



TECHNICAL MEMORANDUM

DATE July 3, 2025

Project No. CA0042515.2530

TO Chris Galway
Lafarge Canada Inc.

CC Caitlin Port, Brian Zeman
MHBC Planning, Urban Design & Landscape Architecture

FROM Sean McFarland, Phyllis McCrindle

EMAIL sean.mcfarland@wsp.com

RE: LAFARGE GOODWOOD EXTENSION PIT - HYDROGEOLOGY PEER REVIEW COMMENTS FROM AECOM

The following response to the hydrogeology peer review comment from AECOM concerning a well monitoring plan for adjacent wells is provided below. The response to the Storm Water Management Plan comments will be provided separately by the WSP surface water discipline.

AECOM COMMENT

Well Monitoring Plan for Adjacent Wells.

WSP Response

As indicated in the hydrogeological report there will be no significant drawdown during the excavation of the pit above and below the water table. The estimated drawdown in private wells will be very low - <0.01m, corresponding to a <0.1% reduction in the water column. Given the minimal groundwater level drawn and the low reduction of water column, there is no need to monitor private wells.

As outlined in the Water Report and included on the Site Plan, the three on-site wells will be monitored throughout pit operations including; Monthly manual groundwater level monitoring and an annual groundwater quality sampling for general chemistry, metals, bacteria, petroleum hydrocarbons and volatile organic compounds.

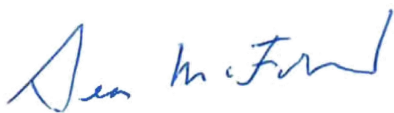
In addition, the ARA Site Plan requires that Lafarge complete the door-to-door water well survey of private wells prior to extraction occurring below the water table.

During this water well survey water quality samples will be collected from private water wells of residents that provide permission for sample collection. These samples will be obtained from taps with untreated water. Field parameters (pH, electrical conductivity and temperature) will be collected at the time of sampling. The water samples will be collected prior to extraction below the water table to provide water quality baseline data.

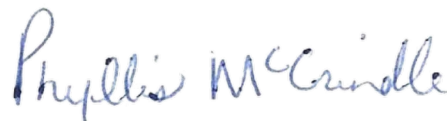
Based on recent discussions with surrounding landowners, the four domestic wells are proposed to be included in the well monitoring program subject to landowner permission. The updated monitoring program and well compliant procedure has been updated on the June 2025 ARA site plan and includes the following:

- 1) A groundwater and surface water monitoring shall continue through Operations. The following tasks shall be carried out:
 - Monthly manual groundwater level monitoring at the three on-site monitoring wells.
 - The three onsite monitoring wells shall be equipped with automated pressure transducers with data loggers, a minimum of one year prior to extraction below the water table in order to provide a continuous record of groundwater levels.
 - Annual groundwater quality sampling of the on-site wells shall be completed for general chemistry, metals, bacteria, petroleum hydrocarbons and volatile organic compounds.
 - Annual surface water sampling of the pit pond shall be completed during the period of below water table extraction for general chemistry, metals, bacteria, petroleum, hydrocarbons and volatile organic compounds.
 - If landowner consent is provided, the following private wells shall be included in the monthly groundwater monitoring and annual groundwater sampling program: 4809, 4639, 4709, 4840 and 4860 Concession Road 4.
- 2) The Site domestic well will be decommissioned per O.Reg. 903 by a licensed well contractor either prior to extraction or at such time that extraction encroaches on the well location.
- 3) To address any complaints from residents concerning the impact of the pit operation on their domestic water wells, the following Well Interference Complaint Procedure shall be in place for the following residential wells: 4809, 4639, 4709, 4840, 4860 Concession Road 4:
 - a. Owners of the domestic wells experiencing disruption or quality problems shall immediately notify the Licensee;
 - b. The Licensee, upon receipt of any water supply disruption or water quality complaint, shall retain the services of an independent Qualified Person (QP, i.e. P.Geo. or P.Eng.) to investigate the cause of the complaint;
 - c. If, through the investigation, it is determined that pit operations have caused an adverse effect at the residential well in question, the Licensee, at their expense, either restore or replace the affected water supply.
 - d. If, through the investigation, it is determined that pit operations have not caused an adverse effect to the well in question, the Licensee shall provide a report documenting the results of the investigation to the well owner and retain a copy on-file so that it can be made available upon request by agencies such as the Township, MNR or MECP.
 - e. Prior to extraction below water, a door-to-door water well survey shall be conducted to confirm baseline conditions at private wells within 500 m of the Site.

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