

IC5. CONCRETE AND ASPHALT PRODUCTION, APPLICATION, AND CUTTING

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 | |
| Floatable Materials | |
| Metals | |
| Bacteria | |
| Oil & Grease | |
| Organics & Toxicants | |
| Pesticides | |
| Oxygen Demanding | |

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. In order to meet the requirements for medium and high priority facilities, 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. **Properly collect and dispose of process water.**
Discharge process water from production, pouring, equipment cleaning, and cutting activities to a sump, process water treatment or recycling system, or sanitary sewer system if allowed.
2. **Protect production, pouring, and cutting areas 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.
3. **Sweep the production, pouring, and cutting areas regularly to collect loose materials.**
 - **DO NOT** hose down area to a storm drain or conveyance ditch.
 - Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stockpile, or dispose in the trash.
4. **Pre-heat, transfer or load hot bituminous material away from storm drain inlets.**
5. **Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use. Dispose of collected material and absorbents properly.**
6. **Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.**
 - Clean covers regularly.
 - Leave covers in place until job is complete and clean any debris for proper disposal.

MINIMUM BEST MANAGEMENT PRACTICES

Pollution Prevention/Good Housekeeping

- Properly collect and dispose of process water.
- Protect production, pouring, and cutting areas from stormwater runoff and runoff.
- Sweep the production, pouring, and cutting areas regularly to collect loose materials.
- Pre-heat, transfer or load hot bituminous material away from storm drain inlets.
- Use drip pans or absorbent material to catch drips from paving equipment, including equipment that is not in use.
- Cover and seal nearby storm drain inlets (with waterproof material or mesh) and manholes before applying seal coat, slurry seal, etc.
- To avoid runoff, use only as much water as necessary for dust control.

Stencil storm drains

Training

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

¹ EPA " Preliminary Data Summary of Urban Stormwater Best Management Practices"
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7. Conduct surface repair work during dry weather to prevent contamination from contacting stormwater runoff.
8. To avoid runoff, use only as much water as necessary for dust control.
9. Do not allow concrete and concrete pumping vehicles to discharge concrete, slurry, or rinse water into gutters, storm drains, or drainage ditches.

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.
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Los Angeles County Stormwater Quality. Public Agency Activities Model Program. On-line:
http://ladpw.org/wmd/npdes/public_TC.cfm

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)

Santa Clara Valley Urban Runoff Pollution Prevention Program. Maintenance Best Management Practices for the Construction Industry. Brochures: Landscaping, Gardening, and Pool; Roadwork and Paving; and Fresh Concrete and Mortar Application. June 2001.

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