


Standard Operating Procedures (SOPs) for:		
Facilities and Building Maintenance		
		Revised December 31, 2009
Purpose of SOP:	Stormwater pollution procedures for the maintenance of buildings, facilities, and fixed structures operated or owned by a municipality or county	
Location of SOP:	(Indicate where SOP is kept- electronic or hard copy.)	
Administrator of SOP:	(Indicate who reviews and updates SOP.)	

Prerequisites

1. Employees should attend PACE's general stormwater pollution prevention training. Contact PACE at 303-786-PACE.
2. Employees performing the procedures in this SOP should read and refer to the materials in the *References and Related Procedures* section of this SOP.

Stormwater Protection Equipment and Materials

1. Spill kit and equipment for dry clean up (socks, absorbent pads, kitty litter, broom, and dustpan)
2. Inlet protection devices (wattles, drain covers, berms and/or filter fabric)
3. Containers for collecting paint wastes
4. Tarps or ground cloths

Standard Operating Procedures

1. Building and Landscape Maintenance

- Maintain the storm drain system (ditches, inlets, catch basins, culverts, drainage channels, or underground lines) on your property. Clean at least twice a year, late in the fall and in the spring. This is done _____ x's/ _____.
- Do not pressure wash or hose off surfaces with soap or chemicals unless wastewater is collected. Do not let wastewater enter storm drains.
- If only cleaning surfaces of ambient dust (with water only), the wastewater can be drained to nearby landscaped/vegetated areas or allowed to pool on-site and evaporate.
- Maintain sprinkler systems as to not over-irrigate. Never water at rates that exceed the infiltration rate of the soil.
- Overflow drains from fountains or decorative ponds should be discharged to the sanitary sewer, drained to a vegetated area, or re-used for irrigation. If fountains or decorative ponds are treated with algaecides or other chemicals, the discharge must be approved by the local wastewater treatment facility.
- If paving or sealing a roof, sidewalk or parking lot, prevent the sealant from reaching the gutters or drains. Use absorbent booms or pigs to protect storm drains.
- Stencil storm drains on your property with the message *"Warning: Drains to Creek, Do Not Dump"*.

2. Heat Transfer Equipment and HVAC Equipment Cleaning

- Do not allow cooling towers to discharge, leak, or mist-out into roof drains (if those drains empty onto pavement, streets or storm drains). Cooling towers should discharge to the sanitary sewer, if permitted by your local wastewater facility.
- Blow-down from utility boilers may not be discharged outside to pavement or to storm drains. Wastewater should be sent to the sanitary sewer.
- Air conditioner (HVAC) condensate that has been treated with algae inhibitors must be discharged to the sanitary sewer as allowed by the local wastewater treatment facility.
- Liquid from flushing HVAC or chiller condenser tubes must be captured and disposed of properly. Comply with the Colorado Department of Public Health and the Environment's *Industrial Permit Requirements for Commercial Washing of Outdoor Structures* at <http://www.cdphe.state.co.us/wq/PermitsUnit/index.html>.

3. Fire Suppression (Sprinkler) Systems

- If possible, discharge water suppression systems (sprinklers) to sanitary sewer. New sprinkler system testing water must be de-chlorinated or sent to sanitary sewer.
- If water systems cannot be discharged to sanitary sewer, divert the wastewater to landscaped areas and minimize erosion.
- Discharge from chemical suppression systems must be disposed in the sanitary sewer and not allowed to flow outside to paved surfaces that may lead to storm drains.

4. Floor Drains and Elevator Shaft Pumps

- Ensure that elevator sump pumps, interior floor drains, and parking garage floor drains are plumbed to the sanitary sewer (not to storm drains).
- Note: A State of Colorado Wastewater Discharge Permit may be required if these drains do not go to sanitary sewer. (<http://www.cdphe.state.co.us/wq/PermitsUnit/index.html>).
- If there are any hydraulic fluid leaks from elevators, assure proper cleanup.

5. Janitorial Practices

- Never dump mop water or cleaning wastewater outside, into parking lot or storm drains. Dispose of wastewater in mop sink or other sanitary sewer drain. (This also includes wastewater from automated floor or carpet cleaning equipment.)
- Do not pour, transfer or dispose of any material outdoors or near a storm drain.

6. Painting, Staining and Sandblasting

- Use a ground cloth or oversized tub for paint mixing and tool cleaning. Properly dispose of the wastes.
- Enclose spray-painting operations with tarps or other means, as possible, to minimize wind drift and to contain overspray.
- Clean paintbrushes and tools used to apply water-based paints in sinks plumbed to a sanitary sewer or in portable containers that can be emptied into sanitary sewer drains. Never clean tools over a storm drain or outside.
- Brushes and tools used for oil-based paints, finishes, thinners, solvents or other materials must be cleaned over a tub or container and the cleaning wastes disposed or recycled at an approved hazardous waste facility. Never clean tools over a storm drain or outside.
- Promptly cleanup any spills of paints, cleaners or other maintenance chemicals or supplies. See *BMP: Spill Cleanup* for details.
- When sand blasting exterior surfaces, place tarps or ground cloths beneath the work area to capture sand blasting media and debris. Enclose the sand blasting area with tarps or plastic to protect from wind and to capture airborne particles (dust).
- Cease all sand blasting operations on windy days.

7. Waste Management

- All waste receptacles must be leak-tight with tight-fitting lids or covers. This includes dumpsters and compactors.
- Keep all container lids closed at all times unless adding or removing material.
→ If possible, Store waste receptacles (dumpsters) indoors, under a roof or roof overhang or inside a shed or covered structure.
- Sweep up around outdoor waste containers regularly.
- Ensure proper disposal of grease bins or tallow bins. Clean up any spills or leaks.
- Do not hose-out dumpsters outdoors. Return dumpsters to the disposal company for cleaning at their facility. If dumpsters must be washed, do so in a wash bay or in an area where wastewater will drain to the sanitary sewer.

Contractors

- Contracts should include stormwater pollution prevention language.
- Ensure that contractors implement proper Best Management Practices (BMPs) to prevent stormwater pollution and know whom to contact in case of spill.
- If contracting out pressure washing, have the contractor fill out the *Pressure Washing Service Agreement* (<http://www.bouldercolorado.gov/pace/documents/PressureWashingServiceAgreement.pdf>) to ensure proper disposal of wastewater. PACE Partners has a list of companies that have completed training to become Pressure Washing PACE Allies. (<http://www.pacepartners.com>)

Employee Training

- All applicable employees should be trained in general 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.
2. Keep copies of all contracts for building services or other maintenance.
3. Who is responsible for cleaning of storm drains, ditches or culverts for your municipality?

4. Keep records of any routine cleaning of parking lots, storm drains or culverts.

References and Related Procedures

PACE Government Operations website: <http://www.bouldercolorado.gov/www/pace/government/index.html>

1. PACE BMP: *Building Maintenance*
2. PACE BMP: *Contracts and Property Leasing*
3. PACE BMP: *Good Housekeeping & Spill Prevention*
4. PACE SOP: *Spill Prevention, Clean Up and Reporting*
5. PACE SOP: *Waste Management, Storage and Disposal*
6. PACE SOP: *Pressure Washing and Exterior Cleaning*
7. PACE Resource Sheet: *Universal BMPs*
8. PACE Resource Sheet: *Facilities Maintenance*
9. PACE: *Training and Test for Surface Cleaners and Pressure Washers*
<http://www.bouldercounty.org/health/environ/water/index.htm>
10. PACE *Guidelines for Pressure Washing*
<http://www.bouldercolorado.gov/www/pace/documents/StormwaterPollutionPrevention-PowerwasherBrochure.pdf>
11. Colorado Department of Public Health and the Environment's *Industrial Permit Requirements for Commercial Washing of Outdoor Structures* at <http://www.cdphe.state.co.us/wq/PermitsUnit/>
12. CDPHE Low Risk Discharge Guidance: *Discharges from Surface Cosmetic Power Washing Operations to Land*:
<http://www.cdphe.state.co.us/wq/PermitsUnit/>