



**IC6. CONTAMINATED OR ERODIBLE SURFACES AREAS
(For sites containing these characteristics.)**

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	
Metals	x
Bacteria	x
Oil & Grease	x
Organics & Toxicants	x
Pesticides	x
Oxygen Demanding	

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Protect contaminated or erodible surface areas from rainfall and wind dispersal.
- Protect materials from stormwater runoff and runoff.
- Conduct routine maintenance.
- 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 contaminated soils and sediment from entering the MS4. [bacteria, nutrients]

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.

1. **Protect contaminated or erodible surface areas from rainfall and wind dispersal through one or more of the following:**
 - Preserve natural vegetation.
 - Re-plant or landscaping bare ground surfaces.

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

- Use chemical stabilization or geosynthetics to stabilize bare ground surfaces.
 - Remove contaminated soils.
 - Cover materials with a fixed roof or a temporary waterproof covering made of polyethylene, polypropylene or hypalon. Keep covers in place at all times when work is not occurring. If areas are so large that they cannot feasibly be covered and contained, implement erosion control practices at the perimeter of the area and at any catch basins to prevent dispersion of the stockpiled material.
 - Use of erosion control methods including sand bags, silt fences, berms, straw bales, or other devices that will keep sediment from eroding away.
2. **Protect materials from stormwater runoff and runoff.** Construct a berm around the perimeter of the area to prevent the runoff of uncontaminated stormwater from adjacent areas as well as runoff of stormwater from the material.
 3. **Minimize pooling of water.** Paved areas should be sloped in a manner that minimizes the pooling of water in the area. A minimum slope of 1.5 percent is recommended.
 4. **Conduct routine maintenance.** Sweep paved areas regularly to collect loose materials.
 - **DO NOT** hose down area to a storm drain or conveyance ditch.
 - Properly dispose of waste materials.
 5. **For sites greater than one acre in size, prepare a Storm Water Pollution Prevention Plan (SWPPP) per San Diego Regional Board Order No. R9-2002-0001 and Santa Ana Regional Board Order No. R8-2002-0010.**

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. **Establish a regular training schedule, train all new employees, and conduct annual refresher training.**
4. **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>

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.

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