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<th>Complete Program Title:</th>
<th>Risk Management Manual (RMM) Number:</th>
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<td>Standard Operating Procedures</td>
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<th>Approved by:</th>
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<tr>
<td>Vice-President, Administration</td>
<td>December 2019</td>
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<td>President and Vice-Chancellor</td>
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<tr>
<th>Date of Original Approval:</th>
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<td>April 2007</td>
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<th>Responsible Executive:</th>
<th>Enquiries:</th>
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<tr>
<td>Vice-President, Administration</td>
<td>Environmental and Occupational Health Support Services (EOHSS)</td>
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<td></td>
<td><a href="mailto:eohss@mcmaster.ca">eohss@mcmaster.ca</a></td>
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**DISCLAIMER:** If there is a discrepancy between this electronic program and the written copy held by the program owner, the written copy prevails.

1 **PURPOSE**

1.1 To provide for the protection of faculty, staff, students and the environment by defining specific minimum requirements to establish safe work practices.

1.2 To ensure compliance with the Occupational Health and Safety Act and other statutes and regulations pertaining to occupational health and safety and environmental protection.

2 **SCOPE**

2.1 All faculty, staff, students, volunteers, visitors and contractors.

3 **RELATED DOCUMENTS**


3.2 Federal and Provincial Environmental Protection Acts.

3.3 Federal Transportation of Dangerous Goods Act, SOR/2007-179

3.4 Ontario Fire Code, Reg 213/07

3.5 The Canadian Nuclear Safety and Control Act and Regulations (1997, c.9)

3.6 Health Canada Laboratory Biosafety Guidelines, 3rd edition 2004

RMM 301 – December 2019
3.7 McMaster University Health & Safety Policy, RMM#100
3.8 McMaster University Risk Management Manual, Programs as applicable
3.9 Manufacturers Equipment Manuals (specific to each individual piece of equipment)
3.10 Job Hazard Analysis Program, RMM# 324

4 DEFINITIONS / ACRONYMS

4.1 Critical Injury: Critical injury as defined by the OHSA means: An injury of a serious nature that:
   (a) places life in jeopardy;
   (b) produces unconsciousness;
   (c) results in substantial loss of blood;
   (d) involves the fracture of a leg or arm but not a finger or toe;
   (e) involves the amputation of a leg, arm, hand or foot but not a finger or toe;
   (f) consists of burns to a major portion of the body; or
   (g) causes the loss of sight in an eye.

4.2 Occupational Illness / Disease – An illness that has its etiology in the work environment. It may be caused by acute or chronic exposure to physical, chemical or biological agents in the workplace. It may appear months or years after the exposure has occurred.

4.3 Standard Operating Procedures (SOPs) – Written and communicated procedures required by the OHSA under specific regulations and by McMaster University Programs that define the techniques, processes and best practices required to prevent injury and/or occupational illness or damage to University equipment or the environment.

4.4 Supervisor – Person who has charge of a workplace or authority over a worker.

4.5 Worker – means any of the following, but does not include an inmate of a correctional institution or like institution or facility who participates inside the institution or facility in a work project or rehabilitation program:
   1. A person who performs work or supplies services for monetary compensation.
   2. A secondary school student who performs work or supplies services for no monetary compensation under a work experience program authorized by the school board that operates the school in which the student is enrolled.
   3. A person who performs work or supplies services for no monetary compensation under a program approved by a college of applied arts and technology, university or other post-secondary institution.4. Such other persons as may be prescribed who perform work or supply services to an employer for no monetary compensation; ("travailleur")
4.6 Acronyms:

PBAC – Presidential Biosafety Advisory Committee
CJHSC – Central Joint Health and Safety Committee
CNSC – Canadian Nuclear Safety Commission
EOHSS – Environmental & Occupational Health Support Services
FHSSO – Faculty of Health Sciences Safety Office
HPAC – Health Physics Advisory Committee
JHSC – Joint Health and Safety Committee
MNR – McMaster Nuclear Reactor
OHSA – Occupational Health and Safety Act, R.S.O. 1990
EPA – Environmental Protection Act, R.S.O. 1990, c.E.19
SOP – Standard Operating Procedure

5 RESPONSIBILITIES

5.1 Role of Senior Managers (Deans/ Directors / Chairs):

Senior Managers shall:

• provide the support and resources necessary to implement and maintain the development and implementation of required SOPs.

5.2 Role of Supervisors:

Supervisors shall:

• ensure that all assigned work is assessed to determine if an SOP is required;
• consider SOPs for work assignments and projects that have the potential to cause critical injury, occupational illness or environmental impairment and/or lost time from work;
• ensure that SOPs for work under their supervision incorporates best practices and every reasonable precaution to protect health, safety and the environment;
• consult on original content and upgrades if appropriate with individuals involved in the task(s) requiring an SOP;
• refer to the McMaster Risk Management Manual and relevant statutes when assessing the need for an SOP - (See Section 3);
• follow the guidelines noted in Section 6 of this Program when drafting an SOP;
• review written instruction in equipment manuals that may be used as a stand-alone SOP or to form part of an SOP;
• consult with EOHSS/FHSSO office when drafting an SOP if advice is required;
• make copies of all employee related SOPs available to the JHSC during routine safety inspections and accident / incident investigations;
• ensure that all individuals involved in the work are provided with appropriate training and any required personal protective equipment to conduct the work safely;
• ensure that work is carried out according to established SOPs; and,
• review SOPs regularly following an incident, injury or change in process.

5.3 Worker / Student:
Workers and students shall:
• participate in the development of SOPs;
• follow the procedures prescribed in SOPs to protect their health and safety and the environment;
• use protective equipment as prescribed in the SOP; and,
• report all incidents involving injury and/or illness, property damage or environmental impairment immediately to the supervisor.

5.4 Joint Health and Safety Committees (JHSC's):
JHSC's shall:
• review and comment on work related SOPs upon request; and
• review the application of workplace SOPs during safety inspections.

5.5 Role of Central Joint Health and Safety Committee:
CJHSC shall:
• review the Standard Operating Procedures Program on a regular basis.

5.6 Environmental & Occupational Health Support Services and Faculty of Health Sciences Safety Office:
EOHSS/FHSSO shall:
• advise on the need for and development of SOPs;
• design, implement and update programs that define the regulatory requirement and technical content for SOPs;
• provide training programs designed to support the implementation of SOPs e.g. Confined Space Entry, Lockout / Tag out, Asbestos Awareness, Working Alone, Field Trips and Electives and Hot Work Permits etc;

6 PROCEDURAL GUIDELINES

6.1 Drafting an SOP
The following standard format shall be used when drafting a SOP.

N.B. Before using this standard format check for other SOP procedural requirements established by legislation and/or University Programs and use the appropriate prescribed guidelines and format e.g. CNSC guidelines for procedures in the MNR, McMaster University procedures for SOPs related to biosafety projects, use of radioisotopes, confined space entry, hazardous waste disposal, asbestos abatement, transportation of dangerous goods etc. (See Risk Management Manual).
• Name of the Standard Operating Procedure
  i. Effective date
  ii. author
  iii. reason for the SOP
  iv. supervisory approvals required and notices to be posted or served
      e.g. equipment shut down, asbestos abatement, etc.

• Definitions
  i. terms
  ii. acronyms

• Requirements
  i. applicable OHSA regulations and / or codes of practice
  ii. training and competency

• Description of the Task
  i. location and time of work
  ii. individuals and skills required
  iii. equipment and supplies required
  iv. personal protective equipment required
  v. sequential steps to complete the work safely

• Contingency Plan and Reporting
  i. accident / injury response
  ii. spill response
  iii. equipment shutdowns (fume hoods, ventilation systems, etc.)

• Environmental Responsibility
  i. waste disposal procedures
  ii. building air quality

• References – OHSA / Regulations, EPA and Municipal by-laws, McMaster
  University Programs / Policy, Safety Data Sheets (SDS)

• Distribution
  i. individual workers
  ii. JHSC if requested

7 RECORDS

To facilitate internal and regulatory audits, copies of SOPs will be retained and
filed as follows:

7.1 Retention: Copies of SOPs shall be retained for a period of three years beyond
the completion of the task or project.
7.2 **Filing:** Copies of SOPs shall be kept by:

- The supervisor responsible for implementing the SOP (electronic or paper).
Appendix A

Excerpt from Ontario Occupational Health and Safety Act:

Section 27 (1) Duties of supervisor - A supervisor shall ensure that a worker,

(a) works in the manner and with the protective devices, measures and procedures required by this Act and the regulations; and
(b) uses or wears the equipment, protective devices or clothing that the worker's employer requires to be used or worn;

Section 27(2) Additional duties of supervisor – Without limiting the duty imposed by subsection (1), a supervisor shall,

(a) advise a worker of the existence of any potential or actual danger to the health or safety of the worker of which the supervisor is aware;
(b) where so prescribed, provide a worker with written instructions as to the measures and procedures to be taken for the protection of the worker; and
(c) take every precaution reasonable in the circumstances for the protection of a worker.