



August 28, 2015

Via: Email

Ms. Kim Wingrove
CAO
The Township of Guelph/Eramosa
P.O. Box 700
Rockwood, ON N0B 2K0

Dear Ms. Wingrove:

**Re: JDCL Response to Hunter and Associates May 15, 2015 Peer Review
Project No.: 300032745.0000**

The Concerned Residents Coalition (CRC) retained Hunter and Associates (Hunter) to provide peer review services of the James Dick Construction Limited (JDCL) documentation associated with the proposed Hidden Quarry. The Hunter review is contained in a May 15, 2015 report. JDCL's Hydrogeological Consultant Harden Environmental Services Ltd. (Harden) responded to the Hunter comments in a letter dated July 16, 2015. R.J. Burnside & Associates Limited (Burnside) reviewed the Hunter letter and the Harden response and offers the following comments using the same numbering as the Harden/Hunter letters.

A recurrent theme in the Hunter review is that the site plans indicate a pit floor elevation of 349 AMSL in Phases 1 and 3 which is below the historical bedrock water levels necessitating dewatering to maintain a "dry" pit floor.

Harden has recognized that there is an issue and as a result has recommended that the site plans be revised to reflect a new pit floor of 354 AMSL which will allow the quarry to operate in dry conditions without any dewatering.

2.1 Applicants Mixed Seasons Bedrock Contour Water Levels

Hunter expresses concern with the use of a mixture of wet season and dry season water level data to create bedrock water table contours. At the end of the section Hunter states "furthermore, the applicants Tributary B hydrogeological conclusions are suspect".

Burnside is satisfied with the Harden response; however we are not clear as to why Hunter believes that the Tributary B hydrogeological conclusions are suspect since Harden has demonstrated that bedrock water levels have no influence on Tributary B.

2.2 Groundwater Modelling

Hunter raised concerns about the calibration of the Harden groundwater model and applies a 2x safety factor to the applicants drawdown predictions. Hunter provides a number of specific examples of how the model has been adversely affected by the data input.

Harden provides a satisfactory response to the Hunter concerns, but does not respond to the specific examples raised by Hunter. Harden indicates that the model represents an average condition. Harden does not challenge the 2x factor of safety proposed by Hunter.

1.0 Adaptive Management

This section of the Hunter review provides proposed trigger levels for both water levels and water quality.

Harden indicates that the discussion of trigger levels should occur once additional groundwater monitors have been installed and seasonal data obtained. Similarly Harden indicates that the details on water quality triggers can be developed after additional samples are obtained and prior to commencement of active quarrying.

Burnside concurs with the Harden recommendations to wait until additional data is available to set specific trigger levels, however the approach to develop the trigger levels should be agreed upon.

Should you have any questions, please contact the undersigned.

Yours truly,

R.J. Burnside & Associates Limited



Dave Hopkins, P.Geol.
Senior Hydrogeologist
DH:sd

cc: Ms. Liz Howson, Macaulay Shiomi Howson Ltd. (Via: Email)