air quality by regulating air pollution emission from stationary and non-stationary sources. The Act includes National Ambient Air Quality Standards (NAAQS) for specific pollutants.

Cleanup: Actions taken to deal with a release or threat of a hazardous substances release that could affect people or the environment. The term "cleanup" is sometimes used interchangeably with the terms "remedial action," "removal action," "response action," "remedy," "remediation," or "correction action."

Cleanup Operation: An operation in which hazardous substances are removed, contained, incinerated, neutralized, stabilized, cleaned up, or in any other manner processed or handled with the ultimate goal of making the site safer for people or the environment.

Clean Water Act (CWA): The purpose of this federal law is to restore and maintain the water quality of lakes, streams and rivers. This goal is being pursued by controlling both point sources and non-point sources of discharge into surface water.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) The federal law established in 1980 to identify, investigate, and clean up sites that might release hazardous substances into the environment. It also established funding for these cleanup projects (commonly called Superfund) and procedures for recovering any fund money expended. CERCLA also requires the reporting of spills and releases of hazardous substances.

Conditionally Exempt Small Quantity Generators: Hazardous waste generators who are basically exempt from the majority of RCRA regulations due to the small amounts generated and the low frequency of production. One must generate less than 100 kilograms of hazardous waste per month, or less than 1 kg of acute hazardous waste to qualify as a conditionally exempt small quantity generator.

Container: Any portable device in which a material is stored, transported, treated, disposed of, or otherwise handled, including drums, pails, buckets, and inner liners.

Corrosive: Material with a pH of less than 2.0 or greater than 12.5 or a material capable of dissolving or wearing away steel at a rate greater than 0.25 inch per year.

Cradle-to-Grave: The Resource Conservation and Recovery Act requirement for management and tracking of hazardous waste is documented from the source of the waste (i.e., generator) through its transportation, to treatment, storage and eventually acceptance by a disposal facility.

Criminal Penalties: Penalties imposed for a willful and/or knowing violation of a criminal law. They include monetary fines for companies and individuals and jail time for individuals.

Department of Transportation (DOT): The federal agency that regulates the transport of hazardous materials under the Hazardous Materials Transportation Act. These materials include CERCLA hazardous substances and RCRA hazardous wastes.

Direct Discharge: Clean Water Act defines direct discharge as any addition of any pollutant or combination of pollutants to (a) U.S. waters from any “point source”, or (b) waters of the ``contiguous zone'' or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation.
This definition includes additions of pollutants into waters of the U.S. from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances owned by a State, municipality, or other person which do not lead to a treatment works; and discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works.

Discharge: The accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of waste into or on any land or water.

Disposal: The discharge deposit, injection, dumping, spilling, leaking, or placing of any solid waste or hazardous waste into any land or water so that such solid waste or hazardous waste, or any constituent thereof, enters the environment, is emitted into the air, or is discharged into any waters, including groundwater.

Disposal Facility: A facility or part of facility at which solid or hazardous waste is intentionally placed into or on any land or water, and at which waste will remain after closure.

Effluent: Any gaseous, liquid, or solid waste material that is released into the environment.

Emergency Response: A response effort by employees from outside the immediate release area or by other designated responders (i.e., mutual-aid groups, local fire departments, etc.) to an occurrence which results, or is likely to result, in an uncontrolled release of a hazardous substance. Responses to incidental releases of hazardous substances which can be absorbed, neutralized, or otherwise controlled at the time of release by employees in the immediate release area, or by maintenance personnel, are not considered to be emergency responses within the scope of the OSHA HAZWOPER standard. Responses to releases of hazardous substances involving no potential safety or health hazard (i.e., fire, explosion, or chemical exposure) are not considered to be emergency responses.

Emergency Planning and Community Right-to-Know Act (EPCRA): The federal law requiring corporate disclosure to local communities about the chemicals used by the company. It also requires the notification of certain spills and releases.

Environmental Protection Agency (EPA): The federal regulatory agency in charge of administering and enforcing various federal environmental laws.

EPA Hazardous Waste Code: The code assigned by EPA to each hazardous waste listed in RCRA regulations and to each hazardous waste characteristic identified in RCRA regulations.

EPA ID Number: The identification number assigned by EPA to each hazardous waste generator, transporter and treatment, storage, and disposal facility.

EPA Region: The states and territories found in any one of ten EPA regions, such as Region 4—Tennessee, Kentucky, North Carolina, South Carolina, Georgia, Florida, Alabama, and Mississippi.

Erosion: The process of being worn away or deteriorated by wind or water.

Evacuation: A personnel or population protection strategy that provides for the orderly movement of people away from an actual or potential hazard.

Facility: All buildings, structures, equipment, and other stationary items that are located on a single site or on continuous or adjacent sites and that are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with such person). Under certain circumstances, a facility can include rolling stock and other transport vehicles.

Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA): The federal law which regulates the sale, distribution, and use of pesticides and establishes requirements for registration, labeling, use, and disposal of these products.

Fire Hazards: Hazardous chemicals, including flammable chemicals, that are liable to cause fire through friction, absorption, spontaneous chemical changes, retained heat, or which can be ignited readily and burn vigorously and persistently; combustible liquids having flashpoints at or above 90°F but below 100°F; flammable liquids with flash points below 100°F; pyrophoric chemicals that ignite spontaneously in air at temperatures of 130°F or below; and oxidizers

that can promote combustion in other materials, causing fire either by themselves or through the release of oxygen or other gases.

Freeboard: The vertical distance from the normal water surface to the top of the confining wall.

Friable Asbestos Material: Any material that contains more than one percent asbestos by weight, and can be crumbled, pulverized, or reduced to powder by hand pressure.

Fugitive Emissions: Air emissions not normally vented through a stack, chimney, vent, or equivalent opening. Fugitive emissions includes emissions from ponds, lagoons, landfills, and piles of stored materials.

Generator of Hazardous Waste: Entity that produces hazardous waste. Generators are classified by how much hazardous waste they produce in a given time period. In general, there are three classes of waste generators: conditionally exempt small quantity generators, small quantity generators, and large quantity generators. The generator is required to determine if a waste is hazardous. If the waste is hazardous, the generator must apply for and obtain an EPA ID number before transporting the waste to an approved treatment, storage, and disposal facility. The generator must also use a hazardous waste manifest to track the hazardous waste, must package and label the hazardous waste, and must keep records of its shipments for 3 years.

Groundwater: Water below the land surface in a zone of saturation.

Hazard: A circumstance or condition that can do harm. Hazards are categorized into four groups: biological, chemical, radiation, and physical.

Hazard Classes: These are descriptive terms prescribed by the Department of Transportation to categorize the nature of DOT regulated materials. There are nine numeric classes and two word classes as follows: Class 1 (explosives), Class 2 (gases), Class 3 (flammable liquids), Class 4 (flammable solids and substances), Class 5 (oxidizing substances), Class 6 (poisonous and infectious substances), Class 7 (radioactive), Class 8 (corrosive), and Class 9 [miscellaneous substances, and Combustible Liquids, ORM-D (consumer commodities)].

Hazardous Material: A substance designated by the Department of Transportation as posing a potential hazard when transported. See 49 CFR 171.101 for a list of DOT hazardous materials. Hazardous wastes requiring a manifest are considered hazardous materials.

Hazardous Substance: CERCLA Section 101(14), as amended, defines “hazardous substance” by referencing other environmental statutes, including: CWA Sections 311 and 307(a); CAA section 112; RCRA Section 3001; and TSCA Section 7. A list of over 600 CERCLA hazardous substances is provided in 40 CFR 302.4. EPA has the authority to designate additional hazardous substances not listed under the statutory provisions cited above.

Hazardous Waste: A solid waste material that may cause or significantly contribute to serious illness or death or that may pose a substantial threat to human health or the environment if not managed properly, and which includes liquids, semisolids, and contained gases. Hazardous wastes are subject to manifest reporting requirements. A material is considered a hazardous waste under RCRA if it meets one of the following conditions:

- The material has been listed as a hazardous waste by regulations.
- It is ignitable, corrosive, reactive, or toxic.
- It is a mixture of a listed hazardous waste and a non-hazardous waste.

Hazmat: A contraction of Hazardous Materials.

Ignitable: Material that has a flashpoint less than 140°F, is combustible through friction, is combustible through absorption of moisture, or can spontaneously combust.

Incident: A release or potential release of a hazardous material, substance, or waste into the environment.

Indirect Discharge: A discharge which goes to a publicly-owned treatment works (POTW). Indirect discharges do not need a National Pollutant Discharge Elimination System (NPDES) permit but must comply with the POTW pretreatment standards.

Influent: Wastewater or other raw or partially treated liquid flowing into a basin, treatment process, or treatment plant.

Land Disposal: Includes, but is not limited to placement of hazardous waste in a landfill, surface impoundment, waste pile, injection well, land treatment facility, salt dome formation, salt bed formation, underground mine or cave, or concrete vault or bunker intended for disposal purposes. Land disposal facilities are a subset of treatment, storage, and disposal facilities (TSDFs). Groundwater monitoring is required at all land disposal facilities. Waste material can only be disposed of at a permitted facility.

Land Disposal Restrictions: Regulations prohibiting the disposal of hazardous waste on land without prior treatment of the waste. Land disposal restriction notifications ensure proper treatment of the waste prior to disposal.

Landfill: A disposal facility or part of a facility where waste is placed in or on land and which is not a land treatment facility, a surface impoundment, or an injection well.

Large Quantity Generators: One of three classes of hazardous waste generators under RCRA producing 1,000 kilograms or more of hazardous waste in one calendar month at a given location.

Listed Waste: Waste listed as hazardous under 40 CFR Part 261. A waste is listed as a hazardous waste based on the process from which the waste was generated and/or the constituents found in the waste.

Local Emergency Planning Committee (LEPC): A local community group, including police and fire departments, which must be notified in the event of an accidental release that exceeds the reportable quantity of the following substances (1) EHSs (listed in 40 CFR Part 355, Appendices A and B); or (2) hazardous substances subject to emergency notification requirements under CERCLA Section 103(a) (listed in 40 CFR 302.4).

Major Stationary Source: Any stationary source that emits or has the potential to emit 100 tons per year or more of any air pollutant.

Manifest: The "cradle-to-grave" paperwork recording hazardous waste movement from its generation through final storage or disposal. All parties must keep records for 3 years.

Material Safety Data Sheets (MSDS): Information sheets which provide workers with details on the health and physical hazards of chemicals to which they may be exposed in the workplace.

Maximum Achievable Control Technology (MACT): Generally, the best available control technology, taking into account cost and technical feasibility.

Milligrams per Kilogram (mg/kg): Weight of a substance, measured in milligrams, contained in a weight of the total material, measured in kilograms. A concentration used to measure solid materials such as contamination in soil.

Milligrams per Liter (mg/l): Weight of a substance, measured in milligrams, contained in a volume of solution measured in liters. A concentration used for liquid substances.

Monitoring: The process of measuring certain environmental parameters on a real-time basis for spatial and time variations. For example, air monitoring may be conducted with direct reading instruments to indicate relative changes in air contaminant concentration at various times.

National Ambient Air Quality Standards (NAAQS): Standards established by the Clean Air Act for air quality of an area in terms of allowable levels of specific pollutants.

National Emission Standards for Hazardous Air Pollutants (NESHAP): The EPA regulations which govern specific processes which could possibly emit certain hazardous pollutants such as asbestos into the air.

National Pollutant Discharge Elimination System (NPDES): A permitting system under the CWA established for regulating direct discharges of wastewater from industries and municipalities into surface waters of the United States.

National Priority List (NPL): The prioritized list required by CERCLA of abandoned or uncontrolled hazardous waste sites.

National Response Center: The center (1-800-424-8802) which must be notified immediately of releases of hazardous substances in excess of their reportable quantities and hazardous materials (under certain circumstances).

New Source Performance Standards (NSPS): Standards established by the EPA under the CAA for new, modified, or reconstructed operations which emit air pollutants.

Nonattainment: The status of an area that is determined to exceed any national ambient air quality standard for a particular pollutant.

Oil: Oil of any kind or in any form, including but not limited to petroleum, fuel oil, oil sludge, oil refuse, and oil mixed with wastes.

On site: The same or geographically contiguous property which may be divided by public or private right-of-way, provided the entrance and exit between the properties are at a crossroads intersection and access is by crossing, as opposed to going along, the right-of-way. However,

non-contiguous properties owned by the same person but connected by a right-of-way which he or she controls and to which the public does not have access are also considered on-site properties.

Operator: The person responsible for the overall operation of a facility or process.

Occupational Safety and Health Administration (OSHA): A federal agency which protects worker health and safety under the Occupational Safety and Health Act and plays an important role in environmental issues such as chemical exposure in the workplace.

Outfall: The mouth of a drain or sewer which flows directly into surface water.

Owner: The person who owns a facility or part of a facility.

Parts per Million (ppm): A standard or measurement for concentrations of pollutants. A ratio (volume/volume or weight/weight) usually used for airborne concentration of gases or vapors, for concentrations of chemicals in water, or concentrations of chemicals in soil.

Permit: A written document issued by the government that establishes standards and/or pollutant limits for water discharges, air emissions, or for the handling, treating, storing, or disposing of hazardous waste.

Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling or mitigating any pest; any substance/mixture of substances intended as a plant regulator, defoliant or desiccant.

pH: A measure of alkalinity or acidity on a scale whose values range from 0 to 14 with 7 representing neutral. Numbers less than 7 correspond to increasing acidity. Numbers greater than 7 correspond to increasing alkalinity.

Point Source Discharges: Any discernible, confined, and discrete conveyance, including but not limited to, any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff.

Pollutant or Contaminant: Any element, substance, compound, or mixture which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingesting through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions, or physical deformation in such organisms or their offspring. It presents an imminent and substantial danger to public health or welfare.

Pollution Prevention: Any source reduction activity that results in the reduction of total volume of waste, reduction of toxicity of waste, or both, as long as the reduction is consistent with the goal of minimizing present and future risks to public health and the environment. Transfer of hazardous constituents from one environmental medium to another does not constitute waste minimization (see waste minimization).

Polychlorinated biphenyls (PCBs): A hazardous chemical once widely used in electrical transformer oil and now subject to a manufacturing ban and use restrictions under TSCA.

Preliminary Assessment/Site Investigation (PA/SI): The first phase of a site investigation for possible chemical contamination. It consists of a record search, investigation of prior site uses, on-site inspections, and possible site sampling to determine if a potential threat exists.

Publicly-Owned Treatment Works (POTW): Any device or system used in the treatment (including recycling and reclamation) of municipal sewage or industrial wastes of a liquid nature which is owned by a "State" or "municipality." This definition includes sewers, pipes, or other conveyances only if they convey wastewater to a POTW providing treatment.

Reasonably Available Control Technology (RACT): Control technology that is reasonably available and both technologically and economically feasible. Usually applied to existing sources in nonattainment areas; in most cases is less stringent than new source performance standards.

Regulated Material: A substance or material that is subject to regulations set forth by the EPA, Department of Transportation, or any other federal and/or state agency.

Releases: Defined by federal and most state laws as any spilling, leaking, pouring, dumping, emitting, discharging, injecting, escaping, leaching, or disposing of hazardous wastes or hazardous substances into the environment. This includes the abandonment of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant. Under environmental laws, the term "release" does not include releases which result in exposure to persons solely within a workplace, with respect to a claim which such persons may assert against the employer of such persons.

Reportable Quantity (RQ): The minimum quantity of a CERCLA hazardous substance or EPCRA extremely hazardous substance which is reportable. A release equal to or greater than the RQ within a 24-hour period must be reported to the appropriate authorities (i.e., National Response Center).

Resource Conservation and Recovery Act (RCRA): The federal act which regulates the management of hazardous waste from the point of generation through transport, storage, and disposal. It also regulates underground storage tanks and nonhazardous waste disposal under separate subtitles.

SARA Title III: The part of SARA, now known as EPCRA (Emergency Planning and Community Right-to-Know Act) which regulates emergency response plans, community right-to-know issues, and chemical release reporting.

Safe Drinking Water Act (SDWA): The federal act which deals with the quality of treated drinking water. Regulations developed by EPA under authority of this act include drinking water standards.

Sedimentation: The act or process of depositing sediment.

Site Inspection: The collection of information from a Superfund site to determine the extent and severity of hazards posed by the site. It follows and is more extensive than a preliminary assessment.

Sludge: A solid, semi-solid, or liquid material produced by the process of settling or sinking caused by gravity. Sludges are generally waste products and are commonly generated by

municipal and industrial water treatment processes and air pollution control processes. Sludges also occur in process tanks where liquids are stored. Sludges must be tested to determine if they are hazardous wastes.

Small Quantity Generators (SQGs): One of the three classes of hazardous waste generators

under RCRA. SQGs produce between 100 and 1,000 kilograms of hazardous waste at a given location.

Soil and Groundwater Analysis: Tests used to determine the presence of substance contamination and concentration levels. The analysis may involve soil borings and the installation of test pits and/or monitoring wells.

Solid Waste: Any garbage, refuse, sludge, or other waste materials not excluded by definition. Exclusions include domestic sewage and any mixture of other wastes that pass through a sewer system to a publicly-owned treatment works (POTW); industrial wastewater discharges that are point source discharges subject to regulation under the Clean Water Act; irrigation return flows; nuclear materials defined by the Atomic Energy Act; and "in situ" or "in position" mining materials. Note that wastewaters being collected, stored, or treated before discharge and sludges generated by wastewater treatment are not excluded. EPA defines hazardous waste as a subset of solid waste.

Solvent: Any substance that can dissolve another substance. The term is most often used to mean petroleum-based solvents, capable of dissolving greases, oils, tars, and asphalts. Many petroleum-based solvents are volatile, flammable, may be hazardous, and may be regulated as an air pollutant. Used solvents being disposed of (even if recycled) must be manifested as hazardous waste unless exempted.

Source Standards: Standards for emission levels at the source or point of emission.

Special Waste: A type of waste which is not a hazardous waste but requires more care than a regular solid waste and may require special disposal procedures. Examples include: certain sludges, asbestos containing waste materials, and oil waste.

Spill Prevention, Control, and Countermeasure (SPCC) Plan: Plan designed to ensure that a facility puts in place containment and other control measures that will prevent oil spills from reaching navigable U.S. waters.

State Emergency Response Commission (SERC): The state agency which must be notified in the event of an accidental release of an extremely hazardous substance, a CERCLA hazardous substance, or a chemical with an MSDS above the chemical's threshold planning quantity (TPQ) or its reportable quantity (RQ).

Stationary Source: Any building, structure, facility, or installation that emits or may emit any air pollutant.

Storage: The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere. Generators are required to have a RCRA permit for storage of hazardous waste for more than 90 days or 180 days, depending on the generator's status. Treatment or disposal facilities must be permitted.

Superfund Amendments and Reauthorization Act (SARA): The amendments to CERCLA

which increased available funds for site cleanups, added cleanup standards, and required hazardous waste operations training for site workers and emergency response personnel.

Superfund: The common name for CERCLA. It also refers to the fund that is to be used for cleaning up hazardous substance sites.

Toxic Substances Control Act (TSCA): The federal law designed to evaluate the human health and environmental effects of all chemical substances entering the U.S. market, to establish an inventory of existing chemicals, and to regulate the use and disposal of toxic substances. PCBs are regulated under TSCA.

Toxicity Characteristic Leaching Procedure (TCLP): A physical/chemical analytical procedure used to determine if a substance is classified as a toxic hazardous waste. If the test results show that a solid waste exceeds any of the limits prescribed for 39 specific contaminants, the waste is deemed to be a characteristically toxic hazardous waste. (The other three characteristics are corrosivity, ignitability and reactivity.)

Transporter of Hazardous Waste: Entity that moves or transports hazardous waste by truck, rail, boat, or plane and has received an EPA hazardous waste transporter ID number. Some states also require proper permits. (On-site movement of hazardous waste does not apply.) Transporters of hazardous waste must properly manifest and record movement as part of "cradle-to-grave" tracking required by RCRA. In addition, transporters must follow Department of Transportation (DOT) Hazardous Materials regulations and must immediately notify the appropriate officials if a release or incident occurs. Transporters are responsible for undertaking emergency response to any accident that occurs during transportation.

Treatment: Any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any hazardous waste to neutralize such waste, to recover energy or material resources from the waste, or to render such waste non-hazardous, safer to transport, store or dispose of, or amenable to recovery, storage, or reduction in volume.

Treatment, Storage, Disposal Facilities (TSDFs): Usually refers to off-site facilities where untreated hazardous waste can be taken for treatment, storage, and/or disposal. TSDFs are subject to RCRA requirements and permits. TSDFs complete the "cradle-to-grave" cycle by continuing record keeping requirements. There are many complex rules for facility operations and training of employees.

Underground Injection Control (UIC): The program under the Safe Drinking Water Act that regulates the use of wells to pump fluids into the ground.

Underground Storage Tank (UST): USTs are regulated under RCRA, Subtitle I by the federal government and by individual states under state programs. A UST is a tank, including any underground pipes, which contains or used to contain regulated hazardous substances or petroleum and has at least 10% of its volume beneath the surface of the ground.

Used Oil: Any oil that has been refined from crude oil or any synthetic oil that has been used and as a result of that use is contaminated by physical or chemical impurities.

Waste Minimization: This is the reduction in volume or toxicity of wastes generated by source reduction or recycling. Generators and TSDFs operating under RCRA permits are required to

certify annually that they have waste minimization plans in place and that the plans are being implemented at their facilities. Generators must also sign a waste minimization statement when signing the manifest.

Waste Pile: Any non-containerized accumulation of solid, non-flowing hazardous waste that is used for treatment or storage.

Waters of the United States: (1) Navigable waters, waters subject to tidal action shoreward to the mean high water mark and currently used or may be used to transport goods moving in interstate or foreign commerce, including oceans, coastal and inland waters, lakes, rivers and streams that are navigable; (2) Tributaries of navigable waters; (3) Wetlands, including those adjacent to waters of the United States as defined above; and (4) Surface waters.