

October 2, 2024

Attention: Adam Wendland
Town of Caledon
6311 Old Church Road
Caledon, ON L7C 1J6

SLR Project No.: 241.031392.00001

Revision: 0

RE: Air Quality Peer Review
CBM Aggregates/St. Mary's Cement; Part of Lots 15-18, Concession 4
WSCR and Part of Lot 16, Concession 3 WSCR, Town of Caledon

SLR Consulting (Canada) Ltd. (SLR) was retained by the Township of Caledon to conduct a peer review of the submission associated with land use planning documents as they relate to air quality impacts for the proposed aggregate extraction and quarry at Part of Lots 15-18, Concession 4 WSCR and Part of Lot 16, Concession 3 WSCR, located in the Town of Caledon, Ontario.

Project Understanding

SLR understands that an application for Official Plan and Zoning By-Law Amendments was filed with the Town of Caledon by Glen Schnarr & Associates on behalf of CBM Aggregates/St. Mary's Cement Inc. (Canada) (the Applicant). The application is to amend the Official Plan and Zoning By-law to redesignate the subject lands (the Site) from General Agricultural Area, Rural Lands and Environmental Policy Area to Extractive Industrial Area B to permit a below the water table pit and quarry use as well as accessory uses. The proposal is for a Class A licence on 261.2 hectares of land, for a below the water table gravel pit and quarry operation with a maximum tonnage of 2.5 million tonnes per annum. It is estimated that the area of extraction will contain 80 million tonnes of high-quality bedrock resource and 5 million tonnes of sand and gravel resource. The Site will be dewatered to allow operations in a dry state.

Materials Reviewed

Materials reviewed include the following:

- Air Quality Impact Assessment, Proposed Caledon Pit / Quarry, prepared by Golder Associates Ltd., revised July 2023.
- Blast Impact Assessment, Proposed Caledon Pit / Quarry, prepared by Golder Associates Ltd., revised July 2023.
- Operational Plan, drawing 2 of 4, prepared by MHBC Planning Urban Design & Landscape Architecture, File. No. 8816AF, dated August 2023
- Rehabilitation Plan, drawing 4 of 4, prepared by MHBC Planning Urban Design & Landscape Architecture, File. No. 8816AF, dated August 2023

Peer Review Findings

The air quality assessment prepared by Golder and Associates, in general, follows the Provincial Guidance documentation for preparing an air quality assessment in the Province of Ontario, specifically, in consideration of the MECP “Air Dispersion Modelling Guideline for Ontario-Version 3.0”, dated March 2017. As such, the general statements referencing the requirements for preparing appropriate studies for evaluating air quality and/or potential land use compatibility have been considered in the study prepared, addressing statements in the regulatory instruments of the Provincial Policy Statement, the Greenbelt Plan, and the Town of Caledon Official Plan.

The study completed by Golder also follows the Terms of Reference prepared by Golder and are included in Appendix A of the report.

With regards to the materials reviewed, SLR has the following comments and recommendations directed to the proponent regarding details of the study completed:

1. Ontario Regulation 244/97, the General regulation under the ARA provides some specific setbacks from sensitive receptors for which dust suppressants are required for both fugitive emissions and direct source emissions with these setbacks being 1000 m and 300 m, respectively [see Conditions of Licence and Permit, 0.12(2)1. and 2.]. Please confirm how these conditions will be met for the proposed activities and that these conditions will be referenced in the appropriate regulatory instruments for the project (e.g., site plans, environmental approval, etc.).
2. Please confirm the appropriate Environmental Approval under the Environmental Protection Act, as stipulated in Ontario Regulation 244/97 [0.12(2).2], for the pit and quarry operations of the proposed facility will be sought.
3. Although not likely a major component of the overall emissions expected from the proposed operations, please confirm what regulatory instrument will reference the drilling related mitigation measures. It has been assumed that fabric filter will be used for the system in order to apply the 99% emission reduction for the activity, as per Section 5.1 which describes drilling operations. There is no mention of the mitigation measure in the Blasting Assessment nor does it appear in the Best Management Practices Plan for the Control of Fugitive Dust (BMPP).
4. Section 5.4 of the assessment describes material handling activities. As part of this section, it is mentioned that an estimate of material moisture percentage is used as a factor for estimating particulate. Understanding that materials below the water table would inherently be saturated, the assessment mentions that work faces are dewatered prior to conducting work so that the area of activity is in a ‘dry state’. When referring to quarry material handling (Source QUARRYMH in the Emission Summary), please provide further justification as to why the maximum moisture content of 4.8%, which translates to an emission factor that is a third of the emission factor used for other materials on site, is suitable if the working area is in a ‘dry state’.



5. Mitigation strategies have been referenced and control efficiencies applied in the assessment prepared. This includes but is not limited to 70% control efficiency, assuming best practices will be applied for stockpile management; and a 95% control efficiency for management of un-paved road dust, both assuming water applications will be applied during operations. Please confirm what regulatory instrument(s) these and other mitigation strategies to be implemented will be referenced as part of the ARA licence.
6. Please provide further discussion on the potential cumulative effects of the other aggregate operations in the area, given the proximity to the community of Cataract and the existence of other operations surrounding that community (particularly to the North and east). Although there may not be a combined effect in the addition of emissions from one operation to the other, as the community is between two operations and never downwind for both operations, there may be a potential for an increase in the frequency of how often the neighbouring community might be affected by surrounding aggregate operations. Please provide a comment on the potential for increased frequency of impacts.
7. Please clarify the mechanism of how the best management practices plan will become an instrument in the regulation of this facility's operations. It is recommended that this plan be referenced in the formal site plans for this facility and registered with the Ministry of Northern Development, Mines, Natural Resources and Forestry (NDMNRF) for the application for the new Class A Quarry Below Water licence, under the Aggregate Resources Act (ARA). Also, this document should be included with the materials submitted for an environmental approval application. Other than the reference in the air quality assessment, this document is not referenced in the other materials referenced above including the blasting assessment and the two plan drawings prepared by MHBC.

Statement of Limitations

This report has been prepared by SLR Consulting (Canada) Ltd. (SLR) for the Township of Caledon (Client) in accordance with the scope of work and all other terms and conditions of the agreement between such parties. SLR acknowledges and agrees that the Client may provide this report to government agencies, interest holders, and/or Indigenous communities as part of project planning or regulatory approval processes. Copying or distribution of this report, in whole or in part, for any other purpose other than as aforementioned is not permitted without the prior written consent of SLR.

Any findings, conclusions, recommendations, or designs provided in this report are based on conditions and criteria that existed at the time work was completed and the assumptions and qualifications set forth herein.

This report may contain data or information provided by third party sources on which SLR is entitled to rely without verification and SLR does not warranty the accuracy of any such data or information.

Nothing in this report constitutes a legal opinion nor does SLR make any representation as to compliance with any laws, rules, regulations, or policies established by federal, provincial territorial, or local government bodies, other than as specifically set forth in this report. Revisions to legislative or regulatory standards referred to in this report may be expected over time and, as a result, modifications to the findings, conclusions, or recommendations may be necessary.



Closure

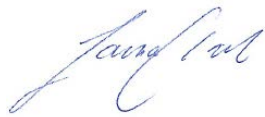
Overall, the reporting completed by Golder and Associates is detailed and addresses the major issues or concerns with respect to potential air quality impacts of the proposed facility. The findings are associated with technical details that require clarification, as summarized above and the mechanisms to which obligations including mitigation are referenced so that these terms and conditions become regulated instruments under the Aggregate Resources Act and Environmental Protection Act.

The above findings have been provided without having reviewed the modelling files used by Golder and Associates to complete the air quality assessment. These files should be obtained to allow for peer review to confirm the conclusions stated on behalf of the proponent.

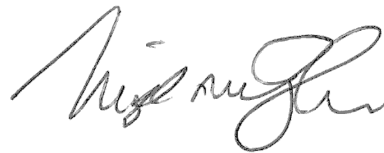
Questions concerning the findings detailed above may be directed to the undersigned.

Regards,

SLR Consulting (Canada) Ltd.



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