



May 28, 2020

Memorandum

To: Permit To Take Water Evaluator, Drinking Water and Environmental Compliance Division - West Central Region Office (Hamilton), 119 King Street West, Floor 12, Hamilton, ON

Submitted Online: Via Environmental Registry of Ontario website

From: Emily Vandermeulen, Risk Management Inspector, Town of Erin

Reviewed By: Kyle Davis, Risk Management Official, Town of Erin

RE: Environmental Registry Number 019-1706, Permit to Take Water St. Marys Cement Inc. – 6033 Trafalgar Road, Hillsburgh

- 1. This application is to renew Permit to Take Water No. 7713-AMNK6P for St. Marys Cement Inc. Water will be taken from Hillsburgh Source Pond for aggregate washing at the Hillsburgh Pit located in the Town of Erin, Ontario. This is an industrial taking and the permitted amount is 12,744 m³ per day.
- 2. The subject property is located within a Wellhead Protection Area D (WHPA-D), 25 year time-of-travel, with a vulnerability score 2 for the Hillsburgh municipal wells. The applicable source protection plan is the Credit Valley, Toronto and Region and Central Lake Ontario (CTC) Source Protection Plan. The property has been identified as being in a Highly Vulnerable Aquifer (HVA). The attached map (WHPA_Map_6033Trafalgar) shows the applicable vulnerable areas, as defined by the Clean Water Act, 2006, applicable to the subject property. Due to the vulnerability scores of these vulnerable areas, significant drinking water threats are not possible, therefore significant drinking water threat policies do not apply. However, activities in these vulnerable areas could be moderate or low drinking water threats, to which CTC Source Protection Plan policies do apply (see section 4). These activities include the handling and storage of dense non-aqueous phase liquids, organic solvents, and the application and storage of sodium and/or chloride. Further, the handling and storage of liquid fuel is also a low drinking water threat in these vulnerable zones.





- 3. The property is completely located within a significant groundwater recharge area (SGRA). An SGRA is an area where greater than normal recharge of water to the aquifer is occurring. Please see attached map (WHPA_Map_6033Trafalgar_Q). It is recommended that the Ministry consider the presence of the significant groundwater recharge area on the property, and that this area recharges above average amounts of precipitation to a highly vulnerable aquifer.
- **4.** It is recommended that the Ministry consider adding conditions that would protect the groundwater from any contaminants on the site. The CTC Source Protection Plan policies for moderate and low drinking water threats encourage the promotion of best management practices by the Province and other implementing bodies in order to encourage their use. Best management practices include, but are not limited to:
 - using secondary containment measures when storing chemicals and fuel
 - ensuring that all potential contaminants are stored safely away from areas where they could be hit by moving equipment or trucks, or have safety measures such as bollards
 - limiting the use of dust suppressant and road salt whenever possible
 - covering storage for road salt and dust suppressant
 - ensuring that there is a plan for spills prevention and response, and that all staff are trained on those procedures
 - maintaining up-to-date records of all inventory of chemicals and fuel stored on site
- 5. Any preferential pathways (transport pathways) existing or created must to be reported to the Source Protection Authority (SPA) by the Town. A transport pathway is a potential direct pathway to the aquifer that could allow contaminants to more quickly enter the groundwater. The purpose of this requirement is to ensure any updates to the vulnerability scoring used in the water quality WHPAs includes up to date information. Transport pathways include the excavation of aggregate. The Town and Wellington Source Water Protection will ensure that a Transport Pathway Notice will be sent to the Credit Valley Source Protection Authority and served to the applicant, pursuant to the Clean Water Act. It appears from the Southwestern Ontario Orthophotography Project (SWOOP) aerial photographs taken in 2015 that a large amount of overburden has been





removed from this site for aggregate extraction. Further, it appears that a pond has been created in the pit, indicating that the upper aquifer has been breached. It is assumed that this pond is the Hillsburgh Source Pond referenced in the Permit to Take Water.

If you require further information, please contact:

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Attachments 1 – Water Quality map: WHPA_Map_6033Trafalgar Attachment 2 – Water Quantity map: WHPA_Map_6033Trafalgar_Q