

Radon Survey Report: TRU (January 2025 - May 2025)

In Partnership with Interior Health

Introduction

This report presents the findings of a radon survey conducted by Risk and Safety Services (RSS) at Thompson Rivers University (TRU) from January 2025 to May 2025. The survey was a collaborative effort between TRU and Interior Health, aimed at assessing radon levels within the university premises to ensure a safe and healthy environment for students, staff, and visitors.

Survey Objectives

The primary objectives of the radon survey were to:

- Measure radon concentrations in various buildings and rooms within the TRU campus.
- Compare the measured radon levels with established safety thresholds to identify any areas of concern.
- Provide recommendations for mitigation if elevated radon levels were detected.

Methodology

Survey Design

The radon survey was systematically designed to cover all frequently occupied buildings and frequently used spaces, low lying spaces within the TRU campus. Detection devices were strategically placed to ensure comprehensive coverage of potential radon infiltration points.

Sampling Process

The sampling process involved the use of passive radon detectors, which were placed in selected rooms within the buildings for a duration of three months. The following steps were as follows:



- Selection of sampling sites based on building age, usage, and occupancy.
- Deployment of passive radon detectors in each selected site.
- Recording of site-specific data, including room location within the building, date of deployment, and detector placement.
- Collection and analysis of detectors after the exposure period.

RSS deployed 89 total detectors across campus; 4 detectors were unretrievable. Two were lost in the demolition of the houses for Future Students and TRUFA, one went missing from the McGill housing laundry room and one went missing from Nursing & Population Health (NPH) building prep/sim lab area. RSS will resample the NPH this fall/winter 2025. The other locations are not going to be resampled as the house no longer exists and the dorms are being decommissioned. Should the McGill residence continue to house people for at least 4 hours a day regularly we will sample this location.

Results

The detectors were collected and sent to an accredited laboratory for analysis. The radon levels detected during the survey were consistently below the recommended safety thresholds set by health authorities. This comparison reinforces the effectiveness of TRU's building management and ventilation systems in mitigating radon exposure.

Partnership with Interior Health

The successful completion of this survey was made possible through the partnership with Interior Health. Their expertise and support were invaluable in ensuring the accuracy and reliability of the survey results.

Conclusion

The radon survey conducted at Thompson Rivers University from January 2025 to May 2025 has demonstrated that radon levels within the campus are below the safety threshold. This outcome confirms that TRU provides a safe environment for its occupants. Continued monitoring is recommended to maintain these safe conditions.



Appendix

Table 1: Summary of Radon Results

Building	Room	Radon Level (Bq/m³)	Threshold (200 Bq/m ³)*
Arts & Education (AE)	AE171	20	
Arts & Education (AE)	AE100C	<15	
Arts & Education (AE)	AE168B	28	
BC Centre for Open Learning (BCCOL)	Media side on white work bench (old OL127)	36	
BC Centre for Open Learning (BCCOL)	Media side blue wall (old OL127)	67	_
BC Centre for Open Learning (BCCOL)	IT on cubicle (old OL121)	36	
Campus Activity Centre (CAC)	Bookstore cubicle (113b)	<15	
Campus Activity Centre (CAC)	TRUSU (180)	19	
Campus Activity Centre (CAC)	Parking office (141a)	<15	200
Campus Activity Centre (CAC)	Den (220, bar, behind column)	<15	200
Clock Tower (CT)	CT165	29	
Clock Tower (CT)	CT154	18	
Clock Tower (CT)	CT226	<15	
Clock Tower (CT)	Theatre near CTO100.1 door	<15	
Culinary Arts (CUL)	Floor office (103A)	<15	
Culinary Arts (CUL)	Kitchen office (210)	20	
Culinary Arts (CUL)	Bakery office (113)	16	
Culinary Arts (CUL)	Meat cutting office (103)	<15	
Culinary Arts (CUL)	Meat cutting office (107)	<19	
Coyote Den	Main floor reception	<17	
Early Child Education Centre (ECEC)	EC155	16	
Faculty Assoc	TRUFA 1st floor	Lost	
Future Students	120 on pole near half circle desk	Lost	



Gathering Place	Basement computer lab	49	
	(GP024/GP020)		
Gym	Rec centre (101)	<15	
Gym	Rec centre (101) DUPLICATE	<15	
Gym	Office G305	<15	
Gym	High performance 312	<15	
Horticulture	Lunchroom	34	
House 4 - Indigenous	Basement	20	
Offices			
House 9 (STAR)	CUPE office 106	18	
House 9 (STAR)	Research 108	<15	
House of Learning (HOL)	Innovation centre (9030)	33	
House of Learning (HOL)	Makerspace (142)	25	
House of Learning (HOL)	Learning Commons front desk (102)	90	
House of Learning (HOL)	Round room (190) by ramp	<20	
House of Learning (HOL)	Basement by 9020 door	15	
Human Resources	HR139 on board	29	
Human Resources	HR117 on board	51	
Human Resources	HR143 on shelf	<15	
International Building	By elevator/Leap 1004	16	
International Building	Post between 1008/1010 hallway	16	
	91105		
International Building	Trading 1021	22	
ITTC	100 (aka 103) office	35	200
ITTC	Tool crib 220	<15	
Ken Lepin (Science)	SC144	<15	
Ken Lepin (Science)	SC144 (Duplicate sample)	<24	
Ken Lepin (Science)	SC174	16	
Ken Lepin (Science)	SC170	31	
Ken Lepin (Science)	Chem prep SC267	21	
Ken Lepin (Science)	SC110	30	
Ken Lepin (Science)	SC210A offices	24	
McGill (building 4)	Basement	Lost	
North Tower	Staff room basement	<17	
North Tower	Facilities office basement	<15	
North Tower	Front office ground floor	<17	
Nursing & Pop. Health (NPH)	Tech area 114A or 114	Lost	
Nursing & Pop. Health (NPH)	Lunchroom NPH142	31	



Nursing & Pop. Health (NPH)	NPH145 top of shelf	<22	
OLARA	ARA236	<15	
OLARA	Front office	<15	
OLARA	Office 213a	<15	
Old Main	Printshop OM1206	27	
Old Main	OM1523	22	
Old Main	OM1487	25	
Old Main	Near OM1679	<15	
Old Main	Near OM1120	<15	
Old Main	OM1812	16	
Procurement, Fac., Mat.	Mat. Dist. by mail area	<15	
Dis.			
Procurement, Fac., Mat. Dis.	Keys office	18	
Procurement, Fac., Mat. Dis.	Facilities office in shop	<15	
Radio	Basement	23	200
Res. Centre & Fac. Ann. House 6/7	Basement 9007	40	
Res. Centre & Fac. Ann. House 6/7	Basement 9002	20	
		00	
Res. Centre & Fac. Ann. House 6/7	Middle cubicle offices 14	26	
Res. Centre & Fac. Ann. House 6/7	FACT side front office near 102	46	
Research & Emer. Man. (REM)	Common office area 124	24	
Trades	Offices TT158	26	
Trades	Offices TT288	22	
Trades	Auto office 212A	<15	
Trades	Tool crib 252	<15	
East Village	1st floor office	18	
East Village	Maintenance basement office	<17	
Vet Tech	Front desk VT104	<15	
Williams Lake	WL1021 downstairs basement office	<15	
Williams Lake	WL1264 nursing lab	<15	
Williams Lake	WL1430 tool crib	<15	

*Health Canada Radon exposure limit/action level, <u>Health Canada</u>.