

# BG-22 Automotive Service – Service Stations



Photo Credit: Geoff Brosseau

## Description

This category includes facilities that provide vehicle fueling services, including self-serve facilities as well as those that provide a car washing facility. Information specific to auto dismantling, body repair, and maintenance is provided in other guide sheets.

## Pollutant Sources

The following are sources of pollutants:

- Fueling,
- Spills,
- Surface cleaning, and
- Air/Water supply.
- Dumpster and trash can areas

Pollutants can include:

- Heavy metals (copper, lead, nickel, and zinc),
- Hydrocarbons (oil and grease, PAHs),
- Toxic chemicals (benzene, toluene, xylene, MTBE),
- Detergents
- Food waste and trash

## Approach

Minimize exposure of rain and runoff to fueling areas by using cover and containment. In and around these areas, use good housekeeping to minimize the generation of pollutants. Make stormwater pollution prevention BMPs a part of standard operating procedures and the employee training program. Provide employee education materials in the first language of employees, as necessary.

## Coverage

These best management practices cover the following activities or areas:

- Fuel dispensing
- Underground storage tanks
- Air/Water supply
- Outdoor waste receptacles
- Car washing facilities



# BG-22 Automotive Service – Service Stations

Retail gasoline outlets will typically have these activities/areas onsite. Outdoor activities/areas are potentially exposed to stormwater runoff, and pollutants can also be transported to the storm drain system via leaks or spills. The best management practices described in this guide are intended to be implemented, monitored, and maintained on a year round basis. Training of employees in good housekeeping measures and spill and leak prevention is critical in preventing discharge of pollutants in stormwater.

## Source Control BMPs

The best management practices are listed by activity or area. Existing Facilities

<p><b>Fuel Dispensing Areas</b></p>	<ul style="list-style-type: none"> <li>❑ Maintain fuel dispensing areas using dry cleanup methods such as sweeping for removal of litter and debris, or use of rags and absorbents for leaks and spills. Fueling areas should never be washed down unless the wash water is collected and disposed of properly.</li> <li>❑ Fit fuel dispensing nozzles with “hold-open latches” (automatic shutoffs) except where prohibited by local fire departments.</li> <li>❑ Post signs at the fuel dispenser or fuel island warning vehicle owners/operators against “topping off” of vehicle fuel tanks</li> <li>❑ Train employees in implementing proper leak and spill prevention and cleanup practices. Major spills require specialized materials and emergency support personnel.</li> </ul>
<p><b>Under-ground Storage Tanks</b></p>	<ul style="list-style-type: none"> <li>❑ Fit underground storage tanks with spill containment and overflow prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.</li> <li>❑ Train employees in implementing proper leak and spill prevention and cleanup practices. Major spills require specialized materials and emergency support personnel.</li> </ul>
<p><b>Facility – General</b></p>	<ul style="list-style-type: none"> <li>❑ “Spot clean” leaks and drips routinely. Leaks are not cleaned up until the absorbent is picked up and disposed of properly.</li> <li>❑ Maintain and keep current, as required by other regulations, a spill response plan and ensure that employees are trained on the elements of the plan.</li> <li>❑ Manage materials and waste to reduce adverse impacts on stormwater quality.</li> <li>❑ Train all employees upon hiring and annually thereafter on proper methods for handling and disposing of waste. Make sure that all employees understand stormwater discharge prohibitions, wastewater discharge requirements, and these best management practices. Use a training log or similar method to document training.</li> <li>❑ Label/stencil drain inlets within the facility boundary to remind employees and customers whether they flow to an oil/water separator, directly to the sewer, or to a storm drain. Labels are not necessary for plumbing fixtures directly connected to the sanitary sewer.</li> <li>❑ Routinely inspect and clean if necessary, storm drain inlets and catch basins within the facility boundary before the beginning of the rainy season (e.g. October 1) each year.</li> </ul>

# BG-22 Automotive Service – Service Stations

<b>Outdoor Waste Receptacle Area</b>	<ul style="list-style-type: none"> <li>□ Spot clean leaks and drips routinely to prevent runoff of spillage.</li> <li>□ Minimize the possibility of stormwater pollution from outside waste receptacles by implementing at least one of the following:               <ul style="list-style-type: none"> <li>✓ Use only watertight waste receptacle(s) and keep the lid(s) closed, or</li> <li>✓ Grade and pave the waste receptacle area to prevent run-on of stormwater, or</li> <li>✓ Install a roof over the waste receptacle area, or</li> <li>✓ Install a low containment berm around the waste receptacle area, or</li> <li>✓ Use and maintain drip pans under waste receptacles</li> </ul> </li> </ul>
<b>Air/ Water Supply Area</b>	<ul style="list-style-type: none"> <li>□ Minimize the possibility of stormwater pollution from air/water supply areas by implementing at least one of the following:               <ul style="list-style-type: none"> <li>✓ Spot clean leaks and drips routinely to prevent runoff of spillage, or</li> <li>✓ Grade and pave the air/water supply area to prevent run-on of stormwater, or</li> <li>✓ Install a roof over the air/water supply area, or</li> <li>✓ Install a low containment berm around the air/water supply area.</li> </ul> </li> </ul>
<b>Car Washing Facility</b>	<ul style="list-style-type: none"> <li>□ Install a wash water treatment system; do not discharge wash water directly to the storm drain.</li> <li>□ Minimize the possibility of stormwater pollution from car washing facilities by implementing the following:               <ul style="list-style-type: none"> <li>✓ Grade and pave the car wash area to prevent run-on of stormwater,</li> <li>✓ Install a roof over the car wash area,</li> <li>✓ Slope the car wash area toward the wash water treatment system, not the storm drain, and</li> <li>✓ Train employees in implementing proper leak and spill prevention and cleanup practices.</li> </ul> </li> </ul>

## Treatment Control BMPs

If treatment controls are installed at the facility, see Section 4 of this Handbook for information on inspecting and maintaining the BMPs.

For information on designing treatment controls, see Section 5 of the New Development and Redevelopment Planning Handbook.

## More Information

### Booklets, Checklists, Fact Sheets, and Pamphlets

Alameda County Clean Water Program, 2012, *Tips for a Cleaner Bay: How Your Vehicle Service Facility Can Prevent Stormwater Pollution*. Available on-line at: <http://www.cleanwaterprogram.org/uploads/IIDC%20Vehicle%202012.pdf>.

California Department of Toxic Control Substances, undated website, *California Green Station Program, Vehicle Service and Repair (VSR)*. Includes fact sheets, training modules, and other resources. Available on-line at <https://dtsc.ca.gov/PollutionPrevention/VSR.cfm>.

# BG-22 Automotive Service – Service Stations

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California Department of Toxic Substances Control, 2001, *Case Studies in Aqueous Parts Cleaning*. Available on-line at:

<https://dtsc.ca.gov/pollutionprevention/vsr/upload/casestudiesauto02.pdf>.

Los Angeles County, Undated pamphlet, *Stormwater Best Management Practices (BMPs)-Automotive Maintenance and Car Care*. Available on-line at:

[http://www.lacitysan.org/watershed\\_protection/pdfs/autobmp.pdf](http://www.lacitysan.org/watershed_protection/pdfs/autobmp.pdf).

Sacramento Stormwater Management Program, Undated, *Best Management Practices for Industrial Storm Water Pollution Control*. Available on-line at:

<http://www.waterresources.saccounty.net/stormwater/documents/industrial-BMP-manual.pdf>.

San Bernardino County Stormwater Program, Undated pamphlet, *Gas Station –Illegal Discharge*. Available on-line at: <http://sbcountystormwater.org/PDF/SBC-Gas-Station-Handout.pdf>.

San Bernardino County Stormwater Program, Undated pamphlet, *Stormwater Pollution Prevention Auto Maintenance*. Available on-line at:

[http://sbcountystormwater.org/PDF/fact\\_sheets/Fact\\_sheet\\_Auto.pdf](http://sbcountystormwater.org/PDF/fact_sheets/Fact_sheet_Auto.pdf).

San Diego North County Stormwater Program in conjunction with Los Angeles Stormwater Program. BMP Shop Poster: *Stormwater Protection is in Good Hands, Yours*. Available on-line at:

[http://www.sdcounty.ca.gov/dpw/watersheds/watershedpdf/automotive\\_poster.pdf](http://www.sdcounty.ca.gov/dpw/watersheds/watershedpdf/automotive_poster.pdf).

USEPA, 1999, *Best Environmental Practices for Auto Repair: Aqueous Part Cleaning*. Available on-line at <http://www.epa.gov/region9/waste/p2/autofleet/autoclean.pdf>.

USEPA, 1999, *Auto Repair and Fleet Maintenance Pollution Prevention: Auto Repair Fact Sheets*. Accessed at <http://www.epa.gov/region9/waste/p2/autofleet/factauto.html>.

USEPA, 1999, *Profit Through Prevention, Best Environmental Practices for Fleet Maintenance* <http://www.epa.gov/region09/p2/autofleet/>.

## References

Alameda County Clean Water Program, 2012, *Tips for a Cleaner Bay: How Your Vehicle Service Facility Can Prevent Stormwater Pollution*. Available on-line at:

<http://www.cleanwaterprogram.org/uploads/IIDC%20Vehicle%202012.pdf>.

California Coastal Commission, 2002, *Model Urban Runoff Program Appendix 4W BMPs for Vehicle Service Facilities* Available on-line at:

<http://www.coastal.ca.gov/la/docs/murp/4w.pdf>.

City of Santa Cruz, Revised 2010. *Vehicle Service Facilities: Best Management Practices – Chapter 1 of Best Management Practices Manual for the Storm Water Program*. Available on-line at:

<http://www.cityofsantacruz.com/Modules/ShowDocument.aspx?documentid=5989>.

USEPA, Undated website, *Auto Repair and Fleet Maintenance Pollution Prevention*. Includes fact sheets and videos. Available on-line at:

<http://www.epa.gov/region09/p2/autofleet/>.