

### Heavy Equipment

**Stormwater Pollution from Heavy Equipment on Construction Sites**  
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. Prevent spills and leaks by isolating equipment from runoff channels, and by watching for leaks and other maintenance problems. Remove construction equipment from the site as soon as possible.

#### Site Planning and Preventive Vehicle Maintenance

- Designate an area of the construction site well away from streams or storm drains where heavy equipment parking, refueling, and routine vehicle and equipment maintenance can take place. Contain the area with berms, sand bags, or other barriers.
- Maintain all vehicles and heavy equipment in proper condition and repair.
- Perform regular maintenance, repair jobs, and vehicle and equipment washing off-site, where clean-up is easier.
- If you must drain and replace motor oil, radiator coolant, or other fluids on site, use drip pans or grease catchers to catch drips and spills. Collect all spent fluids, store in separate containers, and properly dispose as hazardous waste (recycle whenever possible).
- Do not use diesel oil to lubricate equipment parts or clean equipment. Use only water for any onsite cleaning.
- Cover exposed title wheel trenches and other oily or greasy equipment when rains events.
- Clean up spills immediately.
- Never have down "dirty" pavement or other spillable surface where fluids have spilled. Use dry cleanup methods (absorbent material, cat litter, or sorbents) whenever possible, and properly dispose of absorbent materials.
- Sweep up spilled dry materials immediately. Never allow them to wash them away with water, or bury them.
- Use as little water as possible for dust control. Ensure water does not create a mud slurry, and discharge to storm drains.
- Clean up spills on dirt areas by digging up and properly disposing of contaminated soil.
- Contact for significant spills.
- If the spill poses a significant hazard to human health and safety, property or the environment, you must also report it to the State Office of Emergency Services.

### Small Business Hazardous Waste Disposal Prgm

Businesses that generate less than 27 gallons or 220 pounds of hazardous waste per month are eligible to use this program. Call 408-299-7300 for a quote.

DISCLAIMER: THE ARCHITECT/ENGINEER SHALL HAVE NO RESPONSIBILITY FOR ANY LIABILITY, LOSS, COST, DAMAGE OR EXPENSE ARISING FROM RELYING TO ANY USE OF THIS DOCUMENT FOR ANY PURPOSE OTHER THAN ITS INTENDED PURPOSE ON THIS PROJECT. THIS DOCUMENT IS TO BE CONSIDERED IN CONJUNCTION WITH ALL RELATED DOCUMENTATION. ANY DISCREPANCIES IDENTIFIED IN THIS DOCUMENT MUST BE REPORTED IMMEDIATELY TO THE ARCHITECT BEFORE PROCEEDING. CONTRACTORS MUST VERIFY ALL DIMENSIONS PRIOR TO PROCEEDING WITH ANY WORK. ONLY FOUR DIMENSIONS ARE TO BE USED FOR VERIFICATION.

### Dewatering Operations

**Storm Drain Pollution from Dewatering Activities**  
**Be sure to call your city's storm water inspector at 408-472-9907 before discharging water to a street, gutter, or storm drain.** Filtration or diversion through a basin, tank, and sediment trap may be required. Reuse water for dust control, irrigation or another on-site purpose to the greatest extent possible.

#### Check for Sediment or Toxic Pollutants

- Check for odors, discoloration, or an oily sheen on groundwater.
- Ask your city inspector whether the groundwater must be tested by a certified laboratory.
- Depending on the test results, you may be allowed to discharge pumped groundwater to the storm drain OR you may be required to discharge to the sanitary sewer or collect and haul the water off-site for treatment and disposal at an appropriate treatment facility.
- When discharging to a storm drain, protect the inlet using a barrier of burlap bags filled with drain rock, or cover inlet with filter fabric anchored under the grate.
- Contact Cupertino Sanitary District at 253-7071 prior to discharging to the sanitary sewer.

### Earth-Moving Activities

**Storm Drain Pollution from Earth-Moving Activities**  
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. Effective erosion control practices reduce the amount of runoff crossing a site and slow the flow with check dams or roughened ground surfaces.

#### 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.
- Protect downslope drainage courses, streams, and storm drains with wattles, or temporary drainage swales. Use check dams or ditches to divert runoff around excavations. Refer to the Regional Water Quality Control Board's Erosion and Sediment Control Field Manual for proper erosion and sediment control measures.
- Cover stockpiles and excavated soil with secured tarps or plastic sheeting.



### Landscaping, Gardening, and Pool Maintenance

**Storm Drain Pollution from Landscaping and Swimming Pool Maintenance**  
Many landscaping activities expose soils and increase the likelihood that earth and garden chemicals will run off into the storm drains during irrigation or when it rains. Swimming pool water containing chlorine and copper-based algaecides should never be discharged to storm drains. These chemicals are toxic to aquatic life.

#### Pool/Fountain/Spa Maintenance

- Drain pools or spas before adding chemicals. Do not discharge pool water into storm drains. Discharge pool water to a sanitary sewer cleanout.
- If possible, when emptying a pool or spa, let chlorine dissipate for a few days and then recirculate water by draining it gradually onto a landscaped area.
- Do not use copper-based algaecides. Control algae with chlorine or other alternatives, such as sodium bromide.
- Filter cleaning: Never clean a filter in the street or near a storm drain. Rise cartons and disintegrate each filter into a dirt area, and space filter residue into soil. Dispose of spent disinfectant in the garbage.
- If there is no suitable dirt area, call Cupertino Sanitary District at 253-7071 for proper disposal instructions.

### General Construction and Site Supervision

**Storm Drain Pollution from Construction Activities**  
Construction sites are common sources of storm water pollution. Materials and wastes that blow or wash into a storm drain, gutter, or street have a direct impact on local creeks and the Bay. As a contractor, or site supervisor, owner or operator of a site, you may be responsible for any environmental damage caused by your subcontractors or employees.

#### General Principles

- Keep an orderly site and ensure good housekeeping practices are used.
- Maintain equipment properly.
- Cover materials when they are not in use.
- Keep materials away from streets, storm drains and drainage channels.
- Ensure dust control water doesn't leave site or discharge to storm drains.
- Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins. Use the Erosion and Sediment Control Manual available from the Regional Water Quality Control Board as a reference.
- Control the amount of runoff causing your site repeatedly during excavation by using berms of temporary or permanent drainage ditches to divert water flow around the site. Reduce stormwater runoff velocities by constructing temporary check dams or berms where appropriate.
- Train your employees and subcontractors. The city can provide brochures about these issues for you to distribute to workers at your construction site. Inform your subcontractors about the stormwater requirements and their own responsibilities. Use Blueprint for a Clean Bay, a construction best management practices guide available at our Building Dept. counter.
- In addition to local grading and building permits, you will need to obtain coverage under the State's Stormwater Construction Activity Stormwater Permit if your construction site's disturbed area totals 5 acres or more, information on the General Permit can be obtained from the Regional Water Quality Control Board. The criteria will change to one acre as of Mar. 2013.
- Landscaping contractors should take clippings and pruning waste to a landfill that accepts yard waste (BIF's Newby Island and Zanker Rd., landfill are the nearest).
- Do not blow or rake leaves into the street.

In the Santa Clara Valley, storm drains flow directly to our local creeks, and on to San Francisco Bay, with no treatment. Storm water pollution is a serious problem for wildlife dependent on our waterways and for the people who live near polluted streams or baysands. Proper management of construction sites reduces pollution significantly. This sheet summarizes the "Best Management Practices" (BMPs) for storm water pollution prevention.

### ORDINANCE OF THE CITY OF CUPERTINO FOR STORM WATER POLLUTION PREVENTION & WATERCOURSE PROTECTION: Chapter 9.18

**9.18.040 Discharge into the storm drain prohibited**  
It is unlawful to cause, allow, or permit to be discharged, any discharge not composed entirely of stormwater to the storm drain system or to surface waters or to any location where it would contact or eventually be transported to surface waters, including flood plain areas, unless specifically called out in the Municipal Regional Permit as an exempt or conditionally exempt discharge.

**9.18.070 Accidental Discharge**  
All persons shall notify the Director of Public Works immediately upon accidentally discharging pollutants of concern to enable countermeasures to be taken by the City to minimize damage to storm drains and the receiving waters. Initial notification shall be followed, within five (5) business days of the date of occurrence, by a detailed written statement describing the causes of the accidental discharge and the measures being taken to prevent future occurrences. Such notification will not relieve persons of liability for violations of this chapter or for any fines imposed on the City on account thereof under Section 13350 of the California Water Code, or for violation of Section 5650 of the California Fish and Wildlife Code, or any other applicable provisions of State or Federal laws.

**The property owner and the contractor share ultimate responsibility for the activities that occur on a construction site. You may be held responsible for any environmental damage caused by your subcontractors or employees.**

**Removal of BMP Facilities**  
The Project Contractor is responsible for removal of all BMP Facilities located within the Public Right of Way upon project final inspection.

### Fresh Concrete and Mortar Application

**Storm Drain Pollution from Fresh Concrete and Mortar Applications**

Fresh concrete and cement-related mortars that wash into lakes, streams, or estuaries are toxic to fish and the aquatic environment. Disposing of these materials to the storm drains or creeks can block storm drains, causes serious problems, and is prohibited by law.

#### General Business Practices

- Wash out concrete mixers only in designated washout areas in your yard, away from storm drains and waterways, where the water will flow into a temporary waste pit in a dirt area. Let water percolate through soil and dispose of settled, hardened concrete as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse.
- Wash out chutes onto dirt areas that do not flow to streets or drains.
- Always store both dry and wet materials under cover, protected from rainfall and runoff with temporary rows or plastic sheets and berms.
- Park paving machines over drip pans or absorbent material (cloth, rags, etc.) to catch drips when not in use.
- Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from streets, gutters, storm drains, rainfall, and runoff.
- Do not use diesel fuel as a lubricant on concrete forms, tools, or trailers.

**During Construction**

- Don't mix up more fresh concrete or cement than you will use in a two-hour period.
- Set up and operate small mixers on tarps or heavy plastic drop cloths.
- When cleaning up after driveway or sidewalk construction, wash fines onto dirt areas, not down the driveway or into the street or storm drain.
- Protect applications of fresh concrete and mortar from rainfall and runoff until the material has dried.
- Wash down exposed aggregate concrete only when the washwater can (1) flow onto a dirt area, (2) drain onto a bermed surface from which it can be pumped and disposed of properly, or (3) be vacuumed from a catchment created by blocking a storm drain inlet. If necessary, direct washoff with temporary berms. Make sure runoff does not reach gutters or storm drains.
- When breaking up pavement, be sure to pick up all the pieces and dispose of properly. Recycle large chunks of broken concrete. See [www.recyclestuff.com](http://www.recyclestuff.com) for info on recyclers.
- Never bury waste material. Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- Never dispose of washout into the street, storm drains, drainage ditches, or streams.

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### Storm Drain Pollution from Roadwork

Road paving, surfacing, and pavement removal happen right in the street, where there are numerous opportunities for a spill, saw-cut slurry, or excavated material to illegally enter storm drains. Extra planning is required to store and dispose of materials properly and guard against pollution of storm drains, creeks, and the Bay.

#### General Business Practices

- Develop and implement erosion/sediment control plans for roadway embankments.
- Schedule excavation and grading work during dry weather.
- Check for and repair leaking equipment.
- Perform major equipment repairs at designated areas in your maintenance yard, where cleanup is easier. Avoid performing equipment repairs at construction sites.
- When refueling or when vehicle equipment maintenance must be done on site, designate a location away from storm drains and creeks.
- Do not use diesel oil to lubricate equipment parts or clean equipment.
- Recycle used oil, concrete, broken asphalt, etc. whenever possible, or dispose of properly. (www.recyclestuff.com for list of recycling companies.)

#### Asphalt/Concrete Removal

- Avoid creating excess dust when breaking asphalt or concrete.
- After breaking up old pavement, be sure to remove all chunks and pieces. Make sure broken pavement does not come in contact with rainfall or runoff.
- When making saw cuts, use a little water as possible. Shovel or vacuum saw-cut slurry, and remove from the site. Cover or protect storm drain inlets during saw cutting. Sweep up, and properly dispose of, all residues.
- Sweep, never hose down streets to clean up tracked dirt. Use a street sweeper or vacuum truck. Do not dump vacuumed liquor in storm drains.

### Roadwork and Paving

**General Business Practices**

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- Schedule excavation and grading work during dry weather.
- Check for and repair leaking equipment.
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### Painting and Application of Solvents and Adhesives

**Storm Drain Pollution from Paints, Solvents, and Adhesives**  
All paints, solvents, and adhesives contain chemicals that are harmful to wildlife in local creeks, San Francisco Bay, and the Pacific Ocean. Toxic chemicals may come from liquid or solid products or from cleaning residues or rags. Paint material and wastes, adhesives and cleaning fluids should be recycled when possible, or disposed of properly to prevent these materials from flowing into storm drains and watercourses.

#### Handling Paint Products

- Keep all liquid paint products and wastes away from the gutter, street, and storm drains.
- Never clean brushes or rinse paint containers into a street, gutter, storm drain, French drain, or creek.
- For water-based paints, paint out brushes to the extent possible, and rinse into an inside sink drain