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