University of Regina

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Name:	**Hazardous Materials Management Policy**
Origin:	**Human Resources**
Approved:	**January 18, 2005**
Approval Process:	**President, University of Regina**
Revision Date(s):	Every 3 three years and whenever there is a change of circumstances that may affect the health and safety of employees.

Policy Statement

The University of Regina hazardous materials management policy establishes a framework whereby the University of Regina can manage hazardous materials in a responsible manner while maintaining teaching and research missions, and operations. This policy has several purposes:

1. to ensure compliance with legislative requirements (Federal/Provincial acts, regulations, standards and guidelines and Municipal by-laws) pertaining to hazardous materials management
2. to ensure protection from hazardous materials for all individuals governed under the University Safety Policy
3. to ensure the University controls access to hazardous materials
4. to set out University requirements for proper disposal of hazardous materials
5. to ensure that individuals receive required training in the proper handling, storage, transportation and disposal of hazardous materials and waste
6. to ensure a hazardous materials inventory is maintained

The University will minimize exposure to hazardous materials to ensure employee safety.

Objectives

The University requires that all persons who are responsible for the use of hazardous materials meet or exceed legal requirements with respect to the procurement, handling, storage, transportation and disposal.

Procedures for standard methods of handling hazardous materials in all University of Regina activities will be followed as outlined in the Chemical Safety program.

Proper training is required prior to working with hazardous materials. Documented current training records are to be maintained by Human Resources.

Responsibilities

1. The University

The University is responsible for ensuring compliance with legislative requirements (Federal/Provincial acts, regulations, standards and guidelines and Municipal by-laws) pertaining to hazardous materials management.

2. Deans, Directors, Department Heads, Managers, Supervisors

Hazardous materials management within units or equivalent units is the responsibility of the line management. Supervisors shall ensure that the activities carried out within their area of responsibility comply with federal, provincial and municipal legislation, conform to University policy and follow recognized standards of practice. Deficiencies that cannot be managed at the unit level shall be brought to the attention of the next level of administration for attention or corrective action.

3. Employees and University Employed Students

Employees and University employed students must follow safe work practices and procedures and University Policies. They must attend required training and use the safeguards and personal protective equipment provided.

4. Contractors, Subcontractors, Suppliers and Others

Contractors, subcontractors, suppliers and others providing a service for the University of Regina shall, as part of their contracts, agree to comply with all relevant health and safety legislation and University policies and procedures where directed by the University and as required by the University of Regina Safety Policy.

5. Students and Visitors

Students and visitors must follow safe work practices and procedures and University Policies.

Non-compliance

Individuals who do not follow this policy or regulatory requirements may face disciplinary action and possible criminal prosecution.

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Appendix A

Definitions

A **"biological substance"** means a substance containing living organisms or parts of organisms or products of organisms in their natural or modified forms.

A **"chemical substance"** means any natural or artificial substance, whether in the form of a solid, liquid, gas or vapour, other than a biological substance.

"Competent" means possessing knowledge, experience and training to perform a specific duty.

A **"controlled product"** means a controlled product within the meaning of the *Hazardous Products Act* (Canada).

"Dangerous Goods" means a product, substance or organism included by its nature or by the *Transport of Dangerous Goods Regulations* in any of the classes listed in the schedule to the *Transport of Dangerous Goods Act.*

"Hazardous" means likely to cause harm or injury in certain circumstances.

A **"Hazardous material"** means any prohibited product, restricted product, controlled product or special waste.

A **"hazardous waste"** means a controlled product that is intended for disposal or is sold for recycling or recovery.

A **"label"** includes any mark, sign, device, stamp, seal, sticker, ticket, tag or wrapper.

"Line management" means the person to whom you report.

A **"material safety data sheet"** means a document on which words, figures or symbols disclosing the information mentioned in sub-clauses 40(e)(i) to (v) of the *Occupational Health and Safety Act* may be written, printed or otherwise expressed.

A **"Member of the University community"** means a faculty member, a staff member, a student, a contractor or subcontractor or visitor at the University of Regina.

A **"notifiable chemical and biological substance"** means any of the substances listed in Table 19 of the *Occupational Health and Safety Regulations*.

"Personal protective equipment" means any clothing, device or other article that is intended to be worn or used by an employee to prevent injury or to facilitate rescue.

"Regulated biological waste" means a waste stream that includes infectious and non-infectious waste materials generated in the diagnosis, treatment, or immunization of human beings or animals; in research thereto; or in the production of biologicals.

"Special waste" means any product, substance or organism that is dangerous to the environment or to human beings, and that is no longer used for its original purpose, at the time of disposal or in storage/transportation prior to treatment or disposal.

"Supervisor" means a person who is authorized by the University of Regina to oversee or direct the work of employees.

A **"supplier"** means, unless otherwise stated, a person who supplies, sells, offers or exposes for sale, leases, distributes or installs any biological substance of chemical substance or any plant to be used at the University of Regina.

To **"train"** means to give information and explanation to an employee with respect to a particular subject matter and require a practical demonstration that the employee has acquired knowledge or skill related to the subject matter.

A **"visitor"** denotes any individual who is not an employee or student who is using hazardous material and has been authorized to do so on the University of Regina campus.

"Employee" means a person who is engaged in an occupation in the service of the University of Regina.

Applicable Legislation

All chemical and biological materials are considered hazardous unless specifically excluded from Schedule 7 of the Transportation of Dangerous Goods Act. Materials classified as special wastes must be disposed of in a safe manner in compliance with regulatory requirements. The rules for handling hazardous materials apply regardless of quantity.

Laws and regulations governing hazardous materials acquisition, handling, storage, transportation and disposal include, but are not limited to:

- *Canadian Environmental Protection Act*
- *Transportation of Dangerous Goods Act and Regulations*
- Workplace Hazardous Materials Information System (WHMIS)
- Hazardous Materials Information Review Act
- Hazardous Products Act (Canada)
- Environmental Management and Protection Act and the Hazardous Substances and Waste Dangerous Good Regulations
- *Occupational Health & Safety Act and Regulations*

- Laboratory Biosafety Guidelines for Health Canada
- Health Canada, Narcotics/Hazardous Materials Act for pharmaceuticals
- Saskatchewan Biomedical Waste Management Guidelines
- Fire Prevention Act
- National Fire Code of Canada
- City of Regina Sewer Service Bylaws

In accordance with Section 122 of the Canadian Environmental Protection Act:

"Where a corporation commits an offence under this Act, any officer, director or agent of the corporation who directed, authorized or assented to, or acquiesced to or participated in the commission of the offence is a party to and guilty of the offence, and is liable to punishment provided for the offence, whether or not the corporation has been prosecuted or convicted."

In accordance with Section 40 of the Occupational Health and Safety Act:

"Employer's duties regarding substances and controlled products:

Every employer shall:

- *Ensure that concentrations of chemical substances and biological substances in the place of employment are controlled in accordance with prescribed standards*
- *Ensure that all chemical substances and biological substances in the place of employment are stored, handled and disposed of in the prescribed manner*
- *Ensure that all chemical substances and biological substances in the place of employment, other than controlled products, are identified in the prescribed manner*
- *Ensure that each controlled product in the place of employment or each container in the place of employment in which a controlled product is contained:*
    - *Has a label that discloses all applicable prescribed information applied to it; and*
    - *Has all applicable prescribed hazard symbols displayed on it in the prescribed manner*
- *Make available a material safety data sheet with respect to each controlled product in the place of employment."*

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Procedures for Hazardous Materials Management

The number and variety of possibly hazardous materials at the University of Regina are large. Some are created as the result of experimentation. For this reason, the procedures under this policy are meant to provide guidance by illustration, and example to individuals at the University of Regina regarding areas such as chemical, biological, human, and animal materials. For radioisotopes, please refer to the Radiation Safety Policy and Manual. Individuals unsure about whether a substance (such as paint, oil, pharmaceutical, battery) is hazardous, or about the appropriate steps to take should refer to the University's Chemical Safety Program:
http://www.uregina.ca/hr/hse/laboratory-safety/index.html

PERMIT REGISTRATION

Notifiable Chemical Substances
Principal Investigators in research and teaching laboratories using Notifiable Chemical Substances are required to obtain an Operating Permit from Saskatchewan Labour, Occupational Health & Safety Division. To initiate this process, the Supervisor/Principal Investigator must register by contacting the Dean of the Faculty or Director who approves requests for use of the notifiable chemical substances and submits them to the Health & Safety office for assistance in making the application.

Notifiable Biological Substances
Principal Investigators in research and teaching laboratories using or storing biological substances in Risk Groups Level 2 or greater are required to obtain approval from the Dean of the Faculty. If the function of the laboratory or work changes, the onus is on the Supervisor/Principal Investigator to inform the Dean and the Health & Safety office of this change.

Radioactive Substances
The permit approval requirements are outlined in the Radiation Safety Policy and Manual:
http://www.uregina.ca/presoff/vpadmin/policymanual/hr/2010560.shtml

HAZARDOUS MATERIALS/PURCHASING/ACQUISITION/RULES
Consideration must be given to substituting less harmful materials for those that are known to be hazardous at the time of acquisition. Hazardous materials should be purchased in quantities small enough that they do not have to be stored at the University of Regina over specified time periods.

Hazardous materials can only be ordered by authorized faculty and employees through the University purchasing Departments (Science Stores, Physical Plant Stores and Supply Management Services). Students/visitors require written authorization of permission from the Dean, Director or Department Head to order any hazardous materials. The unit must be capable of handling the supportive functions needs as prescribed by legislation.

Persons receiving or transporting dangerous goods must hold a valid Transport of Dangerous Goods (TDG) certificate of training.

The Health & Safety office, in consultation with the Chemical Safety Committee, develops and maintains a Chemical Safety Program that provides generic chemical safety information. For chemicals unique to a particular laboratory, the principle investigator must develop written procedures, to be vetted by the Health & Safety office. Each faculty, department, or equivalent unit using hazardous materials must develop or adopt procedures that include:

- Acquiring minimum quantities only
- Safe and secure storage
- Removing out-of-date materials from inventory
- Inspection of time sensitive materials
- Appropriate labelling consistent with WHMIS requirements
- An ongoing current inventory of hazardous materials
- Training of faculty, staff and students
- Proper use of personal protective equipment, emergency spill and decontamination
- Compliance with University procedures for disposal

A copy of the Chemical Safety Program must be available at all labs:
http://www.uregina.ca/hr/hse/laboratory-safety/chemical-safety/index.html

The Health & Safety office provides training on the Program.

HUMAN, ANIMAL AND BIOLOGICAL MATERIALS

The Health & Safety office, in consultation with the Biosafety Committee, develop generic procedures for handling and use of infectious materials. A copy of the Biosafety Program must be available at all labs. For materials unique to a particular laboratory, the supervisor using human, animal, or biological materials must develop specific written procedures that includes how to deal with regulated biological waste. Regulated biological waste includes, but is not limited to, the following categories:

- Cultures and stocks of infectious agents, and any materials contaminated with a potentially infectious agent, including, culture dishes and devices used to transfer, inoculate and mix cultures
- Any human pathological wastes, including waste human blood or blood products, generated in medical or research procedures, and other potentially infectious materials; items contaminated with these materials, and any containers that held these potentially infectious materials
- Any animal specimens, carcasses or tissues
- Any biological material contaminated with an infectious agent

- DNA
- Vaccines, pharmaceuticals
- Wastes from medical or research procedures that were in contact with infectious agents, including slides and cover slips, disposable gloves, and protective equipment
- Sharps: used or new hypodermic needles and syringes (with or without needle attached), scalpels and razor blades. Also, Pasteur pipettes and broken glassware, when contaminated with an infectious agent
- Mixed waste: Biological specimens or material treated with or preserved in chemicals including alcohol or formaldehyde are considered mixed waste (regulated biological waste and hazardous chemical waste)
- Bedding for animals
- Other regulated biological waste solids must be placed in secure, leak-proof packaging and stored in such a manner that will prevent decomposition or deterioration during storage

It is the responsibility of each individual to establish proper disposal procedures prior to producing regulated biological wastes. Area supervisors or other employees producing regulated biological waste materials are responsible for compliance with applicable regulations and disposal program requirements.

Each faculty, department, or equivalent unit using human, animal or biological materials must develop procedures that include:

- Acquiring minimum quantities only
- Safe and secure storage
- Appropriate labelling and an annual inventory of materials
- An ongoing current inventory of hazardous materials
- Training of faculty, staff and student
- Proper use of personal protective equipment, emergency, spill and decontamination procedures
- Compliance with University procedures for disposal

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Chemical Safety Program

1. The Chemical Safety Program is coordinated by the Health & Safety office and includes procedures for the acquisition, handling, responsible use, storage, transportation and disposal of hazardous materials and makes provision for the following:
    a. Designation of responsibility
    b. Acquisition
    c. Identification (labelling and Material Safety Data Sheet (MSDS)
    d. Information and training
    e. Storage
    f. Engineering controls
    g. Safety devices and personal protective equipment
    h. Record keeping
    i. Registration and reporting to external compliance agencies
    j. Accident and incident investigation
    k. Spill response
    l. Emergency preparedness and response
    m. Hazardous waste collection and disposal

Disposal of Hazardous Waste

1. The Health & Safety office shall coordinate the Hazardous Waste Program using an accredited and certified commercial disposal company. Managers and supervisors are responsible to organize and arrange for hazardous waste disposal in their units. All hazardous waste scheduled for disposal shall be stored in a safe, suitable location in a laboratory or other approved storage site pending pick-up by the disposal company. Maximum storage time shall be six months.

2. Packaging, identification and labelling of hazardous wastes and their transport to the temporary holding area are the responsibility of the individual producing the hazardous waste.

3. All materials designated for disposal shall be properly labelled as waste and packaged in containers suited to the type of waste. The containers shall be tightly sealed and in good condition.

4. All containers shall be properly labelled with the name of the material, its chemical class, quantity, the laboratory or room from which it came, the name of the person(s) whose activity produced the waste, and the date. An MSDS shall be supplied for each compound.

5. Hazardous waste of different classes shall not be mixed in the same container.

6. When several containers are packed inside a box, each container shall be properly labelled and the box shall have a list of the contents on the outside.

7. It is the responsibility of the individual using hazardous materials to identify each material and label it properly. Unidentified compounds are the responsibility of the individual producing the hazardous waste.

8. A hazardous waste disposal request form must be submitted to the Health & Safety office for approval. Science can submit requests to the Coordinator of Science Operations at 585-4769 and Engineering can submit requests to the Laboratory Services Coordinator at 337-2468. The form is available at: http://www.uregina.ca/hr/hse/laboratory-safety/chemical-safety/index.html

Operational Responsibilities

The University

1. The University is responsible for the safe handling and disposal of hazardous waste from the point of generation to final treatment, and shall maintain an Emergency Procedures Policy and Handbook.

2. The University recognizes its responsibility to act with due diligence where hazardous materials are concerned.

3. Where hazardous materials are used, they shall be identified, evaluated and controlled to minimize risk. Hazardous materials shall be ordered only in quantities required and shall be stored in appropriate areas.

4. Hazardous materials shall only be used in facilities appropriately and adequately equipped to control personnel exposure. Personal protective equipment shall be worn wherever it is required. Appropriate antidotes and spill response materials will be kept in close proximity to locations where hazardous materials are used.

5. Individuals using hazardous materials shall be suitably trained and supervised as required by legislation.

6. Hazardous materials shall be stored in an approved manner.

7. A current up to date inventory of hazardous materials shall be kept both in the relevant unit and in a central University registry. The responsibility for maintaining the Unit inventory lies with each Faculty or Department and the Health & Safety office maintains the central University automated registry in CIS Pro.

8. Specialized written procedures and guidance documents relating to hazardous materials management shall be coordinated by the Health & Safety office. These procedures shall be modified to reflect changes in legislation, university operations, and recognized standards or codes of practice.

9. Waste shall be disposed of in a manner, which conforms to legislation, university regulations and responsible standards of practice.

The Health & Safety office

1. The Health & Safety office shall develop, coordinate and oversee the Chemical Safety and Biosafety Programs, and support the administration, the Occupational Health Committee (OHC), subcommittees and the University community in carrying out the duties established therein. To that end, the Health & Safety office shall:

    a. Provide information, technical assistance and advice to individuals and units on the management of hazardous materials;

    b. Organize and coordinate the hazardous waste program;

    c. Maintain records of accidents and incidents and carry out investigations as required;

    d. Support units to ensure WHMIS compliance: MSDS, labelling, specific training and inventory control;

    e. Provide general training sessions on hazardous materials management: specifically WHMIS, TDG and other topics as required;

    f. Initiate and participate in facility inspections, with particular attention to storage, handling and disposal of hazardous materials and make recommendations to the appropriate authority for corrective action;

    g. Monitor the level of WHMIS compliance and report at least annually to the Occupational Health Committee;

    h. Investigate and respond to complaints and inquiries, and report findings to the Occupational Health Committee;

    i. Report to external compliance agencies as required and represent the University to external compliance agencies;

    j. Keep abreast of legislation concerning hazardous materials and the environment, and to advise the University administration and the Occupational Health Committee about potential impact on University activities.

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Deans, Directors, Department Heads, Managers, Supervisors

1. Hazardous materials management within units is the responsibility of the line management. Supervisors shall ensure that the activities carried out within their area of responsibility comply with federal, provincial and municipal legislation, conform to University policy and follow recognized standards of practice. Deficiencies that cannot be managed at the unit level shall be brought to the attention of the next level of administration for attention or corrective action. Specific responsibilities are:

    a. To ensure that all employees and students working within the unit are provided sufficient information, training and supervision to carry out their work safely;

    b. To comply with WHMIS regulations on all unit activities: to provide workplace-specific training; to ensure correct labelling; to maintain current MSDSs and ensure that these are accessible;

    c. To ensure that engineering controls and safety equipment are adequate, appropriate and in good working order;

    d. To provide and maintain all personal protective equipment required by employees and ensure it is used correctly;

    e. To ensure that all personnel receive appropriate and adequate information and training to be able to respond safely to spills and hazardous materials incidents occurring within the unit;

    f. To provide the necessary material and equipment for spill response;

    g. To identify hazards, post hazardous warning signs and communicate emergency procedures;

    h. To evaluate activities carried out within the unit, and to develop specific policy and operating procedures as appropriate;

    i. To carry out regular inspections of laboratories, studios and workshops;

    j. To report accidents and incidents to the appropriate supervisor and to the Health & Safety office within 24 hours of occurrence and cooperate in their investigation;

    k. To maintain records as required by legislation or University policy;

    l. To cooperate with requests from the Health & Safety office or the Occupational Health Committee;

m. To review grant applications to ensure that the space, facilities, engineering controls and procedures are adequate and appropriate for the work and hazardous waste disposal to be carried out safely and in accordance with regulations;

n. Where significant hazards exist to appoint a local safety officer and to establish a unit health and safety committee.

Employees/Students/Visitors

1. It is the responsibility of individual employees/students/visitors:

    a. To be familiar with all University and unit safety instructions, whether written or oral, and to comply with such instructions when performing assigned duties;

    b. To report all incidents/accidents involving hazardous materials to their immediate supervisor and the Health & Safety office or Campus Security within 24 hours of occurrence.

Employees/students/visitors who have not received appropriate training and specific hazard information, or who cannot be competently supervised, shall not use or handle hazardous materials.

Contractors

1. All contractors working on University premises shall carry out their work in accordance with the legislation and University policies;

2. No contractor shall bring a hazardous material onto University premises without ensuring that a copy of the MSDS is readily available to employees.

The following documents outline policies, procedures or guidelines for the handling of potentially hazardous materials and are available at:

http://www.uregina.ca/hr/hse/policies/index.html

1. Hazardous Materials Management Policy
2. Chemical Safety Program
3. Chemical Inventory System (CIS Pro)
4. MSDS Filing Cabinet
5. Emergency Procedures Policy and Handbook
6. Laboratory Closeout Policy
7. Working Alone Policy
8. Radiation Safety Policy and Manual