



Source: Knoxville BMP Manual, 2003.

Description

Practices that prevent or reduce the discharge of pollutants in non-storm water and accumulated precipitation from areas requiring dewatering activities so construction activity may proceed.

Applications

- Non-storm water from sources such as groundwater and water used during construction activities.
- Precipitation accumulated within depressed areas on construction sites.

Installation and Implementation Requirements

- Dewatering discharges may include one of the following types of pollutants:
 - Sediment and
 - Toxics and petroleum productsDue to the nature of dewatering operations, high sediment content is common. Toxics and petroleum products, however, are not prevalent unless heavy industrial activities or groundwater contamination occurred in the surrounding area.
- Sediment Removal requirements include the following:
 - Use sediment controls such as a sediment trap to remove sediment from dewatering discharges. Refer to SC-15 (Sediment Trap) and SC-16 (Sediment Basin) in this manual for more information and
 - Apply filtration methods to remove sediment from the sediment trap. These include:
 - Sump pit combined with a perforated/slit standpipe with holes, which is wrapped in geotextile filter fabric. As water collects in the pit, stones placed around the

Installation and Implementation Requirements (Continued)

- standpipe filter the water, which collects in the pit prior to being pumped out. Due to the wrapped standpipe, an increased suction inlet area may be required to prevent clogging and unacceptable pump operation and
- Floating suction hose, which allows cleaner surface water to be pumped out.

- Toxics and Petroleum Products Removal requirements include the following:
 - Areas of suspected groundwater contamination shall be tested by a laboratory for known or suspected pollutants using methods detailed in 40 CFR Part 136. The laboratory shall enforce a quality assurance/quality control measures program. Comply with the dewatering requirements in subsection 209.03 (D) of the 2005 Standard Specifications, and as amended
 - Discharges to the sanitary sewer system shall receive approval from DOH and the owner of the wastewater system. Additional testing and disposal requirements may be necessary.

Limitations

Contaminated water may be an indication of contaminated soil. Refer to SM-8 (Contaminated Soil Management) in this manual for more information.

Inspections and Maintenance

- Inspect excavated areas daily for contaminated water indicated by discoloration, oily sheen, or odors.
- Remove and properly dispose of sediment collected in sediment control devices.
- Inspect the dewatering discharge point for erosion daily.