Liquid Chemical Waste Collection and Disposal

Standard Operating Procedure

Lab: ESB 155

Department: Materials Science and Engineering

PI/Manager of Space: Paul V. Braun

Written By: Kaitlin Tyler

Section 1: Overview

Type of SOP: ☒ Process  □ Hazardous Material  □ Hazardous Class of Materials  □ Equipment

Synopsis:

This SOP describes the proper procedure for handling the collection and disposal of liquid chemical waste.

Section 2: Risk Assessment Summary (Hazards and control measures)

Information obtained from performing a risk assessment should be entered into this section.

Materials:

<table>
<thead>
<tr>
<th>Material (name, CAS #, other ID)</th>
<th>Hazards</th>
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<tbody>
<tr>
<td>*specific to individual process</td>
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Relevant References for Material Hazards:

Sigma Aldrich

Equipment Hazards:

Equipment is considered low hazard.

Hazardous Conditions:

Conditions considered low hazard.

Technique Hazards:

Technique is considered low hazard.

Personal Protective Equipment

The following PPE are needed in addition to proper lab dress:

Safety glasses
Nitrile Gloves
*Additional PPE may be necessary for specific chemical disposal. Please consult MSDS of chemical before handling.

Engineering Controls
This process should be completed within a fume hood if chemicals being disposed of should be handled in a fume hood during normal use.

Section 3: Procedures
Identify proper size/type of container for liquid waste being generated. Container should be chemically compatible with waste and large enough to handle a volume of waste over a maximum of three months.

Pour liquid waste into waste container. Use a funnel if spilling is a risk.

**Container should be labeled with the following information:**

1. WASTE
2. Name of Waste Generator
3. Name of Chemicals inside container (no abbreviations or shorthand)
4. Date of when waste stream began

Waste container should be placed in a secondary containment bucket on the chemical waste storage shelf.

Waste should be disposed of if one of the three conditions is met:

1. Three months have passed since the waste container was started
2. Waste container is full
3. Process that generates waste is complete and no more of this waste will be created.

Disposal instructions are included in Section 4.

Section 4: Waste Disposal/Cleanup

**Waste Generator:**
Fill out chemical waste description form and give to designated Chemical Waste Disposal person

**Chemical Waste Disposal Person:**
Determine which CWM TRK form is necessary based on the type of waste.
Fill out necessary form and mail to DRS (ChemTrak, DRS, 102 EHSB, MC-255)/Drop off at DRS Building
Place DRS pick up stickers on containers when received from DRS.
Make sure lab is open to DRS staff on day of pick-up

Section 5: Emergency Response
If waste container breaks, find a new container. Consult MSDS for particular chemical to clean up mess left behind in secondary container.
Section 6: Additional Information

Advice:

1. Consult lab manager/lab safety person/chemical waste disposal person if unsure how to properly deal with chemical
2. Contact DRS if there are questions of how to properly store waste.

Checklist:

☐ Read (Material) Safety Data Sheets for chemical being disposed
☐ Proper container is used for type of chemical waste
☐ Waste has been properly labeled
☐ Waste is disposed of in a timely manner (less than three months after start date)

References:
Training Documentation
Signing this document means that you have read and understand all aspects of this Standard Operating Procedure. The supervisor is the person that acknowledges you took the training and understand the procedure. They can be a lab manager or researcher assigned by the PI to oversee this particular SOP.

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