

PARKING LOT MAINTENANCE

Litter accumulation in parking lots can contribute suspended solids to stormwater runoff; runoff from parking lots may also contain hydrocarbons, oil and grease, and heavy metals to stormwater. Maintaining these areas may involve one or more of the following activities:

- 1. Sweeping and Cleaning
- 2. Repair

POLLUTION PREVENTION:

Pollution prevention measures have been considered and incorporated in the model procedures. Implementation of these measures may be more effective and reduce or eliminate the need to implement other more complicated or costly procedures. Possible pollution prevention measures for parking lot maintenance include:

- Keep accurate maintenance logs to evaluate materials removed and improvements made.
- When repairing parking lots, consider making retrofits that will reduce storm runoff quantities (i.e. permeable surface, directing surface flows to landscaped areas, etc.)
- Once per year, educate municipal staff on pollution prevention measures.
- Educate others about storm water pollution prevention.

MODEL PROCEDURES:

1. Sweeping and Cleaning

- ✓ Sweep/vacuum all parking lots at least once before the onset of the wet season.
- ✓ When cleaning with water use the procedures below:
 - Block the storm drain or contain runoff.
 - Wash water should be collected and disposed of properly. If

wash water does not contain soap or other cleaning agents the water may be discharged to a pervious surface (dirt or landscaped area).

- ✓ Dispose of parking lot sweeping debris and dirt at a landfill.
- ✓ When cleaning heavy oily deposits:
 - Clean oily spots with absorbent materials
 - Do not allow discharges to the storm drain
 - Collect wash water and dispose of properly.
- ✓ Appropriately dispose of spilled materials and absorbents.
- ✓ If cleaning agents are used, select biodegradable products.

Litter Control

- ✓ Enforce anti-litter laws.
- ✓ Provide an adequate number of litter receptacles.
- ✓ Clean out frequently and/or cover litter receptacles to prevent spillage.
- ✓ Sweep/vacuum all parking lots at least once before the onset of the wet season.

3. Surface Repair

- ✓ Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff.
- ✓ Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc. Leave covers in place until job is complete and until all water from emulsified oil sealants has drained or evaporated. Clean any debris from these covered maintenance holes and drains for proper disposal.
- ✓ Use only as much water as necessary for dust control, to avoid runoff.
- ✓ Catch drips from paving equipment that is not in use with pans or absorbent material placed under the machines. Dispose of collected material and absorbents properly.

4. Control Spills

✓ If a spill occurs on dirt, excavate and remove the contaminated (stained) dirt.

See Spill Prevention and Control

- ✓ Store spill response materials at a central location and keep maintenance vehicles adequately supplied.
- ✓ Appropriately dispose of spilled materials and absorbents.

LIMITATIONS:

Limitations related to sweeping activities at large parking facilities may include current sweeper technology to remove oil and grease.

REFERENCES:

California Storm Water Best Management Practice Handbooks. Municipal Best Management Practice Handbook. Prepared by Camp Dresser & McKee, Larry Walker Associates, Uribe and Associates, Resources Planning Associates for Stormwater Quality Task Force. March 1993.

The Stormwater Managers Resource Center (http://www.stormwatercenter.net/)

Model Urban Runoff Program: A How-To Guide for Developing Urban Runoff Programs for Small Municipalities. Prepared by City of Monterey, City of Santa Cruz, California Coastal Commission, Monterey Bay National Marine Sanctuary, Association of Monterey Bay Area Governments, Woodward-Clyde, Central Coast Regional Water Quality Control Board. July. 1998.

Oregon Association of Clean Water Agencies. Oregon Municipal Stormwater Toolbox for Maintenance Practices. June 1998.

Santa Clara Valley Urban Runoff Pollution Prevention Program. 1997 Urban Runoff Management Plan. September 1997, updated October 2000.