

# Environmental Management Practices



Activity: Ship Breaking

EMP No. O-15

## Description:

Prevent or reduce the release of contaminants during ship breaking activities

## Targeted Activities:

Ship dismantling or demolition  
Scrap metal storage  
Scrap metal handling



## Development EMPs:

Design new facilities to:

- Minimize contact of rust or paint stripping debris with surface water
  - Use dry dock facilities whenever possible
  - At a minimum, use dry-docks for final hull scrapping
  - Provide shroud between ship and pier to minimize materials spilling into water
- Cover work areas
  - Outfit new dry-docks with cover
  - Place tarp over work area where possible
- Cover storage areas
  - Provide covered storage for oily scrap materials
  - Provide covered storage space for hazardous materials (e.g., PCBs, asbestos, lead-paint, TBT)
- Scrapping and storage areas should be paved where possible
- Provide storm water runoff controls for scrapping and storage areas
  - For new uncovered dry-docks, provide stormwater capture and pumping system
  - Install oil/water separators to remove floatables
  - Maintain oil/water separators as discussed in EMP O-6
  - Pump captured stormwater to sanitary sewer or treatment facility
  - For uncovered scrap storage areas install oil/water separator to remove floatables and detention system to remove sediments and metal particles
  - Provide berms/dikes around scrapping and storage areas to minimize run-on of stormwater

## Potential Pollutants:

Oils and grease  
Heavy Metals  
Suspended Solids  
PCBs  
Asbestos

## Target Environmental Media:

Surface water  
Soils  
Air

## US Regulatory Requirements & Guidance:

40 CFR 50 -99 Clean Air Act Regulations  
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

# Environmental Management Practices



## EMP No. O-15

### Operational EMPs:

- Cover work areas where possible
  - Provide tarps or solid covers, particularly in areas where fuels, lubricants, and other hazardous materials were used and stored
- Remove fluids before starting scrapping process
  - Store fluids separately
  - Do not mix fuel, lubricants, and other chemicals together
- Provide adequate spill response material at scrapping and storage areas
  - Clean up spills of fluids before scrapping
  - Clean up spills during scrapping process as they occur
- Cover all fluids removed during scrapping operations
- Cover oily scrap with tarp to eliminate stormwater run-on
- Encourage operators to keep equipment tuned up and in good working condition.
  - Leaks should be identified and repaired
- Retrofit storm drain system to allow capture and treatment of runoff
  - Send runoff to sanitary sewer where possible
  - Install oil/water separator to remove floatables
  - Sediment traps can be used to remove metal particles and sediments
- Place berms around storage areas to prevent stormwater from running onto area
- For existing dry docks, provide pumps to remove stormwater to treatment system or sanitary sewer
- Provide shroud between ship and pier/dock to prevent materials from spilling into surface water
  - Clean shroud frequently to prevent material from being blown into the water
- Clean work areas frequently
  - Remove dust and spills on a daily basis and before hull is breached
- Remove asbestos in accordance with local, state, and federal regulations
- Remove and dispose of sand blast residue in accordance with local, state, and federal guidelines
  - Do not sand blast over open water
  - Provide cover over work area and shroud under work area
- Remove PCB-containing materials in accordance with federal, state, and local guidelines
  - Provide skin and respiratory protection for affected workers.

### Considerations:

- Conduct routine inspections of scrapping and storage areas to ensure releases are minimized
- Conduct sampling of sediments beneath and around scrapping activities to determine current and future conditions
- Workers should be trained in methods to reduce impacts from operations, particularly what actions should be taken in the event of a spill