



Canadian Nuclear
Safety Commission

Commission canadienne
de sûreté nucléaire

Canada



Regulatory Oversight Report for Canadian Nuclear Laboratories Sites: 2018

Commission Meeting
November 7, 2019
CMD 19-M24.A

CNSC Staff Presentation

e-Doc# 5969282.pptx
e-Doc# 6030151.pdf

nuclearsafety.gc.ca





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Presentation Outline

- Overview
- Scope of this Regulatory Oversight Report (ROR)
- CNSC Regulatory Oversight of Canadian Nuclear Laboratories (CNL) sites and facilities
- Events and Other Matters of Regulatory Interest
- Updates on 2019 Event Initial Reports
- Key Themes from Interventions
- Conclusions



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OVERVIEW



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RORs Presented to the Commission in 2019

November 6/7, 2019:

- Canadian Nuclear Power Generating Sites
- Use of Nuclear Substances
- **Canadian Nuclear Laboratories Sites**

December 11/12, 2019:

- Uranium Processing and Nuclear Processing Facilities
- Uranium Mines and Mills





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ROR Highlights

- Summary of CNSC staff's regulatory oversight efforts
- Ratings for CNL sites against the CNSC's 14 safety and control areas (SCAs)
- Doses to workers and to the public, environmental performance, and health and safety at CNL sites
- Topics of regulatory interest at CNL sites





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Corrections to CMD 19-M24

- All instances of licence WNSL-W1-182.0/2021 should read WNSL-W1-182.1/2021
- **Section 3.4** indicates that **37** enforcement actions were issued to the Port Hope Area Initiative; the correct number is **36**
- **Section 5.3.2** and the **Acronyms list** incorrectly spell ‘Manitoba Metis Federation’ as ‘Manitoba Métis Federation’
- **Table G-1** should list the 2018 Accident Severity for CRL as 2.57, not 2.47
- **Tables H-7** and **H-8** should list the Derived Release Limit for Gross Alpha at Douglas Point as “**N/A**”



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SCOPE OF THE ROR

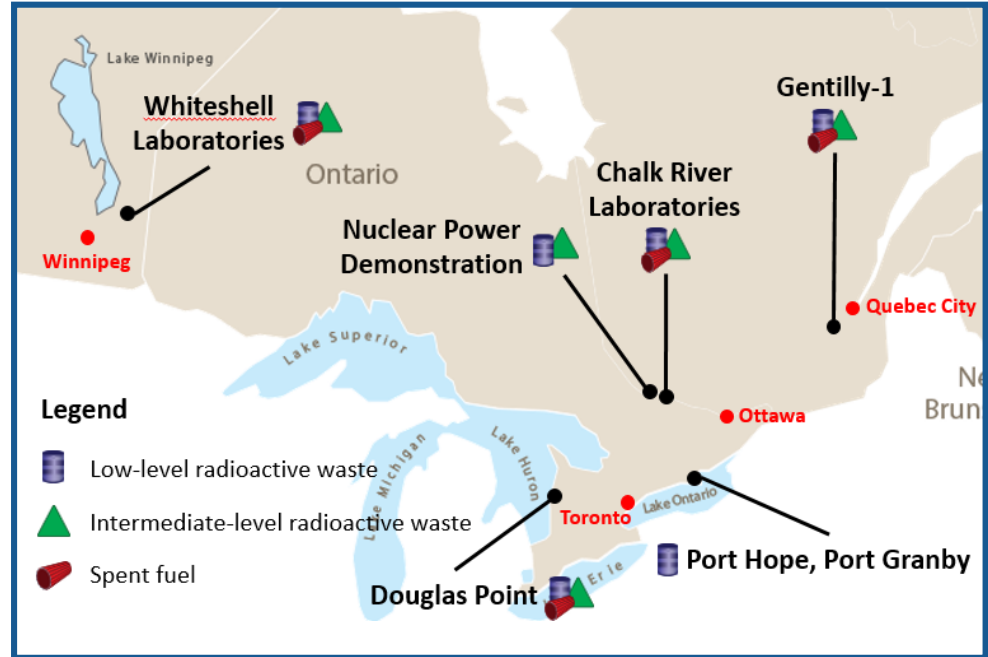


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Scope of the 2018 CNL ROR

This is the first ROR focused on CNL's licensed activities in one report.

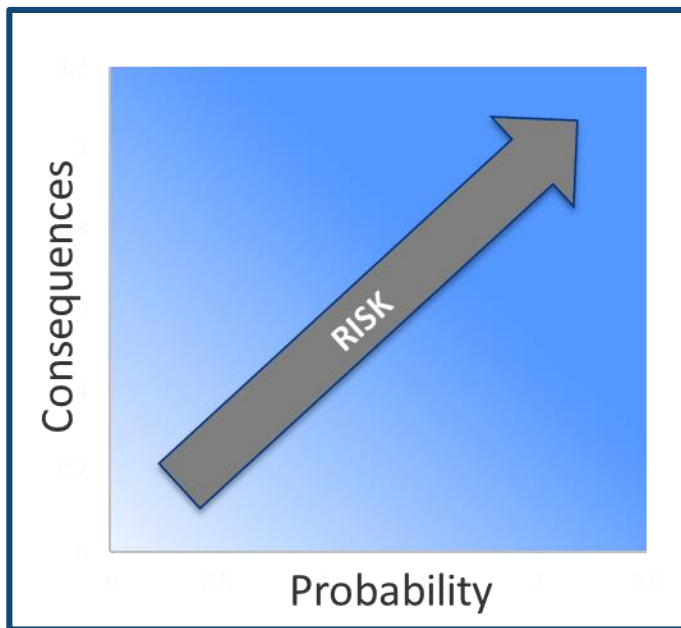
Responsibility for regulatory oversight of CNL is under the CNSC's Nuclear Fuel Cycle Program.





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Nuclear Fuel Cycle Program Risk Classification



CNSC staff classify the risk of a licensed activity based on its potential impacts.

CNSC staff assess against:

- The probability and consequences of possible failures on safety, security and the environment, including potential long-term effects
- The nature of hazards associated with a given activity
- The scope, scale and state of operations



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Licences Covered by this CMD

Site /Facility/Project	Risk Classification	Licence Number
Chalk River Laboratories (CRL)	High	NRTEOL-01.00/2028
Whiteshell Laboratories (WL)	Medium	NRTEDL-W5-8.05/2019
Port Hope Project (PHP)	Medium	WNSL-W1-2310.02/2022
Port Granby Project (PGP)	Medium	WNSL-W1-2311.02/2021
Douglas Point (DP) Waste Facility	Low	WFDL-W4-332.02/2034
Gentilly-1 (G-1) Waste Facility	Low	WFDL-W4-331.00/2034
Nuclear Power Demonstration (NPD) Waste Facility	Low	WFDL-W4-342.00/2034
Port Hope Pine Street Extension Temporary Storage Site	Low	WNSL-W1-182.1/2021
Port Hope Radioactive Waste Management Facility	Low	WNSL-W1-344-1.8/ind



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Significant Licensing Changes in 2018

Site, Facility or Project	Licence Changes	Licence Conditions Handbooks (LCH) Changes
Chalk River Laboratories	New 10-year licence , March 2018 (CMD 18-H2)	New LCHs issued, May 2018 and February 2019
Whiteshell Laboratories	1-year extension for the 2019 calendar year, August 2018 (CMD 18-H103)	No change
Port Granby Project	Licence amendment request to incorporate Release Limits for the new Waste Water Treatment Plant granted, April 2019 (CMD 19-H101)	No change in 2018 New LCH issued, April 2019
Douglas Point, Gentilly-1 & Nuclear Power Demonstration waste facilities	Request for Separation of single licence into three individual licences for each site granted, February 2019 (CMD 18-H107)	No change in 2018 Three new LCHs issued in 2019



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Chalk River Laboratories (CRL)

CNSC staff focused on:

- Inspecting CNL's decommissioning of legacy facilities and planning of new facilities
- Monitoring the repatriation of highly enriched uranium to the United States
- Assessing CNL's proposal to construct and operate a Near-Surface Disposal Facility
- Assessing CNL's plan to host a Small Modular Reactor



Aerial view of CRL, a nuclear research and test establishment, located 160km north-west of Ottawa, Ontario



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Chalk River Laboratories

The National Research Universal (NRU) reactor and the associated Molybdenum-99 Production Facility were permanently shut down.

CNSC staff confirm that CNL has removed all fuel and heavy water from the NRU reactor core.

**NRU's permanent shut-down
reduces the risk posed by CRL**



The NRU reactor hall



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Whiteshell Laboratories (WL)

CNSC staff focused on:

- Assessing CNL's application for a 10-year licence renewal
- Inspecting CNL's waste management and decommissioning work throughout the site
- Assessing CNL's proposed safety case for in-situ decommissioning of the WR-1 reactor, and holding associated meetings with stakeholders



Aerial view of WL, a shut-down nuclear research and test establishment located near Pinawa, Manitoba



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Port Hope Project (PHP)

CNSC staff focused on:

- Inspecting CNL's continued construction of the Port Hope Long-Term Waste Management Facility (LTWMF)
- Monitoring CNL's first receipts of off-site waste at the LTWMF
- Assessing CNL's management and treatment of impacted water, including modifications to increase impacted water storage capacity



Aerial view of the Port Hope LTWMF site, which consists of a project to remediate legacy contamination in the Municipality of Port Hope



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Port Hope Project

CNSC staff focused on:

- Assessing CNL and Cameco's preparations for remediation activities at the Port Hope Harbour and adjacent Centre Pier
- Developing compliance verification methodology for CNL's Small Scale Site remediation



CNL's wave attenuator at the mouth of the Port Hope Harbour



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Port Granby Project (PGP)

CNSC staff focused on:

- Inspecting CNL's excavation of legacy waste, and its transfer to the Port Granby LTWMF
- Assessing CNL's management of impacted water, including modifications to increase water storage capacity
- Evaluating CNL's revised effluent Release Limits for inclusion in the Port Granby licence
- Monitoring CNL's preparations for the closure and capping of the Port Granby LTWMF



Lake Tanks used for Additional Water Storage at the PGP, a project to remediate legacy contamination in the Municipality of Clarington



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Prototype Power Reactors

CNSC staff focused on:

- Inspecting CNL's ongoing hazard reduction and waste characterization work, in preparation for full decommissioning
- Assessing CNL's proposed safety case for in-situ decommissioning of the NPD reactor
- Assessing and actioning CNL's request to separate the single licence covering these sites

*Douglas Point,
Tiverton, Ontario*



*Gentilly-1,
Bécancour, Québec*



*Nuclear Power
Demonstration,
Rolphton, Ontario*





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CNSC REGULATORY OVERSIGHT



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Regulatory Effort in 2018

Site, Facility or Project	Risk Classification	Inspections		Enforcement Actions Issued	Person Hours of Compliance Work	Person Hours of Licensing Work
		2018	Trend since 2017			
Chalk River Laboratories	High	12	↑	12	13163	9023
Whiteshell Laboratories	Medium	2	→	1	1808	3143
Port Hope Project	Medium	5	↓	14	3938	465
Port Granby Project	Medium	6	↑	22	2190	405
Douglas Point	Low	1	→	2	3398	4620
Gentilly-1	Low	1	↑	None		
Nuclear Power Demonstration	Low	1	↓	None		
Total		28		51	24 495	17 662



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Focused Inspections at CNL Sites

- CNSC staff carried out two focused inspections at CNL sites in response to external complaints
- Neither inspection identified concerns with raising safety-significant issues
- Some reticence was found amongst workers to raising non-safety significant issues

CNSC staff requested that CNL perform a corporate-wide self-assessment of safety culture



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Safety and Control Area (SCA) Performance Ratings (1/2)

CNSC staff assess and evaluate licensee performance on applicable SCAs.

Performance is rated as:

- Fully satisfactory
- Satisfactory
- Below expectations
- Unacceptable

Ratings are derived from results of regulatory oversight activities.

CNSC Safety and Control Areas (SCAs)

Management system

Human performance management

Operating performance

Safety analysis

Physical design

Fitness for service

Radiation protection

Conventional health and safety

Environmental protection

Emergency management and fire protection

Waste management

Security

Safeguards and non-proliferation

Packaging and transport



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Safety and Control Area Performance Ratings (2/2)

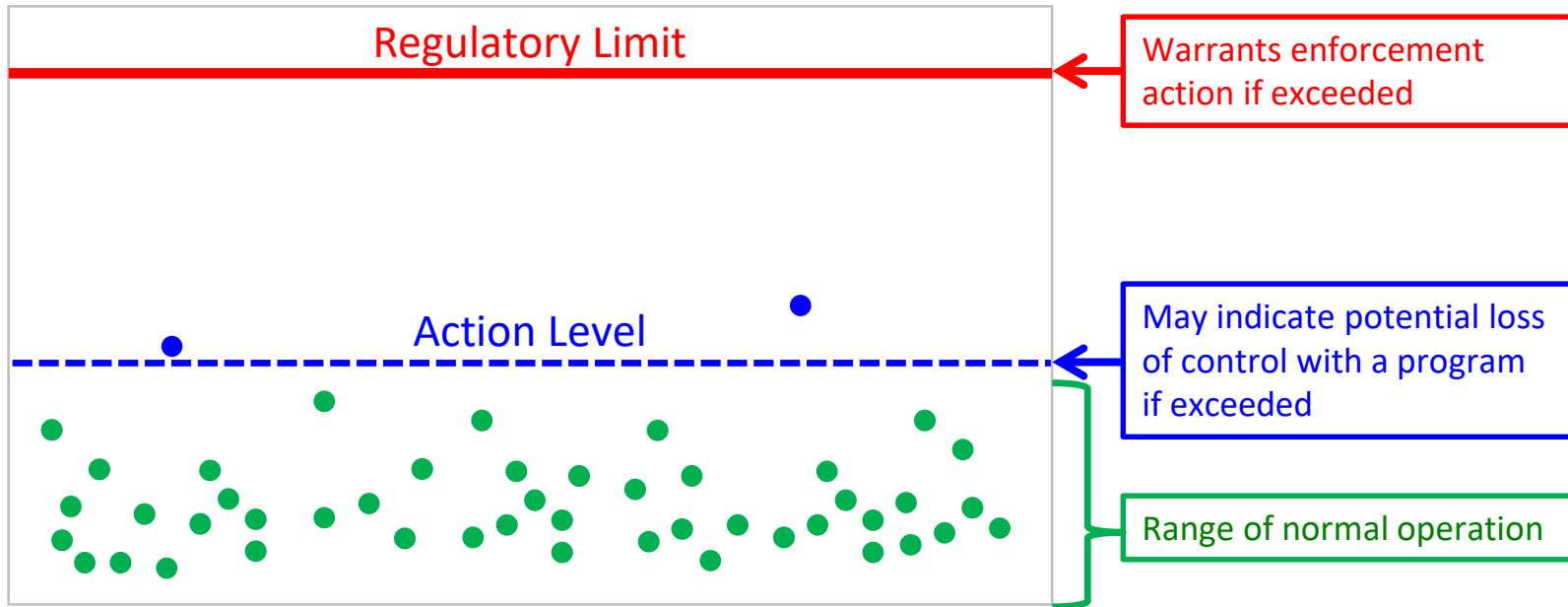
Fully satisfactory (FS)
Satisfactory (SA)
Below expectations (BE)
Unacceptable (UA)

Safety and control area	Chalk River Laboratories	Whiteshell Laboratories	Port Hope Project	Port Granby Project	Douglas Point	Gentilly-1	Nuclear Power Demonstration
Management system	SA	SA	SA	SA	SA	SA	SA
Human performance management	SA	SA	SA	SA	SA	SA	SA
Operating performance	SA	SA	SA	SA	SA	SA	SA
Safety analysis	SA	SA	SA	SA	SA	SA	SA
Physical design	SA	SA	SA	SA	SA	SA	SA
Fitness for service	SA	SA	SA	SA	SA	SA	SA
Radiation protection	SA	SA	SA	SA	SA	SA	SA
Conventional health and safety	SA	SA	SA	SA	SA	SA	SA
Environmental protection	SA	SA	SA	SA	SA	SA	SA
Emergency management and fire protection	SA	SA	SA	SA	SA	SA	SA
Waste management	SA	SA	SA	SA	SA	SA	SA
Security	SA	BE	SA	SA	SA	SA	SA
Safeguards	SA	SA	SA	SA	SA	SA	SA
Packaging and transport	SA	SA	SA	SA	SA	SA	SA



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Regulatory Limits and Action Levels





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Radiation Protection Performance

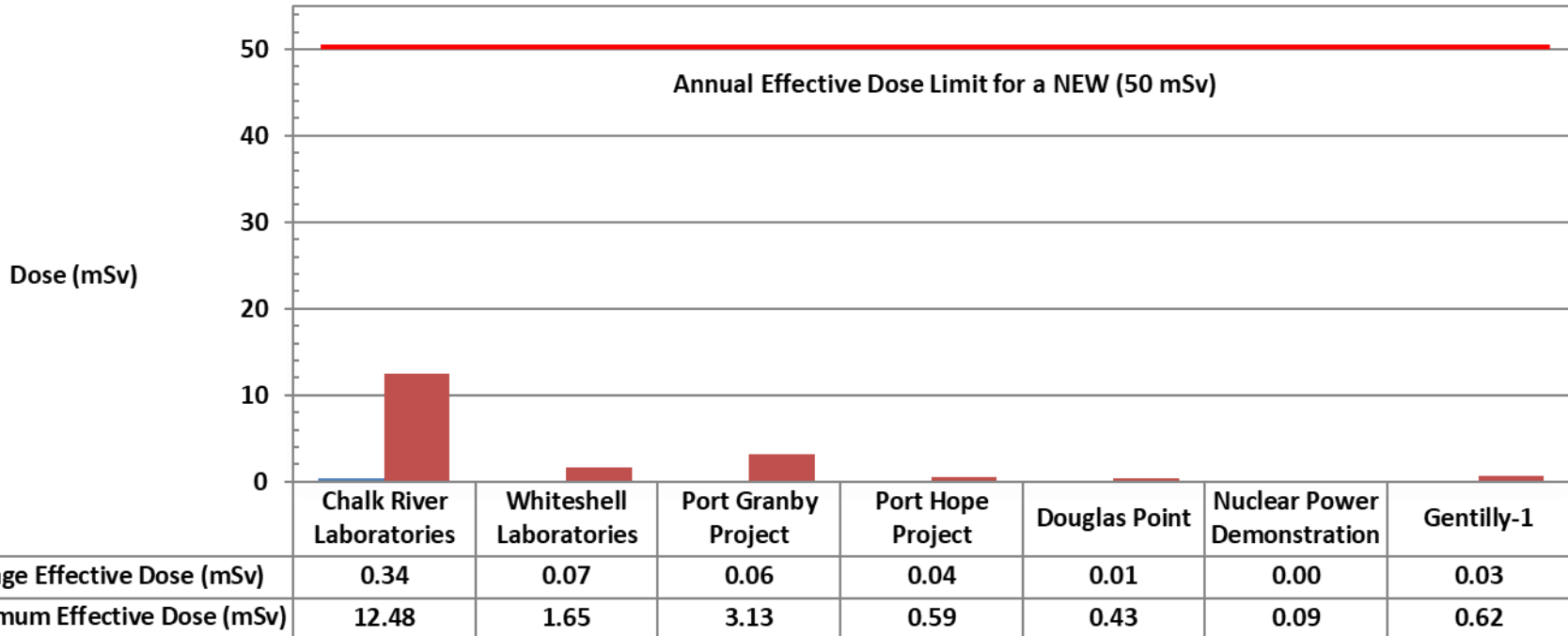
- Doses to workers were well below regulatory limits at all CNL sites
- One radiological action level exceedance in 2018 at the Port Granby site
 - A worker received an effective dose of 1.16 mSv over a 4 week period (action level = 1 mSv)
 - The exceedance did not represent a loss of control of CNL's Radiation Protection program and CNL was already in the process of reviewing this Action Level
 - CNSC staff are satisfied with CNL's reporting and investigation of this event
- CNSC staff confirmed that CNL's corporate and site-level programs were effective in controlling radiological hazards

Doses remain low at CNL sites



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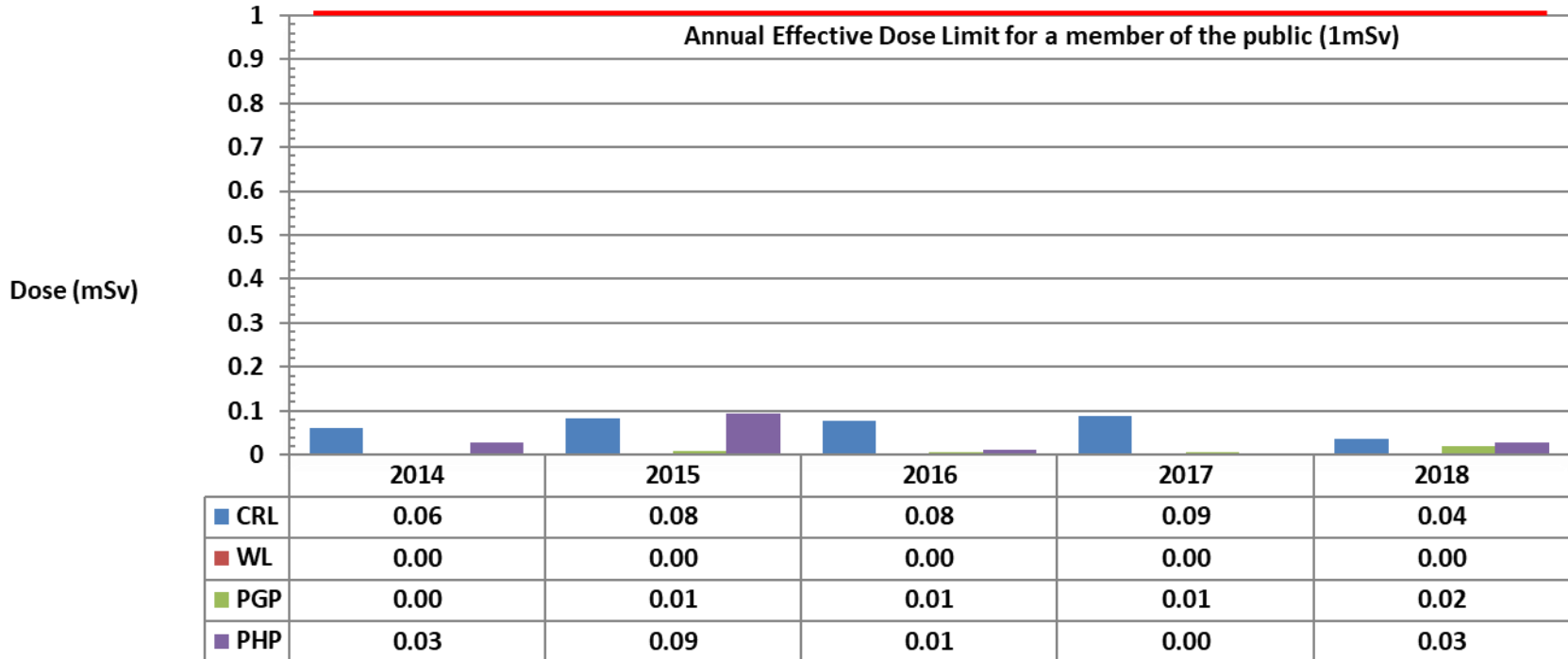
2018 Doses to Nuclear Energy Workers (NEWs)





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Estimated Dose to the Public





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Environmental Protection Performance

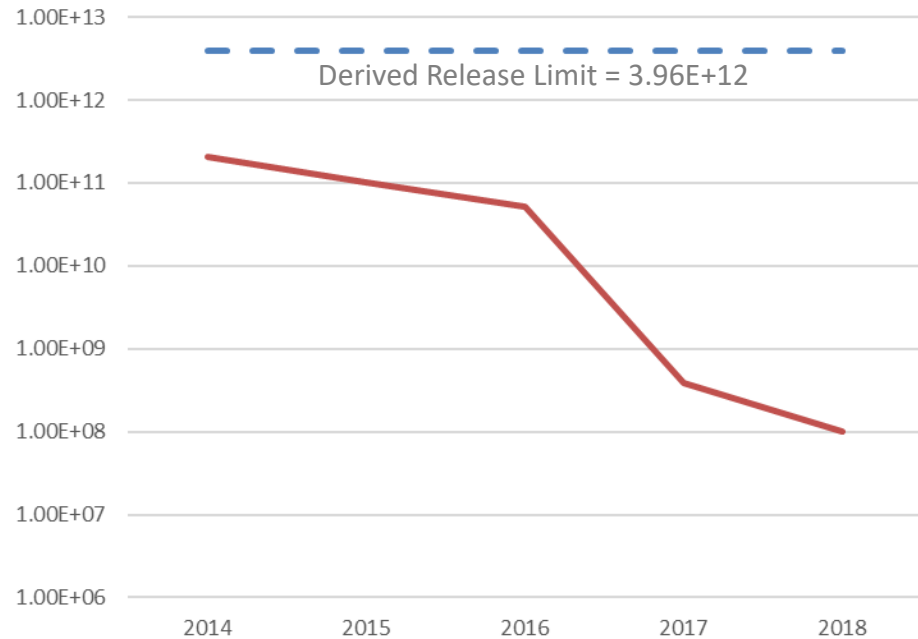
- CNL reported six environmental Action Level exceedances in 2018
 - Three at the CRL site, all related to the operation of the NRU reactor
 - Three at Port Hope Area Initiative sites, all related to contaminants in treated effluent
 - CNL investigated each event as required and concluded that these did not represent a loss of control of CNL's Environmental Protection program
 - CNSC staff are satisfied with CNL's reporting and investigation of these Action Level exceedances
- CNSC staff confirmed that CNL's corporate and site-level programs were effective in controlling environmental releases



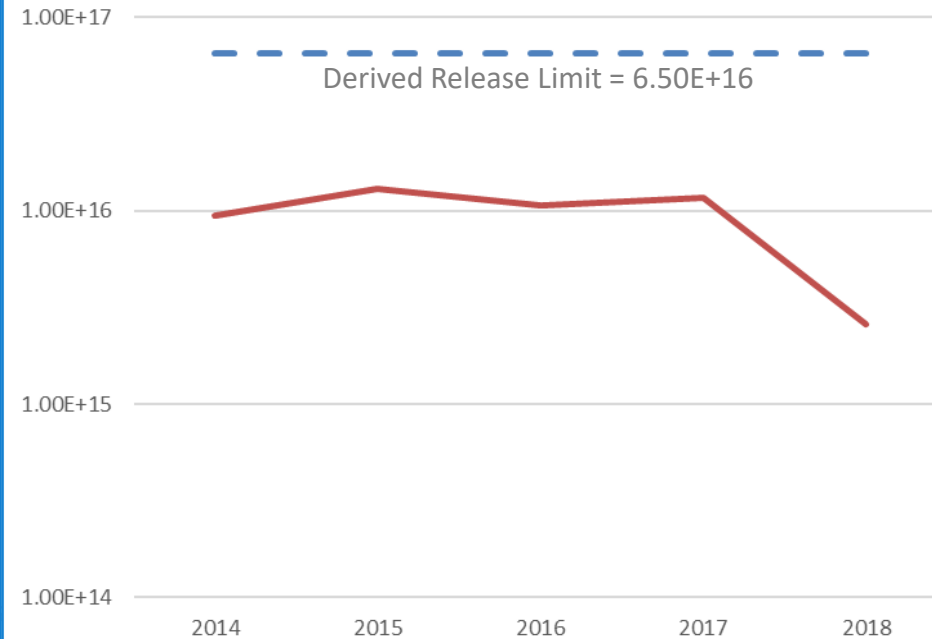
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Reporting on Releases to the Environment

Iodine-131 Releases from CRL (Bq)



Argon-41 Releases from CRL (Bq)





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IEMP at Gentilly-1/Gentilly-2

Food Sample



Air Sample



Vegetation Sample



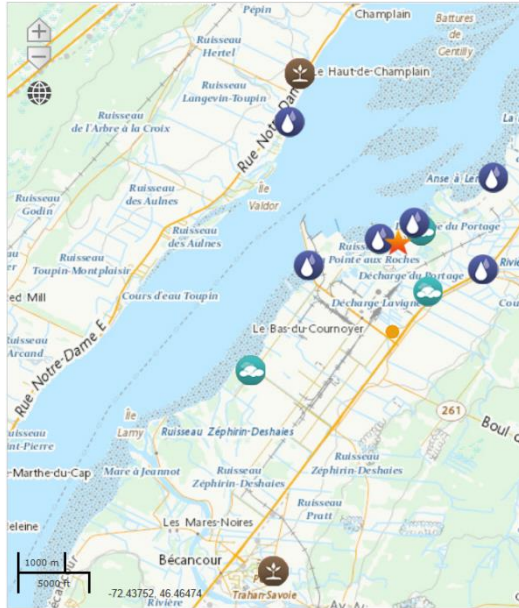
Water Sample



Soil Sample



Gentilly2



Map of 2018 sample locations in the
Gentilly area



CNSC staff take water samples from the St. Lawrence river

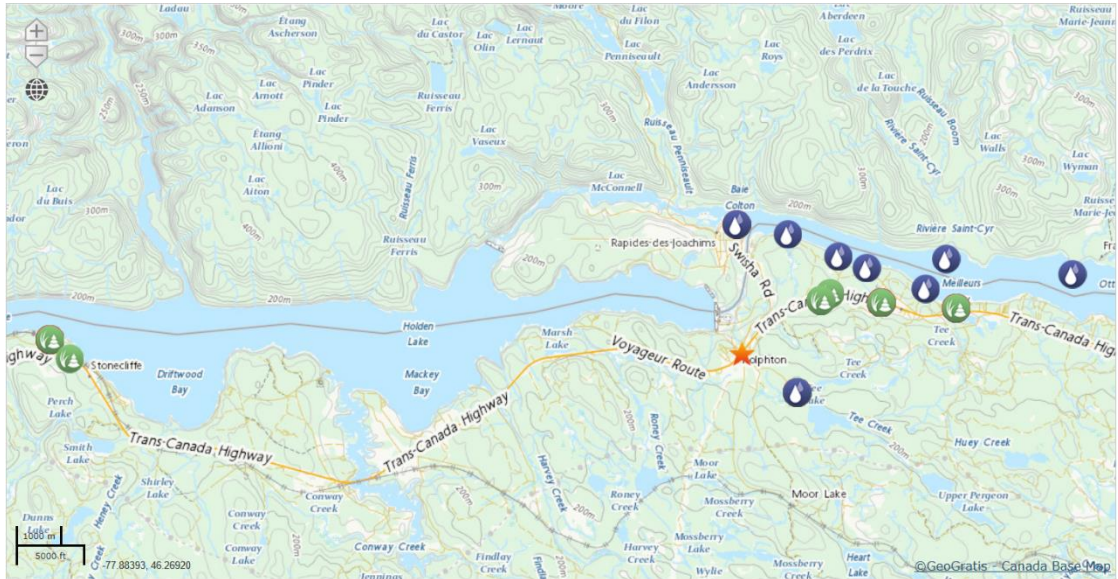


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IEMP at Nuclear Power Demonstration



CNSC staff collecting chokecherries near NPD
e-Doc# 5969282



- Food Sample**
- Vegetation Sample**
- Water Sample**
- Soil Sample**
- Nuclear Power Demonstration Waste Facility**

Map of 2018 sample locations in the NPD area

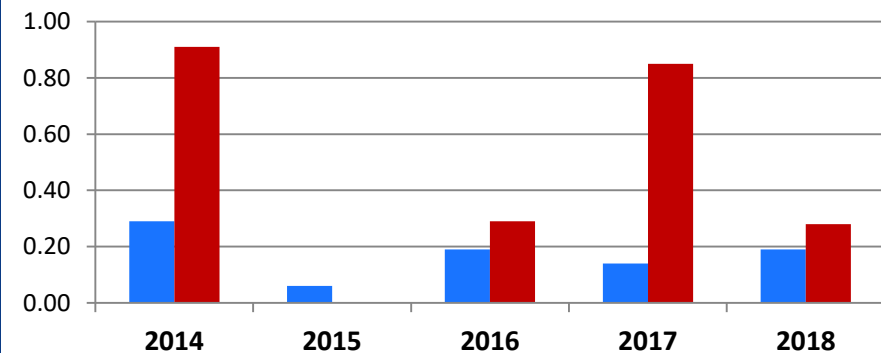


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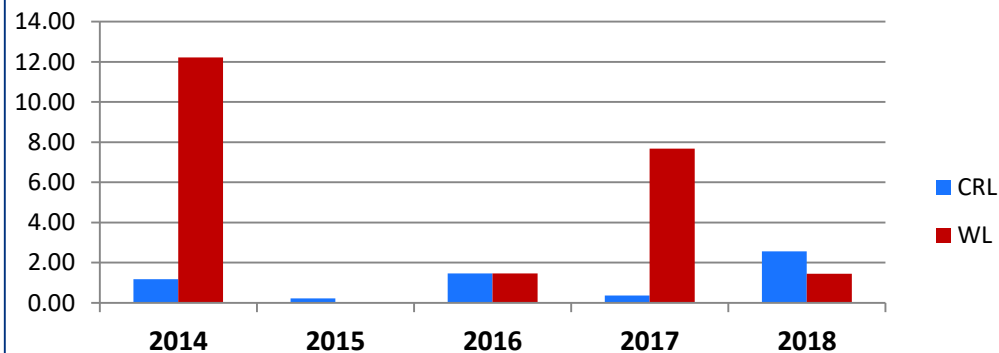
Conventional Health and Safety

- CNL is accountable for ensuring the health and safety of all persons on site
- CNSC staff evaluate CNL's conventional health and safety practices during all inspections

Lost Time Injury Frequency



Lost Time Injury Severity





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IAEA Safeguards at CNL Sites

- The IAEA carries out inspections at nuclear sites in Canada to verify their exclusively peaceful nature
- CNSC staff participate in most IAEA activities
- No significant issues identified at CNL sites in 2018

	# of IAEA activities in 2018
Chalk River Laboratories	51
Whiteshell Laboratories	1
Port Hope Project	3
Gentilly-1 Waste Facility	2



The IAEA's unattended portal monitor at the Port Hope LTWMF (courtesy IAEA)



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EVENTS AND OTHER MATTERS OF REGULATORY INTEREST



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Event Reporting at CNL Sites

- CNL required to report specific types of events involving its licensed activities
- CNSC staff analyze all event reports
- Significant events are reported to the Commission as Event Initial Reports (EIRs)
 - There were no EIRs for CNL sites in 2018

CNSC staff are satisfied with CNL's event reporting and corrective actions in 2018

Site	# of Events
Chalk River Laboratories	35
Whiteshell Laboratories	0
Port Hope Project	5
Port Granby Project	5
Douglas Point Waste Facility	0
Gentilly-1 Waste Facility	0
Nuclear Power Demonstration Waste Facility	2



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Public and Indigenous Engagement (1/2)

- CNSC staff engage with the public and Indigenous groups at dedicated sessions, community events and fairs
- Going to where interested parties are increases accessibility to the CNSC and promotes dialogue

**Indigenous groups were informed
of this report and of the Participant
Funding opportunities**



*CNSC staff at the 2018 Port Hope & District
Agricultural Society Fair*



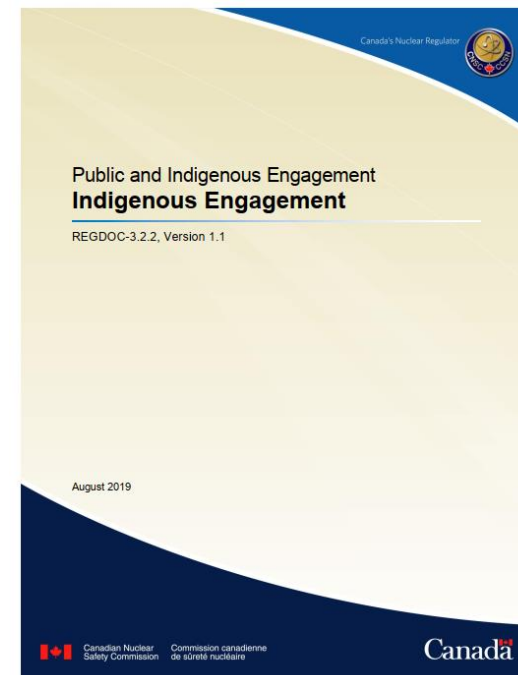
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Public and Indigenous Engagement (2/2)

CNSC's Participant Funding Program

supports individual, not-for-profit organization
and Indigenous group participation in the CNSC's
environmental assessment and licensing
processes

CNSC staff also review CNL's engagement efforts
to ensure compliance with requirements





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Major Projects Proposed on CNL Sites

CNSC Staff are performing technical assessments of the following proposals:

- Construction of a **Near-Surface Disposal Facility** at the Chalk River site
- In-situ decommissioning of the **NPD** and **WR-1** reactors
- Commencement of dismantlement work at **Douglas Point**
- Hosting a **Small Modular Reactor (SMR)** at a CNL site

Environmental Assessment and Licensing approvals from the Commission are required for each of these proposals



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UPDATES ON 2019 EIRS



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Update on Injured Worker at Port Granby

CMD 19-M9, Worker injured on January 9, 2019 at CNL Port Granby Project

- The worker was pinned by the unloading mechanism of a roll-off bin truck
- The worker had the remote control for the mechanism in their pocket, and inadvertently activated it
- Corrective actions included a CNL-wide safety bulletin regarding remote controlled mechanisms, and training for operators

CNSC staff verified implementation of these corrective actions and found them to be acceptable



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Update on Power Outage at CRL

CMD 19-M10, Power Outage on February 3, 2019 at Chalk River Laboratories

- The site-wide power outage was caused by a fire in cable insulation and a switch gear malfunction
- CNSC staff reviewed CNL's Root Cause Analysis of the event and the resulting corrective actions
- CNSC staff will continue to monitor CNL's progress on implementing corrective actions going forward

CNSC staff are satisfied with CNL's analysis, the interim and long-term corrective actions



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KEY THEMES FROM INTERVENTIONS



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Key Themes in Interventions (1/4)

Nine interventions were received; CNSC staff observed the following key themes:

- Public Information and Disclosure for CNL sites
- Indigenous engagement and consultation
- Waste generation, management and transport



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Key Themes in Interventions (2/4)

Public Information and Disclosure for CNL Sites

- Intervenors requested that CNL disclose additional information to the public such as:
 - Detailed site maps
 - Additional environmental monitoring data
- CNL's Public Information and Disclosure Program requires them to disclose extensive information
- CNSC staff encourage licensees and applicants to release information where appropriate



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Key Themes in Interventions (3/4)

Indigenous Engagement and Consultation

- Indigenous groups requested more information, and additional opportunities to participate in CNSC processes
- CNSC staff engage with Indigenous groups when planning IEMP activities
- In 2018, CNSC staff signed engagement terms of reference with the Saugeen Ojibway Nation, and the Historic Saugeen Métis
- CNSC staff are working on terms of engagement with other groups, and are committed to ongoing engagement and information sharing with all interested Indigenous groups



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Key Themes in Interventions (4/4)

Waste Generation, Management and Transport

- Intervenors expressed concerns about CNL's management and transport of radioactive wastes
- CNSC staff assess that CNL's programs for Waste Management and for Packaging and Transport are both 'Satisfactory'
- Due to increased work at all CNL sites, CNSC staff's focus and regulatory efforts will also increase going forward



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CONCLUSIONS



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Conclusion

- CNSC staff have carried out extensive regulatory oversight activities at CNL sites, and conclude that:
 - Doses to workers and the public were below regulatory limits
 - Environmental releases were below regulatory limits
 - Workers were protected from conventional health and safety risks
- CNSC staff will report to the Commission annually on CNL's performance

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INTERVENTION DISPOSITION TABLES



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Algonquins of Ontario (1/11)

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Comment/Recommendation	CNSC staff Disposition
<p>AOO1 Please provide additional details on the Repatriation of Highly Enriched Uranium (HEU) including a description of the regulatory requirements including vehicle types, packaging requirements, security considerations, monitoring and routing.</p>	<p>Information regarding the packaging and transport of HEU which is not confidential or prescribed is available on the CNSC’s website: http://nuclearsafety.gc.ca/eng/reactors/research-reactors/nuclear-facilities/chalk-river/highly-enriched-uranium-in-canada.cfm</p> <p>Any further details regarding movements of Highly Enriched Uranium (HEU) are classified. CNSC staff cannot provide any detailed information other than what is in the ROR.</p> <p>CNSC staff can confirm that CNL meets the requirements of the <i>Nuclear Security Regulations</i> and <i>Packaging and Transport of Nuclear Substances Regulations, 2015</i>, and keeps CNSC staff up to date on the security of HEU repatriation transport in regards to continuously updated threat and risk assessment for the transport route, and all security measures associated with each transport. CNL has had no security issues during the shipment of Category I, II or III nuclear material.</p>



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Algonquins of Ontario (2/11)

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Comment/Recommendation		CNSC staff Disposition
AOO2	<p>a) Please provide reporting on the baseline quantities of HEU at each site location, prior to initiating repatriation.</p> <p>b) Please specify the predicted timeline for the removal of all HEU from the CRL site.</p> <p>c) Please specify the volume of liquid HEU remaining on site and the storage requirements for the remaining HEU on site.</p>	See response to AOO1.
AOO3	Please specify what industrial use is planned at the NPD site. Is this reference to the NPD Closure Project?	This request is best directed to CNL. CNSC staff are not aware of any specific industrial use which CNL intends for the NPD site post-decommissioning.
AOO4	Please provide details on the nature of enforcement actions issues and the specific issues related to training that were identified at CRL by CNSC inspectors.	The enforcement actions related to an inspection of Nuclear Response Force training. The inspection identified areas for improvement, but none constituted a breach or potential breach of security at CRL. Additional information is confidential and cannot be provided publically.



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Algonquins of Ontario (3/11)

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Comment/Recommendation		CNSC staff Disposition
AO05	Please specify how CNL's action plan addresses the issues around timely (safeguards) reporting.	CNL's action plan included the development of procedures for preparing nuclear material accountancy reports, implementation of stricter QA/QC procedures prior to submission of those reports to the CNSC, and training on nuclear materials accounting requirements delivered by CNSC staff. All actions are now complete. Significant improvement has been noted in both the timeliness and accuracy of CNL's reporting since the implementation of the action plan.



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Algonquins of Ontario (4/11)

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Comment/Recommendation

CNSC staff Disposition

AO06

- a) Please specify in detail the information CNSC staff received that alleged details of deficiencies in the safety culture, specifically related to the raising of issues by CNL staff.
- b) Please specify in detail what lead CNSC inspectors to conclude that there was “some reluctance” amongst those workers interviewed on CNL sites with regards to raising other issues in general.
- c) Please provide a copy of CNL’s self assessment for review when it is available.

- a) – In order to respect the confidentiality of the persons who approached the CNSC, the details of the communications cannot be released. In summary, it was alleged that some workers may not feel free to raise issues (including safety-significant issues), some workers may be working in unsafe conditions, and that CNL may not have processes in place to meet proactive disclosure levels requested by the Commission.
- b) – CNSC staff came to this conclusion on the basis of confidential interviews with CNL staff. A number of CNL staff declined to participate in this voluntary process. Some CNL staff who did participate indicated dissatisfaction with CNL’s process for raising issues which CNL management did not deem to be safety-significant.
- c) – This request is best directed to CNL.



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Algonquins of Ontario (5/11)

CMD 19-M24.2

Comment/Recommendation	CNSC staff Disposition
<p>AOO7</p> <p>Please specify whether this hypothetical member of the public would be representative of an Algonquin land user who may partake in traditional land and resource use including harvesting near CRL.</p>	<p>CNL has considered Indigenous people in the calculation of its DRLs (Hypothetical members) and concluded that the driving factor for local food consumption is the setting of the community.</p> <p>Requests for further information are best directed to CNL.</p>



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Algonquins of Ontario (6/11)

CMD 19-M24.2

Comment/Recommendation	CNSC staff Disposition
<p>AOO8 Please specify any wildlife mortality that occurred at CRL and NPD sites in 2018 including the date, species and cause of death. The AOO would like to determine whether additional mitigation measures are necessary to protect significant species on site including species-at risk such as the Blanding's Turtle.</p>	<p>Wildlife mortality on a licenced site is not an event which must be reported to the CNSC. This request is best directed to CNL.</p>
<p>AOO9 Please provide a list of all reportable events at the CRL and NPD sites including dates, description of the incident, risk to the public and corrective actions taken to resolve issues.</p>	<p>CNSC staff note that CNL has committed to quarterly updates to the public on event reports through their website. The event reporting requirements on CNL can be found in the <i>General Nuclear Safety Control Regulations</i> and REGDOC-3.1.2 <i>Reporting Requirements, Volume I: Non-Power Reactor Class I Nuclear Facilities and Uranium Mines and Mills</i>. When events have the potential for significant impacts or high public visibility, these are reported to the Commission in Event Initial Reports (EIRs). Although there were reportable events at CRL and NPD in 2018, none met the criteria to be reported to the Commission in an EIR.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Algonquins of Ontario (7/11)

CMD 19-M24.2

	Comment/Recommendation	CNSC staff Disposition
AOO10	Please specify the volume of radioactive waste (high, intermediate or low) generated in 2018.	This request is best directed to CNL. Information on waste volumes are provided to CNSC staff via CNL's Annual Compliance Monitoring Reports. Details on waste volume and type are made publically available every three years as part of Canada's national update under the <i>Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management</i> . Information on for the 2015 to 2017 period is currently available on the CNSC's website: http://www.nuclearsafety.gc.ca/pubs_catalogue/uploads/joint-convention-sixth-national-report-oct-2017-eng.pdf
AOO11	a) Please specify the origin and nature of all radioactive waste that was accepted at CRL in 2018, not including waste generated at the NPD and CRL sites. b) Please specify whether accepting waste from other jurisdictions was included in the CRL's current licence.	a) This request is best directed to CNL b) Accepting waste from other jurisdictions is included in the licensing basis for the Chalk River Laboratories site, so long as CNL's waste acceptance criteria are met, and operations are within CNL's governing documentation.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Algonquins of Ontario (8/11)

CMD 19-M24.2

Comment/Recommendation	CNSC staff Disposition
<p>AOO12 The AOO recommends that the IEMP continue to engage the AOO for future sampling at CRL and NPD. The AOO must have input and involvement in all IEMP sampling efforts within the unceded Algonquin Traditional Territory. The AOO has recently developed the Kichi-Sibi Guardians Program, a community-led environmental monitoring program. Where possible CNSC's IEMP should coordinate with the AOO to integrate the Kichi-Sibi Guardians Program into IEMP sampling in the unceded Algonquin Traditional Territory. It is recommended that a formal protocol be developed between the AOO and CNSC around involvement in the IEMP.</p>	<p>CNSC staff acknowledge the comment. CNSC staff are committed to ongoing engagement with Indigenous groups on IEMP activities that are relevant to them.</p> <p>CNSC staff will continue to work with the AOO on IEMP activities, and consider AOO's recommendation going forward.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Algonquins of Ontario (9/11)

CMD 19-M24.2

Comment/Recommendation	CNSC staff Disposition
<p>AOO13 The AOO recommends that in future ROR's in addition to a "hypothetical member of the public" the CNSC also include an "Indigenous Land User" who would spend considerable time near the sites, also conduct harvesting activities near the site, and who is also working at each CNL managed site. This would help to determine whether there is additional risk for radiation exposure to Algonquin land users who may consume plants, animals or fish harvested near CRL and NPD, and have work at CNL managed sites.</p>	<p>See response for AOO7.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Algonquins of Ontario (10/11)

CMD 19-M24.2

Comment/Recommendation	CNSC staff Disposition
<p>AOO14 The AOO recommends that CNSC and AOO continue relationship building activities to work towards establishing a formal consultation and accommodation agreement.</p>	<p>CNSC staff acknowledge the comment. CNSC staff are committed to building long-term relationships with Indigenous groups who have interests in nuclear facilities’ regulation within their traditional and/or treaty territories, including the Algonquins of Ontario.</p> <p>The CNSC is committed to continue developing the ongoing relationship with the AOO and are open to exploring opportunities to enhance and formalize the engagement relationship to enable and outline meaningful, agreed upon consultation processes where appropriate.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Algonquins of Ontario (11/11)

CMD 19-M24.2

Comment/Recommendation	CNSC staff Disposition
<p>AOO15 The AOO recommends that the results from the Algonquin Knowledge and Land Use Study (AKLUS) be integrated (where appropriate) into the EA processes for the Near Surface Disposal Facility Project and Nuclear Demonstration Closure Project, as well as other activities at the CRL site.</p>	<p>Although this is outside the scope of this ROR, CNSC staff acknowledge the comment and are committed to working collaboratively with the AOO to integrate the results of the AKLUS into the respective EA processes, to the extent possible.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Municipality of Port Hope (1/2)

CMD 19-M24.3

Comment/Recommendation		CNSC staff Disposition
MPH1	The extent to which arsenic levels influence the volume of soils removed or left in-situ.	This request is best made to CNL. CNSC staff note that arsenic is included in the clean-up criteria table in Appendix C of the Port Hope Project licence.
MPH2	The extent to which the Remediation Verification Standard Operating Process (RVSOP) is extending the time required to complete clean-ups on private property.	This request is best made to CNL. CNSC staff consider the RVSOP process to be of fundamental importance to the Port Hope Area Initiative. CNSC staff have reviewed CNL's RVSOP methodology, and carried out inspections on RVSOP implementation in Port Hope and Port Granby.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Municipality of Port Hope (2/2)

CMD 19-M24.3

Comment/Recommendation	CNSC staff Disposition
<p>MPH3 Long term implications of private property owners wanting to forgo complete remediation, leading to a partial clean-up. This results in some Low Level Radioactive Waste being left in-situ without the application for a Special Circumstance protocol.</p>	<p>CNSC staff feel this topic needs thoughtful and collaborative effort from all parties involved, in order to make sure that there is balance between the risks and benefits of a partial cleanup and its potential long term implications. CNSC staff have initiated discussions with CNL and MPH on this. Meetings are being planned for late November/December, 2019.</p>
<p>MPH4 The Municipality holds the position that any potential changes to the currently approved processes and licensing basis must demonstrate equivalency and consistency with the overall Project objective to clean up LLRW within the community. The Municipality is interested in the views of the CNSC regarding any proposed changes to the licensing basis that maybe required to address these challenges.</p>	<p>CNSC staff acknowledge the comment. When a licensee proposes to make changes to a document which is fundamental to the licensing basis, CNSC staff perform a technical assessment to determine if the proposed changes are within the licensing basis approved by the Commission at the time of licensing. If CNSC staff determine that the changes are outside the licence basis, in order to proceed, the changes require Commission approval. For CNL sites, this would require some form of public Hearing process.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (1/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF1 AECL and the CNSC should use a distinction-based approach for consultation and accommodation, an approach that explicitly recognizes and accounts for the distinct rights, claims, and interests of the MMC, as well as their significant history with the WL site and connection to the land. AECL and the CNSC must consult MMF, as the democratically elected self-government representative of Métis Citizens in Manitoba, on how they would like to be engaged in these processes on an ongoing basis to ensure the rights, claims, and interests of the MMC are adequately considered and, where required, accommodated.</p>	<p>Although out of scope in the context of the ROR, CNSC staff acknowledge this comment and is committed to continue developing the ongoing relationship with MMF and are open to exploring opportunities to enhance and formalize the engagement relationship to enable and outline meaningful, agreed upon consultation processes where appropriate.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (2/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF2 CNL, and AECL and the CNSC representing the Crown, must engage the MMF in developing a mutually agreeable Communication Strategy for the current site decommissioning activities. This Communication Strategy should include a process to inform the MMF on an ongoing basis about decommissioning and demolition activities and potential adverse effects, as well as a process for soliciting feedback and making revisions to the planned activities in light of MMF’s feedback and concerns. The Communications Strategy should also include a process for proactive communication with the MMF regarding proposed activities, including shared decision making regarding the timing of such activities to minimize impacts on Métis harvesters access to the WL site and area. It should also follow a distinctions-based approach that recognizes the unique governance structure of the MMF and processes for communication with Manitoba Métis Citizens. This will allow for clearer, more meaningful communication and engagement between CNL, AECL, CNSC and the MMF throughout the full decommissioning process at the WL site.</p>	<p>See response to MMF1.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (3/14)

CMD 19-M24.5

Comment/Recommendation		CNSC staff Disposition
MMF3-1	Establish a Communication Protocol for informing the MMF of any regulatory oversight activities happening within the Manitoba Métis Homeland. Such a protocol should include clear timelines and processes that not only inform the MMF but solicit their feedback and allow for modification to the planned activities in light of information and concerns raised by the MMF. Joint decision -making opportunities should be built into this process wherever possible.	For comments 3-1 and 3-2, see response to MMF1.
MMF3-2	Provide adequate capacity support for the MMF to meaningfully participate in regulatory oversight programs, for example, by funding a Métis Liaison position within the MMF (see Comment #5) or an Indigenous oversight committee.	



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (4/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF3-3 Develop policy guidance collaboratively with the MMF around the integration of Métis traditional knowledge, land, and resource use into the CNSC’s regulatory oversight programs, and AECL’s site ownership and decision-making roles, including licensing requirements. This should include how Métis traditional knowledge will be used to inform ongoing monitoring, environmental protection and remediation or reclamation activities in institutional and post-institutional control periods.</p>	<p>See response to MMF1.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (5/14)

CMD 19-M24.5

Comment/Recommendation		CNSC staff Disposition
MMF3-4	Provide the MMF with the opportunity to be involved in all aspects of regulatory oversight, and safety and control framework activities, including, but not limited to, the following: a) environmental protection programs, b) emergency planning and response, c) transportation route planning.	See response to MMF1.
MMF3-5	Set out requirements within the Safety and Control Framework that compel facility operators to meaningfully involve the MMF in all aspects of the management system.	



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (6/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF4 CNL, AECL and the CNSC must keep the MMF informed regarding enforcement actions and orders at the WL site using the communication strategies and protocols recommended in Recommendations 2a and 2b to ensure any incidents that may have an impact on the rights, interests, and claims of the MMC are communicated to the MMF in a timely manner so that the MMF and the MMC can respond accordingly to minimize risks or impacts on Métis Citizens. The MMF recognizes that there may be emergency situations that require an immediate response from CNSC, however, in other circumstances advance communication with the MMF regarding enforcement actions and orders that could potentially impact Métis Citizens and s. 35 Métis rights is required. This could include sharing the results of inspections with the MMF and providing draft enforcement action orders to the MMF for review and comment regarding how the proposed action or order may affect Métis rights-holders.</p>	<p>CNSC staff is committed to continuing to develop the ongoing relationship with MMF and are open to exploring opportunities to enhance and formalize the engagement relationship to enable and outline topics of interest and information sharing including regulatory oversight and compliance activities, where appropriate.</p> <p>However, in order to preserve CNSC independence and ensure the technical nature of CNSC findings, this process does not involve consulting parties not involved in the inspection on enforcement actions before they are made final. CNSC staff share finished inspection reports on request, where information security considerations permit.</p>





ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (7/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF5 Due to the importance of these natural resources for use by the MMC, it is critical that monitoring of relevant country food and medicinal plant tissues for radiological and nonradiological contaminants conducted by CNL, AECL and the CNSC occur in a manner that will detect any potential impacts on the natural resources that are used by the MMC. Moreover, as the WL site is decommissioned and improved access is permitted, it will be just as important to ensure that ongoing liabilities associated with the site are managed appropriately for the type of use that the MMC will have. CNL must consult with the MMF regarding the development of the monitoring plans so that the distinct circumstances of the MMC and Métis harvesters are appropriately being considered and Métis traditional knowledge and stewardship rights are included in the plans.</p>	<p>CNSC staff make it a priority to engage with Indigenous Nations and knowledge holders when determining which types of materials to sample under the IEMP. CNSC will ensure to consult with the MMF prior to the next IEMP sampling campaign near Whiteshell Laboratories to work towards the inclusion of Métis values.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (8/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF6 To ensure that monitoring accurately captures the data required (i.e., the locations, species, and parts of plants/animals consumed by the MMC) and that transparency of results is occurring, it is recommended that CNL and CNSC engage with the MMF to identify a Métis Liaison who can comment on monitoring design, review data, examine reports (e.g., Annual Environmental Monitoring Reports from CNL), then share information back to the MMF and MMC. This liaison should be involved in the management structure (i.e., committee) for implementation of the IMP and IEMP. This liaison should also be able to participate in field-based data collection or identify Métis Citizens from the surrounding area who would be interested in participating.</p>	<p>CNSC staff acknowledge the recommendation. CNSC staff are committed to continuing to engage with the MMF on IEMP activities moving forward, and explore opportunities of common interest.</p> <p>CNSC staff will continue to work with MMF relating to information sharing and monitoring, where appropriate.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (9/14)

CMD 19-M24.5

	Comment/Recommendation	CNSC staff Disposition
MMF7	<p>The MMF has limited resources and capacity to undertake the needed oversight of the WL site and support long term monitoring and the unique stewardship challenges that are raised by decommissioning of the WL site and nuclear facility. Therefore, the role of the Métis Liaison should be funded by AECL, the CNSC and/or CNL as part of a long-term relationship agreement.</p>	<p>CNSC staff acknowledge this comment and is supportive of CNL's commitment and efforts to work directly with MMF to develop an appropriate and mutually acceptable communication and collaboration protocol that takes into account MMF Citizens' unique rights and interests.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (10/14)

CMD 19-M24.5

	Comment/Recommendation	CNSC staff Disposition
MMF8	<p>The CNSC should engage the MMF in having a more active role in the IEMP at the WL site, similar to what has been carried out between the CSNC and AOO at the NPD site. This would facilitate a process to consider and address the MMF’s stated concerns regarding outstanding impacts on the MMC, exercise of Métis stewardship rights and obligations, and the need to incorporate Métis traditional knowledge into monitoring and decommissioning plans and activities. This could include collaboratively developing sampling plans for the WL site with the MMF, integrating MMF sites of importance into the sampling program, and having MMF harvesters accompany the CNSC in the sample collection around the WL site.</p>	<p>CNSC staff make it a priority to engage with Indigenous Nations and knowledge holders when determining which types of materials to sample under the IEMP. CNSC will ensure to consult with the MMF prior to the next IEMP sampling campaign near Whiteshell Laboratories to work towards the inclusion of Métis values.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (11/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF9</p> <p>CNSC and CNL should be required to provide safety reports to the MMF so that the MMF can monitor them and consider implications for the MMC and harvesters who will access and use the site to exercise their harvesting and other rights following decommissioning activities. This would increase transparency regarding the decommissioning activities and exposure doses, and allow the MMF to provide information and feedback from the perspective of the use of the land by MMC and their rights and interests that can be considered in these reports.</p>	<p>CNSC staff acknowledge this comment but cannot always share licensee documentation. This request is best directed to CNL.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (12/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF10</p> <p>The CNSC must provide greater detail on what a below expectations score means for the security SCA and what measures it requires CNL to take at the site to improve the security performance at the site. Additional information is required in order to determine if Métis rights and interests were considered in the security enforcement order and what impacts on the MMC may result that require additional or responding actions to address. This information would be facilitated by having a communication protocol in place that could be used if there are any implications or risks for the MMC to be aware of, especially to alert citizens who are active harvesters in the area about changes in access or other security measure they should be aware of.</p>	<p>In 2017, CNSC staff identified a deficiency in the security arrangements at the WL site that led to enforcement actions being taken including an Order. There has been no breach of security at the site, and no risk to the public or Indigenous groups.</p> <p>As a result, CNL's 2018 performance in the SCA of Security at the WL site was evaluated as 'BE'. CNSC staff's summary of the assessment is included in CMD 19-H4.A. Additionally, CNL's corrective action plan to address the gaps identified is also found in CMD 19-H4.A. Since CMD 19-H4.A contains prescribed information it is not publicly available, therefore details on the nature of the deficiency cannot be disclosed. The Commission was provided the details in their review and deliberations for the Whiteshell site licence renewal.</p> <p>CNL has partially completed the implementation of the items in the corrective action plan and is making progress towards completing all the remaining actions. During the October 2/3, 2019 WL relicensing hearing, CNSC staff also proposed an additional facility-specific licence condition for WL related to security that would require CNL to fully implement the corrective action plan in a timely manner.</p>





ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (13/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF11 CNSC must provide additional information regarding the suitability of CNL’s plans to transport and store low- and intermediate-level waste at Chalk River Laboratories to the MMF for review. The feasibility of these transportation and long-term storage plans is of the utmost importance in decision making and management of the WL site, which will impact the ability of the MMC to utilize the site in the future.</p>	<p>CNSC staff note that the Licence Conditions Handbook for the Chalk River Laboratories site states “The licensee shall not produce, in the course of the licensed activities, or accept from outside clients, waste for which there is no identified treatment, or storage, or disposal facility.” CNL’s current plan to move wastes from Whiteshell to Chalk River are subject to the availability of suitable treatment, storage, or disposal facilities at the Chalk River site. CNSC staff have reviewed CNL’s plans and have concluded that there is sufficient storage capacity in the Waste Management Areas at CRL.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Manitoba Metis Federation (14/14)

CMD 19-M24.5

Comment/Recommendation	CNSC staff Disposition
<p>MMF12 CNSC must provide more information regarding the source of the radionuclides, particularly the plutonium, alpha, and beta in the wastewater at the WL site to provide greater clarity on the sources contributing to certain levels of radionuclides being reached, despite the current stage of activity of the WL site. Where additional information is not available, further monitoring and investigation are required in order to identify the sources. In light of the limited monitoring data available, additional monitoring as part of the decommissioning and post-decommissioning phases may also be required in order to verify that measures remain below acceptable levels over time.</p>	<p>The presence of radiological contamination at Whiteshell is due to past activities at that site. CNL began monitoring for plutonium in 2017, to support decommissioning activities in impacted areas of the site. CNSC staff note that the data presented in Appendix H of CMD 19-M24 indicates that contaminants in wastewater at Whiteshell are all orders of magnitude lower than Derived Release Limits.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (1/9)

CMD 19-M24.6

Comment/Recommendation	CNSC staff Disposition
<p>CELA1 As this is the first ROR for CNL, the CNSC should more clearly set out its rationale for initiating this report and its aim moving forward.</p>	<p>CNSC staff determined to produce a CNL ROR in order to streamline reporting to the Commission on CNL’s diverse projects. CNSC staff intend to publish a ROR on CNL on an annual basis. With the exception of the nuclear substances licence for the LaPrade heavy water storage facility, which is part of the ROR on the Use of Nuclear Substances in Canada, CNL content will not be presented in other RORs.</p>
<p>CELA2 The ROR should include greater discussion of overarching conclusions and findings related to CNL’s actions and how they compare to other licensees’ undertakings and sites.</p>	<p>The ROR includes CNSC staffs’ overall conclusion that CNL operated its sites safely in 2018. CNSC staff’s assessment of CNL’s performance for all CNL sites is reflected in the performance ratings of each of the 14 SCAs. These same SCAs are used to assess licensee performance throughout the CNSC, allowing for comparison between various licensees.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (2/9)

CMD 19-M24.6

Comment/Recommendation	CNSC staff Disposition
<p>CELA3 The ROR should more clearly set out the considerations and rationale informing a site’s risk classification.</p>	<p>Further information on this topic has been included on slide 10 of CNSC staff’s presentation associated with the 2018 CNL ROR.</p> <p>Risk classifications are reassessed should licensed activities substantially change, or if there are changes to the information and assumptions used for the initial categorization.</p>
<p>CELA4 The impact of new licensed activities on a site’s pre-existing risk classification should be considered by the Commission in its vendor review process and review of licence applications.</p>	<p>Proposed future activities do not impact the current risk classification of a site. Classification is reassessed only once licensed activities substantially change – in some cases, this is linked to the approval of a licensee’s proposed activity by the Commission. A site already classified as high risk will retain that ranking even when overall site risk increases due to new activities.</p> <p>Although new activities on site may not result in a change to the risk classification, they may warrant augmenting the number of inspections performed by CNSC staff in order to ensure compliance.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (3/9)

CMD 19-M24.6

Comment/Recommendation	CNSC staff Disposition
<p>CELA5 In addition to summarizing changes to CNL Licences and Licence Conditions Handbooks, the ROR should present updates, where applicable, regarding ongoing federal environmental assessments.</p>	<p>CNSC staff acknowledge the comment. The main intent of the ROR is to provide CNSC staff's assessment of licensee performance at sites that are licensed to CNL, therefore detailed updates on ongoing EAs for proposed projects that may or may not become licensed activities in the future have been excluded.</p> <p>However, key Information and updates on the ongoing EAs can be found on the respective project webpages on the Public Registry (Canadian Impact Assessment Registry), the CNSC's website, and CNL's website. Further, CNSC staff send out emails to project distribution list subscribers, and can be reached by email, through the Environmental Assessment email inbox at cnsceae-ee.ccsn@canada.ca.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (4/9)

CMD 19-M24.6

Comment/Recommendation		CNSC staff Disposition
CELA6	If CNL's 'below expectation' rating for Security relates to surveillance, we recommend the Commission review the proponents most recent surveillance plan to ensure conformance with (draft) RegDoc 2.11.1.	<p>CNSC staff have interpreted this comment as referring to draft REGDOC-2.11.2 <i>Decommissioning</i>, on the basis of associated text in this intervention.</p> <p>The term 'surveillance' in draft REGDOC-2.11.2 is not used in the sense of nuclear security. As currently written, draft REGDOC-2.11.2 will apply to Chalk River Laboratories, Whiteshell Laboratories, Douglas Point, Gentilly-1, and Nuclear Power Demonstration.</p> <p>For information on CNL's progress on security at Whiteshell, refer to the response to question MMF10.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (5/9)

CMD 19-M24.6

Comment/Recommendation	CNSC staff Disposition
<p>CELA7</p> <p>The ROR should present the reasons why CNL is requesting a change in decommissioning approach (e.g. monetary or time constraints, difficulty in achieving full dismantlement, or revised risk assessments) and secondly, provide evidence of how CNL and the CNSC, respectively, weighed economic, environmental, human health, risk and safety considerations.</p>	<p>Under the CNSC’s regulatory framework, applicants are responsible for selecting and justifying their proposed decommissioning strategy. CNSC staff will assess the proposed decommissioning strategy, in accordance with the CNSC’s regulatory framework, with safety being the overriding factor.</p> <p>CNL’s motivations for pursuing one decommissioning approach over another is outside the mandate of the CNSC. CNSC staff do not generally consider economic or time considerations, unless those are relevant to safety.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (6/9)

CMD 19-M24.6

Comment/Recommendation		CNSC staff Disposition
CELA8	The ROR meeting should include submissions from CNL and CNSC Staff on measures being taken by nuclear facilities to (1) phase out asbestos use in nuclear facilities by December 31, 2022 and (2) pursue technically and economically feasible asbestos-free alternatives.	CNSC staff regulate conventional health and safety aspects on licensed sites, and this includes ensuring that appropriate measures are taken to protect workers and the environment when work involving asbestos is carried out. CNSC staff note that the <i>Prohibition of Asbestos and Products Containing Asbestos Regulations</i> put in place requirements regarding the use of asbestos in nuclear facilities in Canada.
CELA9	The ROR should explain how the CNSC verifies environmental monitoring results conducted by licencees.	As stated in section 4.1 of the 2018 CNL ROR, CNSC staff evaluate CNL’s environmental protection program via independent assessment of CNL’s effluent and emissions monitoring data and environmental monitoring data, ongoing evaluation of CNL’s Environmental Management System, and also on the basis of activities carried out during inspections at CNL sites in 2018. The CNSC’s Independent Environmental Monitoring Program also serves to verify licensee environmental monitoring results.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (7/9)

CMD 19-M24.6

Comment/Recommendation	CNSC staff Disposition
<p>CELA10</p> <p>The ROR should explain how, in applying the ALARA principle, the CNSC accounts for differential in risk among sites (i.e. the ALARA radiation protection rating for a contaminated site might be different than that of a decommissioned reactor).</p>	<p>The Radiation Protection SCA consists of 5 Specific Areas: Application of ALARA, Worker Dose Control, Radiological Hazard Control, Radiation Protection Program Performance, and Dose to the Public.</p> <p>The rating of the SCA is based on the performance of the licensee in the development and implementation of the measures taken for each of the specific areas, including 'Application of ALARA'.</p> <p>The application of ALARA is commensurate with the radiological hazards and potential for radiological exposures (social and economic factors taken into consideration) and will differ from one CNL site to another.</p> <p>The risk classifications are among the factors used by CNSC staff in determining the frequency and scope of the regulatory activities at each of the CNL sites.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (8/9)

CMD 19-M24.6

Comment/Recommendation		CNSC staff Disposition
CELA11	Greater detail is needed to discuss the relationship between the numbers in Table 2 and Table 3.	Table 3 represents the baseline 10 year inspection plan for CNL sites based on risk classification. This is the minimum number of inspections that would be performed by CNSC staff during this 10 year timeframe. Table 2 represents the actual number of on-site inspections performed per site during 2018.
CELA12	Licensed activities should be reviewed against their climate resiliency. The Commission should direct CNSC Staff to include this as a component of regulatory oversight reporting.	The CNSC requires that licensees conduct a hazards analysis and be able to protect their operations against reasonable events such as floods and storms. CNSC staff expect that licensees will from time to time review these plans to ensure their adequacy in light of climate change predictions.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Canadian Environmental Law Association (9/9)

CMD 19-M24.6

Comment/Recommendation		CNSC staff Disposition
CELA13	Radionuclides should be reportable to Canada's National Pollutant Release Inventory (NPRI), an online data portal and a key resource for identifying pollution prevention priorities, supporting the assessment and risk management of chemicals, and encouraging actions aimed at reducing pollutant releases.	<p>Radioactive substances are not part of the NPRI. Proposed changes to the NPRI must be made through Environment and Climate Change Canada.</p> <p>The CNSC includes data on the total annual release of radionuclides in Regulatory Oversight Reports. In addition, the CNSC and Environment and Climate Change Canada are working together to establish active links between the CNSC and NPRI web sites. The CNSC has also commenced the creation of downloadable digital databases of radionuclide releases further supplementing the range of CNSC environmental data products linked to the NPRI website.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (1/16)

CMD 19-M24.7

Comment/Recommendation	CNSC staff Disposition
<p>ORK1 The CNSC should immediately initiate a comprehensive review of access to information or interrogatory processes for future Commission meetings and hearings in consultation with stakeholders.</p>	<p>CNSC staff strive to respond to requests received from intervenors in a timely way. Sometimes these requests are for licensee documents, for which permission to release must be obtained from the licensee. This can introduce delays in responding to requests. Intervenors are encouraged to seek licensee documentation from the licensee directly.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (2/16)

CMD 19-M24.7

Comment/Recommendation	CNSC staff Disposition
<p>ORK2 In the meantime, the CNSC should immediately institute the following changes concerning access to information by intervenors for future Commission meetings:</p> <ul style="list-style-type: none"> a. When notifying organizations of their funding grants, Participant Funding Program officers should also immediately provide contact information for designated individuals representing the industrial facilities that are subject to the meeting reviews. These representatives should be prepared to field questions and should be made aware of intervenors' timeframes and deadlines; and b. Some CNSC staff time, and industry/proponent staff time must be designated to provide intervenor-requested information and engage in follow-up information requests and/or site visits. 	<ul style="list-style-type: none"> a. It is not the role of the CNSC to provide contact information for licensee staff. b. CNSC staff strive to respond to requests received from intervenors in a timely way. CNSC staff are exploring the creation of a facility registry on our website, where facility-specific documentation and information would be made available. CNSC staff have no mandate or authority to provide site visits for intervenors.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (3/16)

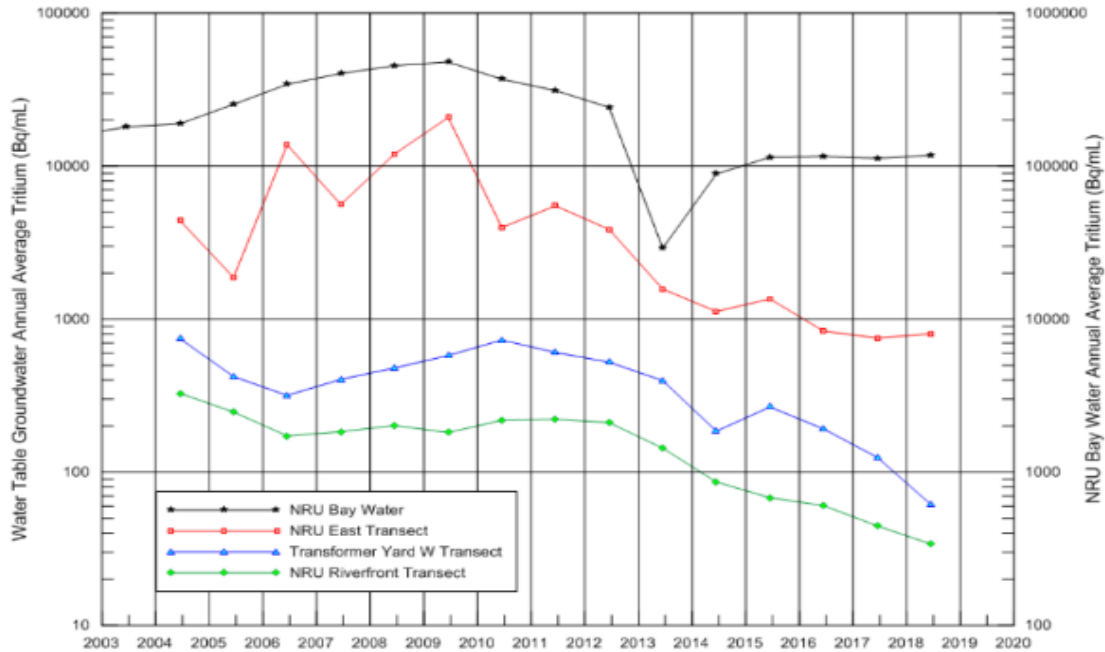
CMD 19-M24.7

Comment/Recommendation	CNSC staff Disposition
<p>ORK3 That CNL and CNSC staff characterize Sr-90 contamination of the soil around the NRX facility and that that soil contaminant runoff be regularly monitored and taken into account in the CRL's stormwater management plan.</p>	<p>CNSC staff expect that CNL will consider radioactive contamination on the CRL site when reviewing their stormwater management plan. The CRL site is very well characterized for all radiological contaminants.</p>
<p>ORK4 CNL and CNSC staff should conduct further investigations and release additional publicly accessible information concerning the migration of the tritium plume originating in the groundwater below the NRU facility.</p>	<p>CNL has conducted comprehensive studies (including hydraulic testing and 3-D groundwater and contaminant modeling) as well as monitoring of the tritium plume in the groundwater downstream of NRU. CNL has 8 groundwater monitoring wells around the NRU bay and 21 groundwater monitoring wells between the NRU building and Ottawa River to monitor the plume on a quarterly basis. The results are submitted to CNSC in its annual groundwater monitoring report as well as the environmental monitoring report. As shown in the graph on the following slide (taken from CRL's 2018 environmental monitoring report), tritium concentrations continue to decrease.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (4/16) CMD 19-M24.7





ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (5/16) CMD 19-M24.7

	Comment/Recommendation	CNSC staff Disposition
ORK5	CNL and CNSC staff should conduct further investigation and release additional publicly accessible information concerning airborne emissions of tritium from the NRU facility, and their migration to the Ottawa River via contaminated soil carried by stormwater.	CNSC staff note that the permanent shut-down of the NRU reactor in 2018 will drastically reduce all emissions from that facility, including tritium, and that CNL has also committed to providing public updates on emissions of tritium.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (6/16)

CMD 19-M24.7

Comment/Recommendation		CNSC staff Disposition
ORK6	CNL and CNSC staff should conduct further investigation and release additional publicly accessible information concerning the quantity and concentration of PCBs and mercury released by NRU facility into the surrounding environment (especially groundwater and soil).	CNSC staff note that CNL currently implements a comprehensive environmental monitoring program, which includes testing for hazardous substances such as mercury and PCBs. In its 2019 Environmental Risk Assessment, CNL sampled and analyzed for PCBs and mercury, as well as other non-radiological and radiological chemicals in surface water and ground water. PCBs and mercury have not been identified as contaminants of primary concern from NRU. CNL has committed to implementing CSA N288.7 on groundwater protection and monitoring by the end of 2020. It is expected that in the implementation process groundwater monitoring and protection needs would be re-assessed.
ORK7	CNL and CNSC staff should ensure airborne emissions of tritium and noble gases from the NRU to surrounding soil is addressed in the new stormwater management plan for CRL.	CNSC staff note that the permanent shut-down of the NRU reactor in 2018 will drastically reduce all emissions from that facility, including tritium and noble gasses. CNSC staff note that noble gasses are not chemically reactive and these would not be expected to be found as contaminants in soil.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (7/16)

CMD 19-M24.7

Comment/Recommendation		CNSC staff Disposition
ORK8	CNL and CNSC staff must demonstrate that upstream contamination is being taken into account in the calculation of upstream (i.e. baseline) conditions against which the impacts of Chalk River facilities are measured.	CNSC staff agree with this recommendation. Baseline conditions are used in the CRL Environmental Risk Assessments (ERAs), as recommended by CSA N288.6 on ERA and CSA N288.4 on Environmental Monitoring. This is done to statistically detect impacts from CRL activities on water and sediment quality as well as health of fish and associated food webs.
ORK9	That CNL and CNSC staff provide more publicly-accessible information concerning the recent failure of the Sr-90 groundwater treatment facility to assist further public review.	The potential impacts of strontium-90 in the Perch Lake basin are mitigated through the operation of two groundwater plume treatment systems for the WMA B and Chemical Pit plumes. Extended outages at both of these groundwater treatment facilities occurred in 2009 and 2010, but both treatments systems returned to full capacity from 2011 to 2018. CNSC staff are not aware of any recent failures.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (8/16) CMD 19-M24.7

Comment/Recommendation	CNSC staff Disposition
<p>ORK10</p> <p>That CNL and CNSC staff publicly disclose more information concerning the interaction of flora and fauna exposed to contaminants in swamp and wetland areas (including South, West, East, and Duke Swamps) in the Perch Lake and Maskinonge Lake basins, with special mention included of interactions with the four at risk species of turtle that have been identified at the Chalk River complex.</p>	<p>Information on species at risk at the Chalk River Laboratories site can be found in the updated 2019 Environmental Risk Assessment (ERA) for that site, which is available on CNL's website.</p> <p>In the ERA, risks to flora and fauna as well as species at risk in the Perch Lake and Maskinonge Basins are assessed. In this ERA, CNL committed to evaluate remedial options for this area. In the meantime, the Chemical Pit Pump & Treat Facility and the South Swamp Subsurface Funnel and Gate System will continue to remove strontium-90 from contaminated groundwater. Any large scale remediation of contaminated material will be on hold until after a disposal facility is available to avoid unnecessary interim waste storage. In the interim, ongoing monitoring and assessment will continue. CNSC staff agree with this path forward.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (9/16)

CMD 19-M24.7

Comment/Recommendation	CNSC staff Disposition
<p>ORK11 That CNL and CNSC staff develop and publicly release a site-specific recovery plan for the Thorium Pit, as well as remediation activities to remediate resulting contamination of Duke Swamp. Should such a plan not be deemed necessary, reasons outlining such a decision should be made publicly available.</p>	<p>Development of such a plan would be the responsibility of CNL, and not of CNSC staff.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (10/16)

CMD 19-M24.7

Comment/Recommendation		CNSC staff Disposition
ORK12	That the CNSC licence database on its website include all licences in Canada, regardless of their Class.	In response to ORK18, 19 and 20, CNSC staff note that, given that licences are predominantly only in English, they are currently available on request. Licences include addresses and facility names, the names of the applicant authority, and the site location.
ORK13	That the CNSC licence database on its website include the addresses and facility names associated with all catalogued licences.	
ORK14	That actual copies of all licences be posted to the CNSC licence database on its website so that they can be made permanently available to the public on a continuous basis that does not require CNSC staff intervention.	



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (11/16)

CMD 19-M24.7

Comment/Recommendation	CNSC staff Disposition
<p>ORK15</p> <p>That Commissioners and CNSC staff include additional LCH action levels, derived release limits, for the Perch Lake Basin and Maskinonge Lake Basin in addition to those specified the LCH for facilities in the Chalk River Basin.</p>	<p>CNSC staff note that CNL’s “Administrative Levels and Action Levels for CRL Air and Liquid Radioactive Effluents” and “Derived Release Limits (DRLs) for AECL’s Chalk River Laboratories” are listed in the LCH as documents which form part of the CRL licensing basis. These documents include information on CNL’s environmental monitoring in the Perch Lake and Maskinonge Lake basis, which CNSC staff have reviewed. Because these are licensing basis documents, compliance with them is effectively a requirement on CNL. CNL must notify CNSC staff of changes to these documents, and CNSC staff can carry out compliance activities on the contents of these documents.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (12/16)

CMD 19-M24.7

Comment/Recommendation		CNSC staff Disposition
ORK16	<p>As a starting point, that contamination in the Perch Lake Basin and Maskinonge Lake Basin be better regulated in the Licence Conditions Handbook for CRL. At the very least, that Action Levels and Derived Release Limits for:</p> <ul style="list-style-type: none"> a. waterborne releases of Sr-90, Cs-137, Cl, and Co-60, tritium, phosphate, mercury, Ba, V, uranium, and Pb, solvents, chloroform, toxic elements and heavy metals and b. airborne emissions of Ar-41 at sites in both basins be immediately included in CNL's LCH. 	<ul style="list-style-type: none"> a. See response to comment ORK15. b. CNSC staff note that Argon-41 is produced when natural Argon-40 in the air is exposed to neutron radiation, such as near a running reactor. Given the roughly 109-minute half-life of Argon-41, and the length of time elapsed since the permanent shutdown of the NRU reactor, quantities of that isotope produced at the CRL site have since decayed away.
ORK17	<p>That the Commissioners and CNSC staff amend the current LCH to include Action Levels and Derived Release Levels for all contaminants of concern identified in the 2019 Environmental Risk Assessment (ERA) for CRL.</p>	<p>For ORK24 and 25, see response to comment ORK 15.</p>
ORK18	<p>In particular, that additional ground water and effluent streams and outfalls monitored in the 2019 ERA be included in the Licence Conditions Handbook.</p>	



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (13/16)

CMD 19-M24.7

	Comment/Recommendation	CNSC staff Disposition
ORK19	That CNSC staff confirm and explain whether LCH controls were established keeping in mind exposure to varied ecological components in addition to human exposure.	The documents included in the CRL LCH were chosen by CNSC staff to represent the most important licensing basis documents for the CRL site. They cover all programs required by the licensing basis, including programs to protect persons (both workers and the public) and the environment.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (14/16)

CMD 19-M24.7

	Comment/Recommendation	CNSC staff Disposition
ORK20	That CNL confirm whether it has been granted a s.35 permit from the DFO, and provide a copy of the permit and the assessment used to inform it. If no permit has been granted, CNL should still provide the assessment conducted to support any decision not to issue a permit.	A <i>Fisheries Act</i> authorization has not been issued. A joint CNSC-DFO review process is currently underway to determine whether a <i>Fisheries Act</i> authorization is required. As part of CNSC staff's technical review, staff have determined that CNL's draft application requires additional information. CNL has indicated that this additional information will be provided.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (15/16) CMD 19-M24.7

	Comment/Recommendation	CNSC staff Disposition
ORK21	That CNSC staff make sampling results of the Port Hope Harbour publicly accessible on its website.	CNSC staff note that results from samples taken in the Port Hope Harbour after the west wall collapse are available in CMD 18-M66, which was presented to the Commission in December 2018 and which is available on the CNSC website . CNSC staff have also provided the laboratory results from these samples to the CNSC Secretariat, for provision to the intervenor.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Lake Ontario Waterkeeper and Ottawa Riverkeeper (16/16)

CMD 19-M24.7

	Comment/Recommendation	CNSC staff Disposition
ORK22	That CNSC staff, CNL, Cameco, and the municipality of Port Hope consider collaborating more on major incident communications to ensure the public knows in a timely way: when the incident occurred, measured environmental effects (including sharing available monitoring data), and a description of any mitigation and/or remediation efforts.	The onus is on the licensee to communicate with the public during major incidents. CNL and Cameco both maintain public information and disclosure programs for the release of information on major incidents. CNSC staff routinely communicate with licensees when events have been reported, and ensure that their reporting requirements have been met.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (1/8)

CMD 19-M24.9

Comment/Recommendation		CNSC staff Disposition
CCRC1	That CNSC require that a complete list of radionuclides involved in any waste management, transportation or decommissioning scenario, complete with half-lives, activities (in becquerels per kilogram or per litre), mode of disintegration, radioactive progeny and target organs, be provided by the proponent	For the purpose of transport, the <i>Packaging and Transport of Nuclear Substances Regulations, 2015</i> and the <i>Transportation of Dangerous Goods Regulations</i> requires that a transport document accompany every shipment. The regulations incorporates requirements from the IAEA. Information required on a transport document includes a list of the most restrictive radionuclides, a description of the chemical and physical form of the material and the total activity of material during transport.
CCRC2	That all information about the radioactive inventory involved in any such scenario be communicated to indigenous peoples and to other members of the Canadian public in plain language stripped of scientific symbols and abbreviations	CNSC staff acknowledge the recommendation.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (2/8)

CMD 19-M24.9

Comment/Recommendation		CNSC staff Disposition
CCRC3	That CNSC ensure that the necessary laboratory tests are carried out on each batch of decommissioning waste to detect the presence of transuranic contamination	For CCRC3, 4 and 5, CNSC staff ensure that there is a detailed safety case provided for any disposal facility, for consideration by the Commission as part of licensing hearings.
CCRC4	That CNSC not accept the emplacement of any measurable quantities of radioactive carbon-14 in any surface or near-surface facility, given its 5700 year half-life and its exceptional environmental mobility as radioactive carbon dioxide or carbonic acid	
CCRC5	That CNSC ensure that no ion-exchange resins be emplaced in any surface or near-surface radioactive waste facility (among other reasons is that carbon-14 contamination is almost always found in such resins)	



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (3/8)

CMD 19-M24.9

Comment/Recommendation	CNSC staff Disposition
<p>CCRC6</p> <p>That CNSC reconsider its opposition to the mandatory environmental assessment of new nuclear reactors and recommend to the federal government that such assessments be required</p>	<p>Although this is outside the scope of this ROR, the CNSC ensures that licensees and applicants adhere to all applicable regulatory requirements within the current regulatory framework, which includes the <i>Impact Assessment Act</i>.</p> <p>A project list was established by the Government of Canada that identifies the types of projects that may require an impact assessment. This list was published for public consultation in May 2019. Further information on the final project list, as well as the Government’s rationale and how public input was considered can be found on the Canada Gazette website:</p> <p>http://www.gazette.gc.ca/rp-pr/p2/2019/2019-08-21/html/sor-dors285-eng.html</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (4/8)

CMD 19-M24.9

Comment/Recommendation		CNSC staff Disposition
CCRC7	That CNSC require any proponent of a facility for permanent storage of radioactive waste to propose a comprehensive strategy for the transmission of Records, Knowledge and Memory (RK&M) to future generations, including a detailed inventory of specific radionuclides included in the proposed facility along with relevant physical, chemical and biological properties	For recommendations CCRC7, 8 and 9, the CNSC is currently in the process of developing a suite of waste management regulatory documents, several of which are currently undergoing the public consultation process. It is anticipated that these regulatory documents will be published in 2020. The CNSC also includes relevant waste management CSA standards in the licensing basis.
CCRC8	That CNSC require any proponent of a facility for permanent storage of radioactive wastes to provide detailed instructions as to how the wastes can be retrieved and repackaged if need be at some future date; failing such instructions, approval for such a permanent storage project should be withheld	
CCRC9	That CNSC require any proponent of a facility for permanent storage of radioactive waste to examine the option of Rolling Stewardship as an alternative to abandonment	



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (5/8)

CMD 19-M24.9

Comment/Recommendation		CNSC staff Disposition
CCRC10	Tthat CNSC request the government of Canada to formulate a socially acceptable policy on the long-term management of radioactive wastes other than used nuclear fuel, based on extensive public consultations with First Nations and other Canadians	CNSC staff encourage the intervenor to raise this topic with Natural Resources Canada, the government department responsible for nuclear policy.
CCRC11	That CNSC establish a new set of regulations governing the transport of radioactive waste, including requirements for justification and discussion of alternatives	The <i>Packaging and Transport of Nuclear Substances Regulations, 2015</i> govern the transport of all types of nuclear substances, including nuclear waste.
CCRC12	That CNSC withhold approval for the transportation of radioactive wastes over public roads unless the proponent of such transport can show a demonstrable improvement in security and environmental protection as a result of such transport	CNSC staff acknowledge the recommendation. Approval for transport would not be given if CNSC staff assessed that the transport would not be compliant with all regulatory requirements, including the demonstration of security and safety.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (6/8)

CMD 19-M24.9

Comment/Recommendation	CNSC staff Disposition
<p>CCRC13 That CNSC not permit the transport of irradiated fuel from other CNL sites to the Chalk River site unless CNL presents an irrefutable safety case for doing so</p>	<p>Pursuant to the <i>Packaging and Transport of Nuclear Substances Regulations, 2015</i>, a licence to transport is required for the transport of irradiated fuel. Applicant must submit an application which includes a security plan.</p> <p>If CNSC staff believed that the transport was not in compliance with all regulatory requirements and could not be executed safely, a licence would not be issued.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (7/8)

CMD 19-M24.9

Comment/Recommendation		CNSC staff Disposition
CCRC14	That CNSC initiate a consultation process to develop a new classification scheme for radioactive waste materials based on health and environmental considerations rather than ease of handling	See response to CCRC7.
CCRC15	That CNSC require a thorough manifest of radionuclides, complete with half-lives, activity levels in becquerels, and type of radioactive emission, to accompany every shipment of radioactive waste material, easily accessible for use by first responders	See response to CCRC1. On every transport document, the consignor is required to provide a 24-hour telephone number to provide technical information to first responders. The <i>Transportation of Dangerous Goods Regulations</i> specify the location where the transport document must be kept during transport (e.g. a pocket inside the driver door).



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Concerned Citizens of Renfrew County and Area (8/8)

CMD 19-M24.9

Comment/Recommendation	CNSC staff Disposition
<p>CCRC16 That CNSC develop an entire suite of regulations focussed exclusively on radioactive wastes, concentrating on questions of waste characterization, hazard analysis, packaging, labeling, and transport requirements</p>	<p>The CNSC is currently in the process of developing a suite of waste management regulatory documents, several of which are currently undergoing the public consultation process. It is anticipated that these regulatory documents will be published in 2020. The CNSC also includes relevant waste management CSA standards in the licensing basis. Finally, the CNSC staff note that the <i>Packaging and Transport of Nuclear Substances Regulations, 2015</i>, govern the transport of all nuclear substances, including wastes.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (1/7)

CMD 19-M24.10

Comment/Recommendation

CNSC staff Disposition

KFN1

Like many other First Nations across Canada we rely on federal assessments to enable KFN to participate in decision-making regarding industrial activities that impact our rights and to provide protections for our lands and waters from industrial and energy projects that have potential to impact our rights and territory. How does the CNSC improve Indigenous consultation and accommodations with Algonquin SAR communities throughout the ROR process?

How does the CNSC plan on integrating existing incomplete and a now obsolete CEAA2012 environmental assessment processes of the NSDF and NPD closure projects with the improved legislative criteria for Indigenous engagement under the 2019 Impact Assessment Act and supporting regulations?

CNSC staff seek the participation of the public and Indigenous groups in all public CNSC processes, including Commission meetings such as the presentation of the 2018 CNL ROR. CNSC staff provided information on the 2018 CNL Regulatory Oversight Report to the CNSC’s mailing list of Indigenous communities, including the Kebaowek First Nation. Participant funding was made available, to assist intervenors to provide value-added interventions to the Commission.

While this concern is out of scope of the context of the ROR, the NSDF and NPD projects are subject to Environmental Assessments (EAs) commenced under CEAA 2012, prior to the coming into force of the Impact Assessment Act, these projects are subject to the transition provision as described in subsection 182 of the IAA. As a decision statement has not yet been issued, these projects will therefore continue and be completed under their current processes.

CNSC staff are committed to continue consultation activities with Kebaowek with regards to the NSDF and NPD closure projects, and are open to exploring opportunities to enhance and formalize the engagement relationship to enable and outline meaningful, agreed upon consultation processes where appropriate.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (2/7)

CMD 19-M24.10

Comment/Recommendation	CNSC staff Disposition
<p>KFN2</p> <p>At this time, KFN submits that consultation with our community to date has been inadequate and in no way should the NSDF, or NPD closure projects be approved on the basis of consultations with the AOO and MNO organizations.</p> <p>We are requesting CNSC enters into a consultation framework agreement with our SAR communities and the Algonquin Nation. We are requesting CNSC regroup on the environmental assessment processes of the NSDF and NPD closure projects with the improved legislative criteria for Indigenous engagement under the 2019 Impact Assessment Act and supporting regulations.</p>	<p>CNSC staff acknowledge the recommendation. Although the NSDF and NPD Closure projects are not in scope of the context of the ROR, CNSC staff are committed to continuing to consult with interested Indigenous groups on the NSDF and NPD closure projects, including KFN.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (3/7)

CMD 19-M24.10

	Comment/Recommendation	CNSC staff Disposition
KFN3	<p>Chalk River Laboratories has for decades faced questions over the way it deals with its radioactive waste. Environmentalists have decried the facility for discharging radioactive waste into the Kitchi sibi and for radioactive leaks. It was positive news to see in the ROR that, “Releases to the environment from the CRL site have decreased due to the permanent shutdown of the NRU reactor, in addition to the decrease in 2016 from the shutdown of the Molybdenum-99 Production Facility.” However, KFN recognizes from the ROR that “Releases to the environment from the CRL site have decreased due to the permanent shutdown of the NRU reactor, in addition to the decrease in 2016 from the shutdown of the Molybdenum-99 Production Facility.” KFN is concerned over the potential for future releases around the NSDF and NPD closure projects. KFN is disappointed CNSC staff supports and engages with the Algonquins of Ontario (AOO) in site assessment studies related to CEAA as well as Independent Environmental Monitoring Program (IEMP) interactions at the CRL site but not other Algonquin communities. KFN supports the Algonquin Anishinabe Nation Tribal Council of which we are a member in the following recommendations regarding the NSDF.</p>	<p>CNSC staff are committed to ongoing engagement with Indigenous groups on IEMP activities that are relevant to them.</p> <p>CNSC staff will work with the KFN on IEMP activities, where appropriate.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (4/7)

CMD 19-M24.10

Comment/Recommendation	CNSC staff Disposition
<p>KFN4 More information needs to be provided in the EIS concerning the waste that will actually be held at the NSDF. A discussion of the ecological hazards of individual radionuclides that may be held in the NSDF should also be included.</p>	<p>The EIS for the NSDF is out of scope of this ROR.</p> <p>CNSC staff are committed to continuing to consult with interested Indigenous groups on the NSDF and NPD closure projects, including KFN. CNSC staff look forward to meeting with KFN in order to discuss the community’s concerns and and topics of interest. CNSC staff encourages KFN to continue to participate in the remaining EA and regulatory processes for the NSDF and NPD project, including review of the EISs.</p>



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (5/7)

CMD 19-M24.10

Comment/Recommendation		CNSC staff Disposition
KFN5	The EIS should include a discussion of alternatives to holding 10,000 m3 of intermediate waste at the NSDF.	Although the EIS for the NSDF is outside the scope of this ROR, CNSC staff can clarify that CNL no longer proposes to store intermediate level wastes in the NSDF. CNL will keep ILW in interim safe storage until a disposal solution is approved and put in place.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (6/7)

CMD 19-M24.10

Comment/Recommendation		CNSC staff Disposition
KFN6	KFN is disappointed that CNSC has established Independent Environmental Monitoring Program (IEMP) with the AOO.	CNSC staff plan to consult with relevant traditional knowledge holders for all IEMP activities, including the KFN, when IEMP sampling occurs in areas of interest to them. CNSC staff will continue to work with all interested Indigenous groups on information environmental monitoring and information sharing, where appropriate.
KFN7	What evidence was used in the recent relicensing hearings for the Commission to decide the CNL « goco » also referred to as the Canadian National Energy Alliance, to which SNC Lavalin is part would be the best future stewards of the CNL site and our Algonquin lands and waterways?	The role of the CNSC is to determine whether nuclear activities in Canada can be performed safely. The Commission did not determine that CNL ‘would be the best’ licensee to operate AECL’s sites, but the Commission did determine that CNL could be licensed to operate those sites safely. CNSC staff continue to evaluate CNL against the requirements on them.



ROR Canadian Nuclear Laboratories Sites: 2018
CMD 19-M24.A

Kebaowek First Nation (7/7)

CMD 19-M24.10

Comment/Recommendation		CNSC staff Disposition
KFN8	Is the CNL licence decision being reviewed yearly by the Commission in the context of the SNC Lavalin political interference scandal in seeking a special deferred prosecution agreement (DPA) through the PMO?	CNL is the licence holder and responsible for safety. CNSC staff continue to evaluate CNL against regulatory requirements, regardless of CNL's ownership structure.
KFN9	Is CNSC staff monitoring key performance indicators for conventional health and safety for the number of recordable lost-time injuries (RLTI) and Fitness for Service events that occur at CNL per year in the context of the private contractors operating for profit at the site?	CNSC staff do not differentiate between licensee employees and contractors – all are considered to be persons under the <i>Nuclear Safety and Control Act</i> . Injuries on CNL sites are included in the RLTI statistics included in the ROR whether the injured person is a CNL employee or a contractor.