



Your property cleanup

The radiological cleanup of private properties in Port Hope involves a number of steps (from testing to design and agreement) before excavation starts. Find out more about this work.



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PHAI in action

Work continues in Port Hope



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Listening and learning

Public information sessions and engagement opportunities help CNL gather valuable feedback.

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- **Community Involvement**

10-year licence renewal granted

The Canadian Nuclear Safety Commission (CNSC) has renewed the licence for the Port Hope Project, as part of the PHAI, for a 10-year period beginning January 1, 2023. This licence allows CNL to continue the safe cleanup and management of historic low-level radioactive waste in Port Hope.

CNL respects the treaty and Aboriginal rights of local First Nations.

Your private property cleanup: It's a multi-step process



The community-requested cleanup of privately owned properties in Port Hope continues as part of the Port Hope Area Initiative (PHAI), one of the largest Canadian environmental remediation projects. Canadian Nuclear Laboratories (CNL) remains committed to completing this cleanup as efficiently as possible, while remaining compliant with all regulatory requirements.

Ensuring all activities are completed safely while meeting all regulatory requirements means this work may take longer than conventional residential construction.

From the testing of properties to determine the presence or absence of historic low-level radioactive waste through to design and execution of the cleanup and subsequent restoration, multiple project teams are undertaking specialized work at properties throughout the community.



Contracting changes

CNL has implemented a new contractual approach to the cleanup of privately owned properties. One contractor is now responsible for a property throughout the various stages of the process – from testing to design followed by the cleanup and restoration. For efficiency, work in Port Hope has been divided into two main areas, east and west of the Ganaraska River.

Delineation

“How many times do you need to come back?”

This is a question CNL often receives from property owners. There may be multiple visits to your property to confirm the extent of the waste to be removed. If low-level radioactive waste is identified on a property, soil sampling activities are expanded in a radius until an uncontaminated sample is found. One sample will not provide enough data to determine the perimeter or the depth of the waste, which means further sampling is required to find the boundaries of the waste.

Currently, contractors are scheduling this work in preparation for the design phase of the next group of properties. The additional sampling will either fine-tune or reduce the area on a property to be cleaned up.



Pre-design inventories

After a property has been tested and the limits of the waste identified, the property enters the design phase. Contractors will schedule visits to each property to do a thorough inventory of any feature that will be impacted by the cleanup. In total, there can be up to seven visits that need to be conducted to meet legal requirements. These include topographical and property line surveys, a property boundary survey, a Species at Risk Survey, an assessment by an arborist, a Designated Substance Survey and utility locate marking.



Once these visits have been completed, the information obtained is combined with the results from the original testing and a design package is created. At this point, CNL meets with property owners to review the proposed cleanup.



Cleanup

CNL is working with contractors to clean up private properties and laneways at various sites across Port Hope. These properties were specifically chosen because they would require PHAI work regardless of a possible change to the cleanup criteria for arsenic, which is currently under review.

When will my property be remediated?

CNL will notify owners that their property has been scheduled for the next construction season prior to the end of the preceding calendar year. For example, if your property is to be cleaned up in 2024, you will hear from CNL by December 2023.



PHAI in action



Port Hope Long-Term Waste Management Facility (LTWMF)

Close to 1.5 million tonnes of waste have already been placed into long-term storage. This facility continues to accept up to 100 truckloads of waste daily at peak times. The LTWMF is located just south of highway 401.

Highland Drive

Cleanup work is underway at the former Highland Drive landfill where low-level radioactive waste is being separated from residential garbage and transported for safe storage to the LTWMF. Access to the Jack Burger Sports Complex and parking lot remains open.



Waterworks West (West Beach area)

Historic low-level radioactive waste is being removed from the West Beach area. Work at the site will continue into 2024 as contaminated soil is cleaned up. A transportation bridge was installed to protect the Alexander Creek and the species that live there. Access to the beach and water remains, however there is limited parking in the area.



CN/CP Viaducts

CNL cleanup at the Port Hope viaducts is complete. Restoration of the site is now underway. The site will be restored with grass, trees and other plant species, though it is expected to return to marshland over time.



Alexander Street Ravine

Work is expected to begin in fall 2023, with a special circumstances application in place to protect the habitat of species at risk. This means the cleanup will be reduced to focus on removing radiological materials while protecting a large portion of the tree canopy.



Chemetron Lagoon

The cleanup of industrial waste has begun at this site. A portable water treatment facility has been installed to process water removed from the lagoon. The treated water is being safely discharged to Sculthorpe Marsh.



Lions Recreation Centre Park

The removal of industrial waste and historic low-level radioactive waste has begun at the Lions Recreation Centre Park site. Public access to the Legion, Lions Hall and parking lot remains.

Port Hope Harbour and Centre Pier

Work at the Port Hope Harbour will continue through 2023 and includes mechanical dredging. Contaminated sediment is scooped from the harbour then mixed with Portland cement to solidify the materials. Reinforcement and repairs of the harbour walls are also being completed simultaneously.

For more information on project sites visit PHAI.ca

CNL application to change the PHAI Cleanup Criteria: Status

Through the PHAI, historic low-level radioactive waste in the Port Hope area is cleaned up to meet specific levels for identified contaminants as set out in the PHAI Cleanup Criteria. Through experience cleaning up public and private properties in Port Hope, CNL determined that the cleanup criteria level for arsenic is resulting in more extensive and lengthier cleanups than originally anticipated. In addition, analysis has shown that the current criteria will create significant unintended project impacts to the natural and built environment, including a noticeable loss of trees in the municipality, unless it is amended.

In March 2020, CNL submitted an application to the Canadian Nuclear Safety Commission (CNSC) to amend the PHAI Cleanup Criteria to address these concerns. Based on preliminary regulatory feedback, the application was withdrawn and a revised application is expected to be submitted in 2023.



Unrestricted land use remains the goal of the PHAI. A risk-based approach is being used to identify a potential new cleanup criteria level for arsenic that meets this intent.



Working with multiple federal and provincial agencies adds an added element of rigour that may extend the time frame to determine a new criteria level that meets their individual mandates for being protective of the health and safety of humans and the environment.

CNL ensures that Municipality of Port Hope Council and staff are kept informed as we follow the CNSC application and review process and incorporate feedback from other regulators, including Health Canada and the Ontario Ministry of Environment, Conservation & Parks. Any change to the PHAI Cleanup Criteria will require acceptance from all parties.



Participate in the process

Since the original application was submitted in 2020, CNL has completed an extensive awareness and engagement campaign to inform and solicit feedback from Indigenous communities and organizations, stakeholders and the public.

While CNL prepared for the PHAI licence-renewal hearing in 2022, engagement was paused. With that licence renewal now confirmed, new engagement initiatives are being launched to provide updates on the process and solicit input.

We invite you to attend one or more of CNL's engagement activities so you can be informed about the current and proposed PHAI Cleanup Criteria and any impacts.

If and when the CNSC agrees to schedule a public hearing to review the CNL application, all details will be shared on how to participate in the licensing process.

Visit PHAI.ca for more information and details as the process moves forward or contact us at info@phai.ca or 905.885.0291 to speak with one of our experts.

Listening and Learning

CNL has hosted several public information sessions and engagement opportunities* over the past year. Hearing directly from residents has made these sessions exceptionally valuable. Below is an overview of the feedback received and how CNL is addressing it.



Residents remain concerned about PHAI cleanup times

The PHAI property testing process can take 24 months or more. Once the initial phase of testing is completed, additional testing may be needed if historic waste has been found. This process of discovery is central to the safe completion of work because new information can come to light at any

time. Discoveries such as structural or safety issues, substances that need special handling (e.g. asbestos), or additional impacts on structures and trees during construction may lengthen the timeline for work on your property (see *Your private property cleanup: It's a multi-step process* on page 2).



Saving trees remains a priority

Residents continue to express concern about the impact of PHAI activities on Port Hope. While there remains strong interest in having the waste removed, there is also interest in having it done quickly and with minimal impacts to the tree canopy. CNL works to minimize adverse environmental effects on trees, plants and wildlife through a number of mitigation measures including the Special Circumstances Protocol and the property owner directed cleanup option.

Property updates for individual owners

PHAI notifies owners when radon testing is completed or if historic waste is found, but if a property does not have waste it can take time to get information.

Residents who would like an update on their property and the testing results can contact us for any available information.

Larger sites being cleaned up before residential properties

PHAI work is being completed on large municipally owned properties, including industrial sites. These major sites are properties previously known to be contaminated based on historical file information. Major and industrial sites contain the largest volume of waste in the community. Cleaning up residential properties requires property testing to be complete, design packages to be created and Remediation & Restoration Agreements to be signed before cleanup work can begin. Though the cleanup on residential properties involves smaller volumes of waste, it requires coordination and accommodation that lengthens this process.

Indigenous Engagement

Indigenous engagement is a critical component of the PHAI and all CNL projects. Valuable feedback from engagement with Indigenous communities and organizations supports our efforts to use more balanced language and inclusive perspectives in project implementation and documentation.

*These sessions included the Lions Park Information Session, Highland Drive Landfill Neighbourhood Information Session, Alexander Street Ravine Special Circumstances Information Session and a PHAI General Update hosted in partnership with the Port Hope & District Chamber of Commerce.

Community Involvement

CNL staff and contractors are committed to supporting and participating in the communities where they live and work every day. This includes fundraising efforts and activities that make Port Hope and Clarington an even better place. Here is an overview of recent activities and donations made by CNL team members.



CNL Port Hope staff at the **Northumberland United Way** campaign celebration breakfast. The 2022 campaign raised over **\$16,000** from CNL staff donations.



CNL supported the new **Rotary Centennial Riverview Park** located next to the fish ladder in the Municipality of Port Hope.

CNL staff and contractors worked together collecting litter and other garbage in Port Hope near the waterfront in recognition of **Earth Day**. The group of 70 participants collected over 125 pounds of trash.



CNL staff participated in the **Coldest Night of the Year** event to raise money for Greenwood Coalition.



Employees from CNL presented a cheque for **\$5,000** in support of the planned **Durham Region Hospice**.



CNL staff and contractors showed their generosity by donating over 700 pounds of food and cash to the Northumberland Fare Share Food Bank.



CNL encouraged students at the **Port Hope High School** to pursue careers in the fields of Science, Technology, Engineering and Mathematics to mark the International Day of Women and Girls in Science.



Staff at CNL made a donation to **K9 Crusaders** with the proceeds of a bake sale hosted by the CNL Port Hope Social Club.

CNL is undertaking the PHAI on behalf of Atomic Energy Canada Limited, a federal Crown corporation and is licensed by the Canadian Nuclear Safety Commission.