Guidelines for the College of Chemistry Glass Solvent Bottle Disposal Program

Only empty glass solvent bottles can be disposed of in the Glass Solvent Bottle Bin. Sounds obvious, but there are legal guidelines to follow when calling a container empty. The following information is from the Office of EH&S Help Sheet on Empty Containers.

When is a container empty?

Whether a container is empty in the legal sense of the word depends on the physical state and the degree of hazard of the material that was in the container.

- Pourable materials: A container that held a pourable hazardous material or hazardous waste is empty when no material can be poured or drained from it at any orientation.

- Non-Pourable materials: A container that held a non-pourable hazardous material or hazardous waste such as viscous materials, sludge's, or "caked-up" solids is empty when no material remains in the container that could feasibly be removed by scraping, chipping, or other physical methods. A thin uniform film is considered acceptable.

- Acutely or Extremely Hazardous Materials: A container that held a material listed by the federal or California Environmental Protection Agency as an acutely or extremely hazardous waste must be disposed of through EH&S. Call CCHASP for help with such bottles.

To insure the success of this program the College of Chemistry requires the following amendments to the above definitions.

1. For bottles that contained volatile organic solvents, after emptying the bottle leave it in a well ventilated enclosure in your laboratory for at least 12 hours. Scratch or mark out the label or write "MT" to indicate that it is empty before placing it in the solvent bottle bin.

2. Bottles that contained mineral acids should be rinsed with water until the rinsings are between a pH of 5-10 and then left to drain. Scratch or mark out the label or write "MT" to indicate that it is empty before placing it in the solvent bottle bin.

3. Bottles containing non-volatile organic solvents that are water soluble and fall within the "Guidelines for Drain Disposal of Chemical" program should be triple rinsed and left to drain. Scratch or mark out the label or write "MT" to indicate that it is empty before placing it in the solvent bottle bin. Such solvents include dimethylsulfoxide and dimethylformamide.

UNDER NO CIRCUMSTANCES SHOULD BOTTLES CONTAINING THE FOLLOWING CLASSES OF COMPOUNDS BE WASHED WITH WATER AND THEN DRAIN DISPOSED.

Benzene and other aromatic hydrocarbons.

Pentane, hexane, petroleum ether, cyclohexane and all other hydrocarbons. See 1 for how to handle these materials.

Ethyl ether. See 1 for how to handle these materials.

Methylene chloride, chloroform and all other chlorinated hydrocarbons. See 1 for how to handle these materials.

CCHASP is responsible for placing these bottles in the municipal waste dumpster. Each bottle will be examined to insure that it meets the guidelines of our program. If it does not, it will be disposed of as contaminated laboratory debris and charged to the appropriate account.