



FF-8

MINOR CONSTRUCTION

Minor construction activities can result in the use of materials or generation of waste that may contain toxic hydrocarbons or other organic compounds, suspended solids, heavy metals, abnormal pH, and oils and greases. Minor construction activities may involve one or more of the following:

- 1. General Construction Activities**
- 2. Interim Material Storage**
- 3. Concrete Work**
- 4. Building Work**

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 minor construction include:

- Schedule activities during dry weather whenever possible.
- Use dry cleaning methods whenever possible.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

1. General Construction Activities

- ✓ Prevent debris from entering the storm drain.
- ✓ Do not wash materials into a storm drain or bury spilled dry material.
- ✓ Do not clean or rinse equipment into a street, gutter, or storm drain.
- ✓ Use a storm drain cover, filter fabric, or similarly effective runoff control mechanism if dust, grit, wash water, or other pollutants may escape the work area and enter a storm drain inlet. This is particularly necessary on rainy days. The containment device(s) must be in place at the beginning of the work day, and accumulated dirty runoff and solids must be

See Waste Handling and Disposal

collected and disposed of before removing the containment device(s) at the end of the work day.

- ✓ Clean the storm drain inlets in the immediate vicinity of the construction activity after it is completed.
- ✓ If a spill occurs on dirt, excavate and remove the contaminated (stained) soil.
- ✓ Clean up spills and leaks immediately using dry methods, whenever possible.
- ✓ Designate an area for clean up and proper disposal of excess materials.
- ✓ Sweep up dry materials and residue from cleaning operations. Avoid using water to clean up.
- ✓ Use soil erosion control techniques if bare ground is temporarily exposed.
- ✓ Promptly clean up trash, debris, and litter from job sites and dispose properly.
- ✓ Inspect vehicles and equipment used at the construction site regularly for leaks.
- ✓ Train employees and subcontractors in proper waste management.

2. Interim Material Storage

- ✓ Properly store and cover materials that are normally used during minor construction such as paints, solvents, equipment, fuel, asphalt/concrete materials, sand, etc.
- ✓ Properly store and dispose of wastes generated from the activity.
- ✓ Store dry and wet materials under cover, protected from rainfall and runoff and away from storm drain inlets. After job is complete, remove temporary stockpiles (asphalt materials, sand, etc.) and other materials as soon as possible.
- ✓ Apply and store all products in accordance with manufacturer's instructions and proper safety measures.
- ✓ Store products in labeled containers and with covers or lids.
- ✓ Keep paved areas adjacent to stockpiles and earthwork sites free from loose sediment and tracked materials.
- ✓ Place stockpiled materials away from storm drain inlets, drainage paths, and natural waterways and provide cover to protect from runoff/runoff if feasible.
- ✓ Control stockpiled materials if windy or rainy weather is predicted (e.g. tarps, berthing, sandbags, etc.).
- ✓ Prevent storm water from eroding loose soil and stockpiles.

- ✓ Inspect stockpiles regularly and after significant rain events.

3. Concrete Work

- ✓ Take measures to protect nearby storm drain inlets prior to breaking up asphalt or concrete (e.g. place hay bales or sand bags around inlets). Clean afterwards by dry sweeping up as much waste material as possible.
- ✓ When making saw cuts in pavement, use as little water as possible. Cover each storm drain inlet completely with filter fabric during the sawing operation and contain the slurry by placing straw bales, sandbags, or gravel dams around the inlets. Vacuum saw cuttings and water from the pavement or gutter and remove from site.
- ✓ Avoid mixing excess amounts of fresh concrete or cement mortar on site.
- ✓ Apply concrete, asphalt, and seal coat during dry weather to prevent contamination from contacting stormwater runoff.
- ✓ Protect applications of fresh concrete from rainfall and runoff until the material has dried.
- ✓ Do not allow excess concrete to be dumped on-site, except in designated areas and promptly remove when concrete has dried.
- ✓ Tarps should be placed under concrete pumper trucks and the rear of trucks while concrete is being delivered or transferred from one area to another.
- ✓ Wash concrete trucks and concrete pumper trucks and trailers off site or in designated areas on site, such that there is no discharge of concrete wash water into storm drains, open ditches, streets, catch basins, or other stormwater conveyance structures.
- ✓ For on-site washout:
 - Locate washout area at least 50 feet from storm drains, open ditches, or water bodies. Do not allow runoff from this area by constructing a temporary pit or bermed area large enough for liquid and solid waste.
 - Wash out wastes into the temporary pit where the concrete can set, be broken up, and then disposed of properly.
 - Whenever possible, recycle washout by pumping back into mixers for reuse.
 - Never dispose of washout into the street, storm drains, drainage ditches, or creeks.
- ✓ When washing concrete to remove fine particles and expose the aggregate, contain the wash water for proper disposal. Do not allow water to enter storm drain inlets.
- ✓ Do not wash sweepings from exposed aggregate concrete into the street or storm drain. Collect and return sweepings to aggregate base stock pile, or

dispose in the trash

- ✓ Return left-over materials to the transit mixer. Dispose excess concrete, grout, and mortar in the trash.

4. Building Work

General Guidelines

- ✓ Use ground or drop cloths underneath outdoor painting, scraping, and sandblasting work, and properly dispose of collected material daily.
- ✓ Do not dump any toxic substance or liquid waste on the pavement, the ground, or toward a storm drain.
- ✓ Use a ground cloth or oversized tub for activities such as paint mixing and tool cleaning.
- ✓ Clean paint brushes and tools covered with water-based paints in sinks connected to sanitary sewers. Brushes and tools covered with non-water-based paints, finishes, or other materials must be cleaned in a manner that enables collection of used solvents (e.g., paint thinner, turpentine, etc.) for recycling or proper disposal.
- ✓ If a spill occurs on dirt, excavate and remove the contaminated (stained) soil.

Building Demolition

- ✓ Spray water throughout the site to help control wind-blown of fine materials such as soil, concrete dust, paint chips, and metal chips. The amount of water must be controlled so that runoff from the site does not occur; yet dust control is accomplished.
- ✓ Oils must never be used for dust control.
- ✓ Place filter fabric or a similarly effective device at nearby storm drain inlets to prevent particles and solids from entering the storm drainage system. Filters should be placed at the beginning of the workday and the accumulated materials collected and disposed properly before removing them at the end of the workday
- ✓ Dry sweep surrounding street gutters, sidewalks, driveways, and other paved surfaces at the end of each workday to collect and properly dispose of loose debris and garbage, do not hose down the area to a storm drain.
- ✓ Use permanent soil erosion control techniques if a building cleared from an area is not to be replaced.

LIMITATIONS:

This procedure sheet is for minor construction only; the State's General Construction Activity Storm Water permit has more requirements for larger projects. Be certain that actions to help stormwater quality are consistent with Cal- and Fed-OSHA and air quality regulations.

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.

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

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.