



IC15. PARKING AND STORAGE AREA MAINTENANCE

Best Management Practices (BMPs)

A BMP is a technique, measure or structural control that is used for a given set of conditions to improve the quality of the stormwater runoff in a cost effective manner¹. The minimum required BMPs for this activity are outlined in the box to the right. Implementation of pollution prevention/good housekeeping measures may reduce or eliminate the need to implement other more costly or complicated procedures. Proper employee training is key to the success of BMP implementation.

The BMPs outlined in this fact sheet target the following pollutants:

Targeted Constituents	
Sediment	x
Nutrients	x
Floatable Materials	x
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	x

Provided below are specific procedures associated with each of the minimum BMPs along with procedures for additional BMPs that should be considered if this activity takes place at a facility located near a sensitive waterbody. The owners/operators must select, install and maintain appropriate BMPs on site. Since the selection of the appropriate BMPs is a site-specific process, the types and numbers of additional BMPs will vary for each facility.

MINIMUM BEST MANAGEMENT PRACTICES Pollution Prevention/Good Housekeeping

- For parking lots, remove litter and sweep once per month or on a regular schedule.
- Properly collect and dispose of wash water.
- Keep the parking and storage areas clean and orderly.
- Use absorbent materials and properly dispose of them when cleaning heavy oily deposits.
- When conducting surface repair work cover materials and clean paintbrushes and tools appropriately.
- Block the storm drain when hosing or steam / pressure washing outside dumpster areas, sidewalks, and common areas.
- Stencil storm drains to state "No Dumping Drains to Ocean"

Training

- Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.
- Provide on-going employee training in pollution prevention.

Additional Controls for ESAs

- Keep artificial materials, metals, petroleum hydrocarbons, substances having unusual coloration, or turbidity, waste materials and wastewater out of the MS4. [toxicity]

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"

1. **Conduct regular cleaning.**
 - Sweeping or vacuuming the parking facility is encouraged over other methods.
 - Sweep all parking lots at least once before the onset of the wet season.
 - Establish frequency of sweeping based on usage and field observations of waste accumulation.
2. **Properly collect and dispose of wash water.**
 - Block the storm drain or contain runoff.
 - Wash water should be collected and pumped to the sanitary sewer or discharged to a pervious surface, do not allow wash water to enter storm drains. **DO NOT** discharge wash water to sanitary sewer until contacting the local sewer authority to find out if pretreatment is required.
 - Dispose of parking lot sweeping debris and dirt at a landfill.
3. **Consider use of source treatment BMPs to treat runoff.**
 - Allow sheet runoff to flow into biofilters (vegetated strip and swale) and/or infiltration devices.
 - Utilize sand filters or oleophilic collectors for oily waste in low quantities.
4. **Keep the parking and storage areas clean and orderly.**
 - Clean out and cover litter receptacles frequently to prevent spillage.
 - Remove debris in a timely fashion.

OPTIONAL:

 - Post "No Littering" signs.
5. **When cleaning heavy oily deposits:**
 - If possible, clean oily spots with absorbent materials.
 - Do not allow discharges to the storm drain.
 - Appropriately dispose of spilled materials and absorbents.
6. **When conducting surface repair work:**
 - Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
 - Conduct surface repair work 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 clean any debris for proper disposal.
 - To avoid runoff, use only as much water as necessary for dust control.
 - Use drip pans or absorbent material to catch drips from paving equipment that is not in use. Dispose of collected material and absorbents properly.
7. **Conduct inspections on a regular basis.**
 - Designate personnel to conduct inspections of the parking facilities and stormwater conveyance systems associated with them.
 - Inspect cleaning equipment/sweepers for leaks on a regular basis.
8. **Keep accurate maintenance logs to evaluate materials removed/stored and improvements made.**
9. **Arrange rooftop drains to prevent drainage directly onto paved surfaces.**

Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees on proper spill containment and cleanup.**
 - Establish training that provides employees with the proper tools and knowledge to immediately begin cleaning up a spill.
 - Ensure that employees are familiar with the site's spill control plan and/or proper spill cleanup procedures.

- BMP IC17 discusses Spill Prevention and Control in detail.
3. Provide regular training to field employees and/or contractors regarding cleaning of paved areas and proper operation of equipment.
 4. Establish a regular training schedule, train all new employees, and conduct annual refresher training.
 5. Use a training log or similar method to document training.

Stencil storm drains

Storm drain system signs act as highly visible source controls that are typically stenciled directly adjacent to storm drain inlets. Stencils should read "No Dumping Drains to Ocean".

References

California Storm Water Best Management Practice Handbook. Industrial and Commercial. 2003.
www.cabmphandbooks.com

California Storm Water Best Management Practice Handbooks. Industrial/Commercial 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.

King County Stormwater Pollution Control Manual. Best Management Practices for Businesses. King County Surface Water Management. July 1995. On-line: <http://dnr.metrokc.gov/wlr/dss/spcm.htm>

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 (Revised February 2002 by the California Coastal Commission).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

For additional information contact the City of Laguna Hills Public Services at 949-707-2650.