

Hazardous Waste Disposal Standard

Approved on: December 14, 2005

Approved By: A.V.P., Human Resources

Revised on: February 4, 2008; July 30, 2010; September 7, 2012, 2015

1. Intent:

To outline Lakehead University's procedures pertaining to the disposal of hazardous waste. Hazardous wastes are an unavoidable by-product of maintenance, research, and teaching activities at Lakehead University and require proper management to safeguard staff, students, the general public, property and the environment. All hazardous waste disposal for the Thunder Bay campus (chemical, biohazardous, and radioactive) is arranged through the Office of Human Resources-Health & Safety. Hazardous waste disposal at the Orillia Campus is coordinated by the Human Resources Officer - Orillia. Arrangements are made for disposal of hazardous waste materials through qualified, certified hazardous waste disposal carriers.

2. Definition:

Hazardous wastes include the following substances:

- corrosive substances;
- oils and other petroleum products;
- explosives;
- compressed gases;
- oxidizers and organic peroxides;
- pesticides and herbicides;
- materials that will leach toxic materials, e.g., contaminated soils;
- toxic agents including drugs, chemicals, natural and synthetic products;
- flammable materials including flammable liquids, finely divided metals or powders, and flammable solids;
- radioactive materials; and
- broken glass
- sharps (needles, blades, etc.).
- biohazardous agents;
- pyrophoric materials;

3. Procedure:

3.1 Chemical Waste

All chemical waste must be suitably contained, properly labeled and properly disposed of:

Labels must identify:

- the date (or range of dates) the waste was generated.
- the type of waste, i.e., liquid, acid, solvent, solid, gas, etc.
- if the waste is a mixture, the approximate percentage of ingredients must be noted.
- known hazards of the waste.
- full name of the supervisor whose lab generated the waste, e.g., researcher or department.
- incompatibility of waste to other chemical and/or substance.

Chemical Waste Requests must be made using the ErPortal hazardous materials tracking system.

3.2 Used Chemical Reagent Bottles

These bottles may contain a harmful chemical residue. Before disposing of these containers, they must be rinsed with an appropriate solvent. The rinsings must be collected as hazardous waste. One cleaned, the labels must be defaced and the bottle can be disposed of as regular waste.

For broken chemical reagent bottles, or other glassware that cannot be decontaminated, see Section 3.4 for procedure.

3.3 Biohazardous and Pharmaceutical Waste

Biohazardous wastes are defined as hazardous pathological waste pursuant to the provisions of the Ontario Environmental Act. This waste is to be stored in specific containers supplied or approved by the waste carrier and available from the Office of Human Resources-Health & Safety.

Biologically contaminated waste that has been effectively sterilized by autoclave and poses no other physical hazard (e.g. sharp, chemical, radioactive) may be disposed of in the regular garbage.

Once autoclaved the waste must be:

- placed in a black garbage bag
- tied closed
- left for pickup by housekeeping staff

Biologically contaminated waste that cannot be decontaminated by autoclave or other acceptable means, should be disposed in this manner.

- Pharmaceutical waste is to be stored separately from biohazardous waste in specific containers supplied or approved by the waste carrier and available from the Office of Human Resources-Health & Safety.
- [Contact](#) the Office of Human Resources – Health & Safety to arrange disposal.

3.3 Sharps

i) Sharps (Biological or chemical)

Sharps refers to all sharp objects such as razor blades and needles, *including* those contaminated with **biological and chemical** materials. This waste is to be deposited into approved “sharps” containers. When full, sharps containers are to be placed in biohazardous waste containers supplied or approved by the waste carrier and available from the Office of Human Resources-Health & Safety.

[Contact](#) the Office of Human Resources – Health & Safety to arrange disposal.

ii) Chemically Contaminated Glassware

Chemically contaminated, broken glassware are to be deposited into a sealed “non-breakable” container, such as a large plastic pail. This waste should be separated to ensure that non-compatible chemicals are not mixed. Once sealed, these containers must be disposed of as solid chemical waste.

As with all chemical waste, chemically contaminated glassware must be suitably contained, properly labeled and properly disposed of: Labels must identify:

- the date the waste was generated.
- solid waste
- ingredients of contamination must be noted.
- known hazards of the waste.
- full name of the person who generated the waste, i.e., researcher or department.
- incompatibility of waste to other chemical and/or substance.

Chemical Waste Requests must be made using the ErPortal hazardous materials tracking system.

iii) Broken Glass (Non-contaminated)

Broken glass poses a physical hazard to our housekeeping staff and must be disposed of properly in a “Broken Glass Box.” These boxes consist of a cardboard shell lined with a plastic bag and a self sealing lid. When full, the bag must be secured from opening and the self sealing lid taped securely to the box. For disposal, the box should be marked “garbage” and a work order generated for its removal by housekeeping staff.

Designated broken glass boxes are available at the Office of Human Resources – Health and Safety.

4. Radioactive Waste

All radioactive waste requires special handling, containment and labeling to ensure compliance with the requirements of the Canadian Nuclear Safety Commission (CNSC). If you have or expect to generate radioactive wastes please contact Human Resources – Health & Safety for guidance on waste disposal. Arrangements for disposal are made with a qualified radiation safety consultant as required.

5. Evaluation:

This procedure shall be evaluated by the Health and Safety Officer every two years.