

Verification and segregation LABORATORY CHEMICAL WASTE

In an effort to create a more effective, cost efficient and environmentally friendly waste management system on campus, we are proposing the following procedures for the disposal of hazardous chemical laboratory waste. Procedures for disposal of hazardous waste

Segregate materials according to the categories listed on pages 3 and 4. If possible, also segregate within categories. Unless the materials are used together during the course of an experiment, segregate all waste. Do not mix chemicals together in one container for convenience sake. We can not stress strongly enough that different chemicals have different disposal methods. If you are unsure of which category to use or if the materials can be safely mixed into one dump, Do not guess and do not assume. Label all containers with the group name from the chemical waste category and an itemized list of the contents. For example, do not label a container simply 'Corrosive Liquids'. List each chemical in the container, including all solvents used. List by full name only. Abbreviations, initials or chemical formulas are not acceptable labels. Liquid dumps are intended for liquids only. Do not place glass or plastic items, such as tubes or pipettes, into solution dumps. If these items require disposal, package them separately. (Keep plastic and glass waste separate.) Any waste containing PCB's must not be placed in waste dumps. Special procedures are in place for disposal of PCB's and it is important to keep the volumes small. Packaging and containers: All waste must be appropriately packaged for the waste category. For example: corrosive waste should be stored in non-metallic containers.

All liquid waste must be stored in leakproof containers with a screw-top or other secure lid. Snap caps, mis-sized caps, parafilm and other loose fitting lids are not acceptable. Solid debris must be placed in plastic bags. Do not place chemical or other nonbiohazardous material in a biohazard bag. Biohazard bags are for biohazardous material only. Any waste disposed of in these bags will be treated as such. For the disposal of vials containing liquid scintillation fluid, place plastic and glass scintillation vials in separate boxes. Plastic vials can be placed loose in a cardboard box lined with a garbage bag. Glass vials should be placed in trays, then placed in a box.. Attach a completed "Waste Scintillation Fluid" label (include all requested information). Please do not "hide" items for disposal in the boxes; the boxes are opened for final disposal and unexpected items can create a safety hazard to personnel. Sharps (needles) must be well packaged to avoid any possibility of puncturing personnel. Used needles should be disposed of in a commercial sharps container or other suitable heavy plastic container. With the lids secured, place the containers into a cardboard box and seal with tape. Label "Sharps for disposal".

Importance of segregating waste

T It is very important that hazardous materials are segregated into the proper categories. Different hazardous waste have different disposal methods. These disposal methods are also reflective in the cost of disposal. For example, waste which has the potential for reuse or recycling, such as non-halogenated organic waste is less expensive to dispose of than waste

which is destroyed in a chemical incinerator, such as halogenated organic waste. There is also a tremendous environmental advantage to reusing and recycling chemical waste. When categories are mixed, the disposal method is always for the "more hazardous" chemical. To use the above examples, when a few litres of a halogenated solvent is mixed with a drum of non-halogenated solvent, the entire volume must be considered halogenated waste. The contents of the drum, including the recyclable waste, will be destroyed in an incinerator.