Applicable CNSC licence number

1	4	6	1		-	2	1		-	3	1	.	4	

Declaration of Licensee Representative

I | Michael Campbell | having the authority to act for the licensee pursuant to Section 15 of the General Nuclear Safety and Control Regulations, certify that all statements and representations made in this Annual Compliance Report and any supplementary pages appended to this report are true and correct to the best of my knowledge.

Title	Date (YYYY-MM-DD)
Radiation Safety Officer	2024-11-05

It is an offence under the Nuclear Safety and Control Act to knowingly make a false report.

For questions related to the Accelerators and Class II Facilities Division (ACFD) ACR, contact your CNSC Project Officer.

When complete, please submit this form via email to acr-rac@cnsc-ccsn.gc.ca.

Print Form

Submit by Email

ACR forms are intended to report the licensee's activity. To request an amendment, including changes in licensee's representatives (RSO, alternate, applicant authority, signing authority), please submit your request separately to the CNSC.

The ACR **can not** be used by licensees to request changes to the licence.

Any changes requiring a licence amendment or to comply with licence conditions must be submitted separately to the Project Officer when you become aware of the change.

Applicable CNSC licence number

1	4	6	1		-	2	1		-	3	1	.	4	

Licensee Organization Information

Licensee Name

Thunder Bay Regional Health Sciences Centre

Licensee Business Number	Licensee Corporation Number
	on file

Reporting Period

There should not be any lapse from previous ACR reporting period. Do not report for future dates. The reporting period shall cover a full year.

From	To
2023-11-01	2024-10-30

Head Office Address

Street Address

980 Oliver Rd

City	Province/State	Country	Postal/Zip Code
Thunder Bay	ON	canada	P7B6V4

Mailing Address

The mailing address is the address to which all CNSC correspondence will be mailed.

☐ Check here if same as Head Office Address

Street Address

1040 Oliver Rd - Suite B1

City	Province/State	Country	Postal/Zip Code
Thunder Bay	ON	Canada	P7B7A5

Radiation Safety Officer (RSO)

Name	Title
Michael Gordon Campbell	Radation Safety Officer

Telephone Number	Alternate Telephone Number	E-mail Address
[redacted]	807-343-8110 x8106	mike.campbell@lakeheadu.ca

Alternate (if applicable)

Please provide information of an alternate contact to the RSO in this section. The alternate contact can replace the the certified RSO during the RSO's absence for not more than 60 working days in any consecutive 365-day period. Refer to Class II Nuclear Facilities and Prescribed Equipment Regulations sections 15.1 and 15.11.
https://laws.justice.gc.ca/eng/regulations/sor-2000-205/page-1.html

☐ Check here if no alternate

Name	Title
Sonja Desjardins	Cyclotron Associate

Contact information

Telephone Number	Alternate Telephone Number	E-mail Address
807-684-7010		Sonja.Desjardins@tbh.net

Signing Authority

The RSO is typically appointed as signing authority. The signing authority is authorized to act for the applicant or licensee for all matters encompassed by the CNSC licence.

☑ Check here if same as 'Radiation Safety Officer'

Name	Title
Michael Gordon Campbell	Radation Safety Officer

Contact information

☑ Check here if same as 'Radiation Safety Officer'

Telephone Number	Alternate Telephone Number	E-mail Address
[redacted]	807-343-8110 x8106	mike.campbell@lakeheadu.ca

Financial Contact (if applicable)

Information required only for fee paying licensees.

Name	Title
Dr. Rhonda Crocker Ellacott	President & CEO, TBRHSC

Contact information

Telephone Number	Alternate Telephone Number	E-mail Address
[redacted]		Rhonda.Ellacott@tbh.net

Mailing Address

☐ Check here if same as 'Head Office' Address

Street Address

980 Oliver Rd

City	Province/State	Country	Postal/Zip Code
Thunder Bay	ON	Canada	P7B6V4

Applicant Authority

The applicant authority is an individual at the senior management level that has sufficient authority to direct financial and human resources to address any issue of non-compliance as identified by the CNSC.
It is a regulatory requirement to notify the CNSC within 15 days of a change in the applicant authority. Section 15 of the General Nuclear Safety and Control Regulations under the Nuclear Safety and Control Act.

Name	Title
Dr. Rhonda Crocker Ellacott	President & CEO, TBRHSC

Contact information

Telephone Number	Alternate Telephone Number	E-mail Address
[redacted]		Rhonda.Ellacott@tbh.net

Mailing Address

☑ Check here if same as 'Head Office' Address

Street Address

980 Oliver Rd

City	Province/State	Country	Postal/Zip Code
Thunder Bay	ON	Canada	P7B6V4

Inventory: Sealed Sources (List only sealed sources that are not contained in a radiation device)

Enter your inventory of CNSC-licensed sealed sources specific to this licence in the table below. Report one source per line.

☐ Check here if you currently have no sealed sources in inventory.

Date of inventory (YYYY-MM-DD)

Note: The information requested on this page may be submitted as a separate spreadsheet attached to the same email as this form. Please ensure your spreadsheet uses the same headings as in the table below, and contains all required information, or see www.nuclearsafety.gc.ca/acr for templates.

List the total nominal activity for each batch of seed sources (e.g.: I-125, etc.) along with the total number of seeds in each batch in possession.

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	Sealed Source(s) List only sealed sources that are not contained in a radiation device						
	Manufacturer	Model	Serial Number (N/A for seed sources)	Nuclear Substance	Current Activity	Quantity (seed sources only)	Activity Units
-							

For all sealed nuclear substances that have been transferred or disposed of during the reporting period, please include a copy of the transfer document with the ACR submission.

Additional information

Please see attached list for current inventory and activities

Ascertainment of Doses: Whole Body

Provide a summary of the annual effective whole body radiation doses received by Nuclear Energy Workers (NEWs) and non-NEWs (workers not designated as NEWs) during the year ending December 31st. Provide the information in detail, as shown below. Only report doses for staff working in Canada.

NOTE: Please do **NOT** send personal sensitive information, such as social insurance numbers, to the CNSC. If the total number of workers reported for NEWs or Non-NEWs is less than ten (10), do **NOT** report the maximum individual dose.

	Number of Workers in each effective dose category								
	BDL †	> BDL † and ≤ 0.5 mSV	> 0.5 mSv and ≤ 1 mSv	> 1 mSv and ≤ 2 mSv	> 2 mSv and ≤ 5 mSv	> 5 mSv and ≤ 20 mSv	> 20 mSv	Dosimetry Service Provider ††	Maximum Individual Dose (mSv) †††
Number of NEWs	8	3	1					NDS	0.63
Number of Non-NEWs	3							NDS/ePD	

† BDL = Below Detectable Limits for the dosimeter being used.

†† Enter the name of the dosimetry service provider. If a dosimetry service provider is not used, enter "ESTIMATED" and provide brief details on how dose estimates were derived in the additional information area below.

††† Do not enter a non-personal dose that was the subject of a CNSC approved dose change request.

In accordance with the Radiation Protection Regulations, doses must be reported for a CALENDAR YEAR (January 1 to December 31). Please report your doses for the calendar year preceding your ACR due date (e.g. regardless of the ACR reporting date in licence condition 2912 on your licence, always report the doses for the period Jan 1 - Dec 31 of the previous calendar year).

Additional Information

For calendar year Jan 01, 2023 through Dec 31, 2023

NDS = Health Canada National Dosimetry Service
ePD = Internal monitoring using electronic personal dosimeters (2 student researchers)

Ascertainment of Doses – Extremity

Provide a summary of the annual equivalent extremity radiation doses received by Nuclear Energy Workers (NEWs) and non-NEWs (workers in position not designated as NEWs) during the year ending December 31st. Provide the information in detail, as shown below. Only report dose for staff working in Canada.

NOTE: Please do **NOT** send personal sensitive information, such as social insurance numbers, to the CNSC. If the total number of workers reported for NEWs or Non-NEWs is less than ten (10), do **NOT** report the maximum individual dose.

☐ Check here if your organization has no extremity dose information to submit for the reporting period.

	Number of Workers in each effective dose category								
	< 10 mSv	≥ 10 mSv and ≤ 50 mSv	> 50 mSv and ≤ 100 mSV	> 100 mSv and ≤ 200 mSv	> 200 mSv and ≤ 350 mSv	>350 mSv and ≤ 500 mSv	> 500 mSv	Dosimetry Service Provider †	Maximum individual dose (mSv) ††
Number of NEWs	6	1		1				NDS	
Number of Non-NEWs	2							NDS	

† Enter the name of the dosimetry service provider. If a dosimetry service provider is not used, enter "ESTIMATED" and provide brief details on how dose estimates were derived in the additional information area below.

†† Do not enter a non-personal dose that was the subject of a CNSC approved dose change request.

In accordance with the Radiation Protection Regulations, doses must be reported for a CALENDAR YEAR (January 1 to December 31). Please report your doses for the calendar year preceding your ACR due date (e.g. regardless of the ACR reporting date in licence condition 2912 on your licence, always report the doses for the period Jan 1 - Dec 31 of the previous calendar year).

Additional Information

For calendar year Jan 01, 2023 through Dec 31, 2023

NDS = Health Canada National Dosimetry Service

Workload - Isotope Production Accelerator

Provide a summary of the workload of the Class II prescribed equipment during the reporting period for all operating modes. If you have exceeded your approved annual workload, please submit details in the "Additional Information" area below, including an explanation as to why the approved workload was exceeded, and calculations showing that doses to persons in adjacent areas are still ALARA. Note that in all cases, records of workload must be maintained for inspection by the CNSC.

NOTE: The information requested on this page may be submitted as a separate spreadsheet attached to the same email as this form. Please ensure your spreadsheet uses the same headings as in the table below, and contains all required information, or see www.nuclearsafety.gc.ca/acr for templates.

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	Target identifier or Part Number[1]	Annual uA-hours[2]	Annual Production (GBq)	Number of batches/year	Number of targets rebuilt
-	LT (18F)	9,132.5	18,264	89	2
-	LT (13N)	168.4	970	11	
	Totals	9,300.9	19,234	100	2

1. The target Identifier listed here should match the Target Identifier in the "Part No." column of the Appendix: Licensed Targets on your licence
2. If reporting on dual-beam targets, provide the sum of µA-hours from both beams
3. If reporting on research/test/dummy targets, list each type of target individually
4. If different beam types were used with the same target, report each beam type on a separate line (i.e. research targets with proton beams, research targets with deuteron beam, etc.)

Additional Information

Production information for period from Nov 01, 2023 through Oct 31, 2024
LT(18F) and LT(13N) are the same physical target

Additional Information for Nuclear Substances and Class II Facilities

Please provide additional information related to the Class II prescribed equipment, as detailed below. Note that provision of this information is not a regulatory requirement; CNSC requests this information in order to examine nuclear-safety-related trends and to inform future compliance strategies.

	Prescribed equipment Item Number [1]	Greatest extent servicing performed during the reporting period. [2]	Radiation survey performed during reporting period? If yes, see Note 3.
-	1	Corrective	No

1. Refer to the sections of your licence entitled "Appendix: Nuclear Substances and Class II Prescribed Equipment" and "Appendix: Location(s) of Licensed Activities" to determine the item number of each piece of prescribed equipment. Report one item per row. Add additional rows as necessary.
2. The various extents of servicing are defined as follows:
   - Not applicable: Not licensed to service Class II prescribed equipment
   - None
   - Preventive maintenance: Limited to basic servicing activities and periodic inspections
   - Corrective maintenance: Limited to preventive maintenance, plus troubleshooting and limited repairs or adjustments
   - Extensive servicing: Corrective maintenance, plus replacement of major components, refurbishment of Class II prescribed equipment, installation or replacement of the prescribed equipment or nuclear substances contained within the prescribed equipment, or dismantling of the prescribed equipment
3. Submit the results of the most recent radiation surveys performed during the reporting period or reference it if already submitted to the CNSC during the reporting period.

Additional Information

Replaced and realigned extraction foils, Preventative maintenance, replaced ion source filaments