

## **SC 11 BEST MANAGEMENT PRACTICES FOR INSTALLATION & REMOVAL OF PILES**

### **Construction**

The following report documents the best management practices to be used for installation and removal of piles during construction:

A. Installation of piles shall prioritize driven or hammered methods, if feasible, in order to minimize water quality impacts. Vibratory hammer method shall be prioritized over impact hammer methods, where feasible. However, if an impact hammer is used, pile driving shall use a soft-start/ramping up BMP with hammer strikes that begin at approximately 40 to 60 percent energy levels with no less than a one-minute interval between each strike for a five-minute period. If a water-jetting or drilling method is utilized, silt curtains shall be installed in the work area to contain turbidity where coastal resources, such as benthic communities or eelgrass, may be at risk.

B. Removal of existing piles shall comply with the following requirements, where applicable:

- i. Work shall occur during favorable tidal, ocean, and weather conditions that will enhance the ability to remove, to the maximum extent, the full length of the pile and any associated debris generated during demolition.
- ii. Removed piles and debris shall be placed directly into a vessel or container suitable for transport to land and then off-site.
- iii. Degraded pile sections that cannot be recovered from the substrate shall be cut at the deepest feasible elevation to maximize partial-retrieval.
- iv. All removed piles and debris shall be moved to an off-site, authorized disposal site. Sediment adhered to the removed piles shall be removed from coastal waters.
- v. Piles shall be removed slowly and handled carefully to minimize turbidity and turbidity curtains shall be employed to envelope the pile being removed. Vibratory extraction shall be prioritized over direct-pull methods, where feasible, in order to limit disturbance.

### **Operational Monitoring of HDPE Sleeves**

The High Density Polyethylene (HDPE) sleeves proposed to be applied to steel piles shall be periodically monitored during the life of the structure, to ensure that the plastic material maintains its structural integrity, and shall be repaired or replaced if the material begins to deteriorate. A monitoring and maintenance plan for the HDPE sleeves shall be as follows:

- i. Not less than annual visual inspections to identify surface deterioration, shaving, cracking, spalling or pitting at points of dock contact.