

Title: Sharps Waste Management	Issue Date: March 27, 2008
Document No. LAB-001-02	Revision Date: January , 2012

## Sharps Waste Management

### Document No. LAB-001-02

#### 1. INTENT

This Standard Operating Procedure (SOP) applies to all faculty, staff and students at Wilfrid Laurier University. It was developed by the EOHS Department to ensure that proper procedures for the safe collection, disposal and treatment of sharps waste are followed. Any questions regarding this SOP can be directed towards the EOHS Department at extension 3108.

#### 2. CONTACT INFORMATION

	Brantford	Waterloo
EOHS Department	Ext. 3108	Ext. 3108
Special Constable Service	Market Place, First Floor 45 Market Street <b>General Inquiries: 519-756-8228 ext. 5762</b> <b>Emergencies: 519-756-8228 ext. 5888</b>	232 King Street North <b>Ext. 3333 or</b> <b>519-885-3333</b>
Health Services	<b>519-756-8228 ext. 5803</b>	<b>519-884-0710 ext. 3146</b>
Facilities	Facilities Operations <b>519-756-8228 ext. 5761</b>	Physical Resources <b>519-884-0710 ext. 6280</b>

#### 2. DEFINITIONS

##### Sharps

Syringes, needles, scalpels, blades and broken glassware. Any item having corners, edges, or projections capable of cutting or piercing the skin is considered a sharp. Sharps can either be clean and free of contamination, or contaminated with biological, chemical and/or radioactive materials.

#### 3. ROLES AND RESPONSIBILITIES

Title: Sharps Waste Management	Issue Date: March 27, 2008
Document No. LAB-001-02	Revision Date: January , 2012

### Supervisors/Principal Investigators

Supervisors and Principal Investigators (PIs) are responsible for ensuring that:

- full compliance with the SOP exists at all times
- employees have been given adequate supervision and instruction on the hazards associated with the disposal of sharps
- everyone working in the lab under the PI's authority follows the procedures outlined within this SOP

### Staff/Students Working In Labs

Staff and students working in labs are responsible for ensuring that they:

- are familiar with the hazards and this SOP as it relates to the disposal of sharps
- promptly report any known accidents or unsafe conditions to their supervisor

## **4. GENERAL GUIDELINES**

- All sharps must be recognized as hazardous and be separated from regular waste streams to prevent unnecessary needlestick injuries and/or lacerations.
- Never attempt to recap, bend, shear, or remove needles before disposal.
- Sharps must be disposed of immediately after use into approved containers, according to type of contamination. Never force objects into a sharps container. A container is considered to be full when it has reached 3/4 of its capacity. Start filling a new container when the current container is 3/4 full.
- The sharps container should be located as close as possible to the area where sharps waste is generated.
- A sharps container should never be reused once filled to capacity.
- Always wear the appropriate personal protective equipment (PPE) for the hazard being handled. Wear safety glasses and a lab coat and the correct type of gloves to protect hands against contamination.

## **5. PROCEDURES**

The type of contamination on the item will determine the method of disposal.

<b>Title: Sharps Waste Management</b>	Issue Date: March 27, 2008
Document No. LAB-001-02	Revision Date: January , 2012

## 5.1 Uncontaminated Glassware

Clean, broken glassware, including Pasteur pipettes and intact glassware for disposal must be separated into an appropriately marked glass waste container. Intact glassware for disposal must be treated in the same manner as broken glassware due to the potential for breakage during waste handling activities. Empty glass chemical bottles must be rinsed three times with water before disposal.

Waste containers for uncontaminated glass must be purchased by the user's department. Custodial staff will remove glass waste containers when they are full, have been fully closed with the lid secured by tape and are labelled "Clean glass for disposal".

## 5.2 Contaminated Sharps Disposal

### **5.2.1 Biohazardous Contamination**

Sharps contaminated with biohazardous materials must be disposed of in approved sharps containers. The hard-walled, leak proof yellow coloured containers labelled with the biohazard symbol are provided by EOHS and can be obtained by contacting the EOHS Department.

Full containers will be removed with the biohazardous waste pickup. Contact the EOHS Department for instructions regarding removal of full biohazardous sharps containers.

### **5.2.2 Chemical Contamination**

Sharps that are contaminated with chemicals are disposed of as hazardous waste. The sharps or broken glass should be separated from uncontaminated items and placed in a puncture-proof glass waste container. The container should be sized according to the amount of waste to be packaged. For example, the smaller sized bench top containers should be used for a small amount of chemically contaminated waste sharps. The container is to be labelled as hazardous chemical waste with a description of the item and chemical contaminant and listed on the waste inventory form for removal from the lab. The waste containers must be purchased by the user's department.

### **5.2.3 Radioactive Contamination**

All sharps used for dispensing radioactive materials must be placed in an approved sharps container with a radioactive label on it. The container must be monitored and shielded, if necessary.

Contaminated glass (test tubes, glass pipettes, etc.) must be disposed of in a sharps container labelled with the radioactive symbol and the contents clearly stated.

### **5.2.4 Mixed Contamination**

Title: Sharps Waste Management	Issue Date: March 27, 2008
Document No. LAB-001-02	Revision Date: January , 2012

If sharps become contaminated with a mixture of hazardous components during use, treat as follows:

*Biohazard + Chemical*

Decontaminate the biohazard agent, if it safe to do so, and dispose of as chemically contaminated sharps waste.

*Radioactive + Chemical*

Dispose of as radioactive sharps waste.

*Biohazard + Radioactive*

Decontaminate the biohazardous agent with a 1% Sodium Hypochlorite solution to deactivate the biohazard and place in a sharps container with a radioactive label.

*Biohazard + Radioactive + Chemical*

Decontaminate the biohazardous agent, if it is safe to do so, and manage as radioactive sharps waste.

### 5.3 Mercury Thermometer Disposal

In the event of a mercury thermometer breakage, use the mercury spill kit that is available in each department to contain the spilled mercury. Seal the broken thermometer and any items used for spill cleanup into a bag from the spill kit. Clearly label the bag with its contents and list the bag on the hazardous waste inventory form for removal from the lab.

## **6. APPENDIX**

### **Relevant Standards/Legislation/Policies**

Biosafety Manual, Laurier Environmental/Occupational Health & Safety Office, March 2007.

Canadian Nuclear Safety Commission (CNSC)

“Code of Practice for the Management of Biomedical Waste in Canada”, Canadian Council of Ministers of the Environment (CCME), February 1992.

Environmental Protection Act - R.R.O. 1990, Reg. 347.

Laboratory Biosafety Guidelines, Public Health Agency of Canada, 3<sup>rd</sup> Edition 2004.

<b>Title: Sharps Waste Management</b>	Issue Date: March 27, 2008
Document No. LAB-001-02	Revision Date: January , 2012

Laboratory Health and Safety Manual, Laurier Environmental/Occupational Health & Safety Office, February 2007.

## 7. REVISION HISTORY

<i>Revision</i>	<i>Date</i>	<i>Comments</i>	<i>Initials</i>
00	Mar 27/08	SOP comes into effect	SJL
01	Dec 1/10	Updated for lab to lab pickup	SJL
02	Jan 19/12	Updated for Brantford labs	SJL

## ACKNOWLEDGMENTS

This procedure was shaped by similar documents from The University of Guelph and Queen's University.