



LAFARGE

WELLINGTON

SUMMARY

1. When quarries are constructed, precipitation & groundwater accumulates in the excavation site, requiring it to be pumped out - this is called dewatering.

2. We've learned from local stakeholders how important groundwater is to the community. We took time to carefully assess the site and made design changes based on local knowledge.

Whether a highway, a hospital, a school, an apartment building, a home, a driveway, a water main, or a myriad of other projects – we need stone and gravel.

History & Future; Lafarge Wellington

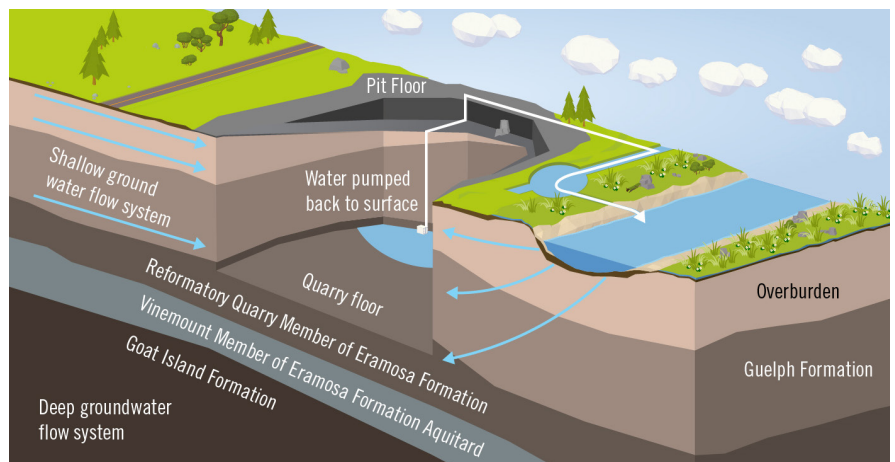
The Lafarge Wellington site, located at 7051 Wellington Road 124, commenced operation in the 1970s. During this time it was periodically operated as a sand and gravel pit under the Aggregate Resources Act (ARA; Ontario 1990). The site also hosts a Ready Mix Concrete plant operated by Lafarge and an Asphalt plant operated by another company under a lease.



What Is Proposed? Stone and gravel are essential building materials for Ontario's infrastructure. With considerable investments being made by all governments in infrastructure projects and the exhaustion of other local quarry resources, the Wellington site is being readied to re-commence aggregate production under its existing license. Before re-commencing operations, amendments to the existing "Permit to take Water" (PTTW) Number 2718-7S3RM7, and "Industrial Sewage Works" (ISW) Approval (Col A No. 0290-6PHGPS) are required. If approved, this will allow Lafarge to meet local infrastructure demands in accordance with modern operating standards.

Gravel Production Above Aquitard

The bedrock extraction onsite is below the water table and will be limited to 285 m above sea level which is above the Vinemount Member of the Eramosa Formation. The Vinemount Member of the Eramosa Formation acts as an aquitard (rock barrier) between the Guelph Formation aquifer above it and the Goat Island & Gasport Formation aquifers below it. This ensures a separation between the lower aquifer and our operations.



3. In doing this assessment, Lafarge engaged experts to conduct thorough water evaluations, including over a year of monitoring, to carefully measure & assess the site, followed by additional months of study.

4. Most of the water removed from the upper bedrock aquifer due to dewatering will be discharged back into the wetland & Speed River. There it can infiltrate back into the aquifer system & minimize consumptive use. The majority of the water is being handled & not removed from the water shed.

5. Although the site's aggregate license allows extraction below the Vinemount aquitard, which shields the deep groundwater aquifer, Lafarge is only applying for operations above the aquitard to ensure a barrier between the lower aquifer sources and our excavation.

Consultation Process

Lafarge is meeting with Provincial/Local Representatives at the Ministry of Environment, Conservation & Parks, Township of Puslinch, Township of Guelph-Eramosa, County of Wellington & City of Guelph about the Wellington Project. Lafarge has also retained experts to prepare mitigation & monitoring reports to ensure wells & the natural environment are protected. For the community, Lafarge is hosting a public open house to provide additional details & answer questions.

Applications Submitted

The proposed amendment to the site's Permit to Take Water (PTTW) uses the word "take", but it can be misleading. Much of the water removed from the upper bedrock aquifer due to dewatering will be discharged back into the wetland and Speed River where it can infiltrate back into the aquifer system. As a result, consumptive use is minimal by the design of the proposed operation. Similarly, the Industrial Sewage Works amendment application refers to the return of storm and groundwater back to the wetland and Speed River, not sanitary sewage.



Why do we need to handle water? When quarries are constructed, they become an open excavation into which precipitation and groundwater seepage, through the quarry walls, can flow. Over time, the excavation would fill with water and so it is necessary to pump the water out of the quarry during operation. After proposed water handling begins, a small percentage of water will continue to be used on site while the majority will be pumped into a nearby wetland (partially recharging the upper aquifer) & the Speed River - i.e. to a large extent where it currently flows.

Water Management Principles

A few important things to understand about aggregate extraction & water resources:

- Clean industry: Chemicals are not added in the extraction & processing of aggregates.
- Water is handled, not consumed: Lafarge handles water & returns it to the watershed in a controlled manner. Only a small percentage of water at this site will be used, while the majority will be kept in the watershed.
- Highly regulated: Extensive monitoring & reporting is required to verify the protection of water resources, including private wells, monitoring wells & the natural environment.

To that end, Lafarge has engaged Golder Associates to complete studies outlining mitigation measures that limit potential adverse effects of aggregate production. The mitigation plan also includes directing dewatering discharges to adjacent wetlands (to prevent dry conditions and partially recharge the upper aquifer) & the Speed River. The application proposes to continue the maximum amount of 6,055 m³/day of water used today by the site's manufacturing operations and to add a maximum of 15,500 m³/day for groundwater & surface water (from storm water) dewatering. These amounts are conservatively estimated for the final year of the 10-year permit. In the first year of operations we estimate adding a maximum of 1,448 m³/day to our existing use.



About Lafarge

Lafarge is Canada's largest provider of diversified construction materials. With 6,000 employees and 400 sites across Canada, our mission is to provide construction solutions that build better cities and communities. The cities where Canadians live, work, and raise their families, along with the community's infrastructure, benefit from the solutions provided by Lafarge consisting of aggregates, asphalt and paving, cement, precast concrete, ready-mix concrete and infrastructure construction.

Lafarge is committed to providing solutions using sustainable manufacturing practices and improving the environment in and around its operations. The company has a sixty year history in Canada and continually works to reduce carbon dioxide emissions, restore wetlands for native plants and animals, and identify waste materials that can be recycled and used in our operations.

For Media Inquires, Contact:

Adam Yahn - ayahn@summa.ca

For Additional Information, Contact:

Faith.Stewart@lafargeholcim.com

Please see our project website lafargewellington.ca for project reports.

To provide comments to the Ministry, please visit www.ero.ontario.ca and search for "Lafarge Canada Permit to Take Water" or "Lafarge Canada Industrial Sewage Works".