

## RADIATION SAFETY INSPECTION CHECKLIST

Section A : Contact Information (Principle Investigator)				
Last Name:	First Name:	Extension:		
Department:	Building:	Room:		
Section B: Inspection				
Date of Inspection:		Time of Inspection:		
		AM <input type="checkbox"/> PM <input type="checkbox"/>		
Section C: Radioactive Laboratory Work Practices				
Applicable Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes	No	Comments
1	Lab personnel are aware of the location of the Radiation Safety Manual and Standard Operating Procedures.			
2	Evidence to show Lab personnel are required to follow these SOP's. (sign off sheets)			
3	No evidence of food or drink being consumed or stored in the lab.			
4	It is forbidden to apply cosmetics or insert/remove contact lenses in the laboratory. (written policy)			
5	Long hair and loose jewelry are restrained.			
6	Open cuts, scratches and/or wounds are covered with appropriate dressings.			
7	Other			
Section D: Laboratory Design, Housekeeping & Physical Requirements				
Applicable Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes	No	Comments
1	Access to the laboratory is limited to authorized personnel and the laboratory is closed and lockable or access controlled.			
2	The laboratory is separated from public areas by a door.			
3	When in storage, access to nuclear substances or radiation devices are restricted to authorized users listed on the permit.			
4	Only authorized users listed on the permit are allowed to be left alone in a radiation room with radioactive materials that are not locked and stored away.			
5	Permit holder has measures in place to provide warning of any sabotage that may have taken place.			
6	Paperwork and report areas, fabric covered chairs are separate from areas where radioactive materials are manipulated.			
7	Areas used to work or store radioactive materials are free of clutter, properly contained, and labeled.			
8	Laboratory is neat and tidy, extraneous non-dedicated equipment and supplies.			
9	Radioactive waste materials are adequately shielded or stored in a location taking the ALARA principle in effect.			
10	Hand washing sinks and soap are located near laboratory exits.			
11	An emergency eyewash station and shower are available inside, or in proximity of, the laboratory.			
12	All locations being used for handling or storing nuclear substances have been authorized by the RS Officer.			
13	Other			

<b>Section E: Personal Protective Equipment &amp; Dose Control</b>				
<b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>		<b>Yes</b>	<b>No</b>	<b>Comments</b>
1	Personal protective equipment and laboratory essentials are available, including gloves, absorbent pads, wipe test paper, radiation tape, decontamination solution etc.			
2	Street clothing and laboratory clothing areas are physically separated.			
3	Dose rate at any occupied location outside the storage area or room does not exceed 2.5uSv/hr (250uR/hr)			
4	The effective dose limit for a member of the general public is 1mSv			
5	Individuals who handle more than 0.13mCi (open bench), 1.3mCi (Glove Box), of radioiodine or 4KBq of tritium must come to the University of Windsor Medical and Health Services for bio-assay monitoring.			
6	Fume hood is available for volatile radionuclide work, functioning properly and certified within the last 365 days.			
7	NO nuclear substances are being used in or on human beings.			
8	Other			
<b>Section F: Hazard Communication</b>				
<b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>		<b>Yes</b>	<b>No</b>	<b>Comments</b>
1	Current Approved University of Windsor Radiation permit is posted in a conspicuous location within all designated radiation rooms.			
2	Radiation warning and security signs are posted on entrance to the area.			
3	CNSC safety (basic, intermediate or high level) and TDG posters are posted.			
4	Radioactive material is clearly identified and labeled.			
5	List of approved personnel are listed and updated on permit.			
6	Radiation warning signs are used appropriately.			
7	Radiation symbols on lead pots or empty radioactive containers are defaced when re-used for non-radioactive work. Containers re-used to store nuclear substances should be re-labeled with a description of the current contents and radiation labels.			
8	Other			
<b>Section G: Training &amp; Regulatory Records.</b>				
<b>Applicable</b> Yes <input type="checkbox"/> No <input type="checkbox"/>		<b>Yes</b>	<b>No</b>	<b>Comments</b>
1	All personnel listed on the radiation permit have completed the University of Windsor's Radiation Safety Training Program for End Users within the last two years. (records present)			
2	All personnel listed on the radiation permit demonstrate adequate knowledge of safe work practices, radiation protection, detection & measurement, TDG requirements, University of Windsor policies & procedures and applicable CNSC regulatory requirements.			
3	Radiation safety awareness is provided by the permit holder to non-radiation users who are in a radiation room and documented.			
4	All personnel designated as a Nuclear Energy Worker, as stipulated on the radiation permit have signed the Nuclear Radiation Worker (NEW) form.			

5	Radiation Safety Officer is notified of any planned relocation, transfer, purchase or planned disposal of nuclear substances or radiation devices.			
6	All nuclear substances in storage and in use are within order/possession limit as indicated on the permit, and nuclear substances handled on the bench/fume hood are within room classification limits.			
7	All nuclear substances in use and in storage have corresponding inventory records.			
8	A separate inventory form is prepared and maintained whenever an unsealed nuclear substance is diluted, processed or separated into different products that are subsequently utilized.			
9	Radiation storage room location, daily usage, remaining quantities, bar code number and final disposal date are recorded on the inventory/waste forms for all nuclear substances.			
10	Inventory/disposal records are kept for a minimum of three years and are available for review..			
11	Other			

**Section H: Contamination & Personal Monitoring**

Applicable Yes <input type="checkbox"/> No <input type="checkbox"/>		Yes	No	Comments
1	Contamination monitoring is performed and recorded in the contamination monitoring form within seven days after working with unsealed nuclear substances.			
2	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.			
3	Survey results are kept in a binder within both individual and communal radiation laboratories whenever unsealed substances are used.			
4	Contaminated areas are cleaned and re-monitored. Records are kept before and after decontamination. Immediate action is required for any contamination on floors, non-working areas or alpha radioactivity.			
5	Contamination monitoring techniques utilized are appropriate and adequate for unsealed nuclear substance in use.			
6	Fixed contamination is reported to the RSO Officer.			
7	All monitoring records are kept for a minimum of three years and are available for review.			
8	Survey meter is available for types of radiation work and is functioning properly.			
9	Containment meter or dose rate meter has been calibrated within one year and in good working condition. Instrument should be given pre-operational checks.			
10	Non portable instruments, such as Liquid scintillation counters, are routinely serviced to the manufacturer's instructions. Instruments used to count wipes should count and record a blank and standard with each set of wipes.			
11	All personnel who may be exposed to a situation which could cause them to be exposed to more than 1mSv/year wear a TLD badge when handling radioisotopes.			

12	Any person who handles a container which contains more than 50 MBq of phosphorus 32, Strontium 89, Yttrium 90, Samarium 153, or Rhenium 186 wears a ring dosimeter.			
13	TLD badges are stored in location away from radiation, working benches, lab coat, radioactive waste etc.			
14	TLD badge wearers have reviewed their exposure reports and return their badges in a timely manner to the CCC/supplier.			
<b>Section I: Decontamination &amp; Waste Handling</b>				
<b>Applicable Yes <input type="checkbox"/> No <input type="checkbox"/></b>		<b>Yes</b>	<b>No</b>	<b>Comments</b>
1	Radioactive waste disposed of according to University of Windsor's radiation safety program.			
2	All radioactive materials deposited into waste containers are identified and recorded on the inventory/waste form.			
3	Radioactive waste materials are adequately shielded or stored in a location that minimizes potential exposure to all personnel			
4	Excessive waste containers should be disposed of by the Chemical Control Centre.			
5	Sufficient disinfectants effective against radioactive materials are available at all times within the laboratory.			
6	Rooms no longer used for radiation work have been satisfactorily decommissioned by the Radiation Safety Officer.			
7	Biological Spill Kit is available and all personnel are familiar with location and associated protocols.			
8	Other			
<b>Section J: Packaging &amp; Transportation of Dangerous Goods (TDG).</b>				
<b>Applicable Yes <input type="checkbox"/> No <input type="checkbox"/></b>		<b>Yes</b>	<b>No</b>	<b>Comments</b>
1	Radioactive package is received in good order and wiped test for contamination. Radioactive waste pail/shipping package is wiped test for contamination before disposal or shipping.			
2	All print out wipe tests are kept for 3 years.			
3	All shipping of radioactive materials is approved by the Radiation Safety Officer.			
4	Radiation safety certificate includes TDG training for receiver and is available for review.			
5	Other			
<b>Section J: Emergencies.</b>				
<b>Applicable Yes <input type="checkbox"/> No <input type="checkbox"/></b>		<b>Yes</b>	<b>No</b>	<b>Comments</b>
1	Emergency contacts/spill procedure poster is posted.			
2	Emergency procedures are followed in case of spill or contamination.			
3	All spills, accidents or exposures are reported to the laboratory supervisor and the Radiation Safety Officer.			
4	An Emergency Plan is available to all laboratory personnel. This includes items such as emergency numbers, MSDS information and protocols.			
5	All radiation users listed on the permit are knowledgeable to spill response procedures, containment, decontamination and reporting procedures.			
6	Other			

Contact Information (Principle Investigator)		
Last Name:	First Name:	Extension:
Department:	Building:	Room:
Inspection		
Date of Inspection:	Time of Inspection: <span style="float: right;">AM <input type="checkbox"/> PM <input type="checkbox"/></span>	

Section J: Notes/Recommendations	
1	
2	
3	

Section L: Actions Required Resulting from Inspection				
#	Issue/Required action	Priority	Response/Action taken	Completion Date
1				
2				
3				

Section M: Signatures			
Completed By:		Title:	
Signature:	Extension:	Date:	

**Priority A: action required immediately**  
**Priority B: action required within 2 weeks**  
**Priority C: action required within 30 days**

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**Lab Supervisors: Please complete the above shaded sections and return to the CCC within 30 days of receiving the inspection report.**