

To: Burnco Rock Products Ltd.
#200 - 155 Glendeer Circle SE
Calgary, AB
T2H 2P9

June 24, 2024

Attn: Travis Coates, Maverick Lam & Ulrich Scheidegger

re: **West Cochrane - Noise Impact Assessment in Rocky View County, AB**

This letter is to address questions from Rocky View County regarding the West Cochrane Gravel Pit (the Pit) and is in conjunction with the noise impact assessment (NIA) completed in September, 2022. [Report entitled, “*Environmental Noise Impact Assessment for the West Cochrane Gravel Pit*” by **aci Acoustical Consultants Inc.**” (September 23, 2022)] (NIA).

Permissible Sound Level & Alberta Energy Regulator (AER) Directive 038 on Noise Control

At the time of writing the report in 2022, the Municipal District of Rocky View No.44 Bylaw No. C-5772-2003 discussed regulating and controlling noise but it did not have specific criteria as it related to noise pertaining to aggregates facilities. Therefore, the projected Project noise levels were compared to the current noise levels of the study area, which was based on a long-term noise monitoring conducted in the study area.

Burnco has since presented to Rocky View County that they would use AER Directive 038 as a guideline to establishing a permissible sound level (PSL). This document sets the PSL at the receiver location based on population density and relative distances to heavily traveled road and rail. When considering the nearest most impacted residential location, using the AER Directive 038, their permissible sound level would be **45 dBA** during the **nighttime** and **55 dBA during the daytime**. Refer to Appendix I for a detailed determination of the permissible sound levels.

L_{eq}1-Hour vs – L_{eq}24

As discussed in Section 5.3 of the NIA, “*all noise sources in the model assume that the equipment is operating throughout the entire 24-hour period, therefore there has been no reduction of the noise levels to account for typical breaks that occur during typical work-shifts.*” This is done by **aci** to provide conservative results (model projections being higher than actual noise levels). Thus, there would be no difference between the L_{eq}1-Hour vs – L_{eq}24 values.

However, for the purposes of the noise monitoring program, values will be provided using L_{eq}1-Hour averages.

We trust the information provided is sufficient; if there are further questions, please contact me directly at 780-499-1591 with any additional questions.

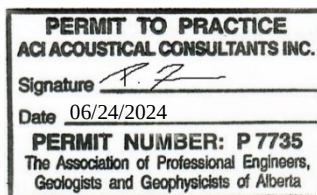
Yours very truly,

aci Acoustical Consultants Inc.,

Per



Patrick Froment, B.Sc., B.Ed., P.L.(Eng.)
Principal Partner



06/24/2024

Appendix I PERMISSIBLE SOUND LEVEL DETERMINATION

Permissible Sound Levels at Residential Receptor

Basic Sound Level				Night-Time	Day-Time
Proximity to Transportation	Dwelling Density (Per Quarter Section of Land)				
	1 - 8 Dwellings	9 - 160 Dwellings	> 160 Dwellings		
	Category 1	40	43	45	45
	Category 2	45	48		
	Category 3	50	53		
Basic Sound Level (dBA)				40	40

Time of Day Adjustment			
Time of Day	Adjustment (dBA)		
Night-time adjustment for hours 22:00 - 07:00	0	0	n/a
Day-time adjustment for hours 07:00 - 22:00	+10	n/a	+10
Time of day adjustment (dBA)		0	+ 10

Class A Adjustments				
Class	Reason for Adjustment	Adjustment (dBA)		
A1	Seasonal Adjustment (Winter)	0 to +5	0	0
A2	Ambient Monitoring Adjustment	-10 to +10	0	0
Sum of A1 and A2 cannot exceed maximum of 10 dBA Leq				
Class A Adjustment (dBA)			0	0

Class B Adjustments				
Class	Duration of Activity	Adjustment (dBA)		
B1	≤ 1 Day	+ 15	0	0
B2	≤ 7 Days	+ 10	0	0
B3	≤ 60 Days	+ 5	0	0
B4	> 60 Days	0	0	0
Can only apply one of B1, B2, B3, or B4				
Class B Adjustment (dBA)			0	0

Total Permissible Sound Level (PSL) [dBA]		45	55
---	--	----	----