

BIOHAZARD WASTE DISPOSAL

1. Purpose

To provide step by step guidance on properly disposing liquid, solid, and sharps biohazardous waste. Biohazardous waste is any liquid, solid or sharp that has come into contact with:

| | |
|--------------------------------|---|
| Risk Group 1 or Group 2 agents | Viral vectors and Aerosolisable Bioagents |
| DNA Staining Reagents | Toxins & Human Tissues |
| Animal Tissues | Etc. |

2. Scope

Applies to all authorized Principal Investigators (PIs) and authorized laboratory personnel working in the LM-CL2 facility (DB440).

3. Prerequisites

You are an authorized user of DB440 and are either included in your PI's permit, or you possess a CL2 permit for DB440.

4. Responsibilities

It is the responsibility of all faculty, staff and students to follow the procedures described in this SOP.

5. Personal Protection Equipment (PPE)



6. Procedure

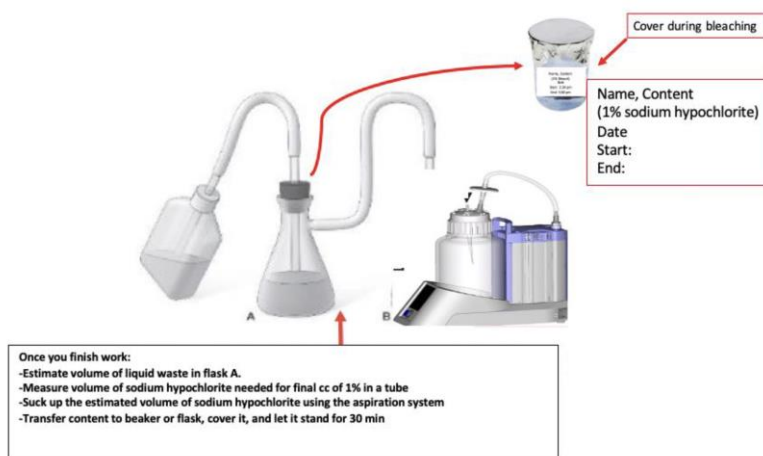
Liquid Biohazardous Waste Disposal

NOTE: Biohazardous liquid waste must be pre-treated with 1% sodium hypochlorite before disposal, as described below.

- 1) Wear PPE as described above. Label liquid waste container with the following:
 - i. Name of user, Content, Date, Time sodium hypochlorite added
- 2) Determine the volume of sodium hypochlorite needed for your liquid waste to get a final concentration of 1% sodium hypochlorite.
 - i. C1: Commercial sodium hypochlorite is usually 10%, but always check the concentration of your sodium hypochlorite stock and modify C1 if required.
 - ii. $C1V1 = C2V2$: $(0.10) \times (\text{Volume of sodium hypochlorite stock to add to liquid waste}) = (0.01) \times (\text{Total volume of liquid waste})$
- 3) Add sodium hypochlorite to the liquid waste. Contact time is 30 minutes.
- 4) After 30 minutes, pour the liquid waste down the sink and run tap water.
- 5) Wash the container with soap and water and leave it to dry.
- 6) Remove and throw away your gloves in the Bio waste pail. Wash your hands with soap and water.

BSC vacuum filtering system waste disposal:

- Label container for liquid biohazardous waste with the following:
 - Name of user, Content, 1% sodium hypochlorite, Date, Time sodium hypochlorite treatment started and ended



Solid Biohazardous Waste Disposal

- Examples include: Broken glassware, empty cell culture flasks, plates, tubes and petri dishes, agar plates, serological and Pasteur pipettes, micropipette tips, contaminated gloves, contaminated paper towels. Ensure that you've removed all left-over liquids before disposal.
- Use lined Bio Waste pails, shown below, to dispose solid biohazardous waste.



- If it is not lined, line with a yellow biohazard bag.
- When the bags are full, tie them. Replace full pails for new ones.
 - **DO NOT remove the bags from the pails.**
 - Contact chem.safety@utoronto.ca to request new pails if not available or if stocks are low.
- When the pails at the BSC's are full, contact chem.safety@utoronto.ca to request pick up and keep the full pails near the entrance.

Sharps Biohazardous Waste Disposal

For needle and blade waste

- Use sharps containers, shown below, to dispose needle and blade waste.



Maximum
capacity
line

- Do not fill the container beyond its maximum capacity (fill line on container).
- Ensure that needles are empty of liquids before disposal. Follow the "Liquid Biohazardous Waste Disposal" procedures if necessary.
- Close the container when full and replace it for a new one.
 - Contact chem.safety@utoronto.ca to request new containers if not available or if stocks are low.
- When containers are full, contact chem.safety@utoronto.ca to request pick up and keep the full containers near the entrance.

For glassware and plasticware waste (even if broken):

- Follow the "[Solid Biohazardous Waste Disposal](#)" procedure above.