

STORMWATER BMPs: VEHICLE AND EQUIPMENT FUELING

AFFECTED FACILITIES

These BMPs apply at all municipal operations where vehicles or powered mobile equipment are fueled with gasoline or diesel fuel. These BMP apply to fueling from stationary tanks (above or underground) as well as fueling from portable tanks (e.g. trailers) and containers (e.g. 5 gallon jerry cans).

BACKGROUND

Spills and leaks that occur during vehicle and equipment fueling can contribute hydrocarbons, oil and grease as well as heavy metals to storm water runoff and snow melt. Implementing these BMPs will help prevent fuel spills and leaks.

BEST MANAGEMENT PRACTICES

- Maintain all fueling equipment in good working order. Conduct preventive maintenance.
- Do not allow “topping off” of fuel tanks.
- Do not allow drivers or operators to leave their vehicles or equipment unattended while fueling.
- If there are any storm drains near the fueling area, instruct the driver or operator to place drain inlet covers or mats over each drain while fueling. Stencil these drain inlets with “Cover While Fueling”.
- When fueling small equipment in the field like lawn movers, small sweepers, weed whackers, blowers, portable generators, etc., do so over a paved (concrete) area well away from any storm drains or ditches. When pouring fuel from a jerry can, use a funnel.
- Conduct daily inspections of the fueling area and clean up any spills and absorbent on the ground.

REQUIRED STRUCTURES AND EQUIPMENT

- Divert any roof drains (that discharge into or near fueling areas or aboveground storage tanks) away from the area.
- Post signs near fueling stations discouraging “topping off” of tanks and that drivers/operators remain with vehicles/equipment while fueling.
- Post signs at each fueling location with information on how and to whom spills or releases are to be reported.
- Make sure that adequate spill response equipment and supplies are available at each fueling station. See “*BMP: Spill Clean Up*” for details.

INSTALLATIONS REQUIRED FOR NEW CONSTRUCTION OR RENOVATIONS

- Construct impervious berms or secondary containment around vehicle and equipment fueling stations to contain leaks or drips.
- Install oil/water separators in any storm drain inlet that might receive run-off from a fueling area.
- Install covers or canopies over fueling stations to avoid exposure to storm water.
- Grade, contour and install impervious pavement around fueling stations to divert run-on and run-off stormwater.

- If storm drains must be located near fueling areas, install shut-off valves in storm drain inlets that can be turned off while fueling.

REQUIRED EMPLOYEE AND CONTRACTOR TRAINING

- Train all current drivers and equipment operators and fueling facility employees on this BMP.
- Train all new hires and job transferees who will drive or operate vehicles or equipment on this BMP.
- Conduct refresher training on this BMP for all drivers and equipment operators (employees) as needed.
- All contracts must stipulate that contracted employees are trained in stormwater pollution prevention BMPs.
- Train all employees and contractors who might be involved in cleaning up spills from vehicle fueling on proper clean-up procedures. See *BMP: Spill Clean Up* for details.

REQUIRED MAINTENANCE

- Conduct all regular and preventive maintenance identified in the SPCC Plan or facility maintenance plan.
- Inspect and clean all oil/water separators according to the manufacturer's recommended intervals or according to municipal ordinance.
- Keep ample supplies of spill response equipment and materials available nearby. See "*BMP: Spill Clean Up*" for detailed list of recommended equipment and supplies.
- Inspect all fueling equipment and fuel islands at least daily for leaks, drips, corrosion, wear or damage. Keep a log of these inspections. Repair or replace all faulty equipment promptly.
- For underground storage tanks fitted with non-alarmed leak detection devices, take readings of these devices on a regular basis. State regulations for underground storage tanks will usually specify the reading intervals.

RECORDS

- Keep records of employee and contractor training.
- Keep records of inspections and repairs done on fueling equipment.

REFERENCES

1. Colorado's Phase II Municipal Guidance, October 2001
2. *California Stormwater BMP Handbook*, January 2003
3. *Knoxville (TN) BMP Manual, Activities & Methods*, January 2001
4. *City of Tacoma: Surface Water Management Manual (Vol. IV Source Control BMPs)*, January 2003
5. *Municipal Facility Runoff Control Plan* (City of Lakewood, CO)
6. *Best Management Practices for Industrial Storm Water Pollution Control* (Santa Clara Valley, CA)