## IC20. VEHICLE AND EQUIPMENT WASHING AND STEAM CLEANING

1. Consider using off-site commercial washing and/or steam cleaning businesses, if feasible.
2. Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site.
3. Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.
4. Clearly mark the vehicle and equipment washing/steam cleaning area.
5. Design wash area to properly collect and dispose of wash water and/or effluent generated.
6. If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.
7. Provide trash containers in wash area and empty on a regular basis.
8. Use hoses with nozzles that automatically turn off when left unattended.
9. Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.

OPTIONAL:

10. Use biodegradable, phosphate-free detergents if possible
11. Recycle waste materials, whenever possible
12. If possible, **eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material**

### Pollution Prevention

Consider pollution prevention measures at all times for improving pollution control. Implementation of pollution prevention measures may reduce or eliminate the need to implement other more costly or complicated procedures.

The following pollution prevention principles apply to most industries:

- Affirmative Procurement - Use alternative, safer, or recycled products.
- Redirect storm water flows away from areas of concern.
- Reduce use of water or use dry methods.
- Reduce storm water flow across facility site.
- Recycle and reuse waste products and waste flows.
- Move or cover potential pollution from storm water contact.
- Provide on-going employee training in pollution prevention.

### Best Management Practices

1. **Use off-site commercial washing and/or steam cleaning businesses.** These businesses are better equipped to handle and properly dispose of the wash waters.
2. **Use on-site commercial washing and/or steam cleaning businesses capable of disposing of wastewater off-site.** Mobile cleaning businesses must use a leak proof cover device that will catch and contain all contaminated (i.e. chemical additives such as soaps, solvents, or degreasers are used) wastewater runoff for later disposal in a manner that complies with all city, county, state, and federal codes.

**If washing must occur on-site:**

3. **Designate an impervious indoor or outdoor area to be used solely for vehicle and equipment washing/steam cleaning.** Do not conduct oil changes and other engine maintenance in the designated washing area.
4. **Clearly mark the vehicle and equipment washing/steam cleaning area.**
5. **Design wash area to properly collect and dispose of wash water and/or effluent generated.** This applies when engine cleaning is conducted and when chemical additives, solvents, or degreasers are used.
    - Install sumps or drain lines to collect wash water.
    - Construct a berm around the designated area and grade to collect wash water as well as to prevent storm water runon.

- Use portable containment (such as ground cover devices) and vacuum collection of wastewater.
- Inspect and maintain equipment (such as ground cover devices) regularly to ensure proper and effective functioning.

When engine cleaning is not involved, vehicle washing can be performed using deionized water, purified water, and/or tap water with no additives for wash and rinse purposes. This water may be discharged to the storm drain system provided there is no visible evidence of chemical contamination such as foams, odors, discoloration, etc.

6. **If the area is outdoors, cover the wash area when not in use to prevent contact with rainwater.**
7. **Provide trash containers in wash area and empty on a regular basis.**
8. **Use hoses with nozzles that automatically turn off when left unattended.**

9. **Training**

    1. **Train employees on these BMPs, storm water discharge prohibitions, and wastewater discharge requirements.**
    2. **Train staff on the proper maintenance of the wash area.**
    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.**

**OPTIONAL:**

10. **Use biodegradable, phosphate-free detergents if possible.**
11. **Recycle waste materials, whenever possible**
    - Recycling is always preferable to disposal of unwanted materials.
    - Separate wastes for easier recycling. Keep hazardous and non-hazardous wastes separate, do not mix used oil and solvents, and keep chlorinated solvents separate from non-chlorinated solvents.
    - Label and track the recycling of waste material (e.g. used oil, spent solvents, batteries).
    - Purchase recycled products to support the market for recycled materials.
12. **If possible, eliminate or reduce the amount of hazardous materials and waste by substituting non-hazardous or less hazardous material:**
    - Use non-caustic detergents instead of caustic cleaning for parts cleaning.
    - Use a water-based cleaning service and have tank cleaned. Use detergent-based or water-based cleaning systems in place of organic solvent degreasers.

- Replace chlorinated organic solvents with non-chlorinated solvents. Non-chlorinated solvents like kerosene or mineral spirits are less toxic and less expensive to dispose of properly. Check list of active ingredients to see whether it contains chlorinated solvents.
- Choose cleaning agents that can be recycled.

## References


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.

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).

Stormwater Management Manual for Western Washington. Volume IV Source Control BMPs. Prepared by Washington State Department of Ecology Water Quality Program. Publication No. 99-14. August 2001.

Orange County Stormwater Program. 2001. Mobile Detailing and the Water Quality Act. June.