



## BMPs for Commercial Facilities

The Best Management Practices (BMP) Program for commercial facilities is a program designed to address the wastewater discharges from commercial operations/activities into the sewer system. This BMP is an important component of an overall plan for minimizing sanitary sewer overflows, protecting the City-Parish treatment plant and the environment. The City-Parish thus require the facilities to obtain an Industrial User Discharge Permit, and the permit is driven by the policies and BMPs found in this document.

Though the following guidance items may be performed by an independent contractor it is ultimately the responsibility of the facility owner to ensure all guidance items are satisfactorily completed. The owner shall be responsible for training the staffs of these best management practices for the facility.

### Best Management Practices:

**Inspection/protection of floor drains:** Floor drains, drip pans and sewer lines should be inspected frequently for corrosion and repaired or replaced as needed.

### Container Security/Secondary Containment:

- Secondary containment for all regulated chemicals should prevent leaks and spills from reaching the city sewer. Secondary containment should be large enough to hold at least 110 percent of the capacity of the primary container.
- Reduce bottle breakage by ordering chemicals in plastic coated bottled whenever possible. Always use plastic or insulated holders for solvent bottles.
- Separate incompatible chemicals to prevent mixing in the event of an accidental spill.
- Keep countertop chemical containers in trays of appropriate capacity or if possible within bermed areas away from sinks and drains.

Use one of the three (3) methods to keep spilled chemicals from reaching floor drains.

- Install a temporary plug that opens automatically when the safety shower is turned on.
- Eliminate the drain, if possible.
- Protect the safety shower drain from chemical spills with a sump. The capacity of the sump must be greater than the volume of the largest chemical container used or stored in the facility, or the sump must be double-contained. The sump may be covered by a grate to reduce hazards to people in the area.
- Chemical Storage and control. Commercial facilities may use a host of chemicals that can be categorized as acids, alkali, oxidizers, solvents or other organics. Never store chemicals above sinks on shelves or in cabinets. Store in approved chemical cabinets or on low shelves. Always latch doors on chemical storage cabinets. For proper storage please refer to Table 1. The management should keep and record file all the Material Safety Data Sheets.
  - *Acids Examples* include sulphuric acid, oxalic acid, acetic acid, sours.
  - *Alkalis Examples* include sodium hydroxide (caustic soda) and sodium carbonate (soda ash), potassium hydroxide, ammonia-based cleaners (contain ammonium hydroxide).

- *Oxidizers Examples* include chlorine-based chemicals such as chlorine bleach (sodium or calcium hypochlorite), hydrogen peroxide or organic peroxides.
- *Solvents Include* perchloroethylene, varsol, paint thinners.
- *Other Organics* Detergents, paints, oils, etc.

**Table 1: Chemical Incompatibilities Relative to Storage**

	Acids	Alkalis	Oxidizers	Solvents	Organics	Chlorine	Ammonia
Acids		X				X	
Alkalis	X		X				
Oxidizers		X		X	X	X	
Solvents			X				
Organics			X				
Chlorine	X		X				X
Ammonia						X	

**Legend: X = Do Not Store Together**

**Spill control and reporting:** Chemical spills at laundry facilities can have disastrous impacts on downstream treatment systems and the environment.

- Operators should take all precautions to isolate spills from floor drains or other sewer systems.
- Spills should be cleaned up using nonreactive sorbent materials, which should then be bagged and disposed of safely by alerting the solid waste contractor.
- Report spills that enter the sewer system immediately so that treatment plant staff may take appropriate action to isolate the wastewater before it enters the treatment plant.
- Follow your Business Emergency Plan, as filed with the local Fire Department.

**Waste Minimization:**

- If possible, substitute chemicals with less toxic alternatives.
- Use minimum amounts of chemicals required by each operation or process to minimize disposal volume at end of procedure. Keep all waste manifests on site, when possible.
- Recycle paints and used oils.

**Good housekeeping practices**

- Choose dry cleaning methods. Eliminate hosing down the site unless all wash water is contained and disposed of to a sanitary sewer system. *Note that some wash water especially those that contain significant amounts of pollutants may not be allowed to be disposed in the sewer system.*
- Sweeping of paved areas is a dry cleaning method that helps prevent trash, debris, and particulate matter such as dirt from accumulating on paved surfaces and being carried to the sewer drain.
- Reduce the use of toxic materials. Substitute non-toxic or less toxic cleaning materials and solvents, use non-caustic and phosphate-free detergents, water-based degreasers, non-chlorinated solvents, when possible.
- Check pipe hoses and connectors for leaks, repair or replace as needed.
- Keep a maintenance log and record all waste and maintenance-related activities. Record lint trap inspection and note the volume of lint removed during service when possible.
- **Do Not**
  - Pour grease down sinks, garbage disposals or other drains
  - Flush disposable wipes, paper towels, washcloths, rags, cotton balls, etc. down toilets
  - Put used oil, oil based paint, chemicals down any drain or ditches

**Training:**

- All workers and employees should understand the importance of utilizing BMPs for water quality protection. Train new employees and refresher training. Keep training records and spill response plan on site for inspection.

**Resources:**

Medina County Recycling Center. "Homeowner Best Management Practices." City of Waldsworth Engineering Department, n.d. Web.

Ontario Laundry Industry Task Force. "Environmental Code of Management Practice for Laundry Operations", July 1996

<http://www.goodyearaz.gov/home/showdocument?id=10980>, Date Accessed: October 31, 2016

Department of Public Works Santa Cruz. "BEST ENVIRONMENTAL MANAGEMENT PRACTICES MEDICAL FACILITIES." <http://www.dpw.co.santa-cruz.ca.us/Pretreatment/BMpMedicalFacilities.pdf>