Proposed Milton Quarry East Extension
JART COMMENT SUMMARY TABLE – Noise

Please accept the following as feedback from the Milton Quarry Joint Agency Review Team (JART). Fully addressing each comment below will help expedite the potential for resolutions of the consolidated JART objections and individual agency objections. **Additional, new comments may be provided once a response has been prepared to the comments raised below and additional information provided**.

	JART Comments (September 2022)	Reference	Source of Comment	Applicant Response	JART Response
Report/Date: Noise Impact Study December 7, 2021			**Aercoustics Engineering Ltd.**		
1.	The noise study has applied the sound level limits at off site receptor locations in accordance with MECP Publication NPC-300. The use of NPC-300 is considered appropriate.	General	Valcoustics Canada Ltd.		
2.	Even though the Milton Quarry operation will be comprised of three separate licenses (two for the existing quarry and an assumed new licence for the East Extension), the operation as a whole including all three licenses needs to be assessed.	General	Valcoustics Canada Ltd.		
3.	The report indicates the existing Milton Quarry is permitted to operate 24 hours per day with an unlimited annual extraction limit. The NIS for the East Extension has been prepared utilizing a maximum daily production scenario. We have the following questions/comments regarding the extraction limit. a. Is this maximum only applicable to the East Extension? b. Will there be additional extraction occurring on other parts of the quarry? c. If this daily production limit applies to the entire site, then this daily production limit effectively creates a maximum annual extraction limit (i.e. the daily limit times the number of production days in a year) which should be incorporated into a noise control recommendation.	General	Valcoustics Canada Ltd.		
4.	There appear to be a number of assumptions that have been made to complete the assessment that should be incorporated into the noise control recommendations since these assumptions establish a limit on the amount of equipment that can operate on the site. a. Section 2.1 implies that the only activity that could occur in the East Cell during Scenario 1 extraction in the East Extension is rehabilitation. This means that there should be no operations in the East Cell once extraction in the East Extension have commenced; and b. Section 5.1 indicates that noise assessment accounts for the berms that currently exist on the site. Thus, the maintenance of these existing berms needs to be a	Section 2.1 and Section 5.1	Valcoustics Canada Ltd.		

	noise control recommendation.				
5.	There also appear to be a number of contradictions within the text of the report. Thus, it is not possible to determine the operations that will occur on the quarry site and that these operations were appropriately accounted for in the acoustical modelling. For example: a. Section 2.2 states that the processing area in the main plant will "wind down" and that any processing in the main plant area will be done using one or two portable plants to process either recycled material or material extracted from below the main plant. However, later in the same section the report states that material from the muck pile in the East Extension will be hauled to the processing plant in the Main Quarry; b. Section 4.3.2 states the processing plant in the Main Quarry will be removed for Scenario 2 and (all?) processing will be done in the East Cell using a portable processing plant. However, the second paragraph in 4.3.2 goes on to state processing could also be done in the Main Plant using two portable plants; and c. The maximum equipment sound emission levels outlined in Table A do not appear to include all of the equipment that could operate on the site. The list is different in Table 3 and in the sample calculations. Table A needs to set limits on the types and amount of equipment that can operate on the site as well as their sound emission limits.	Section 2.2, Section 4.3.2, Table A and Table 3	Valcoustics Canada Ltd.		
6.	Section 4 Quarry Operations outlines the nature of the work that will occur on the quarry site. The list should include the movement of material on the quarry site.	Section 4	Valcoustics Canada Ltd.		
7.	Table 2 in the report outlines the typical operating hours at the East Extension while Section 4.1 states the quarry is proposed to operate 24 hours per day seven days a week. a. Was the assessment completed using the typical operating hours or the worst case 24 hours per day? If typical operating hours were used, these time restrictions need to be clearly outlined in the noise mitigation recommendations; b. In Table 2, for the loading and shipping activities, the typical operating hours are indicated as being "05:30 to 17:00, typically (24 hours is proposed)". Clarification regarding what this actually means is needed; c. The indicated hours are only for the East Extension. What will the operating hours be for the remainder of the quarry?	Table 2	Valcoustics Canada Ltd.		

8.	Section 4.2 Site Preparation and Rehabilitation proposes construction activities be restricted to daytime hours only to minimize their noise impact. The off-site noise impacts from construction can be significant. To minimize their potential noise impact, it is recommended that it only occur during the daytime (i.e. 07:00 to 19:00 hours) Monday to Friday and not on statutory holidays.	Section 4.2	Valcoustics Canada Ltd.		
9.	Section 4.3 indicates the annual tonnage to be removed in the East Extension is 2 million tonnes. Is this the annual production limit for the entire site or just for the East Extension?	Section 4.3	Valcoustics Canada Ltd.		
10.	There are some issues with the on-site trucking equipment limits: a. The general equipment limit reference the number of “Off-Road truck trips/hr”. This is a difficult to enforce limit since a 24 trips/hr limit could have 1 truck making all 24 trips or 24 trucks each making 1 trip. Unless an inspector were to count truck movements for an entire hour, this equipment limit could not be verified. Thus, the preference would be to recommend a maximum number of trucks, which can be easily counted, instead of the maximum number of trips/hr; b. The equipment limits for the two scenarios indicate a separate truck trip limit for the East Extension, Milton Quarry Extension, and the Main and North Quarry. Are these limits cumulative (i.e. will there be up to 72 truck trips/hr)? c. Why is the Off-Road truck trips limit of 32 higher for Scenario 2 than the 24 for Scenario 1 when the extraction limit for Scenario 2 is reduced?	General	Valcoustics Canada Ltd.		
11.	In Section 4.4, what will the additional two front end loaders in the Main Quarry and North Quarry be used for in both Scenarios 1 and 2?	Section 4.4	Valcoustics Canada Ltd.		
12.	Section 5.1 states the modelling generally accounts for hard ground in the quarry area. When was hard ground not used in the model for the quarry area?	Section 5.1	Valcoustics Canada Ltd.		

13.	Table 3 outlines the reference sound pressure levels of the equipment that was used to model the sound emissions from the facility. This table is not the same as Table A and does not include all of the noise sources that were modelled (as can be seen in the sample calculations in Appendix B). Also, which sources were measured at the existing Milton Quarry and which sound levels were assumed?	Table 3	Valcoustics Canada Ltd.		
14.	For the Highway Truck and Off-Road Truck noise sources, what operating speed was used to complete the assessment?	General	Valcoustics Canada Ltd.		
15.	Section 5.3 indicates that the recommended noise controls can be modified if appropriate studies are prepared. These studies need to be reviewed and approved prior to any modifications on the site.	Section 5.3	Valcoustics Canada Ltd.		
16.	Section 5.4 presents the worst-case noise level produced by operations within the East Extension. The noise study needs to confirm that the sound emissions from the entire site comply with the MECP noise guideline limits and not just from the East Extension.	Section 5.4	Valcoustics Canada Ltd.		
17.	Section 5.5. is titled Cumulative Noise Impact. It is not clear which quarry sites are being considered here since the Key Plan only shows the Milton Quarry. As indicated in p) above, the sound emissions from the entire Milton Quarry site must be shown to comply with the noise guideline limits. This section seems to indicate that the noise impacts from the entire Milton Quarry could exceed the noise guideline limits.	Section 5.5	Valcoustics Canada Ltd.		
18.	Section 6 states “since the quarry extension truck traffic will use the same haul routes, no significant change in truck trips is expected to occur”. It is not clear how the use of the same haul routes results in no change in truck trips. Clarification is needed.	Section 6	Valcoustics Canada Ltd.		

19.	Figure 3b only shows highway trucks coming to the site entrance and not travelling to the actual stockpile areas. In addition, the 7 shipping loaders are shown at a central location that is not close to the highway trucks they are loading and appear to not represent a predictable worst-case operating location(s).	Figure 3b	Valcoustics Canada Ltd.		
20.	Figure 4 shows a 100 m long berm and has a dimension of 80 m immediately beside the berm. Either this drawing is not to scale or there is an issue with the dimensioning on this drawing. Clarification is needed.	Figure 4	Valcoustics Canada Ltd.		
21.	Figure 5a seems to show two front end loaders operating in the East Cell for Scenario 1. However, the descriptions in the report indicate there will be no equipment operating at this location. Clarification is needed.	Figure 5a	Valcoustics Canada Ltd.		
22.	In the General Noise Controls Scenarios 1 and Scenario 2: a. Item 6. recommends a limit of 200 trucks per hour enter the site during the nighttime hour. This exceeds the 168 highway trucks per hour that were included in the assessment; b. Item 8. should be revised to indicate the bottom of the first lift shall have a maximum elevation of 325 m a.s.l.	General Noise Controls Scenarios 1 and 2	Valcoustics Canada Ltd.		
23.	In the Noise Controls for Scenario 1: a. Items 11 and 13 recommend an acoustic barrier on the north and west sides of the truck ramp(s). These barriers are not shown on the mitigation plans within the report; b. Item 12 recommends a noise mitigation measure for the screen decks. However, a reference sound emission level (either before or after the recommended mitigation) is not presented in the report. Thus, it will not be possible to confirm that the mitigation, if implemented, is adequate; c. Item 15 refers to a “single drill area”. It is not known where this location is since it is not shown on the drawings in the report; d. Item 15 also recommends a 3 m acoustic barrier for the drills. However, a specific extent and location for this barrier is not indicated. The recommendation needs to clearly indicate the maximum distance this barrier can be from the drills.	Noise Controls for Scenario 1	Valcoustics Canada Ltd.		

24.	Under Phase 1 and 2 in the Noise Controls for Scenario 2 section, the recommendation is no additional noise controls. It is not clear what no additional noise controls means. Since the operations and equipment in the extension are largely the same or greater than for Scenario 1 and there is increased activity in the East Cell, it is not clear why it appears no noise mitigation is needed when noise mitigation was required for Scenario 1.	Noise Controls for Scenario 2	Valcoustics Canada Ltd.		
25.	Appendix B provides sample calculations. We have these comments/questions: a. How are we to determine which scenario the calculations are for? b. The calculations appear to account for equipment that is not included in the equipment lists (Table 3 and Table A); c. Many of the results in the sample calculations are different than the worst-case sound levels presented in Table 4. For example, the calculation for R4 shows 42 dBA while the results in Table 4 show 40 dBA and 39 dBA for Scenarios 1 and 2, respectively. If the results in Table 4 are worst-case, why are the sample calculations showing higher results? d. Why are all the noise sources not included in the sample calculation for each receptor?	Appendix B	Valcoustics Canada Ltd.		
26.	The noise assessment should also incorporate these typical best practices into the noise mitigation recommendations: a. Since back up beepers are a common source of complaint, even when their sound emissions comply with the MECP noise guideline limits, the operator should consider the use of broadband alarms on the equipment operating on site and to design interior haul routes that minimize the need for trucks to operate in reverse; b. A noise monitoring program should be included in the recommendations to ensure equipment noise emission levels do not exceed those recommended within the report and that off site sound levels comply with the MECP limits; and c. A protocol should be established that provides a mechanism for the public to provide noise concerns to the operator and a procedure for the operator to follow to address any concerns.	General	Valcoustics Canada Ltd.		
27.					