Guidance Document
Best Management Practices for the
Use and Disposal of Metal Solutions and Associated Equipment
April 2016

Background: Lab experiments sometimes use metal solutions that may contain metals, including copper, cobalt, cadmium, zinc, mercury and others. The resulting samples are then discarded; the testing equipment washed, decontaminated and reused.

Purpose: The purpose of this guidance document is to prevent solutions containing heavy metals from entering the sanitary sewer (sink and/or floor drains) during:

- Use,
- Disposal after testing is complete, and
- Washing of lab equipment used for the experiment

Best Management Practices (BMPs): Outlined below are BMPs for the use, disposal and washing of samples and lab equipment:

1. Samples: Collect and/or transfer samples over paper towels to capture drips. Gather and discard paper towels in the trash (not the sink). Do not allow ANY amount of sample to drop in the sink. After collecting the samples, use paper towels to wipe down the outside surfaces of the collection tools. Collect then dispose of paper towels in the trash. Maintain a clean lab bench when performing your experiment. Wipe any spilled liquid with paper towels and dispose in the trash (not the sink).
2. Washing of Sampling & Lab Equipment:
   a. Wipe down equipment with paper towels, as needed, and dispose of paper towels in the trash.
   b. Rinse lab glassware with small amounts of water and dispose of the rinsate in the "Aqueous" or "Organic" hazardous waste collection container located in the lab hood. You may perform several such rinses.
   c. Decontaminate equipment as required
3. Sample Disposal:
   a. Liquids – dispose of all resulting liquids in the "Aqueous" or "Organic" hazardous waste collection container located in the lab hood. DO NOT dispose of any metals-containing liquid in the lab sink.
   b. Solids – Dispose of all solids, such as sample vials, droppers, paper towels, disposable containers, etc. in the trash.