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1. INTRODUCTION

This procedure guides in the disposal of waste generated in the ISU Chemistry Stockroom and teaching/research laboratories. All waste generated must be collected in appropriately labeled containers per federal guidelines. Waste in this department is separated into the following categories:

Inorganic—metal salts except Ag, As, Ba, Cd, Cr, Hg, Se, and Pb

NOTE: *The elements listed above are listed in the Resource Conservation and Recovery Act (RCRA) and must be collected separately. DO NOT put these in Inorganic Waste containers not specifically marked to contain it.*

Halogenated – carbon compounds with halogens (F, Cl, Br, I, At).

Non-Halogenated—carbon compounds without halogens.

Acids—solutions with pH less than 7

Bases—solutions with pH greater than 7

Universal—solid waste (NiCd batteries, UV light bulbs, etc.)

NOTE: *For proper characterization of waste refer to figure 1 in Appendix A.*

2. PRECAUTIONS AND LIMITATIONS

- 2.1. If unsure about how to dispose of something, ask a supervisor.
- 2.2. Do not mix, neutralize, or “treat” waste unless specifically authorized to do so (acid/base neutralization).
- 2.3. Wear appropriate personal protective equipment (PPE) when dealing with waste products.

3. APPARATUS AND MATERIALS

- 3.1. Large plastic carboys, various sizes
- 3.2. Glass bottles
- 3.3. Secondary containment trays/tubs
- 3.4. EHS labels
- 3.5. Waste stream labels (inorganic, halogenated, non-halogenated)

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4. REAGENTS

- 4.1. None

5. INSTRUCTIONS

5.1. Labelling waste containers

- 5.1.1. Label acid and base containers with "Used Acid" or "Used Base."

NOTE 1: *These containers are for Acids and Bases only. Do not add any chemical that is part of another waste category.*

Note 2: *Acid and base neutralization is the only waste treatment process allowed by federal regulations. For neutralizing acids and bases see method CSP-0001.*

- 5.1.2. For all other waste containers

- 5.1.2.1. Attach 2 labels on the container indicating what waste type is to be collected (inorganic, halogenated, or non-halogenated).

- 5.1.2.1.1. Place one on the top right.

- 5.1.2.1.2. Place one on the front near the top.

- 5.1.2.2. Attach one larger EHS sticker on the side to indicate the waste must be removed according to federal regulations.

NOTE: *The container cannot be moved to another location by anyone not authorized to do so (EHS).*

- 5.1.2.3. The EHS label must list the major, unabbreviated components that are collected in the container at the time the container is picked up by EHS.

Note: *Components may be added to the label before the container is full, but must be completed prior to collection by EHS.*

5.2. Changing waste containers

- 5.2.1. Verify the pH for corrosivity using pH test paper.

- 5.2.2. Place full waste container into an appropriate under counter or under fume hood storage location.

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- 5.2.2.1. Place waste container into a secondary containment tub.
- 5.2.3. Label a new waste container as directed in steps 5.1.1-5.1.3.
- 5.2.4. Clean secondary containment tub of any spills or residues.
- 5.2.5. Place new labeled container into secondary containment tub.

5.3. Removing waste containers

- 5.3.1. Complete necessary EHS online form submission.
 - 5.3.1.1. Access form directly on <https://www.isu.edu/ehs/>
 - 5.3.1.1.1. Click on Waste Pickup.



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Appendix A

