

Environmental Management Practices



Activity: Vessel Repair and Maintenance

EMP No. O-13

Description:

Prevent or reduce releases from vessel repair and maintenance activities

Targeted Activities:

Vessel maintenance and repair activities



Development EMPs:

Design new facilities to:

- Minimize releases to surface water
 - Conduct hull repair and maintenance work in a dry-dock, whenever possible
 - Cover work areas
 - For new dry docks, provide full or moveable covers to prevent storm water from entering work area
- Provide adequate stormwater controls
 - In uncovered dry docks, provide storm water capture and pumping systems
 - Pump storm water to treatment system or sanitary sewer
- Provide paint booths
 - For small area painting, covers can be used to contain over spray
 - New portable ship paint booths are being tested and may be commercially available soon.
- For small vessels, provide designated upland areas to conduct repairs

Potential Pollutants:

Oils and Grease
Paints
Solvents
Fuels
Sediments

Target Environmental Media:

Surface Water
Air

US Regulatory Requirements & Guidance:

40 CFR 50 -99 Clean Air Act Regulations
40 CFR 62 Ship building, Ship repair NESHAPS
40 CFR 110.3 Discharge of Oil
40 CFR 112 Oil Pollution Prevention (SPCC/ OPA Plans)
40 CFR 117.3 Determination of Reportable Quantities for a Hazardous Substance
40 CFR 122-124 NPDES Regulations for Storm Water Discharges
40 CFR 260-262, 268, and 270-272 Hazardous Waste Management
40 CFR 264-265 Preparedness, Prevention and Contingency (PPC) Plan
40 CFR 302 Designation, Reportable Quantities and Notification Requirements for Hazardous Substances under CERCLA
40 CFR 372 Toxic Chemical Release Reporting: Community Right-to-Know
40 CFR 401 Effluent Limitation Guidelines
49 CFR 171-173, 175, and 177 Department of Transportation (DOT) Regulations
State and Local Regulations as appropriate to the Port

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Operational EMPs:

- For painting and stripping activities, shrouds should be used between the vessel and pier/shore to prevent spillage into the water
 - Low volatile paints should be used
 - Shroud should be cleaned frequently to prevent material from being blown into the water
 - Lead-based paints should be handled in accordance with local, state, and federal regulations
- Provide covers when work area may be subject to storm water
 - Tarps and fixed covers prevent storm water from carrying wastes into surface waters
- Remove fluids from operating equipment before conducting maintenance
 - Provide facilities to handle the volume of fluid expected
 - Do not mix fluids
 - Keep fuels, lubricants, coolants, paints, etc., separate from each other and other chemicals
 - Store and handle chemicals as discussed in EMP O-5
- Clean up spills as they occur
- Keep equipment as clean as possible
 - Clean equipment frequently to prevent buildup of contaminants
- Conduct frequent maintenance to reduce leaks and spills
- Remove asbestos in accordance with local, state, and federal guidelines
- Dispose of lead-based paint residues in accordance with local, state, and federal guidelines.

Considerations:

- Conduct routine inspection of repair and maintenance activities.
- Conduct sampling beneath and around maintenance areas to determine current and future conditions
- Workers should be trained in spill response activities
- New vessel repair dry docks may be costly, but can be designed to eliminate releases to the water and air