

IC21. WASTE HANDLING AND DISPOSAL

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

MINIMUM BEST MANAGEMENT PRACTICES	
<u>Pollution Prevention/Good Housekeeping</u>	
<ul style="list-style-type: none"> Prevent waste materials from coming in direct contact with wind or rain. Keep waste collection areas clean. Secure solid waste containers when not in use. Regularly inspect, repair, and/or replace waste containers. Use all of a product before disposing of the container. Label and store hazardous wastes according to hazardous waste regulations. 	
<u>Stencil storm drains</u>	
<u>Training</u>	
<ul style="list-style-type: none"> Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements. Provide on-going employee training in pollution prevention. 	
<u>Portable Toilet Transport</u>	
<ul style="list-style-type: none"> Empty prior to transport. Fasten securely when transporting. Use dollies and power gates whenever possible. 	

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. Prevent waste materials from coming in direct contact with wind or rain.**
 - Cover the waste management area with a permanent roof.
 - If this is not feasible, cover waste piles with temporary covering material such as reinforced tarpaulin, polyethylene, polyurethane, polypropylene, or hypalon.
 - Cover dumpsters to prevent rain from washing out waste materials.
- 2. Design waste handling and disposal area to prevent stormwater runoff.**
 - Enclose the waste handling and disposal area or build a berm around it.
 - Position roof downspouts to direct stormwater away from waste handling and disposal area.
- 3. Design waste handling and disposal area to contain spills.**
 - Place dumpsters or other waste receptacles on an impervious surface.
 - Construct a berm around the area to contain spills.
 - Install drains connected to the public sewer or the facility's process wastewater system within these contained areas. **DO NOT** discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required.

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

4. **Keep waste collection areas clean.**
 - When cleaning around waste handling and disposal areas use dry methods when possible (e.g. sweeping, use of absorbents).
 - If water must be used, collect water and discharge to the sewer if permitted to do so. **DO NOT** discharge to a public sewer until contacting the local sewer authority to find out if pretreatment is required. If discharge to the sanitary sewer is not allowed, pump water to a tank and dispose of properly.
 - Post "No Littering" signs.
5. **Secure solid waste containers when not in use.**
6. **Regularly inspect, repair, and/or replace waste containers.**
7. **Do not fill waste containers with washout water or any other liquid.**
8. **Use all of a product before disposing of the container.**
9. **Segregate wastes by type and label and date wastes.**
 - Do not mix wastes; this can cause chemical reactions, make recycling impossible, and complicate disposal.
 - Ensure that only appropriate solid wastes are added to solid waste containers.
 - Certain wastes such as hazardous wastes, appliances, fluorescent lamps, pesticides, etc. may not be disposed of in solid waste containers.
10. **Label and store hazardous wastes according to hazardous waste regulations.**
 - Consult your local hazardous waste agency or Fire Department for details.
 - Obtain a hazardous waste generator license or permit if necessary.
12. **Minimize waste.**
 - Recycle materials whenever possible.
 - Modify processes or equipment to increase efficiency.
 - Identify and promote use of non-hazardous alternatives.
 - Reduction in the amount of waste generated can be accomplished using many different types of source controls such as:
 - Production planning and sequencing
 - Process or equipment modification
 - Raw material substitution or elimination
 - Loss prevention and housekeeping
 - Waste segregation and separation
 - Close loop recycling
 - Establish a material tracking system to increase awareness about material usage. This may reduce spills and minimize contamination, thus reducing the amount of waste produced.

Training

1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
2. **Train employees in proper waste handling and disposal.**
3. **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.

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.

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).

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