

# Preventing Storm Drain Pollution

## Guidelines for Commercial and Light Industrial Facilities



For more information about  
Stormwater Pollution Prevention  
1-866-WATERSHED  
[www.MyWatershedWatch.org](http://www.MyWatershedWatch.org)



# Your Business and the Bay

## What's the Connection?

Whether your business is two blocks or twenty miles from the water, it has two connections to the San Francisco Bay (Bay).

1. Indoor drains, such as sinks, toilets and most floor drains, convey wastewater through the sanitary sewer system to a treatment plant where the water is treated before it is discharged into the Bay.
2. Outside, rainwater enters the storm drains system, which flows directly into local creeks and the Bay, with ***no filtration or water treatment***. Water that flows over roads and parking surfaces, buildings, exposed raw and waste materials, vehicles, and equipment (i.e., runoff) picks up pollutants, such as oil, grease, cleaning compounds, pesticides, paint, and litter. Pollutants that enter the storm drain system can be toxic to fish, wildlife and people.



*Sanitary sewer drain flows to treatment plant.*



*Only rain should flow down the storm drain. Storm drains flow directly to creeks and the Bay.*

This booklet will provide instruction on when to contact your local water treatment plant for information about what can and cannot go to the sanitary sewer.

## Why It Matters

Rain and wash water flowing from your business to the storm drain can carry all sorts of pollutants such as soap, pesticides, cleaning compounds, coolants, degreasers, automotive fluids, paint, oil, trash and other materials. Even products labeled “nontoxic” or “biodegradable” can be harmful to sensitive aquatic ecosystems. Polluted runoff is harmful to fish and wildlife. It can harm human health and the environment.

The soap, coolant, or oil flowing into the storm drain from your individual property may not seem like a big deal, but when commercial and light industrial facilities across the Santa Clara Valley fail to clean up their work sites, pollutants end up in the Bay, creating a major problem in our water bodies. In fact, small businesses and residents are major contributors of local stormwater pollution, and have become the primary source of pollutants to the Bay.

### ***It’s Also Against the Law!***

*If your business allows anything other than uncontaminated rain into the storm drain, you could be cited and held liable under federal, state and local regulations.*



## Protect Your Business: Do the Right Thing

By following these guidelines, and making sure that your employees and contractors do too, you can help prevent storm drain pollution and keep your business in compliance. You’ll also help protect the Bay’s ecosystem, and the plant and animal life that it supports, for future generations.

# Material Storage

Prevent material and waste from coming into contact with rain and runoff, and reduce the risk of material discharging to a storm drain (e.g., from leaks, spills or wind).

- Store materials indoors, if possible.
- If stored outdoors, store materials:
  - in a facility with a permanent roof and side protection such as walls or curtains;
  - in a fully enclosed container; or
  - off the ground and covered.
- Use secondary containment when storing fluids outside. Keep container lids, caps, and openings closed when not in use.
- As a temporary storage option, use a tarp or plastic sheet to cover materials exposed to rainwater.
- Store all items as far as possible from storm drain inlets.
- Replace or repair leaky containers. Place drip pans or absorbent materials under leaky containers until they can be repaired and properly dispose of spent absorbent.



## Loading Docks

- Pick up litter around loading docks regularly.
- Keep absorbent materials nearby to clean up or contain spills promptly.
- If you routinely handle large volumes of liquids, your permitting agency may require that you install an emergency shut-off valve or storm drain plug that can be opened and closed in the nearest storm drain inlet in case of spills.

## Waste Storage

- Close trash and recycling dumpster lids, and clean up surrounding area.
- Do not overfill dumpsters. Increase trash pick-up service if there is overflow.
- Clean up all spills and leaks immediately using dry cleanup methods. Replace or repair leaking dumpsters.
- When available, keep dumpsters inside the enclosure when not being serviced.



For information on hazardous materials and waste storage, contact your local fire department or the [Santa Clara County Department of Environmental Health, Hazardous Materials Compliance Division](#) at **(408) 918-3400**.

# Spill Prevention and Cleanup

The majority of pollution that flows off a site can usually be avoided by taking precautions to prevent spills and cleaning spills up promptly if they do occur.

- Exercise care and planning to avoid potential spills, especially when handling liquids and powders.
- Maintain a regular inspection and repair schedule to prevent leaks from equipment and storage containers.
- Provide employees and contractors with absorbent materials for spill containment and cleanup. Keep spill prevention and cleanup materials in a location that is easy to find and access.



- Keep a supply of storm drain covers or plugs on hand. Make sure employees know where they are stored and how to use them. Keep these materials in a high profile location.
- Clean up spills immediately with a spill absorbent material. As soon as the spill is absorbed, sweep up saturated absorbents and dispose of properly.



- Small businesses should contact the **Conditionally Exempt Small Quantity Generator (CESQG) Program** at **(800) 207-8222** or **www.hhw.org** to find out if they can dispose of hazardous waste for a small fee.
- For more information on proper disposal at larger facilities, contact the **Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division** at **(408) 918-3400**.

## Storm Drain Maintenance

Show your commitment as a clean business and to a healthy Bay by maintaining the storm drain inlets on your property.

- Locate and label all storm drain inlets on your business site. To receive free “No Dumping! Flows to Bay” storm drain stencils, call **(866) WATERSHED**.
- Sweep up debris from parking lots and other paved areas regularly.
- Clean out all storm drain inlets on your property with a vacuum or shovel at least twice a year—just before the start of the rainy season and after the first major rain.



# Storm Drain Inlet Protection

Depending on your needs, block or cover storm drain inlets near areas where cleaning, construction, or other activities could potentially spill water or pollutants into the storm drain. Search online for products that filter water or restrict its flow. Examples include:



**Gravel bags** — These are typically placed around storm drain inlets or used as dams to hold or redirect flow. If filling your own bags, make sure to use clean gravel. Depending on the fabric used for the bag, these will filter and/or hold back water.



**Wattles** — Filled with straw, compost or an absorbent, flexible wattles can be placed and contoured where needed to slow and filter water.



**Mats** — Rubber mats may be placed over storm drains to temporarily blocking water from flowing into the inlet.



**Filter fabric** — Fabric allows water to slowly filter through leaving behind sediment. Filter fabric bags are a common storm drain inlet device and can be permanent if maintained properly. Filter fabric stretched directly across a storm drain opening essentially blocks the inlet and may cause flooding, so should only be used to temporarily block water from flowing into the inlet.





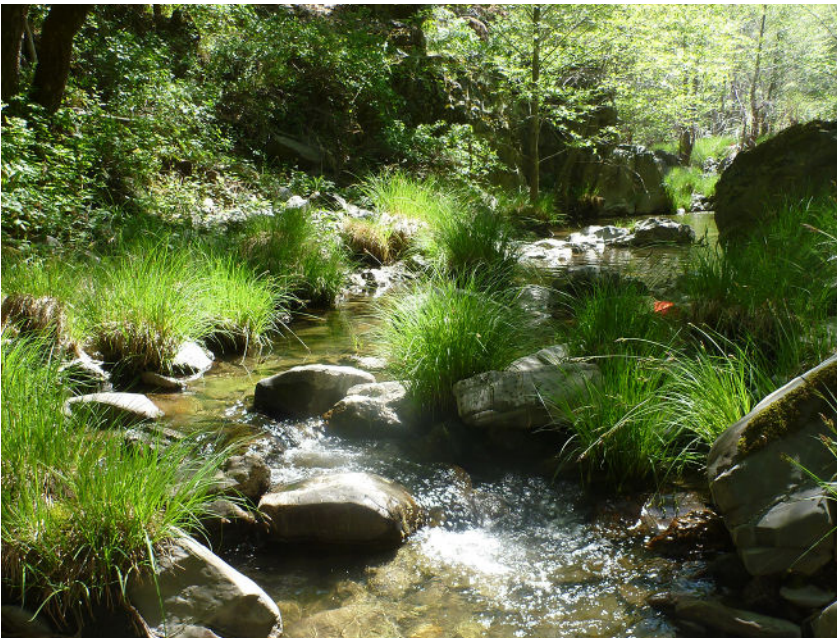
**Berms** — A berm creates a barrier that prevents water from flowing to the storm drain and may be constructed for permanent use (e.g., concrete berm).



**Valves and plugs** — Permanent valves may be installed at a storm drain inlet to allow for emergency shut-off. Plugs may be temporarily inserted in a pipe on-site to block flow through the storm drain system. If used, blocked water must be pumped out and

discharged to landscaping or the sanitary sewer, or disposed as hazardous waste, as appropriate.

Be sure to remove covers or filters designed for temporary use after the activity is complete.



*Storm drains flow directly to creeks and the Bay.*

# Cleaning

Wash water from cleaning often contains solvents, detergents, and metals. **Wash water should never be discharged to a street, gutter, or storm drain.** Contact your local wastewater treatment plant for guidance on what can and cannot go to the sanitary sewer.

## Equipment Cleaning

- Clean equipment inside and dispose of wash water to a sink or floor drain that connects to the sanitary sewer.
- If you must clean equipment outside, work in a bermed area where wash water can be collected and then pumped to an inside sanitary drain.

## Vehicle Cleaning

- Wash vehicles at a commercial car wash where water is treated and recycled or sent to the sanitary sewer system; or
- Wash vehicles in an area where wash water will flow to a lawn, gravel, or unpaved surface.
- If you routinely clean vehicles on-site, or use solvents or acid-based degreasers, provide a bermed vehicle cleaning area with a wastewater collection treatment system (such as an oil/water separator), which drains to the sanitary sewer system.
- Reuse or recycle wash water to minimize discharges to the sanitary sewer.



Contact your local wastewater treatment plant for wash water disposal options and guidance on permit requirements for vehicle fleets.

## Building and Surface Cleaning

- If you must use water for clean-up, use a damp mop instead of hosing down the area. Empty your bucket of wash water into an indoor floor drain or sink that drains to the sanitary sewer.
- When cleaning sidewalks, plazas, and building surfaces, direct wash water to a landscaped or dirt area.
- When it is not feasible to discharge wash water to landscape or the sanitary sewer, check with your municipality for permission to discharge into the storm drain or street. If your municipality permits the discharge, additional management practices will need to be followed, such as filtering and/or settling out solids/sediment.
- If a cleaning compound is used, direct wash water to a landscaped or dirt area, or block storm drains (see *Storm Drain Inlet Protection*, p. 7) and vacuum or pump wash water into a sanitary sewer drain.



### Hiring Contractors for Surface Cleaning

- Choose a contractor that is recognized by the **Bay Area Storm Water Agencies Association (BASMAA)**  
[www.BASMAA.org/Search-for-Cleaners](http://www.BASMAA.org/Search-for-Cleaners)
- If you are a Surface Cleaning Contractor, earn a BASMAA certification by taking an online training course in pollution prevention  
[www.BASMAA.org/Training](http://www.BASMAA.org/Training)

## Water Conservation

- Due to frequent droughts, hosing off sidewalks, driveways, and other hardscapes is not permitted in the State of California.
- For more information about water conservation, visit [www.valleywater.org/programs/waterconservation.aspx](http://www.valleywater.org/programs/waterconservation.aspx)

- Never hose or sweep interior floor debris to an outside area.
- Use a street sweeper to clean parking areas and roadways. Do not use water.
- When wet sand blasting, minimize the quantity of water used. Direct runoff to a landscaped or dirt area, or filter runoff through a filter fabric to keep sand out of the storm drain. When finished, sweep up sand and debris.



## Building Repair and Maintenance

Use and dispose of paint, paint thinner, metal filings, cutting oil and concrete properly to prevent these materials from entering the storm drain, where they will harm local creeks and the Bay. Make sure that your contractors follow these guidelines; **you are responsible for your contractors' actions!**

## Painting

- Before pressure washing to prepare surfaces for painting, test painted surfaces for the presence of lead. Visit [www.epa.gov/lead](http://www.epa.gov/lead) or [www.epa.gov/lead/lead-test-kits](http://www.epa.gov/lead/lead-test-kits) for information on lead testing.
  - If lead is not present, place a protective cover of filter fabric over the drain to catch paint chips and dispose of the chips in the garbage.
  - If lead is present, lightly mist the surfaces before sanding or scraping paint. Collect chips and wash water, and then dispose of both as hazardous waste. Contact [California Department of Public Health's Occupational Lead Poisoning Prevention Program](#) at **(510) 620-5757** for more information on removing lead paint.
- If using water-based paint, brush out excess paint then wash brushes and equipment in the sink. Never dispose of paint or rinse water in a landscaped area, street, gutter, or storm drain. Instead, use or recycle leftover paint. Call the [County Recycling Hotline](#) at **(800) 533-8414** for more information.
- If using oil-based paint, brush out excess paint before cleaning with paint thinner. Filter and reuse thinner when possible. Dispose of paint sludge and thinner as hazardous waste.
  - Small businesses should contact the [Conditionally Exempt Small Quantity Generator \(CESQG\) Program](#) at **(800) 207-8222** or [www.hhw.org](http://www.hhw.org) to find out if they can dispose of hazardous waste for a small fee.
  - For information on proper disposal at larger facilities, contact the [Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division](#) at **(408) 918-3400**.

## Plumbing and Pipe Fitting

- Prevent pipe thread cutting oil and metal shavings from entering storm drains by placing a tarp or protective cover underneath equipment to collect filings, dust, metal shavings, and cutting oil. If necessary, use berms or storm drain covers to protect storm drains. Shovel or vacuum collected material into a garbage bin. Pick up all waste when you are finished in one location or at the end of each work day and schedule disposal.

## Concrete

- Store concrete, grout, and mortar under cover and away from storm drains.
- Do not allow water from concrete tool cleaning, mixing, finishing, or curing to enter the storm drain, ground, or dirt area. Always protect the storm drain with gravel bags or other protective devices. Wash out concrete equipment and tools over a container. When the concrete residue dries and hardens, dispose of it in the garbage. If you generate a large quantity of concrete, contact your local garbage hauler for disposal guidance. Alternatively, take concrete to a concrete recycling facility. Call the **County Recycling Hotline** at **(800) 533-8414** for more information.
- When washing exposed aggregate concrete, divert water to a dirt area where it will not run into a street, gutter, or storm drain. If a suitable dirt area is not available, block wash water and let dry (see *Storm Drain Inlet Protection*, p. 7). Use a wet vacuum to collect the remaining sludge and then dispose of it in the garbage.

## Saw Cut Slurry

- Do not allow saw cut slurry to enter a storm drain. Completely cover or barricade storm drain inlets when saw cutting (see *Storm Drain Inlet Protection*, p. 7).
- Collect, evaporate and remove residue. Pick up all waste when you are finished in one location, or at the end of each work day, and schedule disposal. Minimize water use.
- Use an industrial vacuum for cleanup. Dispose of all liquids from saw cutting into the sanitary sewer following filtration and/or decanting/settling to remove excess solids. Solids can be disposed of into the garbage.
- If saw cut slurry enters a storm drain inlet, shovel or vacuum slurry into a garbage bin immediately.

# Landscaping

- Never apply chemicals or rinse water from equipment that has contained fertilizers, pesticides, or herbicides to vegetation within a 24-hour period of forecasted rain.
- Use the least toxic product for the job. For information on less toxic products visit the **Watershed Watch** website at [www.myWatershedWatch.org](http://www.myWatershedWatch.org) or call **(866) WATERSHED**.
- Use only the recommended amount of chemicals for the job. Always follow label directions.
- Dispose of excess lawn and garden chemical as hazardous waste. Small businesses may qualify to use the **Conditionally Exempt Small Quantity Generator (CESQG) Program** at **(800) 207-8222** or [www.hhw.org](http://www.hhw.org). For information on proper disposal for larger businesses, contact the **Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division** at **(408) 918-3400**.
- Keep leaves, grass clippings, and other yard waste away from storm drains.



## Is your gardener a Green Gardener?

- Consider hiring a certified Santa Clara Valley Green Gardener or Bay Friendly Qualified Professional to maintain your landscape using sustainable practices.
- Santa Clara Valley Green Gardeners:  
[www.mywatershedwatch.org/residents/green-gardener-program/find-a-green-gardener/](http://www.mywatershedwatch.org/residents/green-gardener-program/find-a-green-gardener/)
- Bay Friendly Qualified Professionals:  
[www.rescapeca.org/directory/](http://www.rescapeca.org/directory/)

# Facility Equipment

Follow an inspection and maintenance schedule and dispose of equipment byproducts (blowdown water, condensate, residues, melt water, etc.) properly.

## Cooling Towers

- Use of biocidal cooling tower additives (those containing copper, tributyl tin or chromium) may be prohibited. Contact your local wastewater treatment plant for more information.
- Drain all cooling tower discharges to the sanitary sewer. Do not drain discharges to the parking lot, street, gutter, or storm drain.
- Cooling tower chemicals should not be stored adjacent to storm drains. For questions regarding chemical storage, contact your local fire department or the [Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division](#) at **(408) 918-3400**.



## HVAC, Chillers, Boilers and Refrigerator Units

- Existing buildings with air conditioners should discharge to landscaping. However, non-contaminated condensate (condensate that does not contain descaling or anti-algal agents or copper) may be discharged to the storm drain.
- Direct HVAC contractors to dispose of flushing agent residues (descaling or anti-algal agents) into the sanitary sewer. The use of chemicals containing copper and tributyl tin is prohibited.





- Meltwater from de-icing refrigeration units, cryogenic tanks, etc., may be disposed of in a storm drain as long as it does not contain any type of pollutant or come into contact with a pollutant (from drum and equipment storage nearby, for example).
- All treated boiler discharge and blowdown, including condensation, must be discharged to the sanitary sewer or reused or recycled in a closed loop system approved by your permitting agency.
- New buildings should be designed so that all discharges from air conditioner condensation lines drain to the sanitary sewer. Consult your local planning or building department for more information.

## **Air Compressors**

- Inspect and maintain air compressors routinely. Air compressors produce small quantities of automatic blowdown water, which commonly contains lubricating oil or other potential pollutants. This may not be discharged to the storm drain. Contact your local wastewater treatment plant to obtain guidance on discharging all blowdown water to the sanitary sewer.
- If the compressor has a frequent small bleed, use a drip pan to collect the water. Dispose of accumulated water into the sanitary sewer.
- Repair all fuel and oil leaks immediately. Use a drip pan until repairs are made. Clean up any spilled fuel or oil using a spill absorbent or some other dry cleaning method. When the spill is absorbed, sweep up the saturated absorbent and dispose of it as hazardous waste. Small businesses should contact the **Conditionally Exempt Small Quantity Generator (CESQG) Program** at **(800) 207-8222** or **[www.hhw.org](http://www.hhw.org)**. For information on proper disposal at larger facilities, contact the **Santa Clara County Department of Environmental Health Hazardous Materials Compliance Division** at **(408) 918-3400**.



# Sharing Information

Make sure employees and contractors know where to clean equipment and dispose of wash water.

## Educating and Training Employees

- Storm drain pollution prevention begins with effective employee training.
- Train new employees on the procedures in this guidance manual.
- Review the guidelines in this guidance manual regularly with all employees.

## Overseeing Contractors

- You are responsible for your contractor's actions.
- Before beginning work, show contractors where to clean equipment and dispose of wash water or process waters.
- Make sure contractors know where emergency spill equipment is stored and how to use it.
- Incorporate pollution prevention practices into contract specifications.

## You are a Clean Business — Tell Your Customers!

- Let your customers know what you're doing to prevent water pollution, and encourage them to adopt clean water practices too.
- Where appropriate, itemize charges for hazardous waste handling and disposal.

For more information, contact the [Santa Clara County Green Business Program](#) at **(408) 282-3180**.

# For More Information

The Watershed Watch Campaign is a public education initiative of the [Santa Clara Valley Urban Runoff Pollution Prevention Program \(SCVURPPP\)](#), a coalition of local government agencies. For questions, visit [www.myWatershedWatch.org](http://www.myWatershedWatch.org) or call **(866) WATERSHED**.

## Storm Water Pollution Control Requirements for Business and Industry

### BayWise

888-BAYWISE (229-9473)

Santa Clara Valley Urban Runoff Pollution Prevention Program  
(800) 794-2482

## Wastewater Permitting and Allowable Discharges to the Sanitary Sewer

San José/Santa Clara Regional Wastewater Facility (408) 945-3000

City of Sunnyvale Water Pollution Control Plant (408) 730-7260

Regional Water Quality Control Plant (RWQCP) (650) 329-2598

## Green Business

Santa Clara County Green Business Program (408) 282-3180

## Call to Report Illegal Dumping In or Near Storm Drains

Campbell, Los Gatos,  
Monte Sereno, Saratoga  
(408) 354-5385

Cupertino (408) 777-3354

Los Altos (650) 947-2770

Los Altos Hills  
(650) 941-7222

Milpitas 911

Mountain View  
(650) 903-6378

Palo Alto (24 hour support)  
(650) 329-2413

San José (24 hour support)  
(408) 945-3000

Santa Clara (24 hour support)  
(408) 615-3080

Sunnyvale (408) 730-7260

Unincorporated Santa Clara  
County (408) 918-3400

**In case of emergencies or after business hours, please call 911 to report a concern or incident.**