

## **Basis of Design**

The purpose of this section is to provide guidelines for the development of specifications for wastewater disposal during construction.

### **Overview**

Construction projects sometimes generate wastewater, which must be disposed of properly and in consultation with EH&S. Two common activities that generate wastewater are discussed below. For more information about wastewater disposal, call EH&S at 206.685.3759.

### **Masonry Cleaning**

Only wastewater from water-only washing of surfaces that do not contaminate the wash water may be discharged to storm drains. Call 206.685.3759 for more information before you plan to discharge to a storm drain.

Do not allow wastewater or rinse water to soak into the landscaping unless you have made prior arrangements with grounds maintenance staff. Some landscaped areas are under a strict watering schedule to minimize plant diseases.

If you are using cleaning products or washing a contaminated surface, you must collect the contaminated wastewater for discharge to sanitary sewer. At the job site, you must set up berms to prevent wash water from reaching storm drains. Sweep the area to minimize the rinsing of dirt and other solids into the sanitary sewer.

In the City of Seattle, your wastewater must meet the King County sewer discharge limits, listed at <http://www.ehs.washington.edu/epowaste/sink.shtm>. The University must also report annually to King County all sanitary sewer discharges related to construction, so make sure to forward the location and volume of your discharge to EH&S.

You may have to collect and treat your wastewater to meet the pH limit of 5.5-12. Agricultural lime has limited effectiveness as a neutralizer. Test the pH of the wastewater after treatment and adjust your treatment or disposal method accordingly.

Settleable solids (material that settles to the bottom of the water column within an hour) must be less than 7 ml/l (milliliters per liter). If you would like to borrow an Imhoff cone (used to measure settleable solids) please call EH&S at 206.685.3759. You may have to store the wastewater in a Baker tank or other container to allow sediments to settle in order to meet the standard. For grit and dirt that can be easily filtered, you can use a drain insert.

Lead, asbestos and other hazardous materials cause the wash water to violate sewer discharge limits. If hazardous materials could be in the wash water, you must collect samples and have them analyzed for the concentrations of those materials. If the water violates local sewer discharge limits, then it must be disposed of as hazardous waste.

Avoid the use of strong cleaners and solvents, which can cause the wastewater to be hazardous waste even after use and dilution with rinse water.

### **Potable Water Flushing**

Potable water may be discharged to the storm drainage system. However, because potable water contains residual chlorine, choose a storm drain at least 100 feet away from the point of use to allow chlorine to dissipate into the air before the water enters the storm drain.