

# CWRU Hazardous Waste Program Satellite Accumulation Requirements

Jan 2020 Rev2

- 1) All personnel must take annual RCRA training through EHS
- 2) Containers of waste material must be properly labeled (This is also an OSHA requirement)  
EHS supplies tags for this purpose but you can print your own:
  - a. Building
  - b. Room
  - c. Investigator
  - d. Contact telephone number
  - e. Date each container when full
  - f. A complete list of all the contents of the container. Abbreviation of chemical names is not allowed. Container logs are permitted provided they are kept with the container and both log and container are clearly marked identifying which log goes with which container. EHS tags are usually easier.
  - g. The words Hazardous Waste must be written on all containers regardless of the use of a log. Use of the EHS tag around the neck of the container is accepted. So is a marker or your own label.
  - h. When a container is full, if a log was used, summarize the content on a final label or EHS waste tag
- 3) All containers must be tightly closed except when adding or removing material
  - a. Use of funnels or other devices in the neck of a container except for the time you are directly adding materials is strictly prohibited. Some funnels with tops are on the market. EPA has issued new emission rules and they do not meet the requirement for a sealed container. Use the container cap.
  - b. Evaporation of solvent unless for a purpose such as recrystallization is not allowed and must be done in a fumehood or other ventilated device. Flammables cabinets are not suitable for this operation.
- 4) All materials must be placed in compatible containers.
  - a. HF in glass would be wrong as it dissolves glass
  - b. Solvent in the wrong plastic would be incorrect as the plastic might melt
  - c. Acid or base in non-lined metal cans could corrode.
  - d. Do not place Halogenated solvents in unlined metal cans, as some acid will form causing corrosion.
- 5) You must know exactly what you have in any container all the time
  - a. It is required to track the full contents of all containers
  - b. Some materials like Column material or vacuum pump oil become contaminated. EPA requires that we note this contamination. You must note the contamination as a trace constitute. For example if you used chloroform on a silica column, you would add to the label in addition to the amount of silica "trace chloroform." If you use your vacuum pump for volatile materials, you must do the same and keep track of the kinds of solvent used with the pump. This is true of any other material that might be used in a similar manner. You must always know exactly what is in a container and keep track of it at all times.

Suggestion: For oils and column waste, it would be far easier to make a label that contains all the possible solvents you might use and make premade labels.

Suggestion: Determine the other waste streams in your labs and prepare premade labels for the major waste types you generate ahead of time.
- 6) You must store all hazardous waste in proper storage
  - a. Flammable liquids whether hazardous waste or stock must be stored in a flammable liquids cabinet when not in use if the total in a lab exceeds 2 gallons. (NFPA Fire Code)
  - b. A maximum of 55 gallons may be accumulated and must be removed within 3 days of reaching this quantity
  - c. A maximum of 1 quart of an acutely hazard such as a cyanide may be accumulated and removed within 3 days. 40CFR261.33