

# Preventing Pollution: It's Up to Us

In the Santa Clara Valley, storm drains transport water directly to local creeks and San Francisco Bay without treatment. Stormwater pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or baylands. Some common sources of this pollution include spilled oil, fuel, and fluids from vehicles and heavy equipment; construction debris; sediment created by erosion, landscaping runoff containing pesticides or weed killers; and materials such as used motor oil, antifreeze, and paint products that people pour or spill into a street or storm drain.

Thirteen valley municipalities have joined together with Santa Clara County and the Santa Clara Valley Water District to educate local residents and businesses to prevent stormwater pollution. Join us, by following the practices described in this pamphlet.

## Doing the Job Right *General Business Practices*

- Schedule excavation and grading work during dry weather.
- Perform major equipment repairs away from the job site.
- When refueling or vehicle/equipment maintenance must be done on site, designate a location away from storm drains.
- Do not use diesel oil to lubricate equipment parts, or clean equipment.
- Prevent sediment from migrating offsite and protect storm drain inlets, drainage courses, and streams, with appropriate BMPs (i.e., gravel rolls, silt fences, temporary swales, etc).
- Properly monitor and maintain all erosion and sediment controls and report failures of erosion and sediment controls to the local stormwater authority.

## Storm Drain Pollution from Earth-Moving Activities and Heavy Equipment Operation

Soil excavation and grading operations loosen large amounts of soil that can flow or blow into storm drains when handled improperly. Sediments in runoff can clog storm drains, smother aquatic life, and destroy habitats in creeks and the Bay.

Poorly maintained vehicles and heavy equipment that leak fuel, oil, antifreeze or other fluids on the construction site are common sources of storm drain pollution.

## Site Planning and Preventive Vehicle Maintenance

- Designate a completely contained area of the construction site, well away from streams or storm drain inlets and fitted with appropriate BMPs, for auto and equipment parking, refueling, and routine vehicle and equipment maintenance.
- Maintain all vehicles and heavy equipment. Inspect frequently for and repair leaks.
- Perform major maintenance, repair jobs, and vehicle and equipment washing off site.
- If vehicle or equipment cleaning must be done onsite, clean with water only in a bermed area that will not allow rinse water to run into gutters, streets, storm drains, or surface waters. Do not clean vehicles or equipment onsite using soaps, solvents, degreasers, or steam cleaning equipment, and do not use diesel oil to lubricate equipment or parts onsite.
- If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or drop cloths to catch drips and spills. Collect all spent fluids, store in separate containers, and recycle whenever possible, or dispose of fluids as hazardous waste.
- Recycle used vehicle batteries.

## Practices During Construction

- Remove existing vegetation only when absolutely necessary. Plant *temporary* vegetation for erosion control on slopes or where construction is not immediately planned.
- Use check dams or ditches to divert runoff around excavations. Refer to the CASQA *Construction BMP Online Handbook* ([www.casqa.org/resources/bmp-handbooks](http://www.casqa.org/resources/bmp-handbooks)) for proper erosion and sediment control measures.
- Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
- Keep excavated soil on site and transfer it to dump trucks on site, not in the streets.
- Remove construction equipment from the site as soon as possible.
- Maintain street free of sediment tracking daily.

## Spill Cleanup

- Keep spill cleanup materials (e.g., rags, cat litter, and absorbents) available at the construction site at all times. All fueling trucks and fueling areas should have spill kits or other spill protection devices. Clean up spills immediately when they happen.
- Never hose down "dirty" pavement or impermeable surfaces where fluids have spilled. Use dry cleanup methods (absorbent materials, cat litter, or rags) whenever possible and properly dispose of absorbent materials. If you must use water, use just enough to clean the spill without runoff.
- Sweep up spilled dry materials immediately. Never attempt to "wash them away" with water, or bury them. Use as little water as possible for dust control.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Report significant spills to the appropriate local spill response agencies immediately. (See back of brochure.) If the spill poses a significant hazard to human health and safety, property or the environment, you must report it to the State Office of Emergency Services.

## Small Business Hazardous Waste Disposal Program

Businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month are eligible to use Santa Clara County's Conditionally Exempt Small Quantity Generator Program. Call (800) 207-8222 for a quote, more information or guidance on disposal.

Palo Alto operates a similar program, with monthly collection, for small businesses. Call the City of Palo Alto, (650) 496-6980, or Clean Harbors, 1-800-433-5060 for information or to schedule an appointment.

This brochure is one in a series of pamphlets describing storm drain pollution prevention measures for specific types of construction industry activities. Other pamphlets include:

### ***General Construction and Site Supervision***

### ***Landscaping and Gardening***

### ***Fresh Concrete and Mortar Application***

### ***Painting and Application of Solvents and Adhesives***

### ***Roadwork and Paving***

### ***Dewatering Activities***

### ***Home Repair and Remodeling***

For additional brochures, call **1-800-794-2482**



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## Spill Response Agencies:

1. In the City of Santa Clara, call (408) 615-3080.
2. In the City of Palo Alto, call (650) 329-2413.
3. In the City of San José, dial 9-1-1 if hazardous materials enter the storm drain system. For non-hazardous spills, call (408) 945-3000.
4. In other cities, find the contact number at [www.scvurppp-w2k.com/report\\_spill.shtml](http://www.scvurppp-w2k.com/report_spill.shtml) or **DIAL 9-1-1**
5. State Office of Emergency Services Warning Center (24 hours). . . . . **1-800-852-7550**
6. Santa Clara County's Illegal Dumping/ Discharge Hotline. . . . . (408) 918-3400

## Local Pollution Control Agencies

County of Santa Clara Integrated Waste Management Program. . . . . (408) 282-3180

County of Santa Clara District Attorney Environmental Crimes Hotline. . . . (408) 299-TIPS

Santa Clara County Recycling Hotline. . . . . 1-800-533-8414

Santa Clara Valley Water District. . . . . (408) 265-2600

Santa Clara Valley Water District Pollution Hotline. . . . . 1-888-510-5151

San José-Santa Clara Regional Wastewater Facility. . . . . (408) 635-6600  
*Serving Campbell, Cupertino, Los Gatos, Milpitas, Monte Sereno, San Jose, Santa Clara, Saratoga*

Sunnyvale Water Pollution Control Plant *Serving Sunnyvale.* . . . . (408) 730-7270

Regional Water Quality Control Plant. . . . . (650) 329-2598  
*Serving East Palo Alto Sanitary District, Los Altos, Los Altos Hills, Mountain View, Palo Alto, Stanford*

Regional Water Quality Control Board San Francisco Bay Region. . . . . (510) 622-2300

# Earth-Moving And Heavy Equipment Operations

## *Best Management Practices (BMPs) for the Construction Industry*



## Who should use this brochure?

- Bulldozer, back hoe, and grading machine operators
- Dump truck drivers
- Site supervisors
- General contractors
- Home builders
- Developers