



Industrial & Commercial Best Management Practices

The Stormwater Quality Improvement Program

Placer County is subject to the National Pollutant Discharge Elimination System (NPDES) Municipal regulations for stormwater quality protection. These Federal and State regulations require controls on potential sources of pollution including preventing long term pollution from developed sites, this document will provide examples on how to maintain permanent Best Management Practices (BMPs).

Non-Stormwater Discharges/Spill Prevention, Control & Cleanup

Non-stormwater discharges are those flows that do not consist entirely of stormwater and pose environmental concerns. These discharges (which may include process waste waters, vehicle and equipment wash waters and sanitary wastewater) can carry substances such as paint, oil, fuel and other automotive fluids, construction debris, chemicals, grass clippings, pet wastes and other pollutants into storm drains. The ultimate goal is to effectively eliminate non-stormwater discharges to the stormwater drainage system through implementation of measures to detect, correct, and prevent illicit connections and illegal discharges of pollutants on streets and into the storm drain system and natural waterways.

Many activities that occur at an industrial or commercial site have the potential to cause accidental or illegal spills. Spills and leaks are one of the largest contributors of stormwater pollutants. Store and contain liquid materials in such a manner that if the tank is ruptured, the contents will not discharge, flow, or be washed into the storm drainage system, surface waters, or ground waters. Clean up leaks and spills immediately. Place a stockpile of spill cleanup materials where it will be readily accessible. On paved surfaces clean up spills with as little water as possible. Use a rag for small spills, a damp mop for general cleanup, and absorbent material for larger spills (such as kitty litter). Sweep up the material and dispose of properly. Educate employees about spill prevention and cleanup.



Outdoor Liquid Container Storage

Accidental releases of materials from above ground liquid storage tanks, drums, and dumpsters present the potential for contaminating stormwater with many different pollutants. Materials spilled, leaked, or lost from storage tanks may accumulate in soils or on other surfaces and be carried away by rainfall runoff. Try to keep chemicals in their original containers and keep them well labeled. Cover storage areas with a roof. Minimize stormwater run-on by enclosing the area or building a berm around it. Rise the containers off the ground by use of pallet or similar method and contain the material in such a manner that if the container leaks or spills, the contents will not discharge, flow, or be washed into the storm drainage system, surface waters, or groundwater. Inspect storage areas regularly for leaks or spills. Sweep and clean the storage area regularly. Do not hose down the area to a storm drain.

Outdoor Storage of Raw Materials

Raw materials, by-products, finished products, and materials storage areas exposed to rain and/or runoff can pollute stormwater. Stormwater can become contaminated when materials wash off or dissolve into water or are added to runoff by spills and leaks. Improper storage of these materials can result in accidental release of materials. All outside storage areas should be covered with a roof or, at the very minimum, a temporary waterproof covering. The covers must be in place at all times when work with the stockpiles is not occurring. Place spill cleanup materials, such as brooms, dustpans, and vacuum sweepers near the storage area where it will be readily accessible. Sweep paved storage areas regularly for collection and disposal of loose solid materials, do not hose down the area to a storm drain.



Waste Handling and Disposal

Improper storage and handling of solid wastes can allow toxic compounds, oils and greases, heavy metals, nutrients, suspended solids, and other pollutants to enter stormwater runoff. Garbage dumpsters should be kept covered at all times. Check containers weekly for leaks and to ensure that lids are on tightly. Replace any if they are deteriorating or corroding to the point where leakage is occurring. Sweep and clean the storage area regularly. If it is paved, do not hose down the area to a street or storm drain. Do not fill waste containers with washout water or any other liquids. Place hazardous waste containers in secondary containment.

Parking/Storage Area Maintenance

Parking lots and storage areas can contribute a number of substances, such as trash, suspended solids, oil and grease that can enter receiving waters through stormwater runoff or non-stormwater discharges. Keep parking and storage areas clean, use dry cleaning methods (like sweeping and vacuuming) to prevent the discharge of pollutants into the stormwater conveyance system. Clean oily spots with absorbent material and dispose of properly. Allow sheet runoff to flow into biofilters (vegetated strip and swales) and/or infiltration devices.





Snow Storage

Snow that collects on roads is often chock full of contaminants such as sand, gravel, oil, antifreeze, broken pavement and garbage. Dumping contaminated snow into lakes, rivers and other waterbodies is the same as dumping contaminated rainwater into those waterways. Plan ahead for snow storage and techniques to keep it from impacting our waterways.

Vehicle & Equipment Fueling, Cleaning, and Repair

Spills and leaks that occur during vehicle and equipment fueling can contribute hydrocarbons, oil and grease, as well as heavy metals to stormwater runoff. Use properly maintained off-site fueling stations whenever possible. Maintain clean fuel-dispensing areas using dry cleanup methods such as sweeping for removal of litter and debris. Place a stockpile of spill cleanup materials where it will be readily accessible and “spot clean” leaks and drips routinely using rags or absorbents. Cover fueling areas with an overhanging roof structure so that precipitation cannot come in contact with the fueling area. Inspect fueling areas and storage tanks on a regular schedule. If necessary, install and maintain an oil control device in the appropriate catch basin(s) to treat runoff from the fueling area.

Wash water from vehicle and equipment cleaning activities performed outdoors or in areas where wash water flows onto the ground can contribute pollutants to stormwater runoff. Use properly maintained off-site commercial washing businesses whenever possible. Use biodegradable, phosphate-free detergents for washing. Have all vehicle washing done in areas designed to collect and hold the wash and rinse water or effluent generated. Recycle, collect, or treat wash water effluent prior to discharge to the sanitary sewer, a holding tank, or a process treatment system. Sweep washing areas frequently to remove solid debris.

Vehicle or equipment maintenance and repair are potentially significant sources of stormwater pollution, due to use of harmful materials and wastes during maintenance and repair processes. Engine repair and services, replacement of fluids, and out door equipment storage and parking can impact water quality if stormwater runoff from areas with these activities becomes polluted by a variety of contaminants. Switch to non-toxic chemicals for maintenance when possible and choose cleaning agents that can be recycled. Minimize the use of solvents, clean parts without solvents or using water-based solvents whenever possible. Recycle used motor oil, diesel oil, and other vehicle fluids. Use a vehicle maintenance area designed to prevent stormwater pollution, minimizing contact of stormwater. Perform all vehicle fluid removal or changing inside or under cover to prevent the runoff of spills. Regularly inspect vehicles and equipment for leaks, and repair immediately. Always use secondary containment, such as a drain pan or drop cloth, to catch spills or leaks when removing or changing fluids. Oil filters disposed of in trash cans or dumpsters can leak oil and contaminate stormwater. Recycle your oil filters instead of throwing them away. Store cracked batteries in a non-leaking secondary container and dispose of properly at recycling or household hazardous waste facilities.



Placer County Public Works Stormwater Quality Division



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Or visit us on the web at:

<http://www.placer.ca.gov/Departments/Works/StrmWtr.aspx>

Stormwater Quality Contact Information

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Erosion Control Products Vendors	See “Yellow Pages”
Placer County, Auburn Building Dept.	530-745-3023
Placer County, Tahoe City Building Dept.	530-581-6211
Placer County Stormwater Quality Division	530-745-7500
Tahoe Regional Planning Agency	775-588-4547
Auburn, City of	530-823-4211 Ext. 130
Lincoln, City of	916-645-4070 Ext. 232
Loomis, Town of	916-652-1840
Rocklin, City of	916-625-5000
Roseville, City of	916-774-5417
Truckee, Town of	530-582-2938

Web Sites

California Stormwater Quality Association
www.casqa.org/

Central Valley Regional Water Quality Control Board
www.waterboards.ca.gov/centralvalley/

Lahontan Regional Water Quality Control Board
www.waterboards.ca.gov/lahontan/

Lake Tahoe Best Management Practices
www.tahoebmp.org

Placer County Stormwater Quality Division
www.placer.ca.gov/Departments/Works/StrmWtr.aspx

Sacramento Stormwater Quality Partnership
www.sacramentostormwater.org

Tahoe Regional Planning Agency
www.trpa.org

Sediment Source Control Handbook
by the California Alpine Resort Environmental Cooperative
www.sbcouncil.org/pdf/SSCH_Final_Web.pdf

Erosion and Sediment Control Guidelines for Developing Areas of the Sierra Nevada Foothills and Mountains
www.highsierra-rcandd.org/Documents/Vegetation_Guidelines.pdf