

VEHICLE SERVICE FACILITIES

Best Management Practices

Chapter 1 of the Best Management Practices Manual for the
City's Storm Water Management Program



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Introduction

In the City of Santa Cruz, water in streets, gutters, and storm drains flows directly to local creeks, the San Lorenzo River, or Monterey Bay without any treatment. So, when vehicle fluids get spilled, leaked or washed into the street, they can harm our aquatic environment. Wash water used in vehicle cleaning often carries dirt, soap and degreasers, which also damage sensitive creek habitats and finally end up polluting our bay and ocean. In fact, discharging any kind of polluting substance into a storm drain or any place where it will run off into a storm drain is against the law.

In order to reduce the amount of pollutants reaching local storm drains, the City developed “Best Management Practices” (BMPs) for various types of businesses. All vehicle service facilities, including auto repair shops, gas stations, car and truck rental companies, auto body repair shops, car wash and detail businesses, and vehicle dealerships, are required to abide by the following Mandatory BMPs. “Recommended BMPs” have been included to help achieve compliance with the mandatory Best Management Practices.

Mandatory Best Management Practices

Shop Practices

1. **Wastewater from parts cleaning, engine cleaning, drive train and undercarriage cleaning, and radiator flushing must be contained and may not be discharged, directly or indirectly, into the storm drain or the sanitary sewer.** Vehicle fluids, chemicals, hazardous materials, and floor cleaning wastewater may not be discharged, directly or indirectly, to the storm drain system.
2. **All indoor floor drains that are connected to the storm drain system must be permanently plugged.**
3. **Floor drains in work areas are prohibited.** The exception is if the work area is used exclusively for washing of vehicle exteriors. In that case, the floor drain may be connected to the sanitary sewer.
4. **Drip pans and adequate spill prevention and clean-up materials must be kept on-site and easily available for use.**
5. **Mop water from floor cleaning must be discharged to the sanitary sewer. The following procedure is mandatory for shops that mop their floors:**
 - Clean up spills with rags or dry absorbent.
 - Sweep the floor.
 - Mop floor and discharge mop water to the sanitary sewer via a sink or toilet.

Outdoor Practices

6. **When changing, adding, or draining vehicle fluids outside, all work must be conducted within areas where spills will be contained and cleaned up immediately.**
7. **Small leaks and spills may be cleaned up using minimal amounts of water if the following procedure is used:**
 - Use dry cleanup methods to absorb leaks and spills.
 - Sweep up litter and debris.
 - If necessary, spot clean or mop with minimal amounts of water and dispose of water via the sanitary sewer.
8. **Dry methods must be used to clean fueling islands and adjoining areas.** Dry methods include using rags or absorbents, sweeping, and vacuuming.
9. **Drip pans and open containers containing vehicle fluids must not be left unattended unless they are covered securely and within secondary containment.**
10. **Exterior vehicle washing using detergents or cleansers must be conducted in a City approved wash pad area.** The wash pad area must be sloped and bermed to prevent discharge to the storm drain and to prevent excess storm water from running to the pad area drain. The City may require that the wash pad area be covered. Treatment may be required prior to discharge to the sanitary sewer system.
11. **Discharge of vehicle wash water to the storm drain is limited to water from the washing of vehicle exteriors with plain water only,** except that auto body repair businesses may not discharge any wash water to the storm drain system.
12. **All waste receptacles must be watertight and used with secured lids.**
13. All paved areas must be swept and outdoor sumps and catch basins must be cleaned between September 1st and October 15th each year.
14. **Sidewalks, gutters, plazas, alleyways, outdoor eating areas, steps, building exteriors, walls, and driveways** may be cleaned with water provided that one of the following methods is used:

Method A

- a) Clean up spills using dry absorbent materials;
- b) Next, sweep up debris, trash, cigarette butts, dirt, leaves, and other particles;
- c) Then, mop with minimal amounts of water only—**no soap or cleansers.**

or

Method B

- a) First, clean up spills using absorbent materials;
- b) Next, pick up large debris;
- c) Then, place a screen in the nearest downstream catch basin. The screen must be made of expanded metal and have a metal hem on the perimeter. The mesh size must be a 1/2 inch size or less. The screen must be sufficiently large to cover the entire catch basin;
- d) Mop or hose down (using a regular garden hose) the area without soap or cleansers. This method does not apply if pressure washing or steam cleaning equipment is used, or if hand scrubbing is conducted;
- e) Lastly, remove the screen as soon as the wash water has drained through. Screens may not be left in the catch basin in between cleaning events. The screen should be cleaned after each use and the debris discarded in the trash.

or

Method C

- a) Pressure washing, steam cleaning, and hand scrubbing may be conducted if the wastewater is collected and disposed of into the sanitary sewer. **This wastewater may not runoff to the street or discharge to the storm drain system.**

- 15. **Wastewater from the cleaning of garbage dumpster areas and areas where trash is stored or contained** may not be discharged to or allowed to reach the street or storm drain system. In addition, the wastewater may not be left as “standing” water. This wastewater must be discharged to the sanitary sewer in accordance with the Sewer Use Ordinance. Also, **leakage from dumpsters or trash containers** may not be discharged to or allowed to reach the storm drain system.
- 16. Wastewater from the cleaning of **parking lots, loading docks and delivery areas** may not be discharged to the street or storm drain system, or left as “standing” water. Wash water from these areas must be discharged to the sanitary sewer in accordance with the Sewer Use Ordinance. Loading dock and delivery areas must be kept clean and free of food waste and debris at all times.
- 17. Cleaning solvents **may not be used outside to clean ground surfaces, such as sidewalks, walkways, plazas, patios, driveways, loading docks, delivery areas, or dumpster areas, unless the solvent is cleaned up and properly disposed.**

Other Practices

- 18. **All hazardous material and waste storage regulations must be complied with.**
- 19. **A spill response plan must be maintained and kept current.** The spill response plan shall be made available to City inspectors upon request.

20. **Storm drains** must be kept free of leaves, dirt, and debris.
21. **All employees are required to be trained on Best Management Practices upon hiring and annually thereafter.** A log of all training events, during the past year, must be kept on-site and made available to the City upon request.

Recommended Best Management Practices

Housekeeping

Keep a clean shop at all times!

- Clean up leaks, drips, and spills immediately without using water. Use dry absorbents such as rags, kitty litter, or a wet vacuum. Remember, drips and leaks are not “cleaned up” until the absorbent is picked up and disposed of properly.
- Sweep or vacuum shop floors instead of hosing or mopping with water.
- Remove unnecessary hoses to discourage employees from hosing down floors and outdoor paved areas.
- Collect metal filings, dust, and paint chips from grinding, shaving, and sanding and dispose of properly. Wet mop the floor in machining areas only after all metal particles have been removed.
- Collect brake pad dust and dispose of properly. Never discharge brake pad dust to the storm drain or sanitary sewer.

General Shop Practices

Try to be a “zero discharger!”

- Eliminate or plug all floor drains if possible.
- Use drip pans under leaking vehicles to capture fluids.
- Provide secondary containment in your shop and all storage areas for liquid products and wastes.
- Consider using an oleophilic (oil absorbing) mop for cleaning up oil leaks and spills. This enables the oil to be more easily recycled.

Changing Oil and Other Fluids

Never pour vehicle fluids into sinks, toilets, floor drains, outside storm drains, or in the garbage!

- Change vehicle fluids indoors and only over nonporous surfaces.
- Immediately transfer drained fluids to a designated waste storage area.

Outside Work and Cleaning

Avoid working outside, except for vehicle washing, whenever possible!

- Surround outside work areas with a berm or grading to prevent runoff. If necessary, absorbent socks may be used to berm an area temporarily. Consider installing a roof to protect the work area from rain.
- Do not work over asphalt or blacktop because these surfaces are absorbent.
- If a wrecked vehicle is delivered to your shop, place drip pans under the vehicle as soon as possible.
- Drain all fluids from wrecked vehicles and “parts” cars into appropriate containers as soon as possible. Be sure to park wrecked vehicles and “parts” cars over concrete, not asphalt or dirt.

Cleaning Engines and Parts, and Flushing Radiators

Never discharge wastewater from engine and parts cleaning or radiator flushing to the storm drain or sanitary sewer!

- Designate specific areas or service bays for engine, parts, or radiator cleaning. Do not wash or rinse parts outdoors.
- Use self-contained sinks and tanks when working with solvents and aqueous cleaners.
- Keep solvent sinks and tanks covered when not in use. Remember, neither solvents nor waste aqueous cleaners may be discharged to the storm drain or sanitary sewer.
- Rinse and drain parts over a solvent sink or tank so that the solvent will not drip onto the floor. Use drip pans to catch excess solvent and divert it back to a sink or tank.
- Allow parts to dry over the hot tank. If rinsing is required, rinse over the tank as well.
- Regularly inspect degreasing solvent sinks for leaks and make necessary repairs immediately.
- Collect and reuse parts cleaning solvents and the water used in flushing and testing radiators. When reuse is no longer possible, these solutions are considered hazardous waste (unless otherwise determined) and must be disposed of properly.
- Avoid soldering over drip tanks. Sweep up drips and recycle or properly dispose.

Vehicle Washing

Never discharge vehicle wash water to the street or storm drain if detergents or cleaners are used. Even biodegradable soaps are toxic to many forms of aquatic life!

- Minimize the use of acid-based wheel cleaners. If you do use them, be sure that the rinse water does not runoff to the storm drain. If the rinse water is discharged to the sanitary sewer, it may need to be treated (to comply with pH and other limits) prior to discharge.

- When removing the protective coating (i.e., cosmoline) from a new car, do not discharge any materials to the storm drain. If a solvent is used, the waste fluids may not be discharged to the sanitary sewer either.

Auto Body Repair and Painting

Vehicle wash water from an auto body repair or painting shop may never be discharged or allowed to flow into the storm drain!

- Conduct body repair, sanding, and painting work indoors.
- When receiving damaged vehicles, inspect for leaks. Use drip pans if necessary.
- When wet sanding, place a pan under the panel being sanded to catch drips. Pour the collected fluid back into the wet sanding bucket.
- Clean up wet sanding drips with a rag, or let the drips dry and then sweep or vacuum.
- Sweep shop floors instead of mopping.
- Do not use hose-off degreasers when cleaning auto body parts before painting.
- Minimize wastes by carefully calculating paint needs based on surface area and by using the proper sprayer cup size.
- Do not use water to control over-spray or dust in the paint booth unless the water is collected and treated prior to discharge into the sanitary sewer.
- Clean spray guns in a self-contained cleaner. Recycle the cleaning solution when it becomes too dirty. Never discharge paint gun cleaning wastes to the sanitary sewer or storm drain.

Spill Control and Response

The best spill control is prevention!

- Ensure that all employees are familiar with the spill response plan. Spills are easier to clean up when quickly contained! Ensure that employees know how to use spill response equipment and materials, and train them on personal safety.
- Keep a portable berm and extra drain pans readily available for immediate spill response. If you have a storm drain on your property, keep a large rubber mat on hand that can be placed on top of the storm drain in case of a spill.
- Keep rags and absorbent materials easily accessible from anywhere in the shop. Recycle used cleaning rags through an industrial laundry.
- Minimize the distance between waste collection points and storage areas. Keep lids and containers secured when transferring wastes.
- Check floor drains to be sure that they are not connected to the storm drain system.

Chemicals, Materials, and Waste Storage

Keep waste fluids separate unless otherwise advised by your waste hauler. Combining wastes generally reduces your ability to recycle and can greatly increase your disposal costs.

- Keep chemicals, materials, and wastes stored indoors. If stored outside, keep within secondary containment and protected from rain and runoff.
- Store bulk chemicals within secondary containment whenever possible. Hazardous materials and wastes, including oil and antifreeze, must be stored within secondary containment.
- Keep storage areas clean and dry. Inspect storage areas regularly for leaks and spills.
- Keep containers lids on securely.
- Hazardous wastes must be labeled and stored according to hazardous waste regulations. Call the County Department of Environmental Health, at 454-2022, for details.
- Store batteries within secondary containment. Locate batteries either on the floor or on the lower levels of secured shelving for earthquake protection.

Outdoor Waste Receptacle Area

Wastewater from the cleaning of garbage dumpster areas and areas where trash is stored or contained may not be discharged to or allowed to reach the street or storm drain system.

- Use watertight receptacles and keep the lids on securely.
- Spot clean leaks and drips to prevent runoff, particularly during the rainy season.

Purchasing, Recycling, and Disposal

Purchase the least toxic products whenever you can!

- Purchase reusable or recyclable products whenever possible. Reduce or eliminate the hazardous materials that you use.
- Consider switching to water based cleaners instead of using chlorinated solvents. However, used water based cleaners may not be discharged to the storm drain or sanitary sewer. Both water based cleaners and solvents must be recycled or disposed of off-site.
- Consider buying rags for spill cleanup, rather than absorbents, because rags may be cleaned by an industrial laundry and reused. Saturated absorbents, in general, must be disposed of as hazardous waste.

Education and Training

Ensure that all your employees understand and follow Best Management Practices. Mistakes and misunderstandings can lead to violations and costly cleanups!

- All employees are required to be trained on Best Management Practices upon hiring and annually thereafter.
- Educate your customers and let them know that you take extra measures to be an environmentally proactive business.
- Post emergency telephone numbers to the City's Fire Department and Wastewater Treatment Facility.

Fire Department.....911

Wastewater Treatment Facility.....420-6050

- Post signs above sinks prohibiting the discharge of vehicle fluids and wastes.
- Stencil or post signs near all storm drains located on your property with a message—*"No Dumping—Flows to Bay."*
- Take advantage of **FREE** educational materials provided by the DTSC/EPA. These materials include Best Management Practices and worksheets, which can be found on the Environmental Protection Agency website at:

http://www.epa.gov/region09/cross_pr/p2/autofleet/factauto.html.

You can also ask your City Environmental Compliance Inspector about obtaining additional materials.

**Call the City's Environmental Compliance Inspectors
for more information at:
831-420-6050**

Please remember to contact the City's Planning Department, at 420-5100, prior to making any plumbing changes!