TOWN OF CALEDON

CBM-Caledon Quarry
CAART COMMENT SUMMARY TABLE RESPONSE #1 – [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 (Date)
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 *Aggregate Resources Act* (ARA) Site Plans to operate in accordance with the BMPP and therefore it is enforceable under the provisions of the ARA.	
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.		Confirmed. An Environmental Compliance Approval (ECA) under Section 9 of the *Environmental Protection Act* (EPA) will be required prior to the operation of the crushing plant.	

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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	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. 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.	
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'.	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 moisture in the sand and gravel and bedrock, and the sand and gravel in particular would maintain a relatively high moisture content. 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.	
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.	
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	Figure 1, Page 4	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.	

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	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.		Therefore, given the distance of Project activities from Cataract and the low frequency of winds blowing towards it, air quality impacts are not expected. 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 concentrations at the 90%ile, which in reality is very unlikely. CBM have also committed to the implementation of the BMPP to reduce the potential of dust impacts to the surrounding area, including the community of Cataract.	
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.	Appendix D	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.	