FIGURE 3.1

TERMS OF REFERENCE OF THE RADIATION SAFETY COMMITTEE

1.0 Purpose

The Terms of Reference for the Radiation Safety Committee will set out the structure and responsibility framework for the Radiation Safety Committee. The Radiation Safety Committee is a specialist regulatory committee within the management structure of the Ontario Tech University ("university") with charge over radiation protection on campus. Its primary responsibility is to ensure the effectiveness of radiation safety programs and the integrity of any licenses, certifications or registrations issued to the university from regulators under federal or provincial legislation.

2.0 Authority

The Radiation Safety Committee is vested with the ultimate authority and necessary executive power delegated to it by the Vice President Research, Innovation and International to determine radiation safety policies and procedures for use within the university and to enforce and maintain the required standards of radiation protection necessary for a teaching and research institution. The programs are founded on Federal and Provincial regulations and guidelines issued by the Canadian Nuclear Safety Commission (CNSC), the Radiation Protection Bureau of Health Canada and the Ministries of Health and Labour, Government of Ontario. These regulations and guidelines mandate the provisions on all matters pertaining to the possession, handling, storage and disposal of radioactive materials and the acquisition, installation, development, operation and/or exposure to any equipment or sources producing ionizing or non-ionizing radiation.

The Radiation Safety Committee has the authority to review and approve all ionizing and non-ionizing radiation activities at the university. Further, the committee has the authority and responsibility to grant or withhold an internal radiation or laser permit, and to impose conditions on that permit as a means of enforcing compliance with the University Radiation and Laser Safety Programs, with the regulations and terms of the CNSC Consolidated License and Class II Nuclear Facilities and Prescribed Equipment Licence, X-ray Safety regulations and the ANSI Standard on the Safe Use of Lasers. The committee also has the authority to set standards for limiting exposure to electromagnetic fields (EMFs) and enforce compliance with the EMF Safety Program.

3.0 Terms of Reference

3.1 Radiation Safety Committee

The university has established and shall maintain a radiation safety committee comprising of members of the university community and stakeholders knowledgeable in radiation protection. The responsibility of the committee includes all sources of ionizing radiation and non-ionizing radiation, for all uses (materials and equipment), on properties owned or controlled by the university. The committee also has responsibility to users of ionizing or non-ionizing radiation that perform work off campus for university related business. The committee shall report to the Vice-President Research, Innovation and International.

The Radiation Safety Committee is authorized to:

- review the need for and recommend the development of safety programs related to uses of ionizing and non-ionizing radiation within the University;
- oversee the operation of the Radiation, Laser and EMF Safety Programs on behalf of the University;
• provide direction to the Radiation Safety Officer on matters pertaining to policy and enforcement of
the Radiation, Laser and EMF Safety Programs;
• provide advice and direction on all matters pertaining to radiation safety to users and to University
management;
• approve all uses of radiation, radioisotopes or radiation emitting devices;
• establish policies and procedures on all matters relating to radiation safety and the use of radioactive
materials, radiation emitting devices or exposure to radiation sources;
• take appropriate steps to ensure the safe use of ionizing and non-ionizing radiation within the
university in conformance with legislative requirements and accepted national and international
standards;
• assess the adequacy and effectiveness of the university's training programs related to uses of and
exposure to ionizing and non-ionizing radiation;
• review and approve all Safety Manuals related to uses of and exposure to ionizing and non-ionizing
radiation;
• review all permits issued pursuant to the university Radiation and Laser Safety Programs;
• report annually to the Vice-President Research, Innovation and International on the activities of the
Radiation Safety Committee;
• monitor activities taking place pursuant to any permit and review all instances of non-compliance with
the Radiation and Laser Safety programs and permit conditions;
• review and approve any issuance of, withdrawal of, or changes to a radiation permit(s) or laser
operating permit(s) as a means of dealing with non-compliance with the provisions of the Radiation
and Laser Safety Manuals or the permits;
• notify and recommend to the Vice President Research, Innovation, International any additional
disciplinary measures to deal with continued non-compliance with the radiation and laser safety
policies and procedures.

3.2 Radiation Safety Committee Membership and Terms

The composition of the Radiation Safety Committee is based primarily on technical expertise in radiation
protection and the use of radioisotopes, ionizing or non-ionizing radiation. It may have a minority of
members who are not experts in radiation protection and not involved in using radiation in order to provide
a broader perspective in decision making. The Committee is appointed by and reports to the Vice-President
Research, Innovation and International (VP RII).

1. Committee members are appointed for a nominal term of three years. Members may be reappointed
for additional terms.
2. The number of appointed voting members of the Radiation Safety Committee shall not be less than 3
including the chair and vice chair. At least 2 members, including the Chair, will have expertise in
radiation protection and who are preferably radiation permit holders or individuals directly responsible
for the radioactive work performed by laboratory personnel.
3. At least 1 member will have expertise in laser safety and use, when matters of laser safety are
discussed. This person can be an ad hoc member.
4. At least 1 member will have knowledge or expertise in EMF safety, when matters of EMF safety are
discussed. This person can be an ad hoc member.
5. At least 1 member will be chosen from the academic community at large.

6. The following are ex-officio members of the Committee

• Radiation Safety Officer
• Director of Research Services

Ex-officio members have no fixed term, but serve by virtue of their position within the University. Ex-
officio members will have voting privileges on this committee.
7. The committee shall meet as necessary to fulfill its mandate, with a minimum of two meetings per year.
8. The Committee shall maintain minutes of its meetings with copies to the joint health and safety committee and VP RII.
9. The required minimum quorum for committee meetings will be 50% of the members, inclusive of the Radiation Safety Officer and the Chair.
10. The Committee shall endeavour to reach decisions by consensus. Where no consensus is achieved a simple majority shall suffice and this shall be noted in the minutes.

3.2.1 Chair and Vice Chair

The Chair of the Radiation Safety Committee carries out the executive functions of the Committee and acts on behalf of the Committee on a day-to-day basis. The Chair is appointed by and is accountable to the VP RII. The Chair shall normally be a member of the faculty of the University with expertise in the hazards and uses of ionizing radiation. The Chair will normally be, but need not be, the holder of a radioisotope permit under the Consolidated License.

The Chair is appointed for a three-year term which is renewable.

The Committee shall select a vice-chair who will act as Chair in the absence of the Chair or in the event of a conflict of interest of the Chair. The Chair would be deemed to have a conflict of interest in matters relating to any permit held by the Chair.

3.2.2 Duties of the Chair

1. To act as the "Signing Authority" for the University for all matters encompassed by the Consolidated Radioisotope Licence or Class II Nuclear Facilities and Prescribed Equipment Licence in the absence of the Radiation Safety Officer;
2. To review and sign all permits. Permits issued to the Chair shall be countersigned by the Vice-Chair;
3. To review the annual report on the operation and effectiveness of the Radiation Safety Programs;
4. To review and sign all reports to the Canadian Nuclear Safety Commission, as required;
5. To declare a conflict of interest to the Committee on all matters relating to a permit held by the Chair.

3.2.3 Administrative support

The Office of Research Services, in partnership with the Radiation Safety Officer, shall provide administrative support to the committee and provide the following:
- Maintain records for the radiation safety committee;
- Record minutes of meetings, for correspondence arising;
- Organize committee meetings;
- And other support as needed.

3.2.4 Duties of the Radiation Safety Officer

1. Act as the “Signing Authority” for the University for all matters encompassed by the Consolidated Radioisotope Licence and Class II Nuclear Facilities and Prescribed Equipment Licence; Act as the signing authority for all matters governed by the Ontario Ministry of Labour with respects to x-ray equipment, lasers and EMFs;
2. Act as a consultant to the Radiation Safety Committee in the development, implementation and maintenance of safety programs related to uses of and exposure to ionizing and non-ionizing
radiation and procedures to ensure radiation protection and compliance with regulatory requirements;

3. Maintain the OTU Radiation, Laser and EMF Safety Program and manuals, reviewing and assisting in their update on a regular basis;

4. Monitor existing and proposed uses of radioisotopes and radiation devices, including x-ray and laser systems and prepare appropriate control procedures and applications for amendments to the consolidated license or Ministry of Labour registrations as necessary;

5. Conduct inspections of designated radiation and laser laboratories to determine compliance with the University’s radiation and laser safety programs and any license conditions;

6. Conduct inspections related to concerns with EMF exposure to determine compliance with the University’s EMF safety program;

7. Verify that radiation monitoring devices or equipment are appropriate for their intended use and properly calibrated according to the regulatory requirements;

8. Verify the operability and adequacy of engineering controls (e.g. interlocks) in accordance with University policy and regulatory requirements;

9. Development and deliver internal training programs to ensure that persons who use, handle or may be exposed to radioactive materials, sources or radiation emitting devices are adequately trained in radiation safety/laser safety and compliant with the University’s radiation and laser safety programs and procedures;

10. Participate as a member of the Radiation Safety Committee in overseeing and auditing the operation and effectiveness of the radiation safety programs;

11. Review all applications for internal permits under the consolidated or class II license, recommend appropriate permit conditions and prepare permits for approval by the Committee;

12. Review requests to purchase, receive or use radioactive materials and radiation emitting devices to ensure that the proposed uses comply with applicable regulations and the University’s safety programs related to uses of and exposure to ionizing and non-ionizing radiation;

13. Assist in the investigation of accidents or incidents involving radiation or radioactive materials and in the preparation of reports to the regulatory authority according to legislation and license conditions;

14. Maintain records of the current status of all designated laboratories, radiation emitting devices and radioactive materials. Ensure that all records and reports that are required by legislation and licenses are prepared, maintained, submitted and kept as required;

15. Monitor radiation exposures received by persons to ensure that all doses are ALARA and make recommendations, where appropriate, to reduce exposures;

16. Prepare an annual report to the Vice-President, Research, Innovation and International on the operation and effectiveness of the radiation safety programs;

17. Carry out other duties as requested by the Radiation Safety Committee.

Revised: July 2 2014