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June 21, 2021

Client Services and Permissions Branch 135 St. Clair Ave W Toronto ON M4V 1P5

Re: Renewal of Permit to Take Water No. 1381-95ATPY (Ministry Reference number 3572-A8XGCE) for water bottling purposes

The Grand River Conservation Authority (GRCA) has reviewed the report:

 Nestle Waters Canada – Aberfoyle; Technical Study for Permit to Take Water Renewal Application, prepared by Golder Associates et al., June 2019

and is providing the following comments in response to Notification of Application for Permit to Take Water dated May 5, 2020.

### **Key Comments**

- The GRCA supports the collaboration between the City of Guelph and Nestle Waters Canada to utilize the Guelph-Guelph/Eramosa Tier 3 numerical groundwater flow model for the current Triton Permit to Take Water renewal.
- The GRCA encourages and supports the continued use of numerical models developed for the Source Protection Program for Permit to Take Water applications.
- At a minimum, Triton Water Canada Holdings Inc. (Triton Water Canada) should reduce pumping during declared droughts based on the average weekly rate rather than a monthly rate. There will be a greater reduction in actual water use if Triton Water Canada reduces pumping based on average water taking rates rather than permitted maximum rates that are barely reached during non-drought periods.
- As monitoring data are reviewed by the province, the MECP should ensure that discharges to watercourses that support cold water species are not affected by this water taking and that the hydrologic function of nearby provincially significant wetlands is maintained.
- There are a large number of permitted and private domestic water takings in the vicinity of the permitted taking. The GRCA encourages the MECP to consider the cumulative impacts of all water takings in the local subwatershed when reviewing this permit application.

#### **Source Water Protection**

The water taking on the subject property at 101 Brock Rd South, Puslinch, Ontario is located within a Wellhead Protection Area Q (WHPA-Q) designated with a significant risk level for protecting the sources of municipal drinking water.

The completed Tier 3 Water Budget and Risk Assessment study (Tier 3 Study) for the Guelph/Guelph-Eramosa area, undertaken as part of the required work under the Clean Water Act, 2006, identifies consumptive water takings, which includes water taking from Well TW3-80, as significant drinking water threats.

Significant drinking water threats mandate the development of water quantity policies to be included in the Grand River Source Protection Plan. Water quantity policy development addressing consumptive water takings and recharge reduction activities is currently in process.

The results of this Tier 3 Study have been accepted by the Lake Erie Region Source Protection Committee and the Ministry of the Environment, Conservation and Parks. However, with policy development still in process, the Tier 3 Study results and policies have not yet been included in the Grand River Source Protection Plan and are not in legal effect.

In addition to the Tier 3 Study, a Risk Management Measures Evaluation Process (RMMEP) has been completed. The RMMEP identifies and updates significant threats, and ranks them to determine those that impact the municipal water supplies the greatest. The results of the RMMEP reveal that the majority of the highest ranked threats were City of Guelph municipal wells that impact themselves given increased future water demand and the relative close proximity to each other. The water taking from Triton Water well TW3-80 was ranked 20th within the RMMEP with a 1% impact on the closest municipal well (Burke Well). The complete Tier 3 Study and RMMEP reports are publicly available at <a href="http://www.sourcewater.ca/GGET-Tier3">http://www.sourcewater.ca/GGET-Tier3</a>.

In response to the *Interim Guidance Document* released by the Ministry of the Environment, Conservation and Parks in 2017 outlining requirements for the renewal of Permits to Take Water for water bottling purposes, Nestle Waters Canada (now Triton Water Canada) arranged for the numerical groundwater flow model developed for the Guelph-Guelph/Eramosa Tier 3 Study (Tier 3 Model) to be updated in the areas of the Aberfoyle and Erin operations and applied the model to assess the potential for cumulative effects, under both current conditions and various climate change and drought scenarios.

To apply the Tier 3 Model to the TW3-80 Permit to Take Water renewal, consultants from Nestle Waters Canada and the City of Guelph collaborated; this included sharing data between parties and consultations during data analysis, model refinement, and calibration, and leveraging the experience and local knowledge of these consultants gained through multiple

years of data collection and analysis. The modelling report is included as a supporting document for the application to renew the Permit to Take Water for TW3-80.

Where numerical models developed through the Source Protection Program can be reasonably modified or updated such that they meet the technical expectations and requirements, the GRCA continues to encourage and support the use of these models for assessing Permit to Take Water applications.

#### **Low Water**

The Mill Creek watershed is affected by drought periodically. Because the watercourses in this watershed are dependent on groundwater for baseflow, it is important that all water takings, including deep groundwater takings, reduce pumping rates during drought periods. Triton Waters is encouraged to continue the commitment to drought management shown by Nestle Waters by continuing their participation on the Grand River Low Water Response Team.

The permit renewal application states that Triton Water Canada will commit to voluntarily reducing monthly maximum permitted water use during times of declared low water conditions by 10, 20 and 30 percent, respectively. Based on past water pumping information provided in the application, these reduction targets on a monthly basis will not result in an actual reduction in water use during a drought period. At a minimum, Triton Water Canada should reduce pumping during declared droughts based on the average weekly rate rather than a monthly maximum rate. There will be a greater reduction in actual water use if Triton Water Canada reduces pumping based on average water taking rates rather than permitted maximum rates that they barely reach during non-drought periods.

## **Natural Heritage**

The water taking is located adjacent to the Provincially Significant Mill Creek Wetland Complex, which has both recharge and discharge areas. Changes to water levels can greatly affect the hydrologic function of the wetland complex. GRCA recommends that Triton Water Canada review the monitoring data collected over the period of the current permit and take any necessary action to ensure the hydrologic function of the wetland is not impacted.

Watercourses in the Mill Creek watershed support cold water fisheries, including Mill Creek which supports a self-sustaining population of brook trout and brown trout. Both species are sensitive to and reliant on groundwater discharge with brook trout heavily keying in on discharge areas for their spawning activities. As monitoring data are reviewed by the province, the MECP should ensure that discharges to watercourses that support cold water species are not affected by this water taking.

# **Cumulative Impacts**

The GRCA encourages the MECP to consider the cumulative impacts of all water takings in local subwatershed when reviewing this permit application. There are a large number of permitted and private domestic water takings in the vicinity of TW3-80. It is important to consider all of the groundwater takings in this area when reviewing any individual permit application.

# **Monitoring Program**

The proposed changes to the monitoring program would benefit from additional supporting information made readily available. This could include the original intent of the monitoring locations that are proposed to be removed, well logs, and hydrographs such that the proposed changes can be fully reviewed.

The Ministry should consider the above comments and ensure appropriate terms and conditions are included in the renewed PTTW.

Sincerely,

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Water Resource Engineer

**Grand River Conservation Authority** 

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