# **Environmental Management Practices**



Activity: Bulkhead, Pier, and Dock Construction

### EMP No. D-3

#### **Description:**

To prevent or reduce impacts from construction of piers, docks, and bulkheads.

#### **Targeted Activities:**



Bulkhead construction Underwater utility placement Pier and dock installation

#### **Development EMPs:**

- Select the most appropriate "windows" of time to conduct construction activities
  - Study marine life in the construction area to help determine mitigation requirements, if necessary
- Consider using silt curtains where necessary to ensure compliance with water quality criteria and permit conditions
  - Selection depends on currents, marine life activity, and vessel traffic conditions
- Use piers and bulkheads made of concrete, where possible
  - Steel may deteriorate over time releasing paints and metals into the environment
  - Creosote treated wood may leach toxic chemicals into the environment
- Consider use of bumpers to increase space between piers/bulkheads and vessels
  - This allows for easy passage of marine life between vessels and the pier/bulkhead
- Consider placement of the pier/bulkhead and the potential impacts on sediment transport and shoaling
- Provide adequate space to allow for safe management of:
  - Solid waste
  - Fuels
  - Sanitary wastes
  - Fish wastes
- Provide ability to quickly install booms to capture fuel and other floatables
- Consider recycling creosote-treated timbers when conducting repairs or replacement.

Potential Pollutants: Sediments

#### Target Environmental Media:

Surface water

#### **Considerations:**

- Concrete piers may prove to be more expensive to install, but can substantially reduce releases to the environment
- Sediment controls are dependent on vessel traffic and marine life habitats in the area
- Frequent inspection of the construction area is required to ensure EMPs are installed and maintained properly
- Contractors should be informed about the use of the EMPs

## US Regulatory Requirements & Guidance:

- 40 CFR 50 -99 Clean Air Act Regulations
- 40 CFR 122-124 NPDES Regulations for Storm Water Discharges
- 40 CFR 260-262, 268, and 270-272
- Hazardous Waste Management State and Local Regulations as appropriate to the Port