

## **Environmental Safety Division UNIVERSITY OF GEORGIA**

## **Drain Disposal Guide**

The UGA Drain Disposal Guide applies to all UGA affiliated facilities including laboratories, research spaces, facilities management shops, art studios, or other work areas using hazardous chemicals and materials. For guidance concerning radioactive or biohazardous material, please contact the Radiation Safety Office or the Biosafety Office.

UGA strives to maintain the highest level of compliance in order to minimize environmental impact. Preventing harmful discharges to a drain is important in eliminating impacts to the Athens Clarke County Wastewater Treatment Plant (WWTP) and the Oconee River. Wastewater discharged down sinks and floor drains at UGA flow into the sanitary sewer system and is treated at the Athens Clarke County WWTP prior to discharge to the Oconee River. Many waste-streams that are <u>NOT</u> federally regulated Hazardous Wastes can still interfere with the WWTP process, or pass through, causing potential impacts on the riverine ecosystem.

In order for wastewaters to be drain disposed, they must first meet the following criteria:

- No waste that meets the definition of an EPA regulated Hazardous Waste. Information on EPA regulated waste is available in the Hazardous Waste Manual found on ESD's website under "RCRA compliance".
- No waste with a pH lower than 5.5 or greater than 10.0
- No waste which will impart color to wastewater, such as but not limited to dye waste and tanning solutions (unless special permission has been granted)
- No grease or oil
- No metal containing waste (arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, copper, nickel, zinc, manganese)

Additionally, there are many waste streams that meet these criteria but still need to be containerized and disposed of through the Environmental Safety Division Hazardous Materials Program.

## Do Not Drain Dispose:

- Aqueous phases of organic solvent separations
- Ethidium bromide solutions
- Formalin solutions
- Paraformaldehyde solutions
- Solutions containing any concentration of sodium azide
- Ethanol solutions greater than 24%
- Infectious/biohazard solutions (contact Biosafety for guidance)
- Photographic chemicals (fixer, developer, toner)
- Pesticide solutions



Radioactive materials

## Non-Hazardous Substances Permitted for Drain Disposal:

- Non-toxic common salt solutions (sodium chloride, magnesium chloride, potassium chloride)
- Biological buffers with pH between 5.5 and 10 (phosphate buffers, TRIS, TAE)
- Growth media solutions that have been rendered non-infectious, including culture media containing serum additives.
- Sucrose solutions
- Solutions containing most normal biological metabolites and nontoxic cellular constituents (proteins, nucleic acids, carbohydrates, soluble fats, amino acids)
- Acids and bases that have been neutralized and fall within the 5.5 to 10 range and do
  not contain any underlying hazardous constituents see the Neutralization Guide on
  ESD's website under "RCRA compliance".
- Ethanol and water solutions less than 24% (dilution to achieve this is not permitted)
- Up to 1 liter of Ecoscint brand scintillation cocktail per lab, per day, that has been stored and allowed to decay according to UGA protocols.
- Vesphene (chemical disinfectant) at concentrations of 1% or less and Quaternary ammonium compounds with a pH between 6 and 9.
- Carolina's Perfect Solution in volumes not greater than 500ml a day.

<u>Always</u> ask for assistance in making a proper determination <u>prior</u> to disposing of any amount of a material down the drain or in regular trash.

Questions about the allowance of a particular chemical to be drain disposed or questions regarding this drain disposal policy should be directed to the ESD Hazardous Materials Program at (706) 542-5801 or hazmat@uga.edu.