

30 Wertheim Court, Unit 25 Richmond Hill, Ontario, Canada, L4B 1B9

> email • solutions@valcoustics.com web • www.valcoustics.com telephone • 905 764 5223 fax • 905 764 6813

January 18, 2018

Greenwood Construction Co. Ltd. Regional Road 2 Orangeville, ON L9W 2Y9

Attention: Sam Greenwood sam@greenwoodconst.ca **VIA E-MAIL**

Re: Response to Peer Review of Noise Assessment Violet Hill Pit Town of Mono, Ontario VCL File: 114-310

Dear Mr. Greenwood:

Valcoustics Canada Ltd. (VCL) prepared a Sound Impact Analysis, dated June 14, 2016 and a Memorandum dated July 6, 2017, for the proposed Violet Hill sand and gravel pit located in the Town of Mono. This letter has been prepared in response to the peer review comments provided by Novus Environmental, dated December 20, 2017.

The peer review completed by Novus indicates that they do not have any significant comments regarding the work completed and agree with the findings in both the original study and the updated memorandum regarding the anticipated noise due to the proposed pit operations. They do, however, indicate that the new proposed haul route entrance on Third Line may involve steep grades. This may affect the noise emissions from trucks travelling up and down the slope.

Our analysis used a conservative sound power level of 110 dBA (or a sound pressure level of 78.5 dBA at reference distance of 15 m) for haul trucks moving on site. It must be noted that the highest noise level from a truck occurs when the truck is fully loaded and travelling uphill. In this situation, the loaded trucks will be travelling downhill (leaving the site) and empty trucks will be travelling uphill.

Information on sound levels from heavy trucks travelling at low speeds is presented in the Federal Highway Administration Traffic Noise Model (FHWA TNM) Version 1.0 Technical Manual. For heavy trucks travelling at 20 km/hr, at cruise throttle, the sound level at a 15 m reference distance is approximately 75 dBA. At full throttle, the sound level increases to 80 dBA at a 15 m reference distance. Thus, in our opinion, the reference sound level used in the assessment is considered reasonable even when considering the incline the trucks must travel. Even if all of the trucks were assumed to operate at full throttle while operating on the Violet Hill Pit site, our analysis indicates that the MOECC noise guideline limits would still be met at all noise sensitive receptor locations.



Thus, based on the above, even if all trucks operating on the Violet Hill Pit site produced full throttle sound levels, our analysis indicates that the MOECC noise guideline limits would be met.

Let us know if you have any questions.

Yours truly,

VALCOUSTICS CANADA LTD.

Per: John Emeljanow, P.Eng.

AA\JE\tk J:\2014\114310\000\Letters\Violet Hill Pit L1 - Response to Peer Review.docx

cc: Craig Laing (<u>claingams5@gmail.com</u>)