

Western University Nuclear Radiation Safety Inspection Checklist

Permit Holder: _____ Permit No. _____ Phone: _____

Building: _____ Department: _____ Room(s): _____

Completed by: _____ Signature: _____ Date: _____ Phone: _____

Followed up by (RSC): _____ Signature: _____ Date: _____

Compliance Items: ✓ Compliance × Non-compliance — Not-applicable **Deficiency Noted**

1. Radiation Protection		
1.0 <i>Work Areas:</i> Areas used for work with radioactive materials are properly contained and prepared, and sequestered where possible. Radioactive materials and waste are adequately or stored in a location that minimizes potential exposures to all personnel.	<input type="checkbox"/>	
1.1 <i>Access Control (Storage):</i> When in storage, access to nuclear substances or radiation devices is restricted to authorized radiation users listed on the permit. Only authorized radiation users listed on the permit are allowed to be left alone in a radiation room with radioactive material that is not locked and stored away.	<input type="checkbox"/>	
1.2 <i>Dose Control (Storage):</i> Dose rate at any occupied location outside the storage area or room does not exceed 2.5 microSv/hr (250 uR/hr).	<input type="checkbox"/>	
1.3 <i>No Food/Drink:</i> No evidence of food/drink consumption or storage of food utensils or containers in designated radiation rooms.	<input type="checkbox"/>	
1.4 <i>Dose Limit:</i> Effective dose of radiation user is within UWO action level (2 mSv/year).	<input type="checkbox"/>	
1.5 <i>Thyroid Screening:</i> Every person shall undergo thyroid screening at the University Hospital within five days who uses in a 24-hour period a quantity of radioiodine (I-125 or I-131) exceeding 2 MBq in an open room, 200 MBq in a fume hood, 20 000 MBq in a glove box or any other quantity in another containment approved by the Canadian Nuclear Safety Commission (CNSC); are involved in a spill of greater than 2 MBq of radioiodine; or are detected to have external radioiodine contamination.	<input type="checkbox"/>	
1.6 <i>Fume hood:</i> is available for volatile radionuclide work and it is functioning properly.	<input type="checkbox"/>	
1.7 <i>Contamination Criteria:</i>		
1.7(a) Contamination monitoring is performed and recorded in the contamination monitoring form within seven days after working with unsealed nuclear substances. Print out of wipe test kept in the logbook . For safety work practices, right after working with unsealed nuclear substances, monitor hands and work area for contamination.	<input type="checkbox"/>	
1.7(b) Survey locations are identified on the map and logbook including all work benches, equipment and floors. Contamination monitoring also includes a few random non-working areas such as phones, survey meters, door handles, desks, etc.	<input type="checkbox"/>	
1.7(c) A copy of the contamination survey results is kept in shared, communal radiation labs whenever unsealed nuclear substances are used in these designated locations.	<input type="checkbox"/>	
1.7(d) Contaminated areas are cleaned and re-monitored. Records are kept before and after decontamination. Immediate action is required for any contaminations on floors, non-working areas or alpha radioactivity.	<input type="checkbox"/>	
1.7(e) Contamination monitoring technique is appropriate and adequate for unsealed nuclear substances in use.	<input type="checkbox"/>	
1.7(f) Any fixed contamination must be reported to the Radiation Safety Coordinator.	<input type="checkbox"/>	
1.7(g) Monitoring records are kept and are available for review.	<input type="checkbox"/>	

<p>5.6(d) Daily usage, remaining quantities and final disposal dates are recorded on the inventory/waste forms for all unsealed nuclear substances.</p> <p>5.7 <i>Licence to service radiation device</i>: A company or person who performs installation, repair or dismantling a device other than routine operating procedures as indicated in the manufacturer's operating manual for the device has a CNSC servicing licence.</p> <p>5.8 <i>Post Permit</i>: Radiation permit is posted in all designated radiation rooms with current information (i.e. workers, lab, etc.).</p> <p>5.9 <i>Record Keeping/Retained</i>: Inventory/disposal records and measurements are retained for the minimum of three years.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<p>6. Organization and Management</p> <p>6.1 <i>Worker's Precautions</i>: Workers are working safely and ensuring security.</p> <p>6.2 <i>Area Classification</i>:</p> <p>6.2(a) All locations being used for handling or storing nuclear substance are authorized by the Radiation Safety Coordinator and are listed on the permit</p> <p>6.2(b) All nuclear substances in storage and in use is within order/possession limits and indicated on the permit. Activity of nuclear substances handled on bench/fume hood are within room classification limits.</p> <p>6.3 <i>Supervision</i>: All radiation users are listed on the permit. Permit holder or designate is available to supervise authorized radiation users and designated radiation rooms.</p> <p>6.4 <i>Change Notified</i>: Permit holder reports any changes on the permit to the Radiation Safety Coordinator.</p> <p>6.5 <i>Radiation Safety Manual</i>: Radiation safety manual is accessible to all workers listed on radiation permit.</p> <p>6.6 <i>Prohibition of Human Use</i>: No nuclear substances are being used in or on human beings.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
<p>7. Security</p> <p>7.1 <i>Security/Sabotage</i>: Radiation rooms are locked when unattended. Radiation storage areas are secured or locked when unattended. Alarm system is on (where applicable) when unattended.</p>	<input type="checkbox"/>	
<p>8. Packaging and Transportation of Dangerous Goods (TDG) Class 7</p> <p>8.1 Radioactive package is received in good order and wiped test for contamination. Radioactive waste pail/shipping package wiped test for contamination before disposal or shipping. All print out of wipe tests kept for the minimum of three years.</p> <p>8.2 All shipping of nuclear substances/radiation devices/radioactive materials are approved the Radiation Safety Coordinator.</p> <p>8.3 Radiation safety certificate includes TDG training for receiver is available for review.</p>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

Please retain and provide the completed nuclear radiation safety inspection checklist to the Radiation Safety Coordinator at the time of the scheduled inspection.