VIII. Disposal Procedures for Non Hazardous Waste

Not all laboratory wastes are hazardous and so should not be entered into the SFA hazardous waste program. Some examples of non-hazardous wastes are provided below as well as in an alphabetical list in *Appendix F* on page 52. The chemicals listed in *Appendix F* have been evaluated by EHSRM and determined to be non-hazardous wastes. Non-hazardous waste may include the following:

A. Non-Hazardous Chemical Related Waste

1. Non-hazardous liquid waste may be poured down sink drains after obtaining approval from EHSRM. Liquid waste (i.e., bottles of unused or partially used solutions) may never be disposed of in dumpsters, as liquid wastes are not permitted at the municipal landfill.
2. Empty containers of commercial products or chemicals may be placed in the regular trash if no freestanding liquids remain in the containers and all disposal requirements noted on the label are met. Empty containers must be defaced by removing container labels or marking through labels to indicate the containers no longer contain hazardous materials. See the "Empty Containers" section on page 24 for more information.
3. Animal wastes containing non-hazardous preservative (such as carasafe) should be placed in a bucket or thick trash bag, after all liquid has been drained, and taken directly to the outside dumpster. No animal remains should be placed in the laboratory trash cans. Animal specimens preserved in formaldehyde, formalin, or other hazardous chemical preservative must be handled as hazardous waste.
4. Non-hazardous liquid preservative waste such as Carasafe may be poured down the lab sink drain.
5. Certain solid, non-hazardous chemicals are suitable for disposal to the sanitary landfill. However, such chemicals should not be placed in laboratory trash cans as custodial personnel have been instructed not to handle any chemical or potentially hazardous wastes. Non-hazardous solids should be placed directly into the dumpsters.
6. The following types of solid laboratory wastes are generally considered non-hazardous or of low toxicity and so may be put directly in the dumpsters. As noted above, solutions of such wastes should not be put in the laboratory trash containers. Check with EHSRM Department for quantities greater than 5 pounds.

    a) Organic chemicals:
        - Sugars and starches
        - Naturally occurring a-amino acids and salts
        - Citric acid and its Na, K, Mg, Ca, NH4 salts
        - Lactic acid and its Na, K, Mg, Ca, NH4 salts+

    b) Inorganic chemicals
        - Sulfates: Na, K, Mg, Ca, Sr, NH4
        - Phosphates: Na, K, Mg, Ca, Sr, NH4
        - Carbonates: Na, K, Mg, Ca, Sr, NH4
        - Oxides: B, Mg, Ca, Sr, Al, Si, Ti, Mn, Fe, Co, Cu, Zn
        - Chlorides: Na, K, Mg

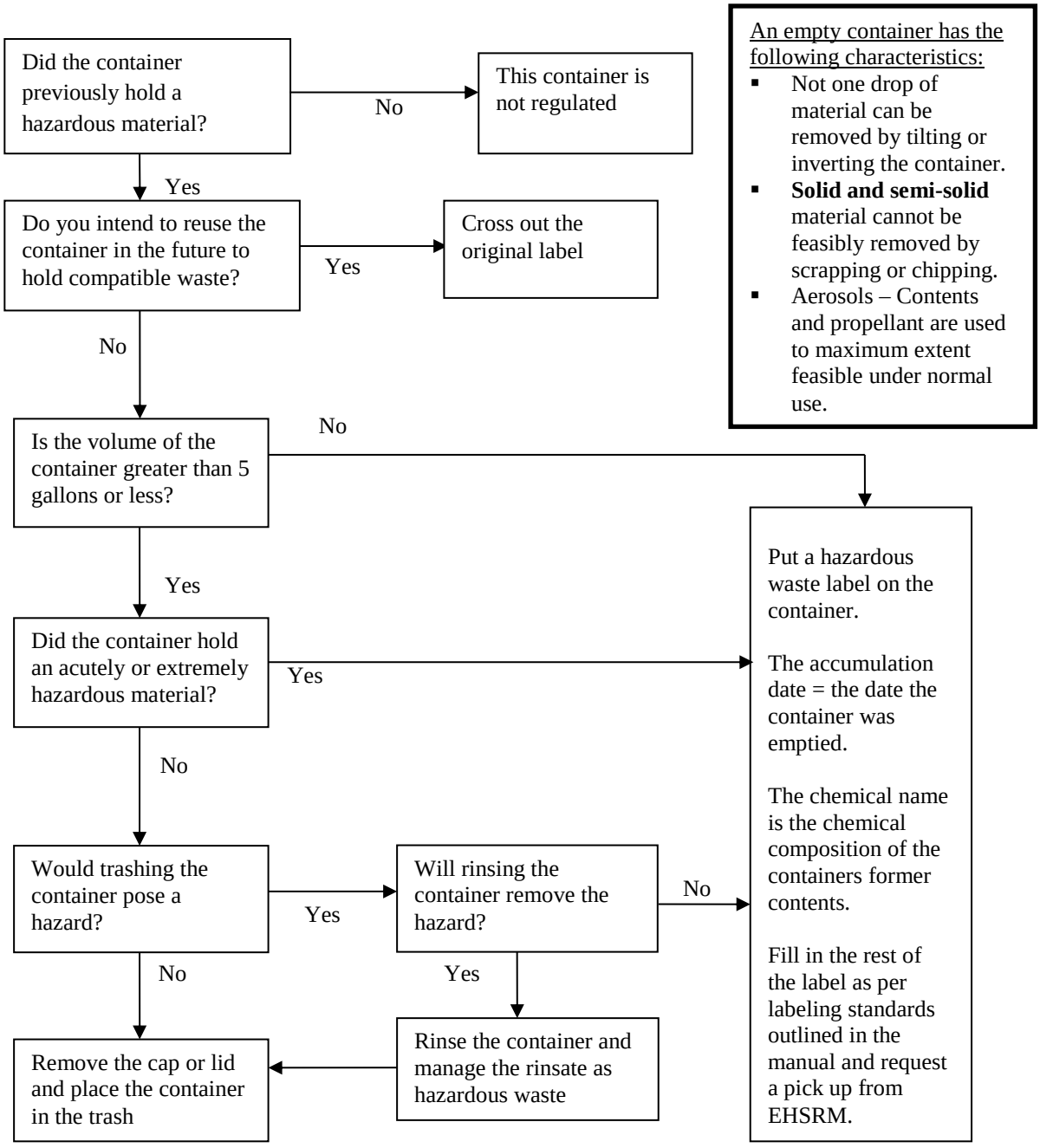
- Fluorides: Ca
- Borates: Na, K, Mg, Ca

c) Laboratory materials not contaminated with hazardous chemicals:
   - Chromatographic absorbents
   - Filter paper, filter aids, and glassware
   - Rubber and plastic protective clothing

7. Non-hazardous gases (e.g. carbon dioxide, nitrogen, argon, neon) may generally be vented to the atmosphere via a certified and functioning laboratory fume hood. Please check with EHSRM prior to such venting, particularly for large volumes.

B. Empty Containers

Use the flow chart below to determine how to properly dispose of empty chemical containers. The container must be truly empty. Not a drop of liquid, or any solid residue that could be scraped out, may be present.



C. Non Contaminated Glass

When a laboratory on campus wishes to dispose of glassware, empty bottles, glass pipettes, test tubes etc. (that is free of radiological, chemical, or biological hazards) the waste can be placed by the laboratory personnel into a cardboard box or other closable rigid container, then placed directly in the dumpsters located outside most of the buildings. Custodial Services will not pick up broken glass or empty chemical containers of any kind. Follow the procedures below for proper disposal of broken and/or waste glass.

1. All glass must be free of chemical, biological, or radioactive contamination before packaging of the material begins.
2. Contaminated glass must be thoroughly cleaned of all visible contamination. Pipettes cannot have appreciable amounts of liquid still inside them. Chemically contaminated glassware must have been triple rinsed and the rinse water collected as hazardous waste. Biological contamination must have been sterilized or sanitized to ensure all organisms, pathogens, or viruses are dead. Radioactive contaminated glassware should be sent out as radioactive waste and not packaged with other glass waste.
3. After the waste generator has ensured that the glass is free of all hazardous contaminants, the glass must be packaged in either a broken glass receptacle, a thick cardboard box, or other rigid container then taped closed.
4. Each container should be no more than 90% full and weigh less than 20 pounds.
5. The container must be marked with the words "Broken Glass" and be taped shut with no protruding shards of glass or pipettes sticking out to prevent injury
6. The generator must ensure the material placed in these receptacles is dry. Wet material will damage the bottoms of the receptacles causing the bottoms to become weakened and difficult to pick up.
7. Take the waste glass container directly to the outside dumpster for disposal.