

LABORATORY HAZARDOUS WASTE REGULATIONS

What is hazardous waste?

There are three significant liquid hazardous waste streams at Williams. Two of them are organic solvents, subdivided into halogenated and non-halogenated. The third comes from aqueous solutions containing toxic materials such as heavy metal ions or cyanides. Other potential sources of hazardous waste include solid organic compounds, inorganic compounds containing heavy metals, and concentrated acids or bases.

How does a lab handle hazardous waste?

1. Every lab has a 'Satellite Accumulation Area' where wastes are combined and stored temporarily. Containers in this area must be **marked** with a label saying 'Hazardous Material' and further information such as 'Halogenated Solvents', or 'Cyanides'. A description of the hazard characteristics should also be on the label. For non-halogenated and halogenated solvent waste this is 'ignitable'. Halogenated solvent waste also should read 'toxic'. Heavy metal and other aqueous waste streams should be labelled 'toxic', and, if appropriate, 'corrosive'. **Suitable containers can be found in the basement stockroom in MSC or in MSC G30.** Please do **not** simply reuse empty reagent bottles without putting Hazardous Material labels on them.
2. In addition to the generic label, a detailed list of the contents of each container must be maintained, using the full chemical names of the materials, not chemical formulas or abbreviations. A preprinted list of solvents in use in the lab is acceptable. This list must be kept with the container. The date on the sheet is that when the container is **filled** because that is technically the starting date for accumulation.
3. The satellite area should be clearly marked with tape and experiments should not be performed in the area. Containers should be in secondary containment in case of spills or leaks.
4. Containers must be closed at all times except when waste is actually being added to them.
5. Any container up to 55 gallons in size can be used to accumulate wastes within the lab. Please use as large a container as can be accommodated, at least 1 gallon, in order to minimize trips to MSC G30A. When a container is full, it must be transferred promptly (within 3 working days) to MSC G30A, the waste handling area. Whoever brings the container to the waste room must log it in, showing date brought in and lab from which the container came. Plan on picking up a fresh container for the lab whenever one is dropped off.
6. Solid waste from spill cleanup should be brought to MSC G30A within 3 days as well and logged in.

7. The College's waste is picked up twice yearly, generally in January and July. All waste, including outdated chemicals, should be brought to MSC G30A.

A calendar is posted in every lab. Once a week the satellite area should be inspected and the calendar signed. The easiest way to do this might be for the first person in the lab on Monday morning to check that the waste is not leaking and **sign** the calendar with their **full name**. **These calendars must be kept in the lab for three years.**