

## **Subsection Q - Sector Q - Water Transportation**

### **Q.1 Covered Stormwater Discharges.**

The requirements in Subsection Q apply to stormwater discharges associated with industrial activity from Water Transportation facilities as identified by the Activity Code specified under Sector Q in Table D-1 of Appendix D of the permit.

### **Q.2 Industrial Activities Covered by Sector Q.**

The requirements listed under this part apply to stormwater discharges associated with the following activities

Q.2.1 water transportation facilities classified in SIC Code Major Group 44 that have vehicle (vessel) maintenance shops and/or equipment cleaning operations, including

Q.2.1.1 water transportation industry, including facilities engaged in foreign or domestic transport of freight or passengers in deep sea or inland waters;

Q.2.1.2 marine cargo handling operations;

Q.2.1.3 ferry operations;

Q.2.1.4 towing and tugboat services; and

Q.2.1.5 marinas.

### **Q.3 Limitations on Coverage.**

Q.3.1 Prohibition of Non-Stormwater Discharges. (See also Part 1.3.4) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

### **Q.4 Stormwater Pollution Prevention Plan (SWPPP) Requirements.**

In addition to the following requirements, you must also comply with the requirements listed in Part 2 of the permit.

Q.4.1 Drainage Area Site Map. (See also Part 2.1.2) Identify where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

Q.4.2 Summary of Potential Pollutant Sources. (See also Part 2.1.4) Describe the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, painting.)

Q.4.3 Good Housekeeping Measures. (See also Part 2.1.5.1)

Q.4.3.1 Pressure Washing Area. If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate NPDES permit. Describe the following in the SWPPP: the measures to collect or contain the discharges from the pressures washing area, the method for the removal of the visible solids, the methods of disposal of the collected solids, and where the discharge will be released.

Q.4.3.2 Blasting and Painting Area. Implement and describe measures to prevent spent abrasives, paint chips, and overspray from discharging into the receiving water or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to prevent or minimize the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean stormwater conveyances of deposits of abrasive blasting debris and paint chips. Detail in the SWPPP any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

Q.4.3.3 Material Storage Areas. Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Implement and describe measures to prevent or minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

Q.4.3.4 Engine Maintenance and Repair Areas. Implement and describe measures to prevent or minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling stormwater runoff collected from the maintenance area.

- Q.4.3.5 Material Handling Area. Implement and describe measures to prevent or minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of stormwater to material handling areas.
- Q.4.3.6 Drydock Activities. Describe your procedures for routinely maintaining and cleaning the drydock to prevent or minimize pollutants in stormwater runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.
- Q.4.3.7 General Yard Area. Implement and describe a schedule for routine yard maintenance and cleanup. Regularly remove from the general yard area scrap metal, wood, plastic, miscellaneous trash, paper, glass, industrial scrap, insulation, welding rods, packaging, etc.
- Q.4.4 Preventive Maintenance. (See also Part 2.1.5.3) As part of your preventive maintenance program, perform timely inspection and maintenance of stormwater management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.
- Q.4.5 Inspections. (See also Part 2.1.5.6) Include the following in all monthly inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.
- Q.4.6 Employee Training. (See also Part 2.1.5.7) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.
- Q.4.7 Comprehensive Site Compliance Evaluation. (See also Part 3.1) Conduct regularly scheduled evaluations at least once a year and address areas contributing to a stormwater discharge associated with industrial activity (e.g., pressure washing area, blasting and sanding areas, painting areas, material storage areas, engine maintenance and repair

areas, material handling areas, and drydock area). Inspect these sources for evidence of, or the potential for, pollutants entering the drainage system.

**Q.5 Monitoring and Reporting Requirements. (See also Part 3 of the permit.)**

<b>Table Q-1. Sector-specific Numeric Effluent Limitations and Benchmark Monitoring</b>			
<b>Subsector (Discharges may be subject to requirements for more than one sector/subsector)</b>	<b>Parameter</b>	<b>Benchmark Monitoring Concentration<sup>1</sup></b>	<b>Effluent Limit Guidelines</b>
Water Transportation Facilities (SIC 4412-4499)	Total Recoverable Aluminum	0.75 mg/L	--
	Total Recoverable Iron	1.0 mg/L	--
	Total Recoverable Lead <sup>2</sup>	0.082 mg/L	--
	Total Recoverable Zinc <sup>3</sup>	0.12 mg/L	--
	Total Suspended Solids (TSS)	100 mg/L	--

<sup>1</sup>You must monitor quarterly in the first year of your coverage for each benchmark parameter (see Part 3.2.2.1). For each parameter, no additional benchmark monitoring is required if the average of your 4 monitoring values does not exceed the benchmark (see Part 3.2.2.3). However, for each parameter there are additional requirements if the average of your four monitoring values exceeds the benchmark (see Part 3.2.2.4).

<sup>2</sup> The benchmark value of lead is determined as a function of hardness (in units of mg/L) in the water column. The value given in Table Q-1 (i.e. 0.082 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for lead:

$$\text{Benchmark} = (e^{[(1.273)(\ln \text{hardness}) - 1.460]})/1000$$

*Example:* Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned} \text{Benchmark} &= (e^{[(1.273)(\ln 175) - 1.460]})/1000 \\ &= (e^{5.1148})/1000 \\ &= 166.46/1000 \\ &= 0.17 \text{ mg/L} \end{aligned}$$

*The following are example benchmark value for lead:*

<u>Hardness (mg/L)</u>	<u>Benchmark value (mg/L)</u>
100	0.082
125	0.11
150	0.14
175	0.17
200	0.20
225	0.23
250	0.26

<sup>3</sup> The benchmark value of zinc is determined as a function of hardness (in units of mg/L) in the water column. The

value given in Table Q-1 (i.e. 0.12 mg/L) corresponds to a hardness of 100 mg/L and should be used if you either did not analyze water hardness, other hardness data are not available, or the water hardness is less than 100 mg/L. If a laboratory analysis indicates that the water hardness is below 100 mg/L, then you should use the benchmark for 100 mg/L. If a laboratory analysis indicates that the water hardness is greater than 100 mg/L, then the following equation may be used to determine the benchmark value for zinc:

$$\text{Benchmark} = (e^{[(0.8473)(\ln \text{hardness}) + 0.884]})/1000$$

*Example:* Laboratory analysis of your water sample indicates the hardness is 175 mg/L.

$$\begin{aligned} \text{Benchmark} &= (e^{[(0.8473)(\ln 175) + 0.884]})/1000 \\ &= (e^{5.26})/1000 \\ &= 192.51/1000 \\ &= 0.19 \text{ mg/L} \end{aligned}$$

*The following are example benchmark values for zinc:*

<u>Hardness (mg/L)</u>	<u>Benchmark value (mg/L)</u>
100	0.12
125	0.14
150	0.17
175	0.19
200	0.22
225	0.24
250	0.26