

**For additional information contact:**

Napa County  
Department of Environmental Management  
(707)-253-4471  
<http://co.napa.ca.us/departments/environment/>

California Department of Fish and Game  
(916) 445-0411  
<http://www.dfg.ca.gov/>

National Storm water BMP'S  
<http://www.bmpdatabase.org/docs.html>

St. Helena Wastewater Treatment Plant  
<http://city.ci.st-helena.ca.us/>  
(707) 967-2878

U.S. Environmental Protection Agency  
(202) 564-9545  
<http://cfpub.epa.gov/npdes/stormwater/menuofbmps/>

State Water Resources Control Board  
(916) 341-5250  
<http://www.swrcb.ca.gov/>

Napa Sanitation District  
(707) 258-6000

Yountville Wastewater Treatment Plant  
(707) 944-2988

Calistoga Wastewater Treatment Plant  
<http://www.ci.calistoga.ca.us/pw/>  
(707) 942-2847

California Department of  
Toxic Substances Control  
(800) 728-6942  
<http://www.dtsc.ca.gov/>

*Remember, storm drains in Napa County are NOT connected to the sanitary sewer system. Anything that is allowed to reach the gutter or storm drain system will eventually reach the Napa River or your local waterways. Be kind to our environment and do your part by following the BMP's above!*



TRENT CAVE, R.E.H.S.  
Director

## NAPA COUNTY

## DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

1195 THIRD STREET, ROOM 101  
NAPA, CALIFORNIA 94559-3082  
(707) 253-4471 FAX(707) 253-4545

## Industrial Facilities Best Management Practices (BMP's)

This guidance presents BMP's to prevent the discharge of pollutants to the storm drainage system from industrial facilities.

Fish and Game Codes 5650 states that it is unlawful to deposit, permit to pass into, or place where it can pass into the waters of this state any of the following:

- (1) Any substance or material deleterious to fish, plant life or bird life.
- (2) Any petroleum, acid, coal or oil tar, lampblack, aniline, asphalt, bitumen, or residuary product of petroleum, or carbonaceous material or substance.
- (3) Any refuse, liquid or solid, from any refinery, gas house, tannery, distillery, chemical works, mill or factory of any kind.
- (4) Any sawdust, shavings, slabs or edgings.
- (5) Any factory refuse, lime or slag.
- (6) Any cocculus indicus.

### Sources of Pollutants

There are several activities that can potentially cause the discharge of pollutants to the storm drainage system from these facilities. These activities of concern include:

- |                                     |  |
|-------------------------------------|--|
| ✓ Cleaning engines, parts,          | ✓ Fuel dispensing                        |
| ✓ Flushing radiators                | ✓ Spill cleanup                          |
| ✓ Landscaping & grounds maintenance | ✓ Surface cleaning / Parking lot washing |
| ✓ Changing oil and other fluids     | ✓ Vehicle washing                        |
| ✓ Body repair and painting          | ✓ Facility maintenance                   |

## Pollutants of Concern

Some of the pollutants of concern from these facilities are:

- ✓ Metals (copper, zinc, chromium, nickel, and lead)
- ✓ Oil and grease
- ✓ Gasoline (e.g. Polyaromatic Hydrocarbons (PAHs) and Methyl Tertiary-Butyl Ether (MTBE))
- ✓ Toxic chemicals in cleaning products, solvents, and pesticides

Best management practices are common sense, good housekeeping measures that can be implemented at reasonable effort and cost to the facility owner/operator. BMP's are mainly related to operational practices, however structural controls or other physical improvements may be imposed at new facility construction, or remodel.

## Facility Maintenance and Management Practices

### *Keeping a Clean Shop*

- ✓ Use drip pans under leaking vehicles to capture fluids.
- ✓ Regularly sweep or vacuum the shop floor and other paved surfaces at your facility. Use mopping as an alternative to hosing down or washing work areas. If mopping is used to clean shop floors:
  - Spot clean any spilled oil or fluids using absorbents or rags.
  - Use dry cleanup methods: Sweep the floor using absorbents.
  - After steps 1 and 2 above (if mopping is still needed), mop and dispose of mop water to the sanitary sewer.
  - Do not pour mop water into the paved areas, street, gutter, or storm drain.
- ✓ Remove unnecessary hoses to discourage washing down floors and outside paved areas.
- ✓ Collect all metal filings, dust, and paint chips from grinding, shaving, and sanding, and dispose of the waste properly. Never discharge these wastes 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. Keep sinks and tanks covered when not in use.
- ✓ Inspect degreasing solvent sinks regularly for leaks, and make necessary repairs immediately.
- ✓ Avoiding soldering over drip tanks. Sweep up drippings and recycle or dispose as hazardous waste.
- ✓ Rinse and drain parts over the solvent sink or tank, so that solvents will not drip or spill onto the floor. Use drip boards or pans to catch excess solvent solutions and divert them back to a sink or tank.
- ✓ Allow parts to dry over the hot tank. If rinsing is required, rinse over the tank as well.
- ✓ Collect and reuse parts cleaning solvent solutions and water used in flushing and testing radiators. When reuse is no longer possible, these solutions are hazardous wastes unless otherwise determined, and must be disposed of properly.
- ✓ Never discharge cleaning solutions used for engines or parts into the sanitary sewer system without adequate treatment. Most facilities have these solutions hauled off-site as hazardous waste because of the permits necessary for on-site treatment.
- ✓ Rinse water may only be discharged to the sanitary sewer after adequate treatment and approval by the sewage treatment plant.
- ✓ Never discharge wastewater from steam cleaning, or engine/parts cleaning to a street, gutter, storm drain.

## Washing Cars and Other Vehicles

### *Regular Activity*

- ✓ If car washing is a central activity of your business, the most desirable option is to treat and recycle the wash water.
- ✓ Designate a vehicle washing area and wash cars and trucks only in that area. This "wash pad" should be bermed to prevent discharges to storm drains and should discharge to the sanitary sewer after adequate treatment and approval of the sewage treatment plant.
- ✓ Cover any outside wash pad to reduce the amount of rainwater reaching the sanitary sewer. Consult your local sewage treatment plant for guidance.

### ***Education and Training***

- ✓ Train all employees upon hiring and annually thereafter, on personal safety, chemical management, and proper methods for handling and disposing of waste. Make sure that all employees understand storm water discharge prohibitions, wastewater discharge requirements, and these best management practices. Use a training log or similar method to document training.
- ✓ Label outdoor drains by paint/stencil (or equivalent) to indicate whether they flow to an on-site treatment device or to a storm drain. Labels are not necessary for plumbing fixtures directly connected to the sanitary sewer.

### **Spill Cleanup**

#### ***The Best Spill Control is Prevention***

- ✓ 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
- ✓ Minimize the distance between waste collection points and storage areas.
- ✓ Contain and cover all solid and liquid wastes – especially during transfer.
  
- ✓ Purchase and maintain absorbent materials in accordance with local regulations and procedures for containment and cleanup of different spills, and make sure they are easily accessible anywhere in the shop. Saturated absorbents generally must be disposed of as hazardous waste.
- ✓ “Spot clean” leaks and drips routinely. Leaks are not cleaned up until the absorbent is picked up and disposed of properly.
- ✓ Check floor drains to ensure that they are not connected to or discharge to the storm drain system

#### ***Cleanup***

- ✓ First, stop any spill at its source.
- ✓ Do not clean up spills by hosing down wash water into the gutter or a storm drain.
- ✓ If the spill could enter a storm drain, protect the drain with sandbags, absorbent rags, or a pile of dirt. You can temporarily seal the storm drain with plastic sheeting.

- ✓ If wet cleaning (including high-temperature or high pressure washing) is required, dry clean first and then mop (or if it is absolutely necessary, wash) and collect water. If outdoors, block storm drain before applying water. Mop up or wet-vacuum water, and dispose to sink or in-door drain, with approval from the local sanitary sewer agency.

### **Changing Oil and Other Fluids**

- ✓ Whenever possible, change vehicle fluids indoors and only on floors constructed of non-porous materials. Avoid working over asphalt and dirt floors – surfaces that absorb vehicle fluids.
- ✓ If vehicle fluids must be removed outdoors, always use a drip pan. Prevent spills from reaching the street or storm drain by working over an absorbent mat and covering nearby storm drains, or working in a bermed area. If necessary, you can use absorbent socks to create a bermed area.
- ✓ When draining fluids into a drain pan, place a larger drip pan (e.g., 3' x 4') under the primary drain pan to catch any spilled fluids.
- ✓ Transfer fluids drained from vehicles to a designated waste storage area as soon as possible. Drain pans and other open containers of fluids should not be left unattended unless they are covered and within secondary containment.
- ✓ Store waste containers of antifreeze and oil within secondary containment. Antifreeze and waste oil should be stored separately and recycled, or disposed of as hazardous waste.
- ✓ Never pour vehicle fluids or other hazardous wastes into sinks, toilets, floor drains, outside storm drains, or in the garbage. These substances should be kept in designated storage areas until recycled or safely disposed of.
- ✓ Drain fluids from leaking or wrecked vehicles as soon as possible, to avoid leaks and spills.

### **Cleaning Engines and Parts, and Flushing Radiators**

- ✓ Do not allow discharges from engine cleaning and flushing of radiators to reach the sanitary sewer and storm drains. Use a licensed service to haul and recycle or dispose of wastes
- ✓ Steam cleaning of engines must be done in a closed-loop water recycling system. No steam cleaning water may be discharged to the sanitary sewer or the storm drain.

- ✓ Acid-based wheel cleaners and other specialized cleaners may be prohibited or require additional treatment before discharge to the sewer.

### ***Occasional Activity***

- ✓ Even biodegradable soap is toxic to fish and wildlife. Whenever possible, take vehicles to a commercial car wash.
- ✓ If soap is used in washing, the wash water must be collected and discharged, preferably with treatment, to the sanitary sewer. This water cannot be discharged to a storm drain.
- ✓ Never rinse spray-on acid-based wheel cleaners where rinse water may flow to a street, gutter, or storm drain.

### **Washing New Vehicles**

- ✓ If cleaning the exterior of new vehicles with water only, the discharged water may go to the storm drain directly unless the vehicle has been coated.
- ✓ Always protect the storm drains from solvents used to remove protective coatings from new cars. Discharges of these solvents to the sanitary sewer must receive adequate treatment and approval of the sewage treatment plant.

### **Body Repair and Painting**

- ✓ Whenever possible, conduct all body repair and painting work indoors or under cover.
- ✓ When receiving damaged vehicles, inspect for leaks. Use drip pans if necessary.
- ✓ When cleaning auto body parts before painting, do not use hose-off degreasers. Brush off loose debris and use rags to wipe down parts.
- ✓ Use dry cleanup methods such as vacuuming or sweeping to clean up dust from sanding metal or body filler. Debris from wet sanding can be allowed to dry overnight on the shop floor, then swept and vacuumed. Liquid from wet sanding should not be discharged to the storm drain.
- ✓ Minimize waste paint and thinner by carefully calculating paint needs based on surface area and using the proper sprayer cup size.
- ✓ Do not use water to control over spray or dust in the paint booth unless you collect this wastewater. This water should be treated before discharge into the sanitary sewer system.

- ✓ Clean spray guns in a self-contained cleaner. Recycle the cleaning solution when it becomes too dirty to use. Never discharge cleaning waste to the sanitary sewer or storm drain.

### **Fuel Dispensing**

- ✓ 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 may never be washed down unless dry cleanup has been done and the wash water is collected and disposed of properly. Disposal of wash water to the sanitary sewer must receive adequate treatment and approval of the sewage treatment plant.
- ✓ Fit underground storage tanks with spill containment and overfill prevention systems meeting the requirements of Section 2635(b) of Title 23 of the California Code of Regulations.
- ✓ Fit fuel dispensing nozzles with “hold-open latches” (automatic shutoffs) except where prohibited by local fire departments.

### **Parking Lots**

- ✓ Littering in parking lots produces parking lot pollution. Signs prohibiting littering, as well as conveniently located trashcans, can help to reduce this problem.
- ✓ Spot clean by applying absorbent materials to spilled or automotive or similar fluids (i.e., gasoline, oil, antifreeze). Absorbents can be used in any parking lot where leaks are observed, on wet areas or in frequently used stalls.
- ✓ Saturated absorbent material should be collected in approved disposal containers, and disposed of properly. In this jurisdiction, oil-soaked absorbent is considered a hazardous waste. Contact the Pollution Prevention team at 253-4471 for information on disposal of such waste.
- ✓ Inspect and clean if necessary, storm drain inlets and catch basins within the property boundary before October 1 each year. Inlet cleaning is usually conducted using one of two methods, manual cleaning or by vacuum truck.
- ✓ Manual cleaning is the removal of debris and sediment using shovels, buckets, etc. Manual cleaning is recommended for a few (5 or less) small sized inlets (approximately 3' x 3' x 3').
- ✓ For sites with greater than 5 small inlets or large sized inlets, the vacuum truck method should be used. The vacuum truck method includes manual removal of debris (trash, branches, etc.) followed by removal of sediment and/or water with a vacuum truck. A vacuum truck company in your area can be found in the Yellow Pages under Sewer Contractors or Pumping Contractors.