



CBM-Caledon Quarry

CAART COMMENT SUMMARY TABLE RESPONSE #2 – [AIR QUALITY]

Please accept the following as feedback from the Caledon Aggregate Review Team (CAART). Fully addressing each comment will expedite the potential for resolution of the consolidated CAART comments and individual agency objections. **Additional comments may be provided once a response has been prepared to the comments raised below and additional information provided.**

Colour Code	Description
	Resolved
	Resolved subject to additional information being provided to CAART Reviewers (e.g, Implementation Guide, Report Addendums)
(no colour)	Response provided, but no further action taken or required by Project Team

	Initial CAART Comments (Date)	Page / Section	Applicant Response (January 22, 2025)	CAART Response – SLR Consulting (Canada) Ltd. (November 28, 2025)	Applicant Response (February 27, 2026)	CAART Response – SLR Consulting (Canada) Ltd. (May 25, 2026)
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.).	Section 5.8, Page 17	The use of dust suppressants on all haul roads is detailed in Table 4 of the Best Management Practices Plan (BMPP) for the Site. It is a requirement of the <i>Aggregate Resources Act</i> (ARA) Site Plans to operate in accordance with the BMPP and therefore it is enforceable under the provisions of the ARA.	Please comment on the use of dust suppressants on other sources of fugitive dust in addition to the haul roads. Table 4 of the BMPP does not outline the intent to use dust suppressants (water or chemical) on sources other than the haul roads. These details should be included in the BMPP.	Table 4 of the BMPP does outline the use of spray bars (i.e. water spray) as a dust suppressant for the crushers and screens. The material coming off the crushing and washing plants will be wet due to the water spray used as a control measure during crushing, and due to washing in the wash plant. Therefore, dust suppressants are not required during handling and stockpiling of washed and processed material.	Acknowledged
2.	Please confirm the appropriate Environmental Approval under the Environmental Protection Act, as stipulated in Ontario		Confirmed. An Environmental Compliance Approval (ECA) under Section 9 of	Please confirm whether the ECA will be solely for the crushing activities or for the entirety of the processing operations. Will a mobile crusher be	The ECA will be for site-wide operations. There will not be any third-party mobile crushers used onsite. CBM	Acknowledged

	Regulation 244/97 [0.12(2).2], for the pit and quarry operations of the proposed facility will be sought.		the <i>Environmental Protection Act</i> (EPA) will be required prior to the operation of the crushing plant.	used onsite that is owned and operated by a third party or will the site operator have ownership and oversight over the ECA?	will have ownership of all equipment and the ECA.	
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).	Page 15, Section 5.1	<p>Controls on the drill are not described in the blast impact assessment as they do not impact the blast impact analysis, but it is acknowledged that most drills are typically equipped with a 2-part dust cyclone which would act to reduce the amount of dust from the drilling process.</p> <p>The use of a dust suppression system on the drill is identified in Table 4 of the BMPP and is included in the technical recommendations. It is a requirement of the ARA Site Plans to operate in accordance with the BMPP and therefore it is enforceable under the provisions of the ARA.</p>	<p>The emission rates calculated for the drilling operations are fully controlled at 99% through the fabric filter. Please comment on the capture efficiency of the filter system, and how the drilling operations are to be enclosed.</p> <p>Table 4 of the BMPP does not explicitly state that the blasting operations are to be controlled through the use of a fabric filter with an efficiency of 99%, but that, "drills equipped with dust suppression systems shall be used at all times". A minimum control efficiency, and a description of the minimum enclosure requirements to ensure emissions are fully controlled through the filter or similarly efficient system should be noted.</p>	<p>A dust cyclone with vacuum suction will be used on the drill.</p> <p>The suction hose of the dust cyclone is typically connected at the head of the drill, ensuring capture of dust as it is generated by the drill bit. The drill bit itself is typically enclosed in a steel tube or shroud to which the suction hose is attached.</p> <p>Vacuum suction will be applied continuously by the suction hose during operation of the drill and cyclone. Maintaining a proper seal between the bottom of the shroud and the ground is critical to achieving dust capture at 99% efficiency.</p> <p>To address the minimum control efficiency, and a description of the minimum enclosure requirements to ensure emissions control, the BMPP Table 4 has been updated to reference maintaining and ensuring a proper seal between the drill shroud and the ground as a procedure to achieve 99% dust control from drilling operations. See Attachment 1 for a copy of the updated BMPP dated February 2026.</p>	Acknowledged
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	Section 5.4, Page 16	The proposed operations at the Site include extraction of both sand and gravel and bedrock below the water table. As a result, dewatering is required to lower the water table and allow the sand and gravel and bedrock to be accessed. Dewatering of the site removes excess water by gravity, lowering the water table so that the aggregate is no longer submerged. Following this process, the area may be referred to as 'in a dry state', rather than a 'wet state'. It leaves residual	Acknowledged.		

	<p>of the emission factor used for other materials on site, is suitable if the working area is in a 'dry state'.</p>		<p>moisture in the sand and gravel and bedrock, and the sand and gravel in particular would maintain a relatively high moisture content.</p> <p>After extraction, aggregate material is crushed, screened, washed and stored in stockpiles before being hauled off-site. A lower moisture content was conservatively used for processed aggregate as these processes remove some of the finer particulate sizes, which impacts the porosity of the material, and may result in less moisture retention.</p>			
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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.	Section 5.7 & 5.8, Page 17	The dust BMPP are referenced on the Site Plans and will be included in ECA application submissions under Section 9 of the EPA, as required. As the BMPP is referenced on the ARA site plan it is subject to MNR enforcement.		<p>The details from Table 4 of the BMPP and elsewhere (as applicable) are outlined in the Site Plans, as items 3.a-j in Revision 5 dated July 2025. The Site Plans (Air Quality note 3.a) will be further updated to reference the updated BMPP dated February 2026.</p> <p>OPA #1 was approved by the Ministry on January 7, 2026, with modifications and the draft requirement for ambient air quality monitoring near new aggregate operations was removed.</p> <p>A third monitoring location will be added to be representative of the Community of Cataract. The AQMP has been updated to add the third monitoring station. See Attachment 1 for a copy of the updated BMPP dated February 2026. Appendix E of the BMPP includes the updated AQMP.</p> <p>Monitoring data will be available electronically to the Town of Caledon.</p> <p>Since 2021, CBM has been proactively undertaking ambient monitoring of existing air quality conditions.</p> <p>The ARA Site Plan will be amended to reference the Air Quality Monitoring Plan as follows:</p> <p>“k. The Licensee shall conduct air quality monitoring in accordance with the monitoring plan found in Appendix E of the BMPP. The locations of the air quality monitoring stations are shown on Drawing 1.”</p>	<p>OPA approval is acknowledged.</p> <p>Regarding the AQMP, on page 4. of the document regarding co-location, Section 7.2.1. It is suggested that monitoring for PM10 for QA/QC purposes using a BGI PQ200 equipped with a PM10 head and using of a Teflon filter will be completed. However, there is a reference in the section of document that the detection limit of the equipment is 10 times lower than the CAAQS of 27 µg/m³. This appears to be the threshold or CAAQS for PM2.5 as opposed to a CAAQS for PM10. There is no longer a CAAQS for PM10. The AAQC for PM10 is 50 µg/m³. Please confirm the particulate fraction that is to be monitored by the PQ200.</p> <p>What are the remedial action items or steps that will be undertaken by the Pit if exceedances of the AAQC are confirmed during monitoring? Is there a timeframe between detection of the exceedance and implementation of the mitigation?</p>
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6.	<p>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.</p>	Figure 1, Page 4	<p>For the majority of the lifetime of the Site, Cataract will be located over 1 km from any extraction and processing activities and in a primarily southeast (SE) location. Based on the wind rose included on Figure 1 in the dust BMPP, winds blow towards the southeast (SE) less than 10% of the time. Therefore, given the distance of Project activities from Cataract and the low frequency of winds blowing towards it, air quality impacts are not expected.</p> <p>Extraction activities will move to the South Area of the Site during Phases 6 and 7 of operations, at which point Cataract will be in a closer proximity to extraction. The maximum predicted cumulative concentrations of all assessed contaminants during extraction in Phases 6 and 7 are presented in Tables 15 – 16 of the Air Quality Impact Assessment (AQIA). For all assessed scenarios, the maximum predicted concentration is below the relevant assessment criteria, which are used as indicators of good air quality. The maximum modelled air quality concentrations are considered to be conservative as they assume maximum emissions from the Site occurring at the same time as worst-case meteorological conditions and background</p>	<p>According to the site area map and wind rose provided from Environment Canada in Figure 1 of the BMPP, winds that could blow fugitive dust over the entire site to the community of Cataract include winds from the west southwesterly through northwesterly directions. Based on the wind rose provided, the community of Cataract is a downwind position from the site, and it appears the winds are underestimated when only considering the main processing plant and not site wide operations or the extents of the community.</p> <p>As per the comment under item #5, please provide details of the monitoring program that has been referenced in the BMPP and how this will take into consideration the local residences including the Community of Cataract.</p> <p>Please confirm how the 90th percentile background concentrations were calculated over the 5-year dataset.</p>	<p>As noted under the Item #5 response, a third monitoring location will be added to be representative of the Community of Cataract. The AQMP has been updated to add the third monitoring station. See Attachment 1 for a copy of the updated BMPP dated February 2026. Appendix E of the BMPP includes the updated AQMP.</p> <p>Regarding the 90th percentile background concentrations, these were calculated using the hourly measurements collected by ECCC's National Air Pollution Surveillance (NAPS) program. The 90th percentile of the 1-hour measurements was calculated using the NAPS data from the years 2014, 2015, 2016, 2017 and 2018.</p> <p>All available 1-hour measurements across the 5-year period were used in the calculation of the 90th percentile background concentrations. For gaseous compounds, NAPS provides measurement data in units of parts per million (ppm) or parts per billion (ppb); these were converted to micrograms per cubic metre based on compound molecular weights and standard molar volume.</p>	Acknowledged
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7.	<p>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.</p>	Appendix D	<p>The dust BMPP is, in fact, referenced on the ARA Site Plans, which is enforced by the MNR. The BMPP would also be included in any future ECA application submissions under Section 9 of the EPA, as required.</p>	<p>Acknowledged. Refer to the response to item #5, the air monitoring plan should also be referenced on the ARA site plans, and the final details and recommendations of the monitoring plan should also be noted.</p>	<p>Section O.3. Air Quality of the ARA Site Plan will be amended to reference the AQMP as follows:</p> <p>"k. The Licensee shall conduct air quality monitoring in accordance with the monitoring plan found in Appendix E of the BMPP. The locations of the air quality monitoring stations are shown on Drawing 1."</p>
					<p>Acknowledged.</p> <p>Additional comments with respect to the BMPP document:</p> <p>2. The BMP's referred to in Section 4 of the BMPP should refer to Table 4 of the document (this may be a typo), the current version refers to Table 5.</p> <p>3. In the second last row of Table 1 (Requirement/Suggested Content) – there is a reference to using available data such as dust fall jars, as opposed to the active monitoring that is currently proposed. This item and the rest of the BMPP should be reviewed and updated where required to make sure the new air quality monitoring program (AQMP) is appropriately considered/reflected/referenced.</p>