



## Biohazard Waste Disposal

### 1. Purpose:

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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 and Human Tissues
Animal Tissues	Etc.

### 2. Scope:

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

### 3. Prerequisites:

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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:

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

### 5. Personal Protection Equipment (PPE):

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### 6. Procedure:

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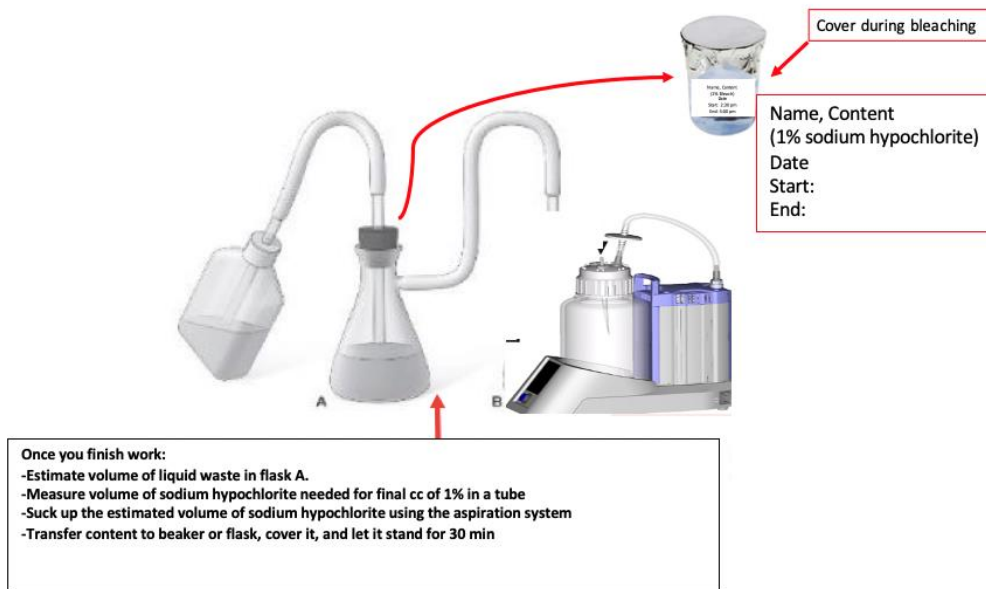
#### Liquid Biohazardous Waste Disposal

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](mailto: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](mailto: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](mailto: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](mailto: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.