

Standard Operating Procedures (SOPs) for:

Street Construction and Utility Installation Projects

Revised December 31, 2009



Purpose of SOP:	Stormwater pollution prevention procedures for street repairs, construction and the installation of utilities in the roadway.
Location of SOP:	(Indicate where SOP is kept- electronic or hard copy.)
Administrator of SOP:	(Indicate who reviews and updates SOP.)

Prerequisites

1. Employees, project managers and contractors should attend PACE's general stormwater pollution prevention training and/or Keep it Clean Partnership's (KICP) Erosion Control training. Contact PACE at 303-786-PACE or KICP at 303-441-1439.
2. Employees performing the procedures in this SOP should refer to the materials in the *References and Related Procedures* section of this SOP.
3. Permits for construction activity (if over an acre). <http://www.cdphe.state.co.us/wq/PermitsUnit/index.html>
4. Permits for dewatering (if water will enter storm drainage system or waters of the state). <http://www.cdphe.state.co.us/wq/PermitsUnit/index.html>

Stormwater Protection Equipment and Materials

1. Inlet protection devices (wattles, drain covers, berms, sand bags, and/or filter fabric)
2. Spill kit and equipment for dry clean up (socks, absorbent pads, kitty litter, broom, and dustpan).
3. Secondary containment (berms, containers and tarps)
4. Port-a-Potties (staked down)

Standard Operating Procedures

1. Storm Drain Protection

- Identify storm drains near work zone.
- Install inlet protection within 25 feet and/or down gradient of work.
- Place covers, rock wattles, sand bags, or filter fabric around or over inlets.
- Inspect site at the beginning of the day and end to ensure operations are not contributing sediment or other pollutants to the flow line or storm drain.
- Clean dirt and mud in right of ways and public roadways with brooms or street sweepers – as needed.

2. Concrete Work, Wash Out and Disposal

- When saw cutting concrete, use the minimum amount of water possible. Let the waste slurry dry and then sweep it up before leaving the location. A wet vacuum may also be used to pick up the waste slurry immediately after cutting is complete. Do not allow slurry to reach storm drain.
- Designate a "Concrete Wash Out Area" at each job site that is as far as possible from any surface waters, storm drain inlets or drainage ditches and is located in a low area where wash water will pool and soak into the ground.
- Concrete trucks must washout in the wash out area or into a container such as a kiddie pool or wheelbarrow.
- Maintain the wash out area, inspect it for clean out needs, and check for run-on and run-off.
- The debris from the wash out area must be taken to a permanent disposal site when the project is complete.

3. Erosion Control and Storage of Materials

- Cover and contain all liquid and solid materials to prevent run off.
- Avoid storing piles of materials (soil, sand, gravel) in the street. If dirt piles must be stored in the street, they must have berms or wattles surrounding them to prevent run-off. Rock wattles should be placed in front of all down gradient storm drains to prevent sediment from reaching the inlets.

- Excavated materials should be placed on the uphill side of trenches to minimize sediment run-off.
- Control erosion to the maximum extent possible. Provide permanent erosion control that will remain effective for the life of the street. (See [UDFCD Volume 3](#) and [KICP's Erosion Control Field Manual](#))
- Inspect and maintain all erosion or sediment control devices or equipment installed in erosion-prone areas as per the Stormwater Management Plan.
- Ensure that projects over 1 acre have the proper Colorado Stormwater Discharge Permits (See: <http://www.cdphe.state.co.us/wq/PermitsUnit/index.html>) and Stormwater Management Plans.

4. Dewatering

- A construction dewatering permit is required anytime groundwater, including groundwater that is commingled with stormwater or surface water, is encountered. However, if the site is covered by a construction stormwater permit, a separate construction dewatering permit will not be required to discharge to the ground - if BMPs specified by the Colorado Department of Public Health and the Environment (CDPHE) <http://www.cdphe.state.co.us/wq/PermitsUnit/index.html> are followed. If this is not possible or the project does not have a construction stormwater permit, a permit from the CDPHE must be obtained for discharge of the water to the storm drainage system and/or *waters of the state*.

5. Spill Response and Reporting

- Any spill or discharge of any pollutant (ex: oil, sediment, paints, fuels, hazardous liquids, or super-chlorinated water) that reaches storm drains or enters *waters of the state** must be reported to the CDPHE Emergency Spill Reporting line at 1-877-518-5608.
- If a spill or leak is of a hazardous substance that exceeds 1 pint or is of an unknown substance of any amount, call 911 and notify the Colorado Department Public Health and the Environment 's (CDPHE) 24-hour emergency spill notification hotline at 1- 877-518-5608, immediately.
- If the spill is more than 25 gallons of a petroleum product from a regulated storage tank or delivery truck or any amount that causes a sheen on nearby surface water, it must be reported to the Division of Oil and Public Safety at the Colorado Department of Labor and Employment within 24 hours at (303) 318-8547 or to CDPHE Emergency Spill Reporting line at 1-877-518-5608 – if after normal business hours. If cleanup cannot be accomplished within 24 hours, the Division of Oil and Public Safety must be notified immediately.
- For non-emergency spills, call 303-441-4444 and page Boulder County Public Health Environmental Emergency Response Team to assist with clean up.
- Report spills to the facility supervisor (Name): _____ Phone (____) _____
- Report spills that reach storm drains or waterways to your city's Stormwater Coordinator (Name): _____ Phone (____) _____. (See list at: <http://www.keepitcleanpartnership.org/> or click on [stormwater coordinators](#).)

6. Waste Management

- Any saw cut slurry or concrete waste must be contained and disposed of as solid waste.
- All containers and dumpsters must be kept closed unless adding or removing materials.

Contracts & Contractors

- Contracts should include stormwater pollution prevention language.
- Ensure that contractors implement proper BMPs to prevent stormwater pollution.

Employee Training

- All applicable employees should be trained in stormwater pollution prevention: including how to recognize and report illegal connections or discharges.

Record Keeping and Documentation

1. Keep a list of all employees trained in the facility's Stormwater Pollution Prevention binder. (This is also recorded in PACE's Training List).
2. If the site is over an acre, maintain and follow the Stormwater Management Plan (SWMP) and keep copies of inspections.

References and Related Procedures

1. Municipality's capital improvement project (CIP) contract language and BMPs.
PACE Government Operations website: <http://www.bouldercolorado.gov/www/pace/government/index.html>
2. PACE BMP: *Street Sweeping and Road Maintenance*
3. PACE BMP: *Potable Water Line Discharge*
4. PACE BMP: *Utility Installation in Roadway*
5. PACE BMP: *Dewatering of Secondary Containment Structures*
6. PACE BMP: *Sanitary Sewer Back up*
7. PACE SOP: *Street Maintenance and Repair*
8. PACE SOP: *Spill Prevention, Clean Up and Reporting*
9. PACE SOP: *Storm Drain System Maintenance*
10. PACE Resource Sheet: *Street Sweeping and Maintenance*
11. [UDFCD Volume 3](#) and [KICP's Erosion Control Field Manual](#) for erosion control BMP installation.

** "Waters of the State" means "any and all surface and subsurface waters which are contained in or flow in or through this state, but does not include waters in sewage systems, waters in treatment works of disposal systems, waters in potable water distribution systems and all water withdrawn for use until use and treatment have been completed. Examples of State waters include, but are not limited to, perennial streams, intermittent or ephemeral gulches and arroyos, ponds, lakes, reservoirs, irrigation canals or ditches, wetlands, stormwater conveyances (when they discharge to a surface water) and groundwater."*