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MATERIAL LOADING AND UNLOADING

The loading/unloading of materials usually takes place outside; therefore, materials spilled, leaked, or lost during loading/unloading have the potential to collect in the soil or on other surfaces and be carried away by runoff or when the area is cleaned. Additionally, rainfall may wash pollutants from machinery used to unload or move materials. Material loading and unloading involves the following activities:

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 material loading and unloading include:

- Check loading and unloading equipment regularly for leaks.
- Cover loading docks.
- Once per year, educate municipal staff on pollution prevention measures.

MODEL PROCEDURES:

General Guidelines

- ✓ Regularly clean work areas to remove materials such as debris, sandblasting material, etc.
- ✓ Design loading/unloading area to prevent stormwater runon that would include grading or berming the area, and positioning roof downspouts so they direct stormwater away from loading/unloading areas.
- ✓ Use overhangs or door skirts that enclose the trailer.
- ✓ Park tank trucks or delivery vehicles so that spills or leaks can be contained.
- ✓ Avoid loading and exposing materials during rain events unless the loading dock is covered and protected from rain. A seal or door skirt between the trailer and the building may also prevent exposure to rain.
- ✓ Shipboard cooling and process water discharges should be directed to minimize contact with spent abrasives, paint, and other debris.

Tank truck transfers

- ✓ The area where the transfer takes place should be paved. If the liquid is reactive with the asphalt, Portland cement should be used to pave the area.
- ✓ Transfer area should be designed to prevent runon of stormwater from adjacent areas. Sloping the pad and using a berm around the uphill side of the transfer area should reduce runon.
- ✓ Transfer area should be designed to prevent runoff of spilled liquids from the area. Sloping the area to a drain should prevent runoff. The drain should be connected to a dead-end sump. A positive control valve should be installed on the drain.

Spill Control

Also see Spill Prevention and Control procedures sheet

- ✓ Contain leaks during transfer.
- ✓ Use drip pans under hoses.
- ✓ Have an emergency spill cleanup plan readily available.
- ✓ Place spill kits and materials next to or near each loading/unloading area.
- ✓ Use drip pans or comparable devices when transferring oils, solvents, and paints.

Training

- ✓ Make sure forklift operators are properly trained.
- ✓ Train employees regarding spill containment and cleanup.
- ✓ Employees trained in spill containment and cleanup should be present during the loading/unloading.
- ✓ Use a written operations plan that describes procedures for loading and/or unloading.

Inspection

Also see Spill Prevention and Control procedures sheet

- ✓ Check loading and unloading equipment regularly for leaks, including valves, pumps, flanges and connections.
- ✓ Inspect regularly for leaking valves, pipes, hoses, or soil chutes carrying either water or wastewater.
- ✓ Look for dust or fumes during loading or unloading operations.

LIMITATIONS:

Space and time limitations may preclude all transfers from being performed indoors or under cover. It may not be possible to conduct transfers only during dry weather.

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.

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.