CANHC
Canadian Association of
Nuclear Host Communities

Canadian Association of Nuclear Host Communities Submission to the Canadian Nuclear Safety Commission

2024 Regulatory Oversight Reports Review

January 28, 2026

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1. Introduction

The Canadian Association of Nuclear Host Communities (CANHC) is a not-for-profit association that supports local governments by acting as a resource for current, future, and interested nuclear host communities, while maintaining the best interests of their communities through ongoing, proactive relationships with the Canadian nuclear industry and regulators. For more than two decades, CANHC's member communities have served as essential partners in enabling the safe, transparent, and publicly trusted use of nuclear technologies across the Canadian nuclear fuel cycle.

CANHC member communities host nuclear generating stations, uranium refineries, conversion and fuel-fabrication facilities, research laboratories, waste-management operations, and medical, academic, and industrial users of nuclear substances. As a result, host community governments carry a unique and indispensable set of responsibilities within Canada's nuclear safety framework. These responsibilities include contributions to emergency preparedness and response, environmental protection and monitoring, infrastructure and land-use planning, transportation oversight, public communication, and the maintenance of social licence. Host communities are where nuclear activities are most directly experienced by the public.

Host community governments interface daily with residents, industry operators, provincial authorities, and federal regulators. Fire services, emergency management teams, planners, environmental staff, public works departments, and communications teams are routinely required to interpret technical or licensing information, respond to public questions, and provide reassurance regarding nuclear activities occurring within their jurisdictions. In this context, **Mayors of nuclear host communities play a critical public-facing role when issues, events, or incidents related to nuclear sites arise, including responding to community concerns and maintaining public confidence**.

These roles directly support the mandate of the Canadian Nuclear Safety Commission (CNSC) to protect health, safety, security, and the environment, and to disseminate objective scientific and regulatory information. The importance of this relationship is reflected in the **CNSC–CANHC Terms of Reference for Engagement and Collaboration**, which commit both parties to regular

communication, information exchange, and capacity building. CANHC appreciates the CNSC's ongoing engagement with host communities, including participation in CANHC meetings and dialogue with host community officials.

More recently, CANHC has received support through the **Indigenous and Stakeholder Capacity Fund** to assist in building modest capacity to participate more effectively in federal nuclear regulatory processes. In addition, CANHC was grateful to receive support through the **Participant Funding Program** to review the 2024 Regulatory Oversight Reports (RORs). This funding enabled CANHC to undertake a more structured review of the RORs than had been possible in previous years.

CNSC's RORs are an important component of regulatory transparency for host communities. For CANHC members, RORs function as the CNSC's annual public assessment of the safety, performance, and compliance of nuclear facilities located within their jurisdictions. They provide consolidated insight into how CNSC staff evaluate licensee performance across the Safety and Control Areas (SCAs) and support host governments in remaining informed, identifying emerging issues, and understanding regulatory perspectives on activities occurring in their communities.

Historically, CANHC and individual host communities have engaged with RORs on a largely ad hoc basis. With limited or no dedicated capacity, **CANHC members** would often scan individual RORs for issues of immediate relevance rather than conduct comprehensive reviews. Having the opportunity to review all four RORs of relevance to CANHC at the same time, was helpful for scanning cross-cutting issues that are of importance to CANHC members and their role in the nuclear safety cases.

This 2024 ROR review cycle, however, still presented notable process challenges. All RORs were released simultaneously (instead of individually), with a shortened 40-day review window that overlapped with annual host community budget deliberations, year-end reporting obligations, and holiday closures. CANHC relied primarily on Mayors and senior host community staff to review and provide feedback within a very limited timeframe. While members engaged constructively, additional time would have supported more thorough review**s** and more comprehensive input.

In addition, this was the first ROR cycle in which no opportunity was provided for oral interventions before the Commission. Historically, oral interventions have provided one of the few avenues through which CANHC and host communities could engage directly with independent Commission members, clarify regulatory findings, and raise cross-cutting or emerging issues. While CANHC fully recognizes the importance of providing Indigenous Nations with meaningful opportunities to appear before the Commission (including at this upcoming ROR meeting), host communities are similarly not members of the general public. As governments that host regulated nuclear facilities, CANHC also warrants distinct engagement

opportunities within the ROR process and should be permitted to participate in the dialogue between Commission members and Industry at ROR proceedings. This is supported in Canada's Policy for Radioactive Waste Management and Decommissioning which specifically lists current and prospective host communities as a separate group from interested persons.

Finally, CANHC notes that RORs are released on varying schedules from year to year, without advance notice or predictable timing. This limits the ability of host communities (or any potential intervenors) to plan internal reviews or allocate elected-official and staff time effectively. Furthermore, the review of the 2024 RORs is taking place in 2026 which is too late to be meaningful to CANHC or the public at large. A timelier review of the state of nuclear facilities would be much more effective. Taken together, the compressed timelines, lack of predictability, the lateness of the annual reporting, and elimination of oral interventions constrained CANHC's ability to participate as fully as it otherwise would have.

CANHC raises these observations constructively and with the intent of strengthening the future ROR processes as a tool for transparency, shared learning, and sustained public confidence in Canada's nuclear regulatory system.

Against this backdrop, CANHC has reviewed four of the five RORs issued by CNSC staff for the 2024 reporting period:

1. **Regulatory Oversight Report for Nuclear Power Generating Sites**
2. **Regulatory Oversight Report for Uranium and Nuclear Substance Processing Facilities**
3. **Regulatory Oversight Report for Canadian Nuclear Laboratories Sites**
4. **Regulatory Oversight Report for the Use of Nuclear Substances in Canada**

The ROR for Small Modular Reactors was not available during this review period.

This submission provides a **comprehensive and host community-focused analysis** of these RORs, and the ROR review process, highlighting areas of strong performance, identifying community-relevant considerations, and offering reflections on where future RORs may benefit from additional or expanded information, and modification of processes.

As nuclear activities increase across the country—through refurbishment projects, modernization initiatives, new construction, expanded transportation, environmental remediation, and long-term decommissioning—host community governments face growing operational, planning, communication, and emergency-management demands. The RORs remain a critical instrument for public transparency, and CANHC believes that strengthening their community-facing content will enhance public understanding and reinforce overall nuclear safety.

Accordingly, this submission aims to:

- **Summarize key findings** from the four reviewed RORs in a manner accessible to host community councils and officials and the public.
- **Interpret regulatory conclusions through a community lens**, identifying real-world implications for host communities.
- **Highlight cross-cutting trends and pressures** that affect multiple communities as nuclear sector activities expand.
- **Provide recommendations** to strengthen future ROR cycles and support continued public confidence.

CANHC presents this analysis in the spirit of constructive collaboration and in recognition of the shared responsibility—held by regulators, industry, host community governments, and Indigenous governments—to uphold the highest standards of nuclear safety, environmental protection, and public assurance.

2. General Observations of CANHC Across All RORs

The four RORs published by CNSC staff and reviewed by CANHC for the 2024 reporting year collectively demonstrate a high level of regulatory compliance across Canada's nuclear sector. The RORs reaffirm that nuclear facilities operated safely, environmental protection remained robust, radiation exposures to workers and the public were well below regulatory limits, and licensees continued to maintain strong safety culture practices. These high-level results are consistent with longstanding performance trends and provide an important foundation for public confidence in the nuclear regulatory system.

However, from the perspective of CANHC, the RORs also reveal a series of **cross-cutting themes and community-relevant considerations** that require continued attention as the nuclear sector expands. While the technical structure of the RORs—organized by SCAs—provides a rigorous framework for assessing performance, this structure does not always capture the full range of interests, impacts, pressures, and responsibilities experienced by host communities which are relevant to ensuring a strong safety case. CANHC therefore offers the following general observations derived from the combined review of all four reports.

2.1. Environmental protection continues to be strong, but public interest and expectations are rising

Environmental protection programs across all facilities remained effective. Monitoring results showed that public exposures from airborne and waterborne releases continue to be a fraction of regulatory limits. Many sites highlighted stability in long-term environmental trends, the reliability of sampling methods, and the transparency of environmental monitoring frameworks.

Public expectations for environmental transparency, however, have increased significantly, particularly in communities undergoing major construction, remediation, or decommissioning planning or activities. Residents frequently request:

- localized monitoring results,
- comparisons to historical data,
- explanations of monitoring methodology,
- clarity regarding abnormal events or spikes, and
- assurances related to cumulative impacts.

Environmental monitoring data presented in future RORs will be essential for supporting host community communications, council briefings, and public information sessions. As sector activity grows and new projects are announced, CANHC expects future RORs to continue expanding plain-language communication of environmental results and to offer clearer summaries of public-facing monitoring trends.

2.2. Worker safety and radiation protection performance remain strong and reinforce public confidence

Radiation protection programs across all nuclear sectors demonstrated effective control of occupational exposures. Doses remained well below regulatory limits, and licensees continued to implement ALARA (As Low As Reasonably Achievable) principles. These outcomes are fundamental to public confidence. CANHC Members have reported that residents look to worker safety as a proxy indicator for the overall safety of facility operations.

Given this relationship, CANHC values the clarity with which the RORs explain occupational dose trends and emerging issues. Future RORs, however, should expand on:

- comparative dose profiles between facilities,
- year-over-year trends,
- identified improvements, and
- how licensees engaged workers in safety culture initiatives.

Such detail supports host community government communications and enhances the public's understanding of the safety measures employed at nuclear facilities.

2.3. Emergency management remains a significant area of community interface, yet RORs do not consistently reflect exercise-related challenges

Emergency preparedness is a central area of shared responsibility between licensees, provincial authorities, and host community governments (upper, lower and single tier). Fire services, emergency management coordinators, social services departments, public works departments, public health departments including paramedic services, police services and communications

teams are key participants in drills and exercises. In 2024, several large-scale emergency exercises were conducted across various facilities.

CNSC's RORs assessed emergency management performance as **Satisfactory**, yet CANHC is aware that **some exercises identified challenges**, including:

- delays in multi-agency coordination,
- incomplete situational awareness across partners,
- misalignment between onsite and offsite procedures,
- gaps in information-sharing, and
- exercise findings that required regulatory follow-up, including the issuance of CNSC Orders outside of this ROR reporting cycle.

While corrective actions were initiated, the limited discussion of these exercise-related challenges in the RORs does not fully convey the complexity of offsite emergency preparedness. CANHC encourages the CNSC to consider whether future RORs could include additional contextual information on emergency exercise outcomes—particularly where findings have implications for offsite response coordination, public alerting, or multi-jurisdictional preparedness.

Further, the status of recommendations from past emergency exercises should be tracked and reported in RORs until they have been fully implemented or otherwise deemed complete. For example, in 2019, Durham Region participated in the IAEA EPREV mission. A number of recommendations came out of that assessment that should be reported on in the RORs.

Public Information Programs (PIPs) remain part of the licensing basis, but ROR reporting on engagement effectiveness is limited. Under REGDOC-3.2.1, licensees must maintain public information and disclosure programs as part of their licensing basis. These programs are critical for maintaining host community government and public confidence, ensuring accurate information flow, and enabling responses to resident concerns.

However, the RORs provide **limited insight** into:

- the quality or frequency of public engagement,
- the types of inquiries received,
- how licensees responded to public concerns,
- how licensees coordinate with host communities in communication planning,
- how misinformation is addressed, and
- the operational pressures that large capital projects place on communications.

Host community governments are increasingly expected to field questions related to:

- refurbishment timelines and construction impacts,
- transportation of nuclear substances and waste,

- environmental monitoring data,
- emergency preparedness,
- nuclear safety, and
- changes to Canada's regulatory landscape.

Future RORs could benefit from structured reporting on PIP performance, including summaries of public engagement activities, key themes in community inquiries, tools used to communicate risk, and collaboration between licensees and host community governments.

2.4. Support of Indigenous engagement activities including monitoring

Several RORs describe licensee efforts to build and maintain relationships with Indigenous communities through information sharing, co-developed monitoring programs, site visits, and capacity-building initiatives. CANHC strongly supports continuation of these efforts and recognizes their direct contribution to reconciliation, environmental stewardship, and public trust.

Indigenous involvement and engagement continue to bring value to the process. Given the overlap between municipal and Indigenous interests related to lands, watersheds, and economic relationships, CANHC encourages the CNSC to continue supporting and documenting Indigenous engagement efforts. Further, expanded reporting on Indigenous-led monitoring and collaborative governance would be a valued addition to future ROR cycles.

2.5. Growing pressures from sector expansion create cumulative impacts not fully reflected in RORs

Canada's nuclear sector is currently undergoing one of the most expansive periods in its history, with multiple major initiatives in planning and underway:

- refurbishment and life-extension projects,
- modernization and capital upgrades,
- environmental remediation and waste movement,
- decommissioning of legacy facilities,
- feasibility studies and impact assessments for new reactors,
- isotopes and new medical applications, and
- expanded use and transport of nuclear substances.

For host communities, these activities generate cumulative impacts:

- increased demand for housing and services,
- transportation congestion,
- higher volume of public inquiries,
- pressure on emergency response capacity,
- heightened media and political attention,
- new and ongoing land-use compatibility considerations and conflicts, and

- impacts on local infrastructure.

While RORs remain primarily technical documents, CANHC encourages the CNSC to consider how cross-cutting community interface observations could be integrated into future reports. This analysis may reveal issues of importance to the regulator with respect to raising red flags about potential nuclear safety and security issues. Such inclusion would not change the technical structure of SCAs but would offer a more complete picture of the realities experienced by communities who enable nuclear operations.

3. Detailed Findings Summaries from RORs

3.1. Nuclear Power Generating Sites (NPGS)

The ROR for Nuclear Power Generating Sites (NPGS) covers Canada's four operating power-generating stations: **Bruce Power**, **Darlington**, **Pickering**, and **Point Lepreau**. These facilities represent the largest and most complex installations regulated by the CNSC and form the foundation of electricity generation in Ontario and New Brunswick. For host communities, nuclear power stations are a critical factor shaping long-term planning, land-use policy, emergency preparedness, service delivery, economic development, and public confidence in local governance.

Across the sector, the ROR concludes that nuclear generating stations **operated safely in 2024**, with all facilities receiving **Satisfactory** ratings in all 14 SCAs. CANHC is encouraged by these findings which are consistent with stable long-term performance trends and reflect the high degree of technical expertise, operational discipline, and safety culture embedded within the Canadian nuclear sector. From CANHC's perspective, however, the ROR technical conclusions must be considered in the broader community context which includes emergency preparedness, communication demands, construction impacts, and the cumulative impacts of nuclear sector expansion.

3.1.1. Operational and Safety Performance

The ROR documents that all generating stations maintained safe and reliable operational performance in 2024. Key indicators—including unplanned shutdowns, forced outage rates, maintenance backlogs, equipment reliability, and safety system performance—remained within acceptable ranges. CANHC notes that these stable indicators contribute directly to public confidence and support the predictability required for planning community infrastructure, services, and emergency preparedness.

The ROR reports that environmental protection remained strong, with radiological and non-radiological emissions significantly below regulatory limits and effluent and environmental monitoring programs demonstrated consistent compliance and stable trends across all facilities. Host community governments rely on these results to respond to questions from residents, community groups, and local media regarding environmental safety and site operations.

Worker radiation doses remained well below regulatory limits across all stations, and ALARA programs continued to be implemented effectively. CANHC observes that public perception of nuclear safety is closely tied to perceived worker safety; when occupational exposures are well-controlled and transparently communicated, local confidence in facility operations is strengthened.

CANHC is satisfied with the operational health and safety findings as they are presented in the RORs.

3.1.2. Emergency Preparedness and Exercise Performance

Emergency preparedness remains the most significant area of shared responsibility between licensees, provincial authorities, and host communities. Host communities have legislated responsibilities in relation to emergency operations centres, fire services, police, paramedicine, traffic control, public alerting systems, evacuation planning, reception centres, evacuation centres, emergency workers centres, public communication, and coordination with provincial emergency agencies. They also face direct public accountability during emergencies or unusual events.

The 2024 reporting period included several **large-scale multi-jurisdictional emergency exercises**, some of which revealed coordination, communication, and procedural challenges significant enough to prompt the CNSC in 2025 to issue **formal Orders** requiring corrective actions. These Orders, while appropriately addressed by licensees, were not reflected in the ROR as they occurred outside the formal ROR reporting cycle.

From CANHC's perspective, the absence of these details in the ROR is notable. When emergency exercises reveal material challenges involving offsite coordination—particularly those requiring regulatory action—reporting in a summary format is essential for:

- maintaining public awareness of the robustness of emergency preparedness,
- identifying trends or systemic issues,
- supporting continuous improvement across all partners,
- reinforcing transparency, and
- enabling host communities to assess local readiness and identify areas requiring capacity support.

CANHC emphasizes that emergency preparedness is not solely a technical exercise; it is a whole-community obligation that relies heavily on seamless coordination between regulators, licensees, provinces, and governments. As new reactors, refurbishment projects, and modernization efforts expand, emergency preparedness arrangements must be understood not only by technical experts but also by the public who depend on them.

3.1.3. Public Information Programs and Community Engagement

Under **REGDOC-3.2.1 (Public Information and Disclosure)**, nuclear generating stations are required to maintain active PIPs, including ongoing communication with host community

authorities and the public. While RORs confirm that licensees continued to operate PIPs, the reports provide **minimal detail** on:

- the frequency and formats of engagement,
- public themes or concerns raised,
- how misinformation was addressed,
- how licensees coordinated with host community communications teams,
- the volume of public inquiries,
- dashboard metrics (website hits, media engagements, social media interactions), or
- specific outreach activities tied to major projects.

In the context of the activities described in the 2024 ROR, host community governments across Ontario and New Brunswick report increased public inquiries related to nuclear station activities, including:

- construction impacts from modernization or refurbishment,
- transportation of oversized loads or waste,
- emergency response expectations,
- results of environmental monitoring programs,
- site access restrictions,
- noise, traffic and dust impacts during major project phases,
- safety implications of reactor outages or unusual events, and,
- long term site plans, particularly at Pickering.

Because host community staff often serve as the first point of contact for residents seeking information about nuclear sites, clearer and more consistent reporting on PIPs within the RORs would be helpful as a reference tool for host community communications. While RORs are necessarily retrospective and not intended to function as real-time public engagement instruments, they nonetheless provide an authoritative, consolidated overview of regulatory oversight that host communities can draw upon when responding to community questions.

As nuclear sector activity continues to expand across multiple sites and lifecycle phases, CANHC anticipates continued growth in public interest and inquiry. Consideration of how RORs might more clearly summarize public engagement approaches and key themes—alongside other engagement mechanisms—could support transparent, informed, and responsive communication between licensees, regulators, host community governments, and the public.

3.1.4. Major Projects, Construction, and Infrastructure Demands

Nuclear generating stations are deeply embedded in their host communities and provide significant long-term economic, employment, and infrastructure benefits that are widely recognized and valued by local governments. As stations enter periods of sustained capital investment and expansion, however, the cumulative scale and duration of these activities also give rise to community-level impacts that require careful coordination and sustained host community capacity, particularly where there are multiple facilities within a single host community.

All nuclear generating stations are currently engaged in—or preparing for—significant capital projects, including:

- refurbishment and life-extension initiatives,
- facility modernization,
- large-component replacement,
- infrastructure upgrades, and
- early-stage planning for new reactors.

These activities can create pronounced and cumulative impacts on host communities, including:

- workforce housing pressures (temporary and long-term),
- road congestion and transportation routing demands,
- increased strain on host community services (e.g. childcare, transit, etc.),
- noise and dust issues,
- changes in land-use patterns,
- increased demand for emergency services,
- coordination of large shipments or specialized equipment,
- periodic surges in population, and
- complex public communication needs.

Host community planning departments routinely manage multiple development applications associated with temporary workforce accommodations, new industrial and commercial activity, and long-term land-use planning related to energy infrastructure. These pressures are particularly pronounced during periods of major construction, refurbishment, outages, or concurrent projects, and underscore the importance of early, detailed, and sustained communication from licensees.

CANHC observes that while site-specific technical performance at nuclear power generating stations remains strong—and while host communities continue to recognize and value the substantial economic and employment benefits associated with these facilities—the cumulative socio-economic and infrastructure impacts of prolonged or overlapping capital projects are becoming an increasing challenge for some host community governments. These projects place substantial demand on host municipalities, which must maintain staff capable of meaningfully participating in regular CNSC licensing and compliance proceedings, federal impact assessments, environmental assessment requirements such as Joint Review Panel processes, and numerous other regulatory processes. Sustaining specialized expertise is an ongoing challenge.

Looking ahead, CANHC encourages greater emphasis on socio-economic impact assessments that are clearly scoped, well understood by host communities, and accompanied by appropriate mitigation measures. Where such assessments are undertaken, follow-up and verification would help confirm whether anticipated impacts, mitigation strategies, and associated costs align with community experience. Sustained or unaddressed infrastructure pressures may, over time, affect broader community resilience, which is an important contextual consideration for effective emergency preparedness and overall site safety.

Future ROR cycles would benefit from including a brief summary of major projects underway at each site, anticipated timelines as known at the time of publication, and high-level information on the status of socio-economic impact assessments related to host community services. Such information would enhance transparency, support host community planning, and provide helpful context alongside the technical Safety and Control Area assessments.

3.1.5. Social Licence, Community Assurance, and Transparency

Public acceptance of nuclear facilities is rooted in:

- consistent safety performance,
- transparent communication,
- demonstrated environmental stewardship,
- visible host community involvement in planning and emergency preparedness, and
- meaningful engagement with residents and Indigenous partners.

The RORs provide strong technical confirmation of safety, but CANHC highlights that **the absence of community interface commentary**—especially regarding PIPs, emergency exercise outcomes, and engagement practices—may suggest that there is a gap between technical regulatory assessment and public perception.

As the nuclear sector grows, host communities expect to play an even greater role in maintaining social licence. Their perspectives, experiences, and capacity constraints should be reflected more explicitly in future RORs. CANHC, as the voice of host communities, must have an opportunity to present these perspectives and experiences orally to the Commission.

3.1.6. Summary of Host Community Considerations for NPGS

CANHC supports and acknowledges the strong technical and regulatory performance of nuclear generating stations in 2024, as reflected in the NPGS ROR findings. At the same time, CANHC identifies several areas where enhanced contextual reporting could better reflect host community realities and support shared understanding across regulators, licensees, and local governments:

- greater transparency regarding emergency exercise scope, coordination challenges, and outcomes,
- clearer and more consistent reporting on the outcomes and outputs of PIP activities and themes,
- high-level summaries of major construction, refurbishment, and modernization activities underway,
- recognition of cumulative growth, infrastructure, and service pressures experienced by host communities,
- integration of Indigenous, public, and host community engagement narratives, and
- improved articulation of socio-economic and infrastructure considerations relevant to host community capacity.

These enhancements would not alter the technical conclusions of the RORs, but would provide improved visibility to the CNSC and the Commission into the lived experience of nuclear host communities. Such context would assist the CNSC in identifying emerging trends or red flags, supporting transparency, and understanding factors that may influence long-term community resilience, emergency preparedness, and public confidence associated with nuclear generating stations.

3.2. Uranium and Nuclear Substance Processing Facilities

The ROR for Uranium and Nuclear Substance Processing Facilities provides a detailed evaluation of the safety, operational performance, environmental protection, and regulatory compliance of facilities central to Canada's nuclear fuel cycle. These facilities—which include the **Blind River Refinery (BRR)**, **Port Hope Conversion Facility (PHCF)**, **Cameco Fuel Manufacturing (CFM)**, **BWXT Nuclear Energy Canada**, and **Best Theratronics Ltd. (BTL)**—supply the essential inputs for power reactor fuel, medical isotopes, industrial devices, and research applications. For many host communities, these facilities are long-standing contributors to local employment, taxation (or Payments in Lieu of Taxes), and infrastructure development, while also presenting unique community interface considerations related to transportation, public information, environmental oversight, and emergency preparedness.

The 2024 ROR concludes that **all uranium and nuclear substance processing facilities operated safely**, with **Satisfactory** ratings across all SCAs, except for isolated **Below Expectations** ratings at Best Theratronics Ltd. (Emergency Management & Fire Protection, and Security SCAs). These findings reflect the overall stability and maturity of the uranium processing sector in Canada. Nonetheless, from a CANHC perspective, the ROR highlights both longstanding strengths and emerging areas where community-relevant information could be more appropriately provided.

3.2.1. Operational Performance and Safety Culture

The ROR indicates that uranium and nuclear substance processing facilities maintained safe, consistent operations throughout 2024. Licensees continued to demonstrate strong safety culture, effective corrective action programs, and rigorous internal oversight. Facilities such as the Blind River Refinery and Port Hope Conversion Facility have decades of operational experience and have successfully implemented robust management systems aligned with CNSC regulatory expectations.

CANHC observes that these facilities maintain close working relationships with host community officials, particularly regarding:

- land-use compatibility,
- integration of new or expanded operations,
- coordination of transportation activities, and
- updates related to outages, maintenance, or abnormal events.

The stability of operational performance supports long-term planning in host communities, particularly in communities with multiple facilities or overlapping responsibilities related to environmental remediation, emergency management, and public communication.

Overall, CANHC is satisfied with the findings presented in the ROR regarding operational performance and safety culture.

3.2.2. Environmental Protection and Monitoring

RORs reported that environmental protection results across uranium processing facilities remained strong, with airborne and liquid effluent releases well below regulatory limits. Monitoring of soil, groundwater, ambient air, and surface water demonstrated stable trends, and licensees continued implementing comprehensive environmental management systems.

Facilities in **Port Hope**, in particular, operate in a complex environmental context due to the presence of historic low-level radioactive waste within the community and the ongoing **Port Hope Area Initiative (PHAI)** cleanup and remediation activities. These overlapping environmental responsibilities mean that residents often view environmental performance holistically rather than by facility. As a result, host communities consistently field questions regarding:

- remediation schedules,
- cumulative environmental impacts,
- distinctions between routine facility operations and historic waste remediation,
- opportunities for and impacts on businesses,
- long-term land-use impacts,
- results of environmental monitoring around multiple facilities,
- safety of waterways, beaches, and recreation areas, and
- human health and safety.

The ROR acknowledges these complexities and highlights substantial progress by CNSC staff and licensees in advancing PHAI remediation and stabilization work.

CANHC strongly supports the continuation of rigorous environmental monitoring and clear, plain-language communication to maintain public confidence.

3.2.3. Emergency Preparedness and Fire Protection

The ROR concludes that most uranium processing facilities maintained satisfactory emergency management and fire protection programs in 2024. These results are consistent with historical performance trends. However, the exception was **Best Theratronics Ltd.**, which received **Below Expectations** ratings in both Emergency Management & Fire Protection and Security.

CNSC staff note that corrective actions were underway and that the facility continued to operate safely. CANHC is also aware that the facility license will be altered significantly, which has

garnered some notable media attention. It is worth noting from this example, that from a host community perspective, that the following be considered for the future:

- first responders (fire services, police, paramedics) must be aware of any deficiencies that have the potential to impact offsite response requirements,
- community reassurance is strengthened when issues identified by the CNSC are communicated early and clearly, and
- even small facilities handling nuclear substances can create disproportionate public attention if emergency arrangements are perceived as inadequate.

CANHC therefore values any additional context that future RORs could provide regarding emergency exercise outcomes, corrective action timelines, and coordination with implicated response agencies.

3.2.4. Transportation of Nuclear Substances

Uranium processing facilities are heavily involved in the shipment of uranium ore concentrates, UF6 cylinders, fuel bundles, waste materials, and nuclear substances used for medical and industrial purposes. These movements occur daily across municipal road networks and through residential and commercial corridors.

The ROR recognizes that transportation events constitute a considerable proportion of reported occurrences across the sector, but that **robust packaging and safety protocols continue to prevent radiological impacts**. This remains one of the most important points for host community communications, as transportation is one of the areas in which the public often expresses concern.

CANHC notes several ongoing realities with respect to the transportation of nuclear substances:

- increasing frequency of shipments during major project activities,
- periodic traffic disruptions due to oversized or escorted loads,
- public inquiries triggered by visible shipments or placarded vehicles,
- reliance on local emergency responders for potential transportation incidents, and
- need for updated training and awareness for first responders.

Given the significant role transportation plays in community perceptions, CANHC would welcome additional details in future RORs as well as future CNSC communications products regarding shipment volumes, trends in transportation-related events, and lessons learned from national and international best practices.

3.2.5. Vision in Motion and Long-Term Remediation Activity

The ROR documents major progress in the **Vision in Motion (VIM)** project at the Port Hope Conversion Facility, including continued facility modernization, cleanup, and waste packaging activities. This project is critical not only to the licensee but also to the entire community of Port Hope, as it intersects with:

- ongoing PHAI remediation,
- local expectations for long-term site cleanup,
- economic development and land-use planning, and
- infrastructure renewal in areas adjacent to industrial lands.

Host community governments in Port Hope and surrounding areas appreciate the transparency associated with VIM updates and encourage continued reporting of project milestones in future RORs.

Beyond VIM, CANHC recognizes that long-term waste remediation activities place additional demands on:

- local transportation networks,
- construction coordination,
- public communications,
- environmental oversight, and
- emergency preparedness during waste movements.

CANHC supports the continuation of clear, accessible reporting on remediation progress and any emerging issues that may require host community coordination.

3.2.6. Public Information Programs and Community Interface

As with nuclear generating stations, PIPs for uranium processing facilities are a core component of their licensing basis. Communities that host these facilities—especially those with long-standing public interest in environmental stewardship—expect clear, accessible, and responsive communication from licensees.

The RORs confirm compliance with PIP requirements but offer relatively **limited insight** into:

- the frequency and types of outreach activities,
- the volume and nature of public inquiries,
- how concerns were addressed,
- how licensees coordinate messaging with host community officials, or
- trends in public perception.

CANHC emphasizes that public expectation for information continues to grow, particularly in areas with historic waste or overlapping remediation activities. Industry could better support itself and communities with enhanced reporting of PIP performance. This would support host community communication efforts and reinforce overall public confidence.

3.2.7. CANHC Relevance Summary

CANHC generally views the uranium and nuclear substance processing sector as stable, well-regulated, and technically proficient. However, it highlights several areas where expanded ROR reporting would support host community governance:

- more contextual reporting on environmental monitoring, especially in communities with historic waste,
- emergency preparedness detail, particularly when SCAs fall below expectations,
- structured summaries of PIP and community engagement activities,
- transportation trends, including shipment volumes and event types,
- updates on major remediation and modernization projects, and
- information that recognizes the cumulative impacts on host community services and planning.

These enhancements would align ROR content more closely with community realities and support host communities in fulfilling their responsibilities to residents.

3.3. Canadian Nuclear Laboratories Sites

The ROR for Canadian Nuclear Laboratories (CNL) Sites provides a comprehensive assessment of regulatory performance across a network of facilities that collectively serve as the centre of Canada's federal nuclear science, research, decommissioning, and waste-management responsibilities. These sites include the **Chalk River Laboratories (CRL)**—Canada's largest and most complex nuclear research campus—as well as the **PHAI**, **Whiteshell Laboratories**, **Douglas Point**, **Gentilly-1**, and the **Nuclear Power Demonstration (NPD)** site.

For host communities, CNL facilities represent a unique category of nuclear activity: they combine active science and research operations, major infrastructure modernization, long-term decommissioning, environmental remediation, historic waste management, and multi-decade federal commitments to environmental stewardship. Unlike power-generating stations or industrial processing plants, CNL sites encompass diverse activities and a wide range of community interfaces, each requiring strong coordination with governments, Indigenous communities, and the public.

The 2024 ROR concludes that **all CNL sites operated safely**, with **Satisfactory** ratings across all SCAs. This finding reflects the maturity of CNL's management systems, the stability of environmental monitoring programs, and the effectiveness of the CNL–CNSC oversight relationship. At the same time, CANHC emphasizes that the breadth and scale of CNL activities—especially environmental remediation and decommissioning—create sustained and evolving pressures on host community governance, public communication, and infrastructure.

3.3.1. Chalk River Laboratories: A Major Federal Science Campus Undergoing Transformation

The Chalk River Laboratories (CRL) remains the backbone of Canada's federal nuclear science and research enterprise. The site is undergoing one of the most significant modernization initiatives in its history, including the construction of new research facilities, renewal of site infrastructure, decommissioning of legacy structures, and the long-term development of a modern, multi-purpose science campus.

From CANHC's perspective—particularly that of the Town of Deep River and the County of Renfrew—CRL activities have tremendous benefits for them as host communities, and there are also important implications for local and regional planning and service delivery, including:

- land-use planning and zoning,
- road capacity and transportation planning,
- emergency preparedness and fire response,
- economic development and population change,
- housing availability related to workforce growth, and
- public inquiries regarding environmental protection, waste-management proposals, and radiological safety.

The 2024 ROR confirms that CRL's operational and safety performance remained stable throughout the reporting period. Radiation protection, environmental monitoring, waste-management systems, and security programs were implemented effectively, with radiological releases remaining well below regulatory limits and consistent performance maintained across all SCAs.

At the same time, CANHC observes that the scale and visibility of ongoing modernization activities have increased interest in CRL well beyond the immediate host community. Modernization and future development plans have drawn attention from neighbouring municipalities across provincial boundaries, Indigenous Nations with broader regional interests, and communities downstream along the Ottawa River, including larger urban centres. This expanded interest reflects both the national significance of CRL and a desire among a broader range of communities to understand the nature, purpose, and implications of site activities.

While the ROR appropriately focuses on technical safety and regulatory oversight, CANHC believes future ROR cycles would benefit from including high-level, up-to-date summaries of major modernization initiatives, key milestones achieved during the reporting period, and anticipated next phases as known at the time of publication. In addition, brief contextual information on how licensees plan to communicate and engage on major modernization activities—through PIPs and other mechanisms—would be helpful.

Such contextual summaries would not alter the technical focus of the RORs, but would support host communities, neighbouring jurisdictions, and Indigenous partners in understanding the broader scope of activities that took place, or are underway at CRL, assist host communities in responding to public inquiries, and enhance transparency around one of Canada's most prominent federal nuclear sites.

3.3.2. Port Hope Area Initiative: One of Canada's Largest Remediation Projects

The PHAI represents a multi-billion-dollar federal commitment to remediate historic low-level radioactive waste in the communities of **Port Hope** and **Clarington**. In 2024, the project saw considerable progress, including removal, transportation, and safe placement of historic waste in purpose-built engineered mounds.

CANHC emphasizes that PHAI activities are highly visible to the public and can intersect with:

- transportation route planning,
- traffic impacts from heavy truck movements,
- public inquiries about dust, noise, and groundwater monitoring,
- construction coordination in residential and commercial areas, and
- local emergency preparedness.
- public communication needs and media attention

The ROR confirms that environmental protection remained robust and that remediation activities were conducted safely. Host communities strongly value this assurance. However, given the magnitude of public interest in PHAI, future RORs would support communities by providing more explicit summaries of:

- remediation milestones reached during the reporting year
- any challenges encountered
- monitoring results of particular public interest
- changes to waste-haul logistics
- long-term plans for remediated areas

CANHC notes that PHAI is deeply intertwined with local identity and public confidence, making clear communication essential.

3.3.3. Whiteshell, Douglas Point, Gentilly-1, and NPD: Progress in Decommissioning

CNL continues to advance decommissioning activities at several former research and demonstration reactor sites, including **Whiteshell Laboratories (Manitoba)**, **Douglas Point (Bruce County)**, **Gentilly-1 (Québec)**, and the **Nuclear Power Demonstration (Renfrew County)**.

For host communities, these projects create unique opportunities and considerations.

3.3.3.1. Environmental Protection and Monitoring

The ROR confirms that environmental protection remained effective at all sites, with monitoring showing continued stability. CANHC relies on this information to respond to resident questions regarding:

- groundwater quality,
- surface-water protection,
- historic contamination,
- wildlife and habitat impacts, and
- long-term stewardship.

3.3.3.2. Transportation of Waste and Decommissioning Materials

Decommissioning activities often require the movement of specialized equipment, demolition debris, and waste materials. These shipments use municipal transportation corridors, sometimes triggering:

- traffic delays,
- public questions regarding visibly marked shipments, and
- increased demands for emergency response coordination.

While the ROR acknowledges steady progress in decommissioning, CANHC notes that future reports could benefit from more detailed discussion of end-state planning, community interface issues, and anticipated timelines for major decommissioning milestones.

3.3.3.3. Public Information Programs, Indigenous Engagement, and Community Interface

The ROR confirms that CNL maintains active public information and Indigenous engagement programs across its sites. CANHC supports these efforts and notes the value of:

- community briefings,
- joint communication sessions,
- site tours and public information events,
- Indigenous-led environmental monitoring initiatives, and
- opportunities for community-Indigenous collaboration.

However, as with NPGS and uranium processing facilities, ROR reporting on PIP performance remains limited. Host communities frequently manage public inquiries related to:

- site modernization plans,
- PHAI remediation,
- decommissioning timelines,
- environmental monitoring, and
- waste-management proposals.

Given the importance of communication in maintaining public confidence, CANHCs encourages future RORs to include structured summaries of communication activities, themes of public concern, and approaches used to address misinformation or emerging issues.

3.3.3.4. CANHC Relevance Summary

Communities hosting or neighbouring CNL sites strongly support the overall findings of strong regulatory performance. At the same time, CANHC highlights areas where enhanced reporting would support host community responsibilities:

- summaries of major modernization and construction work,
- clearer reporting on PHAI progress and upcoming milestones,
- transportation trends and waste-movement statistics,
- community interface considerations during decommissioning,
- expanded summaries of environmental monitoring programs, and
- structured reporting on public information and Indigenous engagement activities.

CNL sites represent some of the most complex and publicly visible components of Canada's nuclear sector. As such, CANHC believes that future RORs could play an increasingly important role in supporting public understanding and community confidence.

3.4. Use of Nuclear Substances in Canada

The ROR for the **Use of Nuclear Substances in Canada** addresses the broadest segment of the nuclear sector in terms of the number and diversity of licensees. With more than **1,400 active licences** across medical, industrial, commercial, academic, and research applications, this sector represents the most frequent point of public and host community government interface within the nuclear regulatory framework. Nuclear substances are used daily in hospitals, universities, cancer centres, veterinary clinics, construction and engineering operations, radiography inspections, oil and gas exploration, and a wide range of commercial activities.

Host Community governments therefore could experience impacts from nuclear substance use through emergency response, transportation oversight, occupational safety coordination, and public communication. Although the activities in this sector typically involve comparatively small quantities of nuclear material and are governed by strict packaging and safety standards, they also account for the **majority of reported events across the Canadian nuclear system**—most of which are transportation-related and have **no radiological impacts**.

The 2024 ROR concludes that the sector **operated safely**, with the overwhelming majority of inspections rated **Satisfactory** and all **Unacceptable** ratings corrected through compliance measures. These findings reinforce the maturity of Canada's regulatory framework for nuclear substances, and the strong safety culture adhered to by users across the country.

3.4.1. Diversity and Distribution of Licensees

The ROR emphasizes the diversity of nuclear substance users, which include:

- nuclear medicine departments in hospitals,
- cancer-treatment centres,
- universities and research institutions,
- industrial radiography and non-destructive testing (NDT) firms,
- gauge users in manufacturing facilities,
- oil and gas exploration operations,
- veterinary clinics,
- commercial suppliers and distributors, and
- waste brokers and service providers.

This diversity means that nuclear substances are **present in nearly every major urban centre in Canada** and in many smaller communities as well. Consequently, community governments must maintain awareness of:

- where nuclear substances are used within their jurisdiction,
- how they are stored and transported,
- how they interface with emergency response systems, and
- what public communication is required if an event occurs.

The ROR confirms that licensees continue to implement strong management systems appropriate to their scale and complexity. CANHC has no issues to raise on this issue.

3.4.2. Inspection Results and Compliance Trends

CNSC conducted a substantial number of inspections across this sector in 2024, with results demonstrating:

- consistently strong compliance,
- appropriate training and certification of workers,
- effective implementation of radiation protection programs,
- well-maintained equipment and storage facilities,
- adherence to security requirements for higher-risk substances, and
- successful corrective action following non-compliances.

Notably, the ROR provides important clarification about the **scoring methodology** used for radiation protection in nuclear medicine facilities. It recognizes that the current scoring framework can give the misleading impression of lower compliance, even when actual safety performance remains high. With new methodologies expected in 2025, CANHC looks forward to clearer and more intuitive presentation of nuclear medicine performance, as hospitals frequently receive public inquiries regarding radiation safety.

From CANHC's perspective, the ROR's granular breakdown of non-compliances is particularly helpful for understanding trends in:

- documentation and procedural gaps,
- adequacy of worker training,
- accuracy of inventory control,
- maintenance of shielding and storage systems, and
- adherence to operating procedures.

These insights can help emergency services and occupational health teams maintain awareness of common issues across sectors. CANHC has no issues to raise with respect to this ROR section.

3.4.3. Transportation

Transportation of nuclear substances—primarily medical isotopes, industrial radiography sources, and sealed sources—remains the **largest category of reported events** in this sector. The ROR provides clear confirmation that transportation-related events:

- rarely involve packaging failures,
- seldom result in any radiological exposure, and
- are typically administrative or procedural in nature.

Nonetheless, transportation is one of the areas that has the potential to intersect with community concerns. Fire services, police, public works, paramedics, and emergency management offices respond to or observe:

- vehicle collisions involving placarded loads,
- roadside inspections,
- loading or unloading incidents,
- public calls triggered by sightings of radioactive symbols, and
- spills involving non-radiological goods transported alongside nuclear substances.

CANHC notes that the visibility of transportation—combined with a general lack of public familiarity with transport regulations—means that even minor events can generate disproportionate public concern. The ROR helps to counteract misunderstandings by providing clear, accessible explanations of event types, regulatory response, and safety outcomes.

In future reporting cycles, CANHC would welcome modest expansions to the transportation section, including:

- annual shipment volumes or activity levels,
- common trends in non-compliances,
- examples of corrective actions,
- summaries of training initiatives for carriers, and
- linkages between transportation events and host community response requirements.

Such information would further support emergency preparedness, support CNSC understanding of trends or issues, and support public education.

3.4.4. Radiation Protection and Worker Safety

The ROR reports that radiation protection programs across the sector remained effective. Most licensees operate under strict procedural controls, with workers trained and certified to appropriate standards. Dose results for workers remained well below regulatory limits, and ALARA principles were implemented broadly.

CANHC appreciates that the ROR clarifies the multi-layered protections that govern nuclear substance use, including:

- shielding,
- limited exposure times,
- secure source storage,
- strict procedural controls,
- contamination monitoring, and
- oversight through mandatory reporting.

Because many communities host hospitals, clinics, or industrial radiography firms, these results reinforce public confidence and support local communications with residents. CANHC supports the findings presented on radiation protection and worker safety in the ROR.

3.4.5. Security and Inventory Controls

Facilities handling higher-risk sealed sources—particularly industrial radiography firms—are subject to enhanced security requirements. The ROR notes strong compliance across this domain, while also identifying isolated areas where corrective actions were necessary.

CANHC highlights that source security is an important contributor to public confidence. Even though the risk of unauthorized access remains extremely low, public awareness of sealed-source control can be heightened by media coverage, community advocacy groups, or unrelated international events. Clear reporting of security compliance is therefore valued by CANHC.

3.4.6. Public Communication, Community Education, and Transparency

Unlike power stations or large industrial facilities, nuclear substance users do not typically maintain formal PIPs. As a result, **host communities often carry the communication burden** when:

- an event occurs,
- emergency responders are dispatched to a facility,
- the media inquires about unusual activity,
- residents raise concerns about nearby clinics or industrial users, or
- decommissioning of old sources or disposal processes occur.

The ROR helps to fill this information gap and can be strengthened by including:

- summaries of event types most relevant to the public,
- common misconceptions encountered by CNSC staff,
- guidance on how host communities can explain nuclear substance safety to residents,
- any emerging trends in radiation protection or source security, and
- insights from compliance promotion activities.

As demand for medical isotopes increases and industrial growth accelerates, public communication needs will continue to increase. However, CNSC and the transporters have a

pivotal role at the time of the incident to communicate immediately to provide information, dissuade misinformation and impart confidence in the system.

3.4.7. CANHC Relevance Summary

Host community governments generally view the nuclear substances sector as low risk and high volume, with occasional community interfaces related primarily to transportation, emergency response awareness, and public inquiries. While this sector does not represent a significant focus area for CANHC members, they note that clear, accessible information remains helpful in supporting local understanding and public reassurance. Given the widespread presence of nuclear substance users across Canada, consistent high-level reporting on transportation activity, radiation protection in medical settings, common compliance themes, and compliance promotion efforts can contribute to public confidence. CANHC encourages continued coordination between the CNSC, licensees, and local authorities to ensure accurate information is available to communities when questions arise.

4. CANHC Summary and Recommendations

CANHC appreciates the CNSC's commitment to transparency, regulatory excellence, and technical rigor across all aspects of nuclear oversight. The 2024 RORs demonstrate strong sector-wide performance and reaffirm the safety of nuclear operations in Canada. While the RORs provide thorough technical assessments across the SCAs, they do not always capture the community dimensions of nuclear hosting—dimensions that are central to public confidence, ensuring strong SCAs, maintaining social licence, and the successful integration of nuclear activities within communities.

This section consolidates CANHC's key observations arising from its review of the four 2024 RORs and from the ROR review process itself. These observations are informed by host community experience across Canada's nuclear sites and are intended to strengthen the value of RORs as tools for transparency, shared learning, and sustained public confidence.

4.1. ROR Review Period and Document Release

Host communities face significant and competing operational demands, including emergency preparedness planning, infrastructure and land-use approvals, budget deliberations, council governance cycles, and public communications. Effective participation in regulatory processes requires sufficient time for elected officials and senior host community staff to review materials and coordinate input.

The 2024 ROR review period was shortened to 40 days, overlapped with holiday closures, and involved the simultaneous release of multiple RORs, and released RORs. This compressed timeframe limited the ability of CANHC members to undertake thorough reviews, consult internally, and provide comprehensive feedback.

CANHC RECOMMENDS THAT CNSC:

- reinstate a minimum 60-day review period for RORs,
- avoid review windows that coincide with holiday closures, or provide compensating extensions,
- provide advance notice and predictable schedules for ROR release,
- release RORs in a timely manner, ideally in the first half of the year following the reporting period, and
- consider staggered ROR release where appropriate.

CANHC notes that while annual reporting for Nuclear Power Generating Sites remains essential, there may be flexibility for longer reporting cycles for other facility types, provided transparency and community awareness are maintained.

4.2. Oral Interventions Before the Commission

CANHC members are elected officials accountable to residents of communities that host regulated nuclear facilities. Historically, oral interventions during ROR proceedings have provided one of the few opportunities for host communities to engage directly with independent Commission members, clarify findings, and raise cross-cutting or emerging issues.

The removal of oral interventions for the 2024 ROR cycle reduced transparency and limited meaningful dialogue between host communities and the Commission. This is of particular concern as longer licence periods reduce the frequency of other Commission-facing engagement opportunities.

CANHC RECOMMENDS THAT CNSC:

- reinstate the opportunity for CANHC to provide an oral intervention during ROR proceedings.

From CANHC's perspective, oral interventions are not procedural formalities; they are a critical mechanism for conveying host community experience, contextualizing technical findings, and ensuring that Commission members hear directly from governments that shoulder day-to-day responsibility for emergency preparedness, public communication, and community confidence. Their absence narrows the feedback loop that supports robust regulatory oversight.

4.3. Social Licence and Host Community Capacity

Host communities play a foundational role in maintaining the social licence for nuclear activities. This includes responding to resident concerns, facilitating land-use decisions, coordinating emergency preparedness and communications, and supporting transparent engagement with the public and media.

As nuclear activity expands, host community capacity constraints are becoming more pronounced. These pressures can affect long-term planning, emergency readiness, and public confidence if not adequately understood and supported.

CANHC RECOMMENDS THAT CNSC:

- more explicitly recognize host community capacity as a contributing factor to effective nuclear safety oversight, and
- continue strengthening engagement mechanisms with host community governments.

CANHC emphasizes that social licence is not an abstract concept; it is built and maintained locally through municipal institutions. Where host communities lack sufficient capacity, or where engagement mechanisms are limited, the effectiveness of public assurance, emergency preparedness, and regulatory transparency can be diminished. Recognizing and supporting host community capacity is therefore aligned with—not separate from—the CNSC's mandate.

4.4. Host Community Perspectives

Host communities wish to see their perspectives, responsibilities, and lived realities more clearly reflected in future RORs.

CANHC RECOMMENDS THAT FUTURE RORs INCLUDE:

- a short, dedicated section in each ROR acknowledging the essential role that host community governments play in the nuclear safety framework and summarizing community interface considerations with respect to:
    - emergency preparedness,
    - land-use planning,
    - infrastructure provision,
    - public communication,
    - environmental awareness,
    - transportation oversight, and
    - social licence and public trust.

Such additions would not alter the CNSC's technical authority or regulatory framework. Instead, they would enhance the RORs' utility as public-facing documents, strengthen public confidence, and improve alignment with the commitments made under the CNSC–CANHC Terms of Reference.

4.5. Public Information Programs and Community Engagement

PIPs are part of the licensing basis for major nuclear facilities. They play a crucial role in maintaining public confidence and ensuring accurate information flow in all phases of nuclear activities. RORs, however, provide limited insight on engagement undertaken and the outcomes

of PIP execution. This information is required in the current atmosphere of growing public interest and inquires related to nuclear facilities.

CANHC RECOMMENDS THAT FUTURE RORs INCLUDE:

- summaries of PIP performance, activities undertaken, and outcomes during the reporting period,
- key themes in public inquiries,
- coordination between licensees and host community communications teams,
- indicators of engagement effectiveness, and
- steps taken to address misinformation.

These additions would enhance public understanding and better support the licensing basis requirements. Such transparent and responsive reporting would not change the technical nature of the ROR but would help bridge the gap between regulatory findings and the public's lived experience of nuclear operations.

4.6. Emergency Preparedness

Emergency preparedness remains a significant area of interface between nuclear facilities and host community governments. Host communities carry multiple responsibilities related to offsite emergency preparedness, including emergency operations centres, fire services, police, paramedicine, public alerting systems, evacuation planning, reception centres, evacuation centres, emergency workers centres (EWC), public communication, and coordination with provincial emergency management authorities.

While the RORs consistently assess emergency preparedness across facilities as **Satisfactory**, host community experience—particularly during large, multi-jurisdictional emergency exercises in recent years—has identified challenges related to procedures, coordination, and information-sharing. In some cases, these challenges were significant enough to result in corrective actions being required through **CNSC Orders issued in 2025**, following exercises conducted outside the formal 2024 ROR reporting period. As a result, these issues are not reflected in the current RORs, despite their relevance to offsite preparedness and community assurance.

Further, the outcomes and recommendations following emergency management exercises must be followed year to year and reported on in each ROR period.

CANHC RECOMMENDS THAT FUTURE RORs INCLUDE:

- high-level summaries of emergency exercises undertaken during the reporting year,
- identification of any multi-agency coordination or communication challenges,
- brief descriptions of corrective actions and follow-up activities,
- reporting on the status, actions and outcomes of recommendations from previous emergency exercises until those recommendations are fully satisfied, and
- contextual information on improvements made since previous exercises.

These additions would support continuous improvement in emergency planning and reinforce the transparency that underpins public confidence and social licence. CANHC emphasizes that emergency preparedness must be understood as a shared capacity: host community governments manage public expectations and are often held publicly accountable for perceived gaps in offsite readiness, even where responsibilities are shared across multiple jurisdictions and organizations.

4.7. Major Projects and Activities

CANHC observes that the Canadian nuclear sector is entering a sustained period of major capital investment and multi-phase development across existing sites, including refurbishment and life-extension work, modernization, large component replacement, infrastructure upgrades, and early-stage planning for new reactors and related facilities. Host communities continue to be proud partners in this growth and recognize the significant economic and employment benefits associated with nuclear generating stations and related nuclear facilities. At the same time, communities note that prolonged or overlapping projects can create community-level pressures that must be planned for and managed over time.

In practical terms, major projects can generate cumulative impacts for host communities, including housing pressures (temporary and long-term), traffic congestion and routing demands, increased strain on municipal services and infrastructure, surges in population, and complex public communication needs. Municipal planning departments are often required to manage multiple development applications linked to temporary workforce accommodations and new industrial and commercial activity, alongside longer-term land-use planning associated with regional energy infrastructure. These pressures underscore the importance of early, detailed, and sustained communication from licensees to host communities—particularly during periods of major construction, refurbishment, outages, or concurrent projects.

CANHC further observes that **socio-economic impact assessments**—where undertaken—are increasingly important tools for understanding, mitigating, and managing host community impacts associated with major nuclear projects. Looking ahead, CANHC encourages a stronger emphasis on socio-economic assessment approaches that are clearly scoped, well understood by host communities, and accompanied by practical mitigation measures. Where such assessments are undertaken, **follow-up and verification** can help confirm whether projected impacts, mitigation strategies, and associated cost assumptions align with community experience and evolving conditions.

While RORs appropriately focus on technical safety and regulatory oversight, CANHC believes that sustained or unaddressed host community capacity pressures may, over time, affect broader community resilience and preparedness—contextual factors that can influence effective emergency preparedness and public confidence. Host community pressures are not a substitute for technical SCA assessments; however, they are relevant to the environment in which safety programs are implemented and understood by the public.

CANHC RECOMMENDS THAT CNSC:

- include in future RORs a summary of major projects underway at each site, key milestones achieved during the reporting period, and anticipated next phases (as known at the time of publication),
- encourage consistent, structured consideration of socio-economic impacts for major projects and expansions, including visibility into whether socio-economic impact assessments are underway and how mitigation measures are being advanced,
- support a follow-up and verification approach for socio-economic impact assessments where they exist, so that projected impacts and mitigations can be evaluated against actual outcomes and lessons learned, and
- consider how host community capacity and infrastructure pressures can be tracked as part of broader context for emergency preparedness, public assurance, and sustained community resilience.

4.8. Transportation of Nuclear Substances

Transportation is one of the most visible areas of community interface across the nuclear sector and a frequent driver of public inquiries. Host communities manage the local road networks and emergency response systems through which shipments pass, and local first responders may be required to respond to vehicle collisions, roadside incidents, or public concerns triggered by signage or media coverage. While the RORs demonstrate that packaging standards and transport controls remain effective and that most transport-related events do not result in radiological impacts, communities continue to face communication and preparedness demands associated with the visibility and frequency of shipments.

CANHC notes that transport reporting is technically strong but often difficult for municipal audiences to translate into practical awareness. Host communities would benefit from higher-level context that supports public reassurance and responder preparedness without expanding the ROR into an operational manual.

CANHC RECOMMENDS THAT CNSC:

- include in future RORs high-level contextual information on transportation activity levels (where feasible), event categories, and key trends in transportation-related occurrences,
- provide brief summaries of common contributing factors and corrective actions related to transport events, to support understanding of continuous improvement,
- where appropriate, include references to relevant guidance for first responders and public communication resources that host communities can use when questions arise, and
- encourage consistent and timely coordination with local authorities when transport-related events generate sustained public interest or local operational impacts.

4.9. Environmental Monitoring, Public Assurance and Accessibility of Results

Environmental protection and monitoring are among the most important drivers of public confidence in nuclear host communities. CANHC notes that the RORs consistently demonstrate strong performance, with radiological and non-radiological releases remaining well below regulatory limits and monitoring programs implemented effectively. Host communities rely on these results to respond to questions from residents, community groups, and local media, particularly during periods of heightened activity such as refurbishment, modernization, decommissioning, or remediation.

At the same time, community governments observe that members of the public often seek localized, plain-language explanations of what monitoring results mean and how they relate to day-to-day community life. Where monitoring information is technically accurate but difficult to interpret, host community governments frequently become the 'translation point' between complex reporting and public understanding.

CANHC RECOMMENDS THAT CNSC:

- include in future RORs more consistent plain-language summaries of key environmental monitoring results and trends of public interest, alongside the technical presentation,
- provide clearer signposting within RORs to direct readers to the most relevant monitoring sections (e.g., public dose, effluent monitoring, groundwater/surface water, major remediation monitoring where applicable),
- consider including short 'public assurance context' summaries that explain what stable results mean, particularly when major site activities are underway or expanding, and
- encourage proactive sharing of monitoring highlights with host communities to support timely and accurate public communication.

4.10. Plain-language Reporting and Timely Communication

CANHC recognizes that RORs are technical regulatory documents intended to report on oversight results across SCAs. However, RORs are also among the few consolidated public-facing sources that host communities can reference when responding to questions from residents. CANHC notes that the technical depth of RORs can make it difficult to communicate key messages in a timely, accessible way—particularly when public interest rises quickly due to a project milestone, an unusual event, or broader media attention.

Communities would benefit from supplementary, plain-language reporting products or dashboards that allow councils, staff, and residents to understand key findings without reducing the rigor or independence of the technical record. Graphs, graphics and images would enhance these images.

CANHC RECOMMENDS THAT CNSC:

- produce short, plain-language summaries of each ROR (or key sector RORs), suitable for host community councils and public audiences, highlighting overall performance, key issues addressed, major activities during the reporting period, and any notable trends,
- improve the predictability and timeliness of ROR publication schedules, recognizing that significant lag between the reporting year and Commission consideration reduces the practical usefulness of RORs as annual report cards,
- ensure mechanisms exist for timely, coordinated communication with affected host communities when events or issues arise that generate heightened public interest, so that accurate information can be shared rapidly and consistently, and
- where feasible, include 'where to find more information' signposting in the RORs (or companion summaries) for PIP contacts, environmental monitoring portals, and municipal-facing resources.

5. Closing Statement

CANHC appreciates the opportunity to provide this detailed submission on four of the five RORs issued for the 2024 reporting period. Host community governments across Canada play a critical, hands-on role within Canada's nuclear safety framework. They host nuclear facilities, manage offsite emergency preparedness and public alerting systems, respond to resident inquiries, oversee transportation corridors, plan and maintain infrastructure that supports major nuclear projects, and help sustain the public confidence that underpins social licence. These responsibilities are not peripheral; they are foundational to the safe, secure, and publicly trusted integration of nuclear activities within Canadian communities.

Host communities are not simply members of the general public. They are governments with statutory responsibilities for public safety, land-use planning, emergency response, and community wellbeing. Their capacity, readiness, and confidence directly influence how nuclear activities are understood, supported, and managed at the local level. Where host communities face sustained capacity pressures or erosion of trust, the broader environment in which nuclear safety programs operate can be affected. CANHC therefore encourages continued evolution in how the CNSC, and the nuclear industry, frames its relationships with host communities—moving beyond the language of public participation toward one that more clearly reflects engagement, ongoing relationships, and partnership with local governments.

Through the CNSC–CANHC Terms of Reference for Engagement and Collaboration, CANHC and the CNSC have established a constructive and respectful working relationship grounded in openness, transparency, and mutual understanding. CANHC values this relationship and acknowledges the CNSC's continued engagement with host communities, participation in annual meetings and dialogues, and support provided through the Indigenous and Stakeholder Capacity Fund and the Participant Funding Program. These mechanisms have meaningfully strengthened host community capacity to engage in federal regulatory processes.

The 2024 RORs confirm that Canada's nuclear sector continues to operate safely, with strong performance across all SCAs. At the same time, CANHC's review highlights opportunities to further enhance how RORs reflect host community realities, including emergency preparedness demands, infrastructure and service pressures, transportation interfaces, public information needs, and the increasing complexity of communicating nuclear safety in a rapidly evolving energy environment. CANHC offers these observations not as criticism, but as constructive input intended to strengthen the clarity, accessibility, and community relevance of future ROR cycles.

CANHC remains committed to working collaboratively with the CNSC, industry operators, Indigenous partners, and all orders of government to uphold the highest standards of nuclear safety, environmental protection, and public trust. As nuclear activities continue to expand across Canada, host communities will remain essential partners in delivering safety, confidence, and resilience at the local level. CANHC looks forward to further strengthening its partnership with the CNSC and ensuring that host community perspectives remain meaningfully embedded within Canada's nuclear regulatory framework.