

Effective Date: February 15, 2010

Originating Office: Office of the Vice-President, Services

Supersedes / Amends: VRS-47/October 20, 2004 Policy Number: VPS-47

<u>SCOPE</u>

This Policy applies to all persons (including University employees, students, researchers, service providers, visitors, contractors or any other persons involved with the acquisition, handling, storage, removal or disposal of chemicals or other hazardous chemical products on University premises.

For the purposes of this Policy, *hazardous materials* includes chemicals, biological, and radioactive materials.

The following policies also relate to the management of hazardous materials and should be used as references for specific elements:

Environmental Health and Safety Policy (<u>VPS-40</u>) outlines institutional obligations and line supervision and/or management responsibilities for health and safety throughout the University.

Radiation Safety Policy (<u>VPS-46</u>) outlines the management of radioactive materials as required by the Canadian Nuclear Safety Commission (CNSC) and in accordance with the Nuclear Substances and Radiation Devices License issued to the University by the CNSC permitting use of radioisotopes in teaching and research.

Biosafety Policy (VPS-52) outlines a framework for the development and maintenance of a biosafety programme in which the University can manage its biohazard risks in a manner which protects the health and safety of individuals and the environment, meets regulatory requirements and supports the University's teaching, research and service missions.



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<u>PURPOSE</u>

The purpose of this Policy is to establish a framework whereby the University can manage its hazardous materials in a responsible manner while maintaining its teaching, research and service missions. To this end, the University is committed to ensuring that individuals using hazardous materials are regularly informed about risks, trained in safe handling procedures and adequately supervised. The University is also committed to encouraging reduction in the acquisition of hazardous materials, the recycling of such materials and substitution for less toxic materials wherever feasible.

The University shall establish and maintain a Hazardous Materials Management Programme which supports the teaching, research and service functions of the University. It will comply with all federal, provincial and municipal legislation concerning occupational health and safety and the environment, and will conform to recognized codes and standards of practice.

For a glossary of terms and acronyms used in this Policy, refer to <u>Appendix A</u>.

POLICY

<u>General</u>

- 1. The University recognizes its responsibility to act with due diligence where hazardous materials are concerned.
- 2. The University shall establish a University Hazardous Materials Committee (UHMC) of academic and technical experts to advise the University community on practices related purchasing, handling, storage and disposal of hazardous materials, and compliance with legislation.
- 3. The University is responsible for the safe handling and disposal of hazardous waste (including transport as per TDG regulations) from the



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point of generation to final treatment and disposal, and shall maintain an emergency response policy and procedure manuals.

- 4. Purchasing and acquisitions of hazardous materials shall be done only by individuals with appropriate training.
- 5. An inventory of hazardous materials shall be maintained and verified at least annually.
- 6. Hazardous materials shall be ordered only in quantities required and shall be stored in appropriate areas in accordance with University guidelines for hazardous materials storage, taking into consideration their flammability, corrosive properties, toxicity and reactivity.
- 7. Hazardous materials shall be labeled in accordance with federal and provincial regulations. Material safety data sheets must be accessible in the area where hazardous materials are used.
- 8. Hazardous materials shall only be used in facilities which have been designated for their use and are appropriately and adequately equipped to control personnel exposure and minimize risk.
- 9. Personal protective equipment shall be worn wherever it is required.
- 10. Appropriate antidotes and spill response materials shall be kept in close proximity to locations where hazardous materials are used.
- 11. Individuals using hazardous materials shall be appropriately trained and adequately supervised.
- 12. All individuals who use, handle or store hazardous materials shall receive WHMIS training.



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- 13. An inventory of hazardous materials shall be maintained both in the department and in a central University registry which shall be accessible to emergency responders as required.
- 14. Written procedures and guidance documents relating to hazardous materials management shall be produced by the Environmental Health and Safety Office (EH&S Office) and if specifically required due to particular activity, by the department or research laboratory. These procedures shall be modified to reflect changes in legislation, University operations and recognized standards or codes of practice.
- 15. Hazardous waste disposal shall conform to federal, provincial and municipal legislation, University policies and recognized standards of practice.
- 16. Academic and research staff are responsible for closing down their laboratory operations and arranging for the disposal of hazardous materials upon the completion of their employment contract or relocation of their operations.
- 17. Hazardous materials transferred to other users must be recorded through the inventory control system.

OPERATIONAL RESPONSIBILITIES

The Environmental Health and Safety Office

18. The EH&S Office shall develop, coordinate and oversee the Hazardous Materials Management Programme and provide support to the University community and the UHMC in carrying out the duties established therein. To that end, the EH&S Office shall:



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- a. Provide information, support and advice to individuals and departments on the management of hazardous materials;
- b. Assist the Office of Research, researchers and departments in conducting risk assessments and evaluate any special certification requirements or needs before issuing certificates as required;
- c. Support departments and service areas with the maintenance of their inventory and oversee the hazardous materials registry;
- d. Organize and coordinate the hazardous waste management programme in accordance with federal, provincial and municipal regulatory requirements;
- e. Maintain procedures to respond to hazardous material emergencies and coordinate response to spills and/or accidental releases of and exposures to hazardous materials;
- f. Maintain records of accidents and incidents and carry out and participate in investigations as required;
- g. Provide general training sessions on hazardous materials management: specifically WHMIS/GHS, TDG, Radiation Safety, Biosafety, spill response and waste management, and other topics as required;
- h. Monitor the level of WHMIS compliance and report at least annually to the UHMC and the Central Advisory Health and Safety Committee;
- i. Initiate and participate in facility inspections, with particular attention to storage, handling and disposal of hazardous materials



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and make recommendations to the appropriate authority for corrective action;

- J. Investigate and respond to complaints and inquiries, and report findings to the UHMC on a regular basis, the Central Advisory Health and Safety Committee as requested, and the Vice-President, Services, as required;
- k. Represent the University to external compliance agencies and report to external compliance agencies as required.
- 1. Monitor legislation concerning hazardous materials and the environment, and advise University administrators and the UHMC about its potential impact on University activities.

Office of Research

- 19. The Office of Research shall:
 - a. Notify researchers of the internal EH&S certification requirements;
 - b. Provide EH&S with the list of approved grants that require EH&S certification;
 - c. Withhold grants that do not receive prior EH&S certification.

Deans, Chairs, Research Directors, Department Directors, Managers, Supervisors

20. Responsibility for the management of hazardous materials within administrative, academic and service units lies with the line supervision in accordance with the *Environmental Health and Safety Policy* (<u>VPS-40</u>).



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- 21. Safety Officers may be appointed to assist persons or managers at all levels of the line of supervision in the exercise of these duties.
- 22. In addition, managers at the appropriate level of the line of supervision must:
 - a. Ensure that engineering controls e.g. fume hoods, biological cabinets and containment or storage devices, emergency shut-offs and safety equipment are adequate, appropriate and in good working order and are used when required;
 - b. Ensure that inventories of hazardous materials are up-to-date and available to EH&S;
 - c. Provide and maintain all personal protective equipment required by personnel and ensure training has been provided in proper utilization;
 - d. Maintain the necessary material and equipment for spill response;
 - e. Carry out inspections of laboratories, studios and workshops;
 - f. Cooperate with requests from the EH&S Office or the UHMC;
 - g. Review grant applications to ensure that the space, facilities, engineering controls and procedures and support services are adequate and appropriate for the work to be carried out safely.

Employees and Students

23. Employees and students must comply with the *Environmental Health and Safety Policy* (<u>VPS-40</u>) and more particularly with respect to the Personal Protective Equipment, training, storage and waste handling procedures.



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<u>Visitors</u>

- 24. Entrance is restricted in areas containing potential or known hazards including, but not limited to, all research and teaching laboratories, maintenance shops, workshops, mechanical and electrical rooms, construction sites, studios and any area where hazardous materials are handled or stored. In accordance with the *Environmental Health and Safety Policy* (VPS-40), Laboratory Supervisors and/or Principal Investigators are specifically responsible for the safety of all employees and visitors in their work areas.
- 25. Visitors to such areas must be continually supervised by University personnel who are trained and knowledgeable of the area's potential hazards. Visitors under 16 years of age (unless considered a Concordia student), are not permitted in restricted access areas except with written consent from the Unit/Department Head and/or designated individual.
- 26. Visitors less than 16 years of age who do not have written consent shall present themselves at the Security Desk prior to entering a restricted access area. The Security Agent will contact the appropriate Unit/Department Head and/or designated individual to obtain authorization.

Contractors

- 27. Contractors working on University premises shall carry out their work in conformity with the legislation and University policy and procedures.
- 28. No contractor shall bring a controlled product onto University premises without providing the project coordinator or the EH&S Office with a copy of the MSDS for that product.



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University Hazardous Materials Committee

- 29. The UHMC shall advise the University administration, through the Vice-President, Services, on matters pertaining to the management of hazardous materials within University facilities and operations. The role of the Committee shall be to advise and support the EH&S Office in developing policies and procedures which support the teaching, research and the service functions of the University, in conformity with pertinent legislation and recognized codes and standards of practice.
- 30. The UHMC shall:
 - a. Recommend the establishment of and endorse the implementation of new University policies and procedures for the management of hazardous materials;
 - b. Evaluate existing policies, procedures and practices and recommend changes as needed;
 - c. Study proposed government legislative and policy changes from regulatory agencies, evaluate their potential impact on University activities and make recommendations regarding implications for University policies and procedures;
 - d. Study accident and incident reports involving hazardous materials and recommend further investigation and corrective action if warranted;
 - e. Review inspection reports of laboratories, studios and workshops where hazardous materials are used.
 - f. Review and evaluate training programmes and compliance reports.



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- g. Consider issues presented by the EH&S Office and concerns raised by members of the University community;
- h. Submit an annual report to the Vice-President, Services and the Central Advisory Health and Safety Committee.

<u>Membership</u>

- 31. The UHMC shall consist of a Chairperson, the Director of Purchasing, a representative from the Office of Research, an appropriate manager from the Department of Facilities Management, at least one member each from the Faculty of Fine Arts and the Faculty of Engineering and Computer Science, and at least two members from the Faculty of Arts and Science and a graduate student whose work involves hazardous materials. A Manager from the Security Department, the Director of Environmental Health and Safety and an EHS designate shall be *ex-officio* members.
- 32. All members of the Committee shall be appointed by the Vice-President, Services, on the basis of their technical expertise and shall serve a renewable two-year term. Appointments from the academic sector shall be recommended by the appropriate Dean.



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PROCEDURES AND GUIDELINES

Procedures and guidelines for the handling of potentially hazardous materials are available on the <u>EH&S website</u> under the Hazardous Materials section. Topics covered include:

- 1. Chemical Storage Poster
- 2. Emergency Response Poster and Procedure
- 3. Handling and disposal of chemical waste
- 4. Transportation of Dangerous Goods (TDG) summary
- 5. University Spill Response Procedures
- 6. Workplace Hazardous Materials Information System (WHMIS) and the Globally Harmonized System (GHS) summary
- 7. Chemical Inventory System guidelines
- 8. Faculty Guide for Research
- 9. Transfers and Closeout of Labs
- 10. Waste Procedures
- 11. Laboratory Safety Manual
- 12. Visitor Access to Laboratory/Studio/Workshops
- 13. University Radiation Safety Policy Manual



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APPENDIX A

DEFINITIONS

<u>Controlled Product</u>: any product included in the classification established by regulation or meeting the criteria set out in the classification. A controlled product could be included in one or more of the following classes: compressed gas; flammable or combustible material; oxidizing material; poisonous or infectious material; corrosive material; dangerously reactive material. [<u>Act</u> respecting Occupational Health and Safety R.S.Q., chapter S-2.1]

<u>GHS</u>: Globally Harmonized System of classification and labeling of chemicals in Canada will probably come into effect in 2009 and it will complement WHMIS regulations.

<u>Hazardous Substance</u>: a substance which, because of its explosive, flammable, poisonous, corrosive, oxidizing, irritant or otherwise harmful nature, is likely to cause injury. [<u>Regulation Respecting Industrial and Commercial Establishments</u> <u>R.R.Q. 1981, S-2.1, r.9</u>]

<u>Hazardous waste</u>: a controlled product that is intended for disposal or is sold for recycling or recovery. [Controlled Products Regulations R.S.C. 1985, SOR/88-66, <u>Hazardous Products Act</u> am SOR/88-555, am SOR /89.150]

<u>Line Supervision or Management</u>: The hierarchical chain of responsibility and accountability whereby responsibility is delegated downwards and accountability passes upwards to the President's Executive Group.

<u>MSDS</u>: Material Safety Data Sheet is an information sheet detailing technical and hazard evaluation information on a hazardous material.

<u>TDG</u>: Transport of Dangerous Goods is a national program to promote public safety during the transportation of dangerous goods. The TDG Directorate serves



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as the major source of regulatory development, information and guidance on dangerous goods transport for the public, industry and government employees.

<u>WHMIS</u>: The Workplace Hazardous Materials Information System is a national system designed to ensure that all employers obtain the information they need to inform and train their employees properly about hazardous materials used in the workplace. WHMIS legislation has specific requirements for information and training, labeling and MSDS (Material Safety Data Sheets).

<u>Workplace</u>: any place in or at which a person is required to be present out of or in the course of work, including an establishment and a construction site. [<u>Act</u> <u>Respecting Occupational Health and Safety R.S.Q., chapter S-2.1</u>]

<u>Safety Officers</u> assist academic and service administrators, including researchers who manage their own laboratories, to fulfill the EH&S responsibilities assigned to them through University policy.