



1.0. Introduction and Scope

This document provides details on properly disposing of laboratory waste in compliance with the Zero Waste Program from UA Facilities, and the UA Office of Suitability (Green Labs initiative). The document will outline the following waste:


- Glass
- Sharps
- Plastics
- Contaminated Waste
- Bio-Hazardous Waste
- Radioactive Waste

2.0. Training and Competence


All laboratory personnel handling hazardous waste must complete the Hazardous Waste Management training (on-line). The training provides information on waste collection, handling, and disposal through CHEMATIX hazardous waste management system. Please follow the link below:

<https://www.ualberta.ca/environment-health-safety/training/hazardous-waste-management>

3.0. Types of Waste

Waste Type	How to dispose
Glass	Uncontaminated glass waste, including chemical containers, pipettes, beakers, jars, flasks, etc. can all be disposed of in the building recycle blue bin. See pail usage under section 4.0.
Plastics	All uncontaminated plastic waste including Plastic lab bottles, large conical tubes, clear plastic packaging, air pillows from shipping containers, clear well cell plate, clear pipet tip box can all be disposed of in the building recycle blue bin. Any plastic labeled as  . See pail usage under section 4.0.
Sharps (Does not include syringes/needles)	Any broken glass/sharps that are uncontaminated can be disposed of in the building recycle blue bin. See pail usage under section 4.0.
Metals	Any uncontaminated metals can be disposed of in the blue recycle bins along with any



	plastics, glass, aluminum, and beverage containers. See pail usage under section 4.0.
Bio-Hazards	Utilize autoclave bags to collect waste as suggested by the Biosafety Guidelines. Store bio-hazardous waste separately and label properly. All biohazardous waste must be either autoclaved, chemically neutralized (i.e. with bleach) or disposed of via Chematix. Refer to Bio-Safety Guidelines.
Radioactive	Utilize CHEMATIX to dispose of the radioactive waste according to the Environment, Health, and Safety Policy.
Contaminated Sharps/Plastics/Glass/Metals/Gloves/Paper	All contaminated waste needs to be collected, labeled, and stored in the lab. A waste pick-up can then be requested through CHEMATIX (contaminated material waste card form, contamination type marked), and will be picked up by EHS personnel as per schedule.
Chemical Waste Chemicals	Hazardous chemical waste must be collected separately in labelled containers. Mixing incompatible chemicals (acids (especially nitric acid) and oxidizers with organic solvents and other substances) must be avoided. Pick up request can be through CHEMATIX. Refer to Hazardous Waste Training for full information and contact EHS via email if not certain about proper action.
Syringes and needles	Must be collected in dedicated labelled sharps containers and submitted through CHEMATIX as contaminated material with contamination type marked in the waste card form.
Contaminated Items	Items that are not described above and require to be dealt as hazardous waste must also be disposed of through CHEMATIX, using contaminated material option.
Non-recyclable	Any plastics with  symbols. Contaminated materials, etc.

Note: All uncontaminated waste must be bagged (in a transparent bag) and labeled as cleaned/uncontaminated along with the laboratory room number(s) where the waste was generated before it is disposed of in the recycle/general waste bins.



4.0. Waste containers (Yellow Pails)

Facilities and Operations provides yellow pails for waste collections to laboratories on campus. These are free of cost to laboratories, and can be requested through the Zero Waste Program Coordinator, Sobia Samad (sobia@ualberta.ca).

These containers may be utilized to collect sharps, glass, metal, and plastic waste. Bio-Hazardous waste requires separate collection; more information on this is available in the University of Alberta Bio-Safety Guidelines.

5.0. CHEMATIX (Hazardous Waste Management System)

The University of Alberta utilizes Chematix (<https://www.hazchem.ualberta.ca/Chematix/>) to manage waste collection and pick up for hazardous waste and contaminated materials. For more details, visit the Environment, Health, and Safety website.

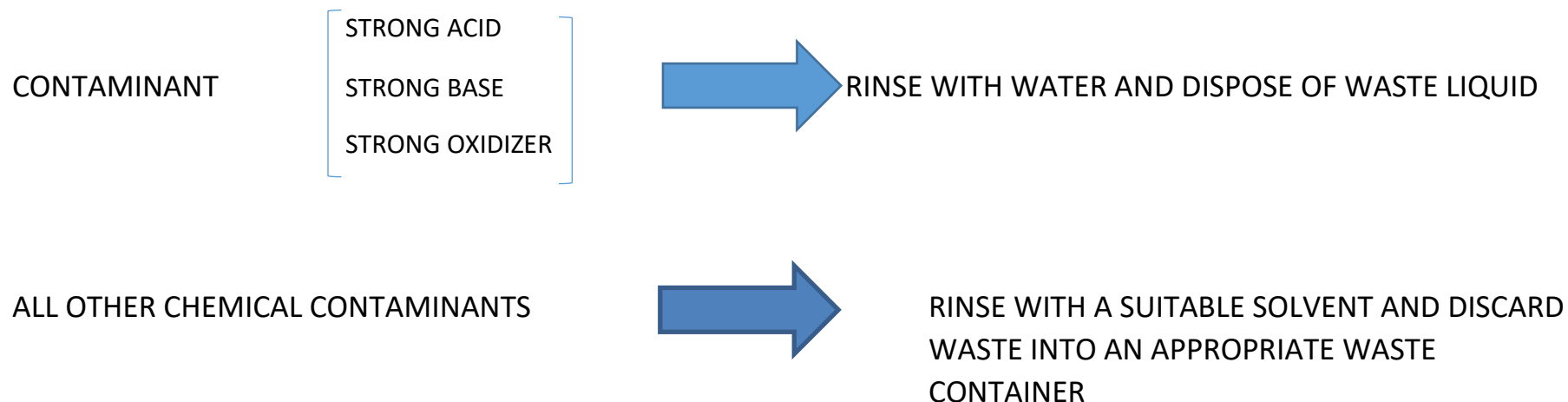
For any questions, feel free to reach out to the engineering safety team at enggplan@ualberta.ca.

Document Control:

Version	Date	Reviewed
1.0	July 26, 2018	Created by SB
2.0	December 4, 2019	SB
2.1	December 7, 2019	SB

6.0. CLEANING GLASSWARE TO BE RECYCLED

The following procedure is to be used on **EMPTY** glassware contaminated with trace amounts of liquid or solid chemicals. Before cleaning glassware, discard any remaining substances into an appropriate waste container.

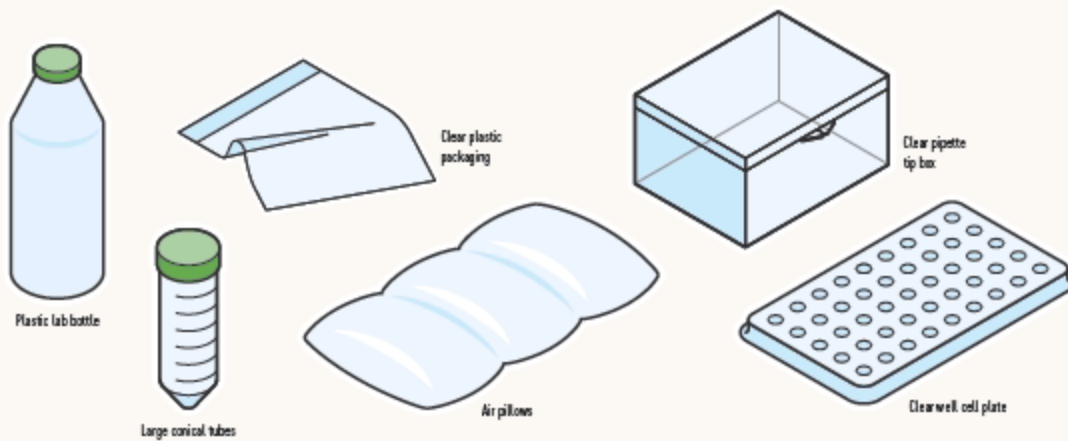


- RINSE BY SWIRLING AND WET ALL SURFACES UNTIL CONTAMINANTS ARE NO LONGER VISIBLE.
- STAINED GLASSWARE CANNOT BE RECYCLED!
- DEFACE THE LABEL BY USING A SHARPIE OR SPRAY PAINT, MAKING SURE THAT ALL WORDS AND SYMBOLS ARE UNRECOGNIZABLE, OR PHYSICALLY REMOVE THE LABEL.
- RECYCLE CLEANED GLASSWARE IN EITHER THE YELLOW PAILS WITHIN LABORATORIES OR THE LARGE BLUE GLASS/LIGHT METALS RECYCLING ROLLING CART OUTSIDE OF LABORATORIES.

LAB PLASTIC RECYCLING



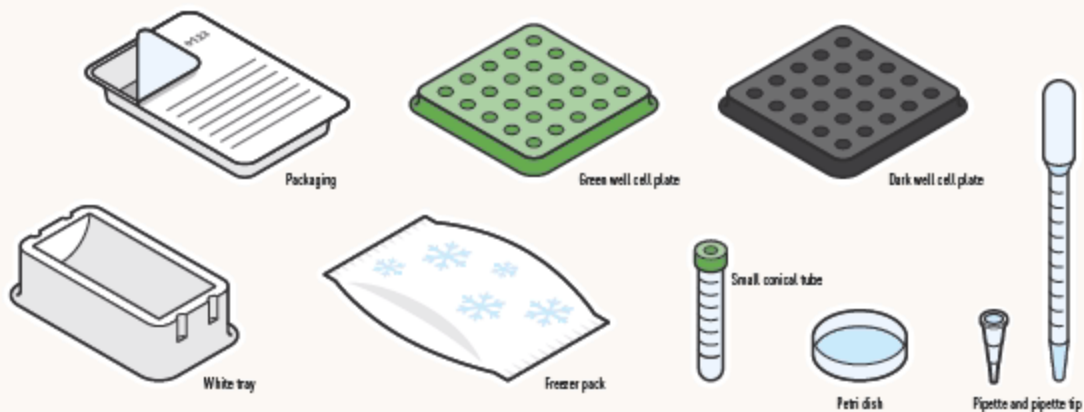
PLEASE RECYCLE (CLEANED AND DECONTAMINATED)



Recyclable plastics include:

Plastics contaminated with chemicals and/or biological waste must be cleaned and decontaminated before being placed in the recycling bin.

DO NOT RECYCLE



Non-recyclable plastics include:

Items that are smaller than a fist, dark-coloured, or made with mixed materials are not accepted for recycling.

Under no circumstance is plastic contaminated with radioisotope hazards to enter the recycle stream.

sustainability.ualberta.ca/greenlabs