



Chalk River Near Surface Disposal Facility Project

Comments on the Draft Environmental Impact Statement

PRESENTED TO THE CANADIAN NUCLEAR SAFETY
COMMISSION

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INTRODUCTION

The Great Lakes and St. Lawrence Cities Initiative (Cities Initiative) appreciates this opportunity to comment on the draft environmental impact statement (EIS) for the proposed Near Surface Disposal Facility Project submitted by the proponent, Canadian Nuclear Laboratories (CNL).

Our organization is a binational coalition of 131 U.S. and Canadian mayors and local officials working to advance the protection and restoration of the Great Lakes and St. Lawrence River. The Cities Initiative and local officials integrate environmental, economic and social agendas and sustain a resource that represents approximately 20 percent of the world's surface freshwater supply, provides drinking water for 40 million people, and is the foundation upon which a strong regional economy is based. Members of the Cities Initiative work together and with other orders of government and stakeholders to improve infrastructure, programs and services and increase investments that protect and restore this globally significant freshwater resource.

As the proposed nuclear waste disposal facility would be located in the near vicinity of the Ottawa River, a main tributary of the St. Lawrence River, the Cities Initiative has decided to submit these comments which call for caution, primarily for the sake of protecting drinking water sources.

Our comments focus on the direct interest and related responsibilities of municipalities with respect to the proposed Near Surface Disposal Facility Project submitted by CNL.



Municipalities are both responsible for First Response in case of emergency, and provide safe drinking water to millions of residents and businesses in the Great Lakes and St. Lawrence region. For these reasons, it is in our direct interest to ensure that the CNSC fulfills its duty to ensure that the disposal facility is designed, built, operated and maintained in a way that:

- 1) Guarantees the safety of drinking water drawn from surface and groundwater within the Great Lakes and St. Lawrence basin,
- 2) Guarantees the safety of the operations for all residents and businesses in its vicinity;
- 3) Guarantees the long-term physical integrity and ongoing operation and maintenance of the installations;
- 4) Guarantees complete remediation and full financial compensation to municipalities and those affected on the ground in the event of a leakage or other cause of exposure to radiation;
- 5) Guarantees a high standard of preparedness, training and equipment availability in the event of fire, leakage, or any emergency situation, and an efficient and rapid response if it occurs, in direct coordination with municipal First Responders.

In order for the proponent to fulfill these conditions, we are asking for additional specific detailed information and further assessment to be conducted. These are described in the following comments.



1) Water protection

As a condition to its approval by the CCNS, the Cities Initiative, requests that the IES conduct a comprehensive risk assessment study on the possibility of a significant leakage reaching the Ottawa River, a major water way located in close proximity (less than 1 kilometer) to the facility, including response time depending on the importance of the incident. The study needs to address the impact of a worst case scenario accident.

The Cities Initiative acknowledges the fact that thorough risk analysis have been performed and that relevant mitigation measures have been integrated into the design of the facility. The effects of possible malfunctions and accidents, along with natural hazards (i.e., extreme weather events, forest fires, and seismic events) and climate change on the NSDF Project have been subject to an objective evaluation, using relevant safety standards.

Nevertheless, subsequent to the results of the different risks analyses , we request that the CNL consult with local and regional water protection staff and relevant departments responsible for the supply of drinking water to identify possible threats and how to optimize response plans collaboratively.

Regarding water quality survey and monitoring, the NSDF Project “is already included in CNL’s Environmental Monitoring Program, which is compliant with *CSA Standard N288.4-10 Environmental Monitoring at Class I Nuclear Facilities and Uranium Mines and Mills*. Effluent from the stormwater management ponds and wastewater treatment facility will be monitored in accordance with CNL’s Effluent Verification Monitoring Program, which is compliant with the *CSA Standard N288.5-11 Effluent Monitoring Programs at Class I Nuclear Facilities and Uranium Mines and Mills*.” (Environmental Impact Statement, p. ES-ix).



Our comments regarding monitoring are that the data should be made publicly available and easily accessible in a timely fashion, for example on the CNL website. This should be added to the EIS in Section 10.1 - Data Management.

Also, all monitoring programs should be periodically updated following upgrades to the CSA Standards. This should be specifically mentioned in the EIS, Section 10.2 - Adaptive Management.

2) Operational Safety

It is of utmost importance that all elements of an operational safety culture be identified and integrated at the very first steps of the project. Regarding the current EIS, we believe the following criteria, measures and practices should be included before the document is approved.

Waste-acceptance criteria

One important item that we have not found in the IES is the list of the conditions by which waste will be accepted in the CNL facility. It would be necessary for the site's waste-acceptance criteria to be clearly outlined.

In order to reduce the risk of seepage or leakage from the facility, the Cities Initiative asks that radioactive waste be prohibited in liquid form. This waste needs to be solidified to reduce the risk of it spreading into the environment.

Precautionary measures and management practices



In addition, it is essential to demand the establishment of satisfactory precautionary measures for all elements of the project, particularly for those identified in the environmental impact statement as having adverse residual effects. It is also important to establish zero-risk management practices, for example by reducing the frequency and size of shipments in terms of their quantity, concentration of contaminants, and radiation.



3) Long term responsibility and accountability

One of our principal concern with the draft environmental impact statement (EIS) is that it does not address the need that the proponent, Canadian Nuclear Laboratories (CNL), be held responsible up to the end of the project. Should the company come in severe financial difficulties, the taxpayer must not have to take responsibility and support the financial burden of this facility.

Accordingly, the EIS needs to evaluate the complete operations and maintenance cost of the facility. We ask that, following this evaluation and considering the risk that the proponent may not be capable of maintaining its financial capacity over the long-term, the CNSC require the creation of a long-term Operations & Maintenance contingency fund. Different scenarios to finance and ensure a sound and transparent management of the fund should be identified so that the regulation agency, and possibly the responsible federal department, can contemplate possible avenues to secure its sustainability over time. The contingency fund maintained by companies operating in the oil transportation sector on the St. Lawrence may serve as a model for such a contingency fund..



4) Full remediation and financial compensation

The fundamental principle of environmental liability in Canada is that the polluter pays. The *Nuclear Liability and Compensation Act* establishes a compensation and liability regime in the event of a nuclear accident resulting in civil injury and damages. This new law entered into force on January 1, 2017.

Under the new law, the operator of a nuclear power plant will now be responsible to pay up to \$1 billion for civil damages resulting from an accident at that plant. Nevertheless, the liability amount is deemed proportional to the level of risk posed by each class of nuclear installation. For some of the Canadian Nuclear Laboratories waste disposal installation, the liability limit has been fixed to only 1 million dollars.

Considering the fact that the new law expands the types of damages for which people and businesses affected by the accident can be compensated and that it provides a longer time period for making claims for bodily injury, the EIS should estimate the financial costs associated with these types of damages. It should compare this estimate with the liability limit in full transparency.

The Cities Initiative recommends that the EIS include an estimation of the value of an adequate emergency situation contingency fund. Several options to finance and manage the Fund should be presented for further consideration.



5) Emergency Response and Preparedness

Finally, on behalf of its member cities, the Cities Initiative demands guarantees the CNL will ensure co-ordination among the relevant authorities so that emergency response teams have sufficient training, benefit from information sharing and are able to respond quickly in case of disaster, as well as to ensure adequate compensation for the costs engendered by dealing with a potential environmental incident.

It is noted in the EIS that “CNL will establish an NSDF Project-specific EPP, including emergency response procedures” (p. 6-24). The Cities Initiative insists that all municipal bodies be informed and involved in the Emergency Preparedness Program, and receive the necessary training and equipment.

Cities Initiative recommends that the IES describes how CNL will ensure integration with local emergency services in the prevention, preparation and response to a major leakage or other event, as well as evaluate its Project-specific EPP. In addition, the CCNS should request that CNL deliver, on an annual basis, emergency response training and detailed information sessions regarding its disposal facility to conservation authorities, regional and local municipal staff, and emergency services personnel for all communities, and sharing the materials for the above with the public for a thorough review and assurance the plan is in place and ready for immediate commissioning in case of a spill.



Conclusion

In conclusion, the Great Lakes and St. Lawrence Cities Initiative, a binational coalition of 131 U.S. and Canadian mayors and local officials working to advance the protection and restoration of the Great Lakes and St. Lawrence River, is calling for great caution, primarily for the sake of protecting drinking water sources.

The draft environmental impact statement (EIS) for the proposed Near Surface Disposal Facility Project submitted by the proponent, Canadian Nuclear Laboratories, requires additional conditions and more detailed information on several aspects that are identified in the comments above.

The comments presented herein are being expressed as a constructive contribution to the health and safety of the invaluable freshwater resource of the Great Lakes and St. Lawrence basin. They should not be interpreted as support or opposition to the project. The Cities Initiative reserves the right to take a position at a later stage in the public consultation process for the proposed disposal facility.