



February 24, 2016

Via: Email

Mr. Shawn Persaud, BA, MCIP, RRP
Manager of Planning and Development
Township of Tiny
130 Balm Beach Road West
Tiny ON L0L 2J0

Dear Mr. Persaud:

**Re: Application for Site Plan Amendment
Aggregate License #3670 (Teedon Pit)
Cedarhurst Quarries and Crushing Limited
Project No.: 300001221.0000**

R.J. Burnside & Associates Limited (Burnside) has reviewed the letter dated April 17, 2015 from the Township of Tiny, which provided comments to the Ontario Ministry of Natural Resources and Forestry (MNRF) on the Application for Site Plan Amendment (Teedon Pit). The most significant change to the Site Plan is the proposed introduction of a wash plant area.

The water for the wash plant is supplied by a well and is stored in a pond on the site. Typically aggregate wash plants utilize significant volumes of water to 'wash' out the fine-grained sediments from the coarse sand and gravel. Although the wash water is recycled, there is a need to replenish the pond with groundwater. As a result, there is a potential for impact to groundwater levels in the area.

A number of nearby residents expressed concern that prior use of the wash pond caused their wells to become silty. Formal complaints were filed and an investigation by the Ontario Ministry of Environment and Climate Change (MOECC) concluded in November of 2015 that problems with nearby wells were not related to use of the wash pond.

It is Burnside's opinion that the current monitoring network does not provide sufficient data to satisfy the Township of Tiny Official Plan.

The Township of Tiny Official Plan indicates that:

- Changes to water quality and hydrological and hydrogeological characteristics of watercourses, lakes, aquifers and wetlands are to be minimized and no development is permitted that will result in a negative impact to the functions and processes of these features.

In addition, Part C Environment and Groundwater Management Policies of the Township of Tiny Official Plan includes objectives that strive to:

- Protect the quality of water available for drinking water purposes.
- Ensure that the integrity of the municipality's watersheds are maintained or enhanced.
- Identify what information is required to support an application that may have an impact on the hydrogeological resources of the Township.

Residents in the area of the Teedon Pit rely on individual wells for their drinking water supply. The information that Burnside has reviewed to date did not include a door-to-door survey to document the condition of residential wells in the area. Obtaining information on the well condition, well yield and water quality would provide a baseline which will be useful in resolving any future well interference claims. Similarly, the existing monitoring well network does not allow for the impact of the wash pond and make-up well on the groundwater resource to be evaluated.

Burnside recommends that if the MNRF were to approve the proposed Site Plan Amendments, the following should be undertaken as part of the approval process:

- The current conditions of nearby domestic wells should be established, including the well depth and condition of the casing/screen, and the well yield and general water quality. The work should be completed by the proponent using an independent qualified consultant.
- The monitoring network at the Teedon Pit should be expanded to include a staff gauge in the wash pond, a nested well with screens completed at a variety of depths (to monitor change in gradients during use of the wash pond), along with a number of wells completed in the aquifer(s) that are used by domestic wells in the area. A professional geoscientist (or equivalent) should be present during the drilling of the wells to describe the geology and select the intervals for monitoring well completion.

Yours truly,

R.J. Burnside & Associates Limited



Mr. David Hopkins, P.Eng.
Senior Hydrogeologist
DH:sd

Enclosure(s)

cc: Wayne Young, Interim Manager of Public Works (enc.) (Via: Email, wyoung@tiny.ca)

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