

Basic Level Laboratory

Nuclear Substance Safety

A laboratory is classified as “basic level” when more than 1 EQ (exemption quantity) of a nuclear substance is handled and where the largest quantity (in Bq) handled by an individual worker does not exceed 5 times its corresponding ALI (annual limit of intake) in Bq.

24 hour emergency contact (name and phone number)

Safety Precautions

1. Keep laboratory locked when unattended.
2. Supervise nuclear substances at all times when in use.
3. Ensure that all staff are aware of their responsibilities and obligations as radiation workers
4. Comply with Dalhousie University Radiation Safety Policies
5. Comply with Dalhousie University permit conditions
6. Consumption or storage of food and/or drink is not permitted in this laboratory
7. Wear required personal protective equipment.
8. Wear whole body and ring TLD monitors if required by permit
9. Clearly identify work areas used for handling nuclear substances.
10. Use a fume hood if handling dry powders or volatile substances
11. Do not mouth pipette
12. Ensure that work surfaces are covered with absorbent liners
13. Follow proper receipt procedures for packages containing nuclear substances
14. Maintain up-to-date inventory sheets for all stock solutions of radioactive material
15. Monitor laboratory for loose contamination at least weekly. Maintain record of results and decontaminate if necessary
16. Maintain records of non-use periods
17. Maintain good personal hygiene (hand washing) and good housekeeping practices

Storage and Waste Disposal

1. Affix radioactive warning symbols and contact information to storage areas and waste containers
2. Transfer radioactive waste to designated storage areas regularly
3. Dispose of radioactive waste as per Dalhousie University “*Management of Radioactive Waste*” policy

Accidents and Radioactive Spills

1. Follow Dalhousie University’s “*Radioactive Spill Clean-Up Procedure*”.
2. Follow emergency procedures outlined in Section A: 16, 17, 18 of the Radiation Safety Manual

Laboratory Requirements

1. Required personal protective equipment
2. Radioactive Spill Kit
3. Required monitoring equipment

Emergency Numbers

1. Security 9 - 494 - 4109
2. RSO 9 - 494 - 2055 or 9 - 452 - 1294 (cell phone)

