



What is the Port Granby Project?

The Port Granby Project is a federal initiative for the cleanup and safe long-term management of historic low-level radioactive waste situated in the southeast corner of the Municipality of Clarington. The project addresses a long-standing environmental problem resulting from past industrial practices.

The project is being undertaken in three phases: planning and regulatory approvals, construction and cleanup, and long-term monitoring and maintenance. With all plans and approvals in place and construction underway, the project is scheduled to be completed by 2021. Long-term monitoring will follow.

Through the project, approximately 450,000 cubic metres of low-level radioactive waste and marginally contaminated soil will be relocated from the existing Port Granby Waste Management Facility (pictured above) on the shoreline of Lake Ontario to a long-term waste management facility being built about 700 metres north of the lake.

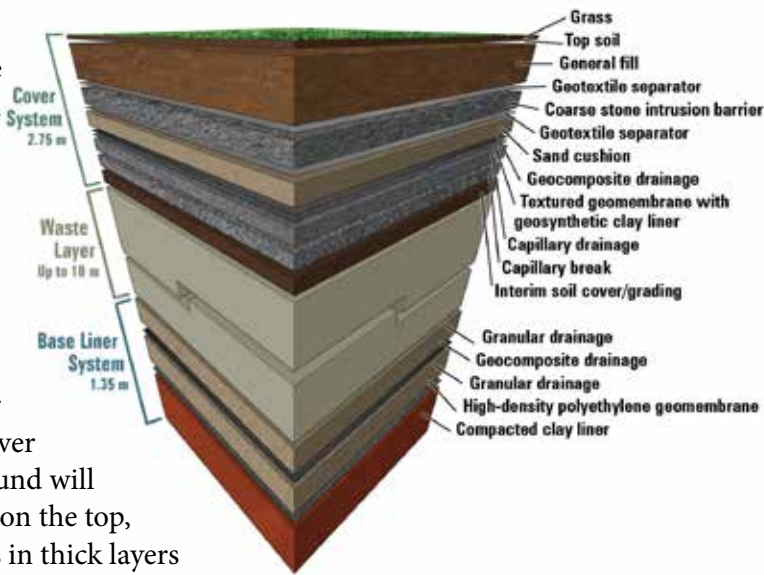
The project is part of the Port Hope Area Initiative (PHAI), which also involves the cleanup of historic low-level radioactive waste in neighbouring Port Hope. The PHAI Management Office, led by Canadian Nuclear Laboratories, is implementing the Port Hope and Port Granby projects on behalf of Atomic Energy of Canada Limited, a federal Crown corporation.

Where did the waste come from?

The historic low-level radioactive waste in Port Granby is a consequence of past practices involving the refining of uranium in neighbouring Port Hope by the former Crown corporation, Eldorado Nuclear Limited. Waste from Eldorado's refining operation was deposited at the Port Granby Waste Management Facility between 1955 and 1988. The site is characterized by sandy, porous soils, 30-metre high eroding bluffs and approximately 400 metres of receding shoreline, making it unsuitable for long-term waste storage. By cleaning up and safely managing the waste, the Port Granby Project will generate lasting environmental benefits.

Managing the waste for generations

The low-level radioactive waste will be contained in an engineered aboveground storage mound, which has been designed to isolate it from the environment using multi-layer base liner and cover systems. The mound will encase the waste on the top, bottom and sides in thick layers of natural and specially manufactured materials that prevent contaminants from entering the groundwater and keep precipitation and melting snow from entering the mound. Monitoring systems will be installed within the mound and around the perimeter of the long-term waste management facility site. Radiation at the surface will be at normal background levels once the mound is capped and closed. The safety and performance of the storage facility will be closely monitored during construction and for hundreds of years into the future.



Treating waste water during construction and beyond

A waste water treatment plant has been built specifically for the project to treat all water collected at the long-term waste management facility, during and after its construction, and at the Port Granby Waste Management Facility site during waste excavation. Following completion of the Port Granby Project, groundwater will continue to be collected at the existing site and treated for decades to come.

The plant has been designed to treat a wide range of contaminants using a two-stage process – biological treatment followed by reverse osmosis – ensuring the treated waste water meets all requirements for discharge to Lake Ontario.



Safely transporting the waste

Waste transported from the existing Port Granby Waste Management Facility to the new site, north of Lakeshore Road, travels along an internal waste haul route and under a temporary underpass, avoiding the use of public roads. Trucks are covered and monitored while transporting waste.



Port Granby Project Sites



Economic benefits

The Government of Canada has committed \$1.28 billion to complete the PHAI, including \$273 million for the Port Granby Project. During the clean-up phase, the area will realize significant economic benefits.

The PHAI is predicted to create about a thousand new jobs in the region in everything from engineering, excavation and skilled trades to site restoration and landscaping. In addition, every project dollar spent is estimated to generate economic spin-offs, which are already creating new opportunities for area businesses in the form of jobs, supplies and services.

Property Value Protection Program

A Property Value Protection (PVP) Program is in place to compensate eligible property owners in a designated area of southeast Clarington if they experience a loss on the sale or rental of their property or mortgage renewal difficulties as a direct result of project activities.

The PVP Program began in 2001 and will remain in effect until two years after the completion of the long-term waste management facility.

Keeping the public informed about the Port Granby Project

The PHAI provides the public with a variety of ways to learn about the Port Granby Project including newsletters, fact sheets, a project website, community meetings, tours and a Project Information Exchange in Port Hope.

A Citizen Liaison Group, composed of volunteer residents, provides the PHAI Management Office with community perspectives about the cleanup and a forum for sharing information.



Visit our website at www.phai.ca

Ensuring project safety

The Canadian Nuclear Safety Commission (CNSC) granted a licence for the Port Granby Project in 2011. In issuing the licence, the CNSC concluded that Canadian Nuclear Laboratories – the lead agency for the PHAI – is qualified and equipped to carry out the project in a manner that

protects the environment and the health and safety of workers and members of the public.

During construction and excavation activities, project contractors must adhere to stringent health and safety plans required by the PHAI Management Office under

the CNSC licence. Contractor requirements for the protection of the public, workers and the environment include dust and traffic management, occupational health and safety practices and radiation protection.

After the Port Granby Project is finished

Years of detailed studies, review and government approvals have brought the Port Granby Project to the point where it is today. Through community consultation, a naturalized landscape design was developed for the engineered aboveground mound once it is capped and closed. The grassed mound will mimic natural drumlins in the area, helping it to blend into the landscape.

The existing Port Granby waste site (pictured below) will be restored and returned to a natural state once the waste has been safely removed. The Port Granby Project will leave an honourable legacy for future generations.



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