

# Protection of Stormwater Quality on Construction Sites

NPD-002

## Purpose:

The purpose of this handout is to inform owners and contractors of their responsibility to protect stormwater quality during construction and to present recommendations on how to protect stormwater quality. Responsible and proper construction management at the job site is essential for the protection of stormwater quality. Property owners and contractors have an obligation to protect stormwater quality, pursuant to the County Code and the County's Stormwater Management Plan.

## Stormwater:

Stormwater runoff is the water that collects on your property and runs off during rain storms. This stormwater runoff might enter a storm drain in an urban area but eventually the water will enter a creek or stream. As rain strikes the earth it can become polluted and can transport this pollution to storm drains and creeks. The goal is for the clean rain water that enters your job site to remain clean as it leaves your site. The most effective method is to control stormwater at the source before it becomes polluted. However, treating polluted runoff before it leaves the property is also an option.

## Common Pollutants:

Construction includes projects such as home construction, commercial construction, new garage and shed construction, general home repair, roof replacements, and the installation and replacement of plumbing, electrical and mechanical work. Common types of pollution at building job sites are sediment from disturbed soil, litter or debris, concrete, paint, oil or fuel, and pathogens.

## Stormwater and Quality Protection:

You can protect stormwater quality by using best management practices (BMPs) on your job site. A BMP is defined as a program, technology, process, siting criteria, operational method or measure, or engineering system, which when implemented prevents, controls, removes, or reduces pollution. The following are some BMPs that will protect stormwater quality during construction.

Pollutant	Origin	BMP
Sediment	Exposed soil, debris piles, excavations, or other earth disturbances.	<ol style="list-style-type: none"><li>1. Store materials under a roof to reduce exposure to rainfall. Alternatively, use plastic sheeting to cover piles or excavations prior to rain and during the rainy season (Oct. 15 through April 15). Keep all debris away from the street and storm drains.</li><li>2. Schedule excavation projects during the dry weather; generally April 16 through October 14.</li><li>3. Prevent erosion by planting fast-growing native grasses that shield and bind soil.</li><li>4. Re-contour disturbed areas to return the ground to its previous shape.</li><li>5. Spray water, without causing runoff, to prevent dust from entering stream systems.</li></ol>
Litter or Debris	Trash at messy job sites.	<ol style="list-style-type: none"><li>1. Clean up and sweep job sites.</li><li>2. Pick up debris and place in covered cans.</li></ol>
Concrete	Pouring new or breaking up pavement or foundations.	<ol style="list-style-type: none"><li>1. Mix correct amounts of concrete so no waste is left. Never bury waste material.</li><li>2. Store concrete bags under cover protected from rainfall &amp; away from storm drains.</li><li>3. Designate a concrete wash-out area for containment, drying and removal.</li><li>4. Transport small amounts of concrete to a landfill.</li><li>5. Transport large amounts of concrete to a crushing company to recycle.</li></ol>
Paint	Application and cleanup during new construction and remodeling.	<ol style="list-style-type: none"><li>1. Avoid spills by careful use and placement of paint cans. Keep all liquid paint away from streets and storm drains. Use water-based paints when possible.</li><li>2. When thoroughly dry, dispose of used brushes, rags, drop clothes, and empty paint cans (lids off) into trash.</li><li>3. Do not use paint manufactured prior to 1980 as lead levels are likely elevated.</li><li>4. Paint chips and dust from non-hazardous dry stripping of paints may be disposed of as trash. Chips and dust from paints containing lead or tributyl tin are hazardous wastes and must be disposed of properly.</li><li>5. If you do use high-pressure water, block nearby storm drains and allow cleaning water to flow into grass, soil, or gravel area.</li><li>6. Paint out brushes to the extent possible. Rinse water-based paints in the sink. Clean oil-based paints with thinner, reuse thinner, and dispose of residue as hazardous waste. Reuse leftover paint for touch-ups.</li></ol>

## Sonoma County Permit and Resource Management Department

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Oil or fuel	Refueling spills. Fuel and/or oil leaks.	<ol style="list-style-type: none"> <li>1. Refuel at one location away from streams or streets. Use drip pans to catch spills.</li> <li>2. Have absorbent pads in the cabs of machinery ready to collect spills.</li> <li>3. Repair equipment such that there are no leaks. Check frequently for leaks.</li> </ol>
Pathogens	Human or animal waste.	<ol style="list-style-type: none"> <li>1. Use appropriate waste disposal systems. Make sure portable toilets are in good working order.</li> <li>2. Clean up dog or other animal waste.</li> </ol>

Please call the Permit and Resource Management Department (PRMD) at 707-565-1900 and ask for the National Pollutant Discharge Elimination System (NPDES) Section for additional information about protecting stormwater. There is much that can be done to help reduce the amount of pollutants entering Sonoma County's waterways. By incorporating stormwater BMPs on your site you can have a project that preserves and protects stormwater water quality in our neighborhoods and in Sonoma County.

Hazardous waste can be dropped off at the County's Household Toxic Facility located at the Central Disposal Site, 500 Meecham Road, Petaluma. The facility is open every week for free drop-off of toxics from Sonoma County residents, no appointment necessary. Contact the Eco-Desk Hotline at 707-565-3375 or [www.recyclenow.org](http://www.recyclenow.org) for more details. Services are also available for certain businesses every week by appointment (call toll free 877-747-1870).