

Historic environmental cleanup underway at Port Granby Project site

The excavation and transportation of historic low-level radioactive waste away from the Lake Ontario shoreline to the newly built Port Granby Project engineered aboveground mound is entering its first full construction season.

Waste excavation at the Port Granby Waste Management Facility site in Southeast Clarington began last November, marking a project milestone for the community. The project, as part of the Port Hope Area Initiative (PHAI), is fulfilling the federal government’s commitment to the cleanup and safe, long-term storage of approximately 450,000 cubic metres of waste, the result of the use of the site, between 1955 and 1988, by Eldorado Nuclear, a former federal Crown corporation.

“The final chapter in addressing this long-standing environmental issue is now being written,” said Craig Hebert, General Manager of the Historic Waste Program Management Office (formerly the PHAI Management Office). “Years of extensive planning and consultation with the Municipality of Clarington and the



community, followed by the construction of a waste water treatment plant and supporting infrastructure, have come to fruition with the remediation of the eroding lakefront site.”

In 2016, contractor AMEC-CB&I completed installation of the mound’s highly engineered base liner system, as well as construction of the internal waste haul roads and a temporary underpass at Lakeshore Road. Trucks are now transporting the waste along the internal route to the new Port Granby Project Long-Term Waste Management Facility, located about 700 metres north of the lake.

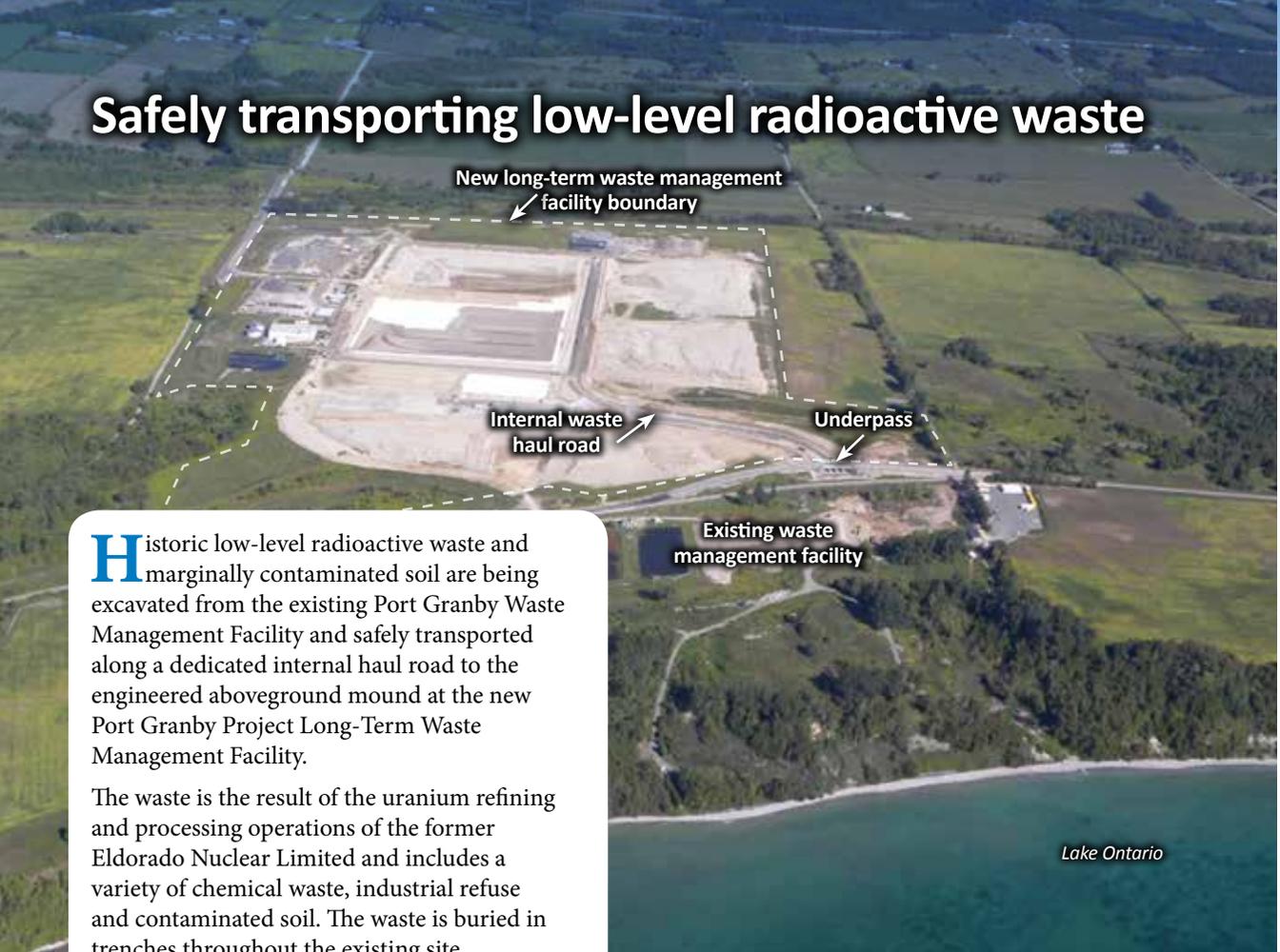
Approximately 64,000 cubic metres of waste had been placed in the first cell of the mound by the end of 2016. In March, the contractor resumed waste excavation, following a period of

continued on back page...

In this issue...

- Safely transporting waste. 2-4
- Ensuring project safety. 5
- Public Attitude Survey 6

Safely transporting low-level radioactive waste



Historic low-level radioactive waste and marginally contaminated soil are being excavated from the existing Port Granby Waste Management Facility and safely transported along a dedicated internal haul road to the engineered aboveground mound at the new Port Granby Project Long-Term Waste Management Facility.

The waste is the result of the uranium refining and processing operations of the former Eldorado Nuclear Limited and includes a variety of chemical waste, industrial refuse and contaminated soil. The waste is buried in trenches throughout the existing site.

Waste excavation

Excavation follows a methodical and staged approach. Individual trenches are delineated and physical barriers installed before crews begin to dig. The waste is carefully placed into specially equipped trucks and covered before it is transported to the new facility.

The waste excavation and transportation plan for the Port Granby Project identifies specific waste handling procedures required under the project's Canadian Nuclear Safety Commission

licence. Daily cover is applied to excavation areas to prevent dust from leaving the work site. All personnel, vehicles and equipment are decontaminated before leaving the site to prevent the spread of contamination.





Vehicle portal monitors and weigh station

Vehicle portal monitors installed at the existing site measure radiation and track waste movement from the excavation trenches to the engineered mound.

Each truckload is weighed to keep an up-to-date record of the total volume of waste being placed in the mound for safe, long-term storage.

Underpass at Lakeshore Road

Once the load has been weighed, covered trucks travel through a temporary underpass at Lakeshore Road to the long-term waste management facility. The construction and use of the internal waste haul road and underpass fulfill a commitment made to the community, during the project's environmental assessment, that no waste would travel on public roadways.





Waste placement

Waste is placed in the cells of the aboveground mound. The mound's highly engineered base liner system has been constructed using multiple layers of natural and manufactured materials to isolate the waste from the environment. Once all of the waste has been placed in the cells, the engineered cover system will be constructed. The mound will rise to

a height of approximately 8 metres once it has been fully constructed.

The mound's performance is closely monitored during waste placement and will continue to be monitored for hundreds of years into the future to ensure its safety.

On-site water management

Storm water management ponds at the long-term waste management facility collect runoff water from surrounding ditches to prevent contamination. The equalization pond collects leachate from within the mound and contaminated water from the existing site to allow sediment to settle out before the contaminated water is pumped to the on-site waste water treatment plant. The treated water is then discharged to Lake Ontario.



Conservative approach ensures project safety

The PHAI works closely with the Canadian Nuclear Safety Commission and other regulatory agencies to meet or exceed safety requirements. With excavation of historic low-level radioactive waste now underway, it is the project's top priority that regulatory requirements, PHAI policies and safe practices are followed at all times.

The PHAI and its Port Granby Project contractor, AMEC-CB&I Joint Venture, have adopted a conservative approach to decision making in the field. Each day – before work begins at the construction sites – the potential hazards of the job are identified during a pre-job brief so that all workers understand their individual responsibilities in ensuring their own safety and that of others.

“The health and safety of people will always be our highest priority. The bottom line is that no one gets hurt, and everyone goes home safely at

the end of the work day,” said Everett Wessner, AMEC-CB&I Project Manager.

The project site plans include specific waste handling requirements. For example, if an unknown potentially hazardous material is encountered, the contractor's on-site Environmental Lead and/or Site Superintendent stops the work immediately. The contractor notifies the PHAI, then takes steps to determine the nature of the substance and ensure that appropriate measures for handling the material are implemented. Work will resume only when it is safe for workers to do so.

The PHAI and its contractor will continue to take this conservative approach for the duration of the cleanup.

“By taking a cautious, planned approach to our work, we are continually raising the bar and creating the safest work environment possible,” said Wessner.



Contractor representatives meet regularly with PHAI staff to review safety requirements prior to starting specific construction work on site. The meetings provide an opportunity for thorough discussion about the implementation of all health and safety provisions pertinent to the work.

Resident awareness of PHAI and Port Granby Project remain high

Key findings from the 2016 PHAI Public Attitude Survey of Southeast Clarington residents show a continued increase in local awareness of the Port Granby Project, with 92 per cent of respondents reporting they have heard about the project, compared to 87 per cent in 2014. More than four out of five respondents (84 per cent) reported that they are aware that the new Port Granby Project Long-Term Waste Management Facility is currently under construction.

Overall satisfaction with living in the area also remains high, with the large majority of respondents – 93 per cent – indicating they are “very satisfied” or “somewhat satisfied” with living in the community. Other key findings indicated that familiarity with the Port Granby Project has increased from about half (51 per cent in 2007) to about three-quarters of respondents, with 73 per cent indicating they are “very familiar” or “somewhat familiar”

with the project. Respondents also expressed increased confidence (64 per cent, up from 58 per cent in 2014) in the PHAI’s ability to minimize project impacts such as disturbance from noise, dust and traffic.

The independent survey was conducted in November 2016 by CCI Research Inc. on behalf of the PHAI. In total, 171 respondents completed the survey, all living within a 10-km radius of the Port Granby Project area. The survey provides the PHAI with valuable information on the community’s thoughts about the project, including areas for improvement in communications efforts to strengthen public confidence, and the information sources preferred and perceived to be most accurate and complete.

An executive summary of the survey is posted on the PHAI website at www.phai.ca, and the full report is available at the PHAI Project Information Exchange, 115 Toronto Rd., Port Hope.

...*HISTORIC CLEANUP continued from pg. 1*

work slowdown during the winter and a PHAI and contractor joint review and implementation of the lessons learned during the first months of excavation. The cleanup is scheduled to take place over three years, after which the mound’s cover system will be constructed, expected to be in 2021.

All contractors working on behalf of the PHAI

must adhere to stringent health and safety plans, required by the Canadian Nuclear Safety Commission licence for the project, as well as industry best practices. Specific waste handling requirements are identified and measures are in place to carefully monitor the waste trucks, all of which are covered even though they do not travel on public roadways.



Historic Waste Program Management Office

115 Toronto Road, Port Hope, ON L1A 3S4
Tel: 905.885.0291 • Fax: 905.885.9344
info@phai.ca • www.phai.ca



Find us on
Facebook



Follow us
on Twitter