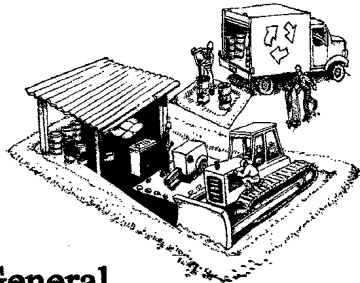




Stormwater Pollution Prevention Program



Stormwater Pollution Prevention Program

Pollution Prevention – It's Part of the Plan It is your responsibility to do the job right!

Runoff from streets and other paved areas is a major source of pollution in local creeks, San Francisco Bay and the Pacific Ocean. Construction activities can directly affect the health of our waters unless contractors and crews plan ahead to keep dirt, debris, and other construction waste away from storm drains and creeks. Following these guidelines will ensure your compliance with local stormwater ordinance requirements. Remember, ongoing monitoring and maintenance of installed controls is crucial to proper implementation.

General Construction & Site Supervision

Advance planning prevents pollution

- ✓ Schedule excavation and grading activities for dry weather periods. To reduce soil erosion, plant temporary vegetation or place other erosion controls before rain begins.
- ✓ Locate and protect storm drains in the vicinity of the site with berms or filters during wet weather periods.
- ✓ Control the amount of runoff crossing your site (especially during excavation) by using berms or 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. Make these brochures available to everyone who works on the construction site. Inform subcontractors about the new stormwater requirements and their responsibilities.

Good housekeeping practices

- ✓ Designate one completely contained area for auto parking, vehicle refueling, and routine equipment maintenance. The designated area should be well away from streams or storm drain inlets, and bermed if necessary. Make major repairs off site.
- ✓ Keep materials out of the rain – prevent runoff contamination at the source. Cover exposed piles of soil or construction materials with plastic sheeting or temporary roofs.
- ✓ Keep pollutants off exposed surfaces. Place trash cans and recycling receptacles around the site to minimize litter.
- ✓ Dry sweep paved surfaces that drain to storm drains, creeks, or channels. If pavement flushing is necessary, use silt ponds or other techniques to trap sediment and other pollutants.
- ✓ Clean up leaks, drips and other spills immediately so they do not contaminate soil or groundwater or leave residue on paved surfaces. Use dry cleanup methods whenever possible. If you must use water, use just enough to keep the dust down.
- ✓ Cover and maintain dumpsters. Check frequently for leaks. Place dumpsters under roofs or cover with tarps or plastic sheeting secured around the outside of the dumpster. A plastic liner is recommended to prevent leakage of liquids. Never clean out a dumpster by hosing it down on the construction site.
- ✓ Make sure portable toilets are maintained in good working order by the leasing company and that wastes are disposed of properly. Check toilets frequently for leaks.

Materials/waste handling

- ✓ Practice source reduction – minimize waste when you order materials. Order only the amount you need to finish the job.
- ✓ Use recyclable materials whenever possible. Arrange for pick-up of recyclable materials such as concrete, asphalt, scrap metal, solvents, degreasers, cleared vegetation, paper, rock, and vehicle maintenance materials such as used oil, antifreeze, batteries, and tires.
- ✓ Dispose of all wastes and demolition debris properly. Many construction materials and wastes can be recycled, including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and cleared vegetation. Materials and debris that cannot be recycled must be taken to an appropriate landfill or disposed of as hazardous waste. Never bury waste materials or leave them in the street or near a creek or stream bed.

Heavy Equipment Operation



Site planning and preventive vehicle maintenance

- ✓ Designate a completely contained area of the construction site, well away from streams or storm drain inlets, 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 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.
- ✓ Do not use diesel oil to lubricate or clean equipment or parts.
- ✓ Recycle used vehicle batteries.

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, and/or rags) whenever possible. If you must use water, use just enough to keep the dust down.
- ✓ 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 spill response agencies immediately. You are required by law to report all significant releases of hazardous materials, including oil. To report a spill, call the following agencies: 1) Dial 911 or your local emergency response number, 2) Call the Governor's Office of Emergency Services Warning Center, (800) 852-7550 (24 hours).

Earth-Moving Activities



During Construction

- ✓ Remove existing vegetation only when absolutely necessary.
- ✓ Seed or plant temporary vegetation for erosion control on slopes or where construction is not immediately planned.
- ✓ Protect downslope drainage courses, streams, and storm drains with hay bales, temporary drainage swales, silt fences, berms or storm drain inlet filters.
- ✓ Use check dams or ditches to divert runoff around excavations and graded areas.
- ✓ Cover stockpiles and excavated soil with secured tarps or plastic sheeting.
- ✓ Properly monitor and maintain all erosion and sediment controls.
- ✓ Properly report failures of erosion and sediment controls to the local stormwater authority.

General Business Practices

- ✓ Schedule excavation and grading work for dry weather.
- ✓ Perform major equipment repairs away from the job site.
- ✓ When refueling or when vehicle/equipment maintenance must be done on site, work within a completely bermed area away from storm drains.
- ✓ Do not use diesel oil to lubricate or clean equipment or parts.

Watch for soil and ponded groundwater that may be contaminated. If any of these conditions are observed, test for contamination and contact the Regional Water Quality Control Board:

- Unusual soil conditions, discoloration, or odor
- Abandoned underground tanks
- Abandoned wells
- Buried barrels, debris, or trash.

Roadwork & Paving



- ✓ Develop and implement erosion/sediment control plans for roadway embankments.
- ✓ Schedule excavation and grading work for dry weather.
- ✓ Check all equipment for leaks and repair leaking equipment promptly.
- ✓ Perform major maintenance, repairs, and washing of equipment away from the construction site.
- ✓ When refueling or vehicle/equipment maintenance must be done on site, designate a completely contained area away from storm drains and creeks.
- ✓ Do not use diesel oil to lubricate or clean equipment or parts.
- ✓ Recycle used oil, batteries, concrete, broken asphalt, etc. whenever possible.
- ✓ Train employees in using these best management practices.

During Construction

- ✓ Avoid paving and seal coating in wet weather, or when rain is forecast before fresh pavement will have time to cure.
- ✓ Cover and seal catch basins and manholes when applying seal coat, slurry seal, fog seal, etc.
- ✓ Use check dams, ditches, or berms to divert runoff around excavations.
- ✓ Never wash excess material from exposed-aggregate concrete or similar treatments into a street or storm drain. Collect and recycle, or dispose to dirt area.
- ✓ Cover stockpiles and other construction materials with plastic tarps. Protect from rainfall and prevent runoff with temporary roofs or plastic sheets and berms.
- ✓ Catch drips from paver with drip pans or absorbent material (cloth, rags, etc.) placed under machine when not in use.
- ✓ Clean up all spills and leaks using "dry" methods (with absorbent materials/rags), or dig up and remove contaminated soil.
- ✓ Collect and recycle or appropriately dispose of excess abrasive gravel or sand.
- ✓ Avoid over-application by water trucks for dust control.

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 from the site.
- ✓ Make sure broken pavement does not come in contact with rainfall or runoff.
- ✓ Protect nearby storm drain inlets during saw-cutting. Shovel or vacuum saw-cut slurry deposits and remove from the site.
- ✓ Never hose down streets to clean up tracked dirt. Use dry sweep methods.

Fresh Concrete & Mortar Application



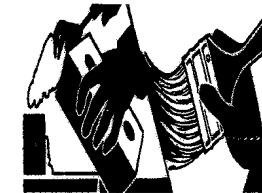
General Business Practices

- ✓ Both at your yard and the construction site, always store both dry and wet materials under cover, protected from rainfall and runoff. Protect dry materials from wind.
- ✓ Secure bags of cement after they are open. Be sure to keep wind-blown cement powder away from gutters, storm drains, rainfall, and runoff.
- ✓ Wash out concrete mixers only in designated wash-out areas in your yard, where the water will flow into containment ponds or onto dirt. Let concrete harden and dispose of as garbage. Whenever possible, recycle washout by pumping back into mixers for reuse. Never dispose of washout into the street, storm drains, drainage ditches, or streams.

During Construction

- ✓ Don't mix up more fresh concrete or cement than you will use in a day.
- ✓ 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.
- ✓ Prevent aggregate wash from driveway/patio construction from entering storm drains. Hose aggregate wash onto dirt areas and spade into dirt.
- ✓ Place hay bales or other erosion controls downslope to capture runoff carrying mortar or cement before it reaches the storm drain.
- ✓ When breaking up paving, be sure to pick up all the pieces and dispose properly.
- ✓ Recycle large chunks of broken concrete at a landfill.
- ✓ Dispose of small amounts of excess dry concrete, grout, and mortar in the trash.
- ✓ Never bury solid or hazardous waste material.

Painting & Application of Solvents & Adhesives



Handling Paint Products

- ✓ Keep all liquid paint products and wastes away from the gutter, street, and storm drains. Liquid residues from paints, thinners, solvents, glues, and cleaning fluids are hazardous wastes and must be disposed of at a hazardous waste collection facility (contact your local stormwater program).

Painting cleanup

- ✓ Never clean brushes or rinse paint containers into a street, gutter, storm drain, or stream.
- ✓ For water-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Rinse to the sanitary sewer once you have gained permission from the local wastewater treatment authority. Never pour paint down a drain.
- ✓ For oil-based paints, paint out brushes to the extent possible and clean with thinner or solvent in a proper container. Filter and reuse thinners and solvents. Dispose of excess liquids and residue as hazardous waste.

Paint removal

- ✓ Paint chips and dust from non-hazardous dry stripping and sand blasting may be swept up or collected in plastic drop cloths and disposed of as trash.
- ✓ Chemical paint stripping residue and chips and dust from marine paints or paints containing lead or tributyl tin must be disposed of as hazardous wastes.
- ✓ When stripping or cleaning building exteriors with high-pressure water, block storm drains. Wash water onto a dirt area and spade into soil. Or, check with the local wastewater treatment authority to find out if you can collect (mop or vacuum) building cleaning water and dispose to the sanitary sewer. Sampling of the water may be required to assist the wastewater treatment authority in making its decision.

Recycle/reuse leftover paints whenever possible.

- ✓ Recycle or dispose of excess water-based paint at a household hazardous waste collection facility, or use up. When they are thoroughly dry, empty paint cans, used brushes, rags, and drop cloths may be disposed of as garbage in a sanitary landfill.
- ✓ Reuse leftover oil-based paint. Dispose of excess liquid, including sludges, as hazardous waste.
- ✓ Small quantity generators should check with the San Mateo County Environmental Health Division regarding recycling or hazardous waste disposal.
- ✓ Unopened cans of paint may be able to be returned to the paint vendor. Check with the vendor regarding its "buy-back" policy.

Landscaping, Gardening, and Pool Maintenance



- ✓ Protect stockpiles and landscaping materials from wind and rain by storing them under tarps or secured plastic sheeting.
- ✓ Store pesticides, fertilizers, and other chemicals indoors or in a shed or storage cabinet.
- ✓ Schedule grading and excavation projects for dry weather.
- ✓ Use temporary check dams or ditches to divert runoff away from storm drains.
- ✓ Protect storm drain inlets with hay bales, berms, filter mats or other inlet protection measures.
- ✓ Revegetation is an excellent form of erosion control for any site.

Landscaping/Garden Maintenance

- ✓ Use up pesticides and follow label directions. Rinse containers, and use rinsewater as product. Dispose of rinsed containers in the trash.
- ✓ Dispose of unused pesticides as hazardous waste.
- ✓ Collect lawn and garden clippings, pruning waste, and tree trimmings. Chip if necessary, and compost.
- ✓ Do not place yard waste in gutters. In communities with curbside yard waste recycling, leave clippings and pruning waste for pickup in approved bags or containers. Or, take to a landfill that composts yard waste.
- ✓ Do not blow or rake leaves, etc. into the street.

Pool/Fountain/Spa Maintenance

- ✓ Never discharge chlorinated pool or spa water to a street or storm drain.
- ✓ When emptying a pool or spa, let chlorine dissipate for 5 to 7 days. Then recycle water by draining it gradually onto a landscaped area, or drain the dechlorinated water to a storm drain.
- ✓ Chlorinated water may be discharged to the sanitary sewer (if allowed by the local sewage treatment authority) by running a hose to a utility sink or sewer pipe cleanout junction.
- ✓ Do not use copper-based algacides. Control algae with chlorine or other alternatives to copper-based pool chemicals. Copper is harmful to aquatic life and cannot be completely removed by the sewage treatment plant.

Storm drain polluters may be liable for fines of up to \$25,000 per day!