

Drain Disposal and Intentional Evaporation of Chemical Waste

Federal, state and local governments have established strict rules and regulations for chemical disposal. These rules and regulations have been established primarily to protect human health and the environment.

Drain Disposal

According to UAB policy all hazardous chemical waste must be collected and properly disposed of. The definition of hazardous waste is broad and the overwhelming majority of laboratory chemicals used at the University fall within this definition and thus requires collection as hazardous waste. Chemicals should not be disposed with regular trash. **There are few chemicals that are permitted to be drain disposed.**

The following non-hazardous substances may be permitted to drain/discharge to the sink if they are not mixed or contaminated with hazardous chemicals (such as heavy metals, solvents, corrosives, toxics, radioactive). **OH&S reserves the right to approve the discharge and/or drain disposal of all substances on a case-by-case basis.**

Non-Hazardous Substances Permitted for Drain Disposal

1. Saline and non-toxic salts in dilute form
2. Inorganic buffers (phosphate or bicarbonate based)
3. Sugar solutions
4. Organic buffers at use concentrations (e.g., TRIS)
5. Liquid tissue culture media, fresh or spent supernatant, which has been rendered non-infectious

Examples of Hazardous Substances Prohibited from Drain Disposal

1. Ethidium Bromide Solution: due to its mutagenic properties it must be collected for hazardous waste disposal
2. Dyes and Stains: the exact chemical contents of dyes and stains will determine whether they may be drain disposed. For example, Coomassie Blue and “Destain”, which contain methanol and acetic acid, would both be considered hazardous wastes and prohibited from drain disposal.
3. Any unused hazardous or nonhazardous chemicals (liquids and solids)
4. No biohazards
5. No radioactive waste

Federal, state and local regulations require the collection of even small quantities of chemicals for proper disposal.

Accidental Drain Discharge

Anyone causing an accidental discharge of a prohibited material to the sanitary sewer must notify OH&S immediately during normal hours at 934-2487. This includes materials accidentally spilled down the drain via sink, floor drain or plumbed equipment. During after hours and weekends call #4-3411 and ask to have the OH&S Director On-Call (DOC) paged.

Evaporation of Hazardous Waste Inside Chemical Fume Hood

Discharge of hazardous liquids, vapors, gases, fumes and dusts to the atmosphere is not considered a disposal method. Laboratory hoods should not be used to evaporate materials from open chemical containers. Intentional evaporation of hazardous waste inside fume hood, intentional dilution or neutralization of a hazardous chemical waste for the purpose of avoiding collection of that chemical as a hazardous waste is illegal.