

Description

Preventative maintenance involves proactive routine inspection and testing of plant equipment and operational systems to prevent leaks and spills. A preventative maintenance program should also include inspections of conveyance channels, storm sewers, inlets, catch basins, stormwater detention areas, and other water quality treatment systems associated with the site.



Photograph PM-1. Preventative maintenance can reduce the frequency and occurrence of leaked or spilled material that can be transported in stormwater runoff.

Appropriate Uses

This BMP is applicable to municipal, industrial and commercial sites.

Preventative maintenance programs typically incorporate practices identified in the Good Housekeeping, Materials Storage and Handling, Vehicle Fueling, Maintenance and Storage, and other source control BMPs. See the Structural BMP Maintenance chapter for preventative maintenance for stormwater BMPs.

Practice Guidelines

Elements of a good preventative maintenance program should include:

- Identification of equipment or systems, which may malfunction and cause spills, leaks, or other situations that could lead to contamination of stormwater runoff. Typical equipment to inspect includes pipes, pumps, storage tanks and bins, pressure vessels, pressure release valves, process and material handling equipment.
- Once equipment and areas to be inspected have been identified at the facility, establish schedules and procedures for routine inspections and scheduling repairs.
- Periodic testing of plant equipment for structural soundness is a key element in a preventative maintenance program.
- Promptly repair or replace defective equipment found during inspection and testing.
- Keep spare parts for equipment that needs frequent repair.
- Replace worn parts prior to failure.
- Implement, maintain and regularly review a record keeping system for scheduling tests and documenting inspections in the preventative maintenance program. Be sure to follow inspections promptly with completion of needed repairs. Clearly record the problem and the specific actions taken to correct the problem. Photos can be helpful components of such records. An annual review of these records should be conducted to evaluate the overall effectiveness of the preventative maintenance program. Refinements to the preventative maintenance procedures and tasking should be implemented as necessary.