

# **BUILDING WASHING—WASTEWATER MANAGEMENT**

## **OPERATING PROCEDURE**

### **APPLICATION**

This procedure applies to wastewater management for wash water produced during cleaning of building exteriors. Discharge to storm drains of wastewater from washing operations is prohibited. Such water may contain chloramines, cleaning compounds, or materials dislodged from building surfaces (such as leaded paint).

### **SPECIAL INSTRUCTIONS**

- Supervisor will develop Task Hazard Analysis. EH&S Industrial Hygiene will review.
- Offsite disposal through the Environment, Health and Safety (EH&S) Division may be necessary if contaminants in the wash water exceed sewer discharge contaminant limits. If cleaning compounds containing surfactants, detergents, or other chemicals are used in the cleaning process and there are sludges or residues that need to be disposed of, contact EH&S Environmental Services Group for disposal guidance.
- Wastewater may be disposed to landscaped areas or the sanitary sewer if contaminant concentrations will not harm the landscape or sewage treatment facility's operations, or exceed Berkeley Lab's Wastewater Discharge Permit limits listed in the permit issued by East Bay Municipal Utility District.
- Before starting work, contact EH&S for technical assistance to determine appropriate methodologies, scope, job plan and mitigation for specific planned task.

### **WORK STEPS I: WASH WATER DISPOSAL—UNPAINTED BUILDINGS**

1. Construct a containment system to prevent wash water discharge to the storm drain. Protect nearby, downstream storm drains.
2. If high-pressure water is used (e.g., hydro-blasting to remove spalled concrete):
  - Settle out the solids using a containment tank, or
  - Filter out the solids using filter fabric or another solids removal method.
3. Divert wash water onto landscaping (preferably) or into the sanitary sewer.

### **WORK STEPS II: WASH WATER DISPOSAL—PAINTED BUILDINGS**

1. Construct a containment system to prevent wash water discharge to the storm drain or sanitary sewer. Protect nearby, downstream storm drains.
2. Pour, pump, or drain the wash water into a containment tank.
3. Use a filter system (e.g., cartridge filters) to remove suspended paint solids. Use settling methods to minimize the amount of solids entering the filter system. This will prevent filter saturation.
4. Contact EH&S Environmental Services for sampling of the filtered water before it is discharged to the sanitary sewer.

- Have the sample analyzed for the 13 priority pollutant metals (antimony, arsenic, beryllium, cadmium, chromium, copper, lead, mercury, nickel, selenium, silver, thallium, zinc) and any other chemicals of concern that could be present to determine whether or not the water is suitable for sanitary sewer discharge.
  - Send a copy of the analytical results to EH&S Environmental Services Group for disposal method determination.
5. If the analytical results exceed EBMUD discharge limits, consider using a finer pore size filter or dispose of the water through EH&S. EH&S will arrange to ship the water to a properly permitted disposal facility.

**RESPONSIBILITIES AND CONTROLS**

Provide signature lines as follows:

REV NO.	SME/Title	REV/Title	APPROVED/Title	DATE	EFFECTIVE DATE
2	 John Tully Facilities CSG Structural Services Supervisor	 John Tully Facilities CSG Structural Services Supervisor	 Dennis Nielsen Facilities SP Department Head	5/23/09	5/22/09