

UPEI Waste Disposal Protocol

Purpose:

The purpose of this document is to ensure that waste is disposed of properly and safely in order to ensure the safety of all who handle waste.

Waste Pretreatment:

In order to reduce the risks of exposure/injury during handling and transport, waste is pre-treated as necessary prior to leaving UPEI.

Biomedical Waste:

The types of waste that may potentially be included with Biomedical Waste (for all areas on campus) are listed on the *UPEI Biomedical Waste Inventory - For External Disposal*. If box contents deviate from this list, then waste generators will make note on the sheet and attach it to the box.

Shipment/transport method:

Waste which must be transported off-site is handled by Facilities Management staff. The appropriate personal protective equipment is worn, such as steel toe boots and work gloves. Facilities Management staff transfer waste to the UPEI truck and deliver the waste to the appropriate location. Once Biomedical Waste leaves the University it is only handled by Facilities Management staff.

The waste going to Energy From Waste or Green Isle is not classified as Dangerous Goods, therefore it does not need to follow the Transportation of Dangerous Goods Regulations and a provincial manifest is not needed as per the Department of Environment.

Hazardous Chemicals for External Waste falls under the Transportation of Dangerous Goods Regulations. These regulations are to be followed internally as well as with the waste hauler.

Transport schedule/communications: Waste going to the Energy From Waste plant: Facilities Management staff will contact Dave Wonnacott the day of transport to verify that the incinerator is operating properly and is available for use at the defined time. Phone: 892-1085, extension 240.

Other Communications: The following must be kept informed (as applicable) of waste processes that change: Facilities Management staff, waste generators (can include employees & students), Energy From Waste, Green Isle, and any others that may be affected by the change.

Note: UPEI does not send the following items to *Energy From Waste* or *Green Isle*: chemicals, animal parts, animal bedding, biohazardous items, items saturated with animal blood, liquids, radioactive waste. Glass will not be disposed of at the *Energy From Waste* plant.

Note: Facilities Management staff are not to handle biohazardous waste.

Nonconformance: It is important to report trouble areas to your supervisor if this protocol is not being followed properly. The failure to follow protocols could result in individuals being injured or exposed to hazards.

Review: Facilities Management staff will review this document every 2 years or earlier if processes change significantly.

*Roles are assumed to be lab staff, unless otherwise indicated as Facilities Management staff.

UPEI Summary of Waste and Disposal Methods		
WASTE TYPE/DESCRIPTION	CONTAINMENT/LABELING/ROLES*	DESTINATION
<p>Autoclaved Waste:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Biohazard sharps containers (needles, blades, etc.) <input type="checkbox"/> Media/plates <input type="checkbox"/> Biohazardous waste from research, teaching & other labs (contaminated paper towel & bench covers, disposable pipettes, pipette tips, plastic containers, disposable test tubes, etc.) <p><u>Pretreatment:</u> autoclave, then remove sharps containers</p> <p><u>Sources:</u> AVC, Biology Department, INH-NRC, Student Health Centre, Chemistry, Family and Nutritional Sciences.</p>	<ol style="list-style-type: none"> 1. Orange bags with universal biohazardous symbol 2. Autoclave 3. Remove sharps containers (needles, blades, etc.) and treat as Metal Waste. 4. Remove glass and glass sharps and handle as glass waste (see “Glass” disposal method). 5. Put the remainder of the autoclaved waste in sturdy secondary containment (box, bucket, etc.) as necessary to prevent leaks/punctures 6. Autoclaved biohazard bag goes into a solid orange bag as Lab Waste <p>Waste is no longer biohazardous - do not use biohazardous symbol/label.</p>	<p>Green Isle - burnable bin (to incinerate at EFW as regular waste)</p> <p>Energy From Waste - autoclaved sharps as Biomedical Waste.</p>
<p>Biomedical Waste:</p> <ul style="list-style-type: none"> <input type="checkbox"/> materials such as disposable protective equipment, surgical masks, gloves, booties, plastic aprons, disposable pampers/absorbents, syringe barrels <input type="checkbox"/> materials from surgery with traces of animal blood <input type="checkbox"/> plastic sample containers that contain trace amounts of blood, feces, or urine <input type="checkbox"/> waste from animal surgeries, post mortem, etc. <input type="checkbox"/> test tubes with traces of animal blood <input type="checkbox"/> autoclaved sharps & sharps containers, metal sharps <p><u>Pretreatment:</u> none required.</p> <p><u>Sources:</u> AVC, Biology Department, Chemistry Department, INH-NRC, Student Health Centre, Family and Nutritional Sciences.</p>	<ol style="list-style-type: none"> 1. Waste is contained within a solid red bag. 2. Bag is placed in a cardboard box labeled as “BIOMEDICAL WASTE”. Note that if bag contents are wet, double bagging may be necessary and then an absorbent pad should be placed on the bottom of the box to prevent leaks. 3. Add a label indicating that the waste is from UPEI and the building name or department where it was packaged (for internal purposes). 4. Facilities Management staff take it to Energy For Waste for immediate incineration (call ahead). Fac. Mgt. will provide a copy of the <i>UPEI Biomedical Waste Inventory Sheet</i> to <i>Energy From Waste</i>. 	<p>Energy From Waste plant (immediate incineration)</p>

WASTE TYPE/DESCRIPTION	CONTAINMENT/LABELING/ROLES*	DESTINATION
<p>Lab Waste (Everything from labs that is NOT biohazardous/sharps/glass/radioactive)</p> <ul style="list-style-type: none"> <input type="checkbox"/> All lab waste that is potentially contaminated with trace amounts of chemicals, such as paper towels, bench top covering, disposable pipettes, weigh boats, empty plastic bottles, etc. <input type="checkbox"/> Includes all disposable personal protective equipment that is clean or chemically contaminated, e.g. gloves, masks, plastic aprons, disposable protective clothing, etc. <input type="checkbox"/> Includes any non-biologically contaminated medical type products, such as bandages, syringe barrels (non-sharps), gauze, etc. <p><u>Pretreatment</u>: none required.</p>	<ol style="list-style-type: none"> 1. Solid orange garbage bag. 2. Facilities Management staff remove from labs. 3. Facilities Management staff deliver to Green Isle. 	<p>Green Isle - burnable bin (to incinerate at EFW as regular waste)</p>
<p>Glass</p> <ul style="list-style-type: none"> <input type="checkbox"/> Empty, clean or chemically contaminated (trace amounts of chemicals only, no MSDS required) glass bottles <input type="checkbox"/> Broken glass, slides, glass pipettes, etc. <p>(This is not intended for kitchen glass waste.)</p> <p><u>Pretreatment</u>: biohazardous glassware is autoclaved, other glassware is cleaned/rinsed, as necessary.</p>	<ol style="list-style-type: none"> 1. Rigid container (box/bucket) with an inner bag 2. Labeled as “Caution - Glass for landfill” 3. Facilities Management picks up the same as regular waste (do not leave outside if wet) and delivers to Green Isle 	<p>Green Isle - non-burnable waste (to be land filled)</p>
<p>Uncontaminated Metal Waste</p> <ul style="list-style-type: none"> <input type="checkbox"/> Metal sharps (razor & scalpel blades, needles, etc.) <p>AVC: see AVC Sharps Waste Disposal Policy: http://www1.upei.ca/policy/content/avc/do/_avcdo_plt0005</p>	<ol style="list-style-type: none"> 1. Appropriate puncture resistant sharps container. 2. Label as “Metal Sharps - Caution” 3. Remove biohazardous symbol/word as applicable 4. Techs send to Post Mortem 5. Facilities Management take to <i>Energy From Waste</i> 	<p>Energy From Waste - immediate incineration</p>

WASTE TYPE/DESCRIPTION	CONTAINMENT/LABELING/ROLES*	DESTINATION
UPEI Incinerated Waste - Biohazardous: <input type="checkbox"/> Animal tissues/body parts/carcasses <input type="checkbox"/> Animal blood products and bodily fluids for diagnosis, from surgery, treatment or autopsy <input type="checkbox"/> Animal bedding <input type="checkbox"/> Items saturated with animal blood (paper towel, sponge, gauze, etc.) <u>Sources:</u> AVC & Biology Department	<ol style="list-style-type: none"> Yellow bags with universal biohazard symbol or the word "BIOHAZARD" on them. Yellow bag is placed in the labeled barrel just inside the doors to the postmortem lab adjacent to the Trim room, labeled as "BIOHAZARD WASTE - AVC INCINERATION" and the biohazard symbol. Stored in Post Mortem (AVC) area for incineration. 	AVC Incinerator
Hazardous Chemicals For External Disposal <input type="checkbox"/> Chemicals that need to be disposed of but cannot be neutralized on site or can't go down the drain <input type="checkbox"/> Chemically contaminated material, such as ethidium bromide contaminated gloves and absorbents, or acrylamide waste, etc.	<ol style="list-style-type: none"> Use appropriate container Label as: - HAZARDOUS WASTE - Name(s) of chemical(s) - don't abbreviate - Rough percentage - if applicable - Total mass or volume of chemical (for reactives: total mass of chemical + container) - Building, lab room #, generator's initials Enter into waste chemical inventory Store in designated waste chemical storage area in the building (include above info./type & size of container) 	Hazardous waste hauler. Procurement sends lists out for tenders.
General Waste	recyclables/compost/waste - <ol style="list-style-type: none"> collected by Facilities Management and taken to Green Isle for sorting, or put in large bins by Facilities Management staff, then picked up by a contractor 	contractor or Green Isle sorts

UPEI Biomedical Waste Inventory: For External Disposal

This waste is delivered to the *Energy From Waste* plant to be immediately incinerated.

Boxes coming from UPEI may consist of any or all of the listed items:

gloves	absorbent pads/coverings
paper towel	diapers
disposable masks/respirators	bandages
protective booties	casts
disposable plastic aprons	metal sharps (blades)
other disposable protective coverings	plastic containers
syringe barrels (non-sharps)	test tubes
autoclaved sharps within sharps containers	biological samples
autoclaved waste	petrie dishes

Additional items not listed above:

Comments:

Waste generators will add additional items to this table, as applicable, and attach it to the box. If this sheet is not attached to the box, then the contents of the box are listed above and Facilities Management staff will provide this sheet with each shipment.

UPEI Biomedical Waste is handled by UPEI Facilities Management staff. They deliver the waste to the *Energy From Waste* plant and put the waste immediately from the truck to the incinerator. This waste is to be immediately incinerated and will not be left on the floor of the plant.

The biomedical waste must be labeled in the lab as “UPEI Biomedical Waste”, along with a label indicating where the waste was generated (building/department).

The *Energy From Waste* health and safety committee approved this inventory sheet in January, 2007.

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