

Wednesday, October 25, 2023

Online Portal Submission

Permissions Modernization Team
Client Services and Permissions Branch
135 St Clair Avenue West, Floor 1
Toronto, ON M4V 1P5

Dear Permissions Modernization Team

RE: Streamlining permissions for water takings for construction site dewatering activities and foundation drains - ERO 019-6853

The City of Guelph (City) has received notice through the Environmental Registry of Ontario (ERO 019-6853 - <https://ero.ontario.ca/notice/019-6853>) regarding proposed policy changes to streamline permissions for water takings for construction site dewatering activities and foundation drains. This submission contains the City's response to the consultation notice.

Policy Proposal:

The Ministry of Environment, Conservation and Parks (the Ministry) is proposing changes to the [Ontario Water Resources Act \(OWRA\) O. Reg. 63/16](#) (*Registrations under Part II.2 of the Act – Water Taking*) and [O. Reg. 387/04](#) (*Water Taking and Transfer Regulations*) to further reduce burden related to water takings for construction site dewatering activities and foundation drains.

The Ministry's notice consists of two components:

- *Construction Dewatering*: For construction dewatering, these changes include removing the current volumetric water taking limit of 400,000 litres of ground water per day (L/day) with regards to taking ground water in relation to one or more dewatered work areas within a construction site. This would allow someone to self-register on the Environmental Activity and Sector Registry (EASR) for the taking of any quantity of ground water or storm water from a dewatered work area(s) at a construction site if all other current eligibility requirements are met. The existing exemption from a permission for water takings of 50,000 L/day or less remains in place. Furthermore, Ontario is proposing to remove the current requirements to notify the local conservation

authority of the water taking to align with changes to the *Conservation Authorities Act*.

- **Foundation Drainage:** For foundation drains, the Ministry is also proposing changes to simplify permissions for residential foundation drainage, such as those for houses and multi-residential buildings. The Ministry states that foundation drains are required to keep buildings dry when their foundations are constructed below the water table and that these buildings cannot be constructed without these drains in place; they must be operated for the lifetime of the building. The Ministry is proposing to make residential foundation drainage systems exempt from requiring a Permit to Take Water (PTTW) for water takings of up to 379,000 L/day. For water taking of more than 379,000 L/day from residential foundation drainage systems, a PTTW will still be required.

Context:

The Ministry has stated that the proposed amendments will ensure appropriate environmental protections are in place while reducing regulatory burden for construction and infrastructure projects.

The City has a strong interest in ensuring that the proposed regulatory changes do not result in a reduction in the environmental protections, particularly with respect to protecting groundwater resources used for municipal drinking water. Herein, the City provides comments on the proposed changes to the OWRA.

The City's interests in the regulatory changes are founded in recent work completed under the Ministry's Clean Water Act (CWA). The City, in conjunction for the Lake Erie Region Source Protection Authority, completed a Tier 3 Water Budget and Local Area Risk Assessment (Tier 3 Study) in April, 2017 which identified a Significant Risk of the City not having sufficient water to meet its future needs under drought conditions. This study, which is the first, comprehensive water budget study for the area, presents the early warning of future water shortages for the City of Guelph.

The study was conducted using a state-of-the-art, integrated groundwater – surface water model. The Tier 3 Study also identified a risk of significant baseflow reduction in several creeks and streams in Guelph and the surrounding area resulting from the future demand (i.e., 2038). The additional groundwater taking to meet the future water demand in 2038 was predicted to reduce baseflow in several local creeks. As a result of the Tier 3 Study, a Wellhead Protection Area for water quantity (WHPA-Q) has been identified surrounding the City of Guelph and extending out into the adjacent Townships within Wellington County. Within the WHPA-Q, existing water takings including PTTW's are considered Significant Drinking Water Threats (SDWT) for water quantity and Source Protection Plan policies are intended to ensure that drinking water threats cease to be or never become significant. The City is in the process of developing source protection

policies to address the Significant Drinking Water Threat (SDWT) associated with water quantity.

This is the basis for which the City provides its comments on the ERO Notice. Our comments are organized according to the two proposals: Construction Dewatering and Foundation Drains.

Construction Dewatering:

Regulatory Oversight

The ERO Notice indicates that the Ministry, “will retain its ability to inspect water taking activities and ensure that they are complying with all necessary legal requirements”. However, this means that there will not be a detailed review prior to approval of the EASR and, if the review occurs at all, it is likely to be after the water taking has occurred. Environmental impacts, if they occur, are likely to only be identified after the fact by complaints.

The use of an EASR for these water takings also means that there is no or limited public knowledge of the water taking, since the EASR will not be placed on the ERO. This means that there will be little opportunity to raise concerns and appeals on the water taking prior to the implementation of the operations.

The City is concerned that self-registration under an EASR does not provide the necessary regulatory oversight, particularly in a water quantity stressed area (i.e., water quantity Wellhead Protection Areas (WHPA-Q)) where the water taking would be considered to be a SDWT. The City recommends that the Ministry not remove the quantity exemption for dewatering operations in a WHPA-Q where the water taking is considered to be a SDWT.

The City is concerned that by delegating water taking proposals to an EASR process, providing less regulatory oversight and less public scrutiny, that the Ministry is abdicating its responsibilities to “provide for the conservation, protection and management of Ontario’s waters and for their efficient and sustainable use, in order to promote Ontario’s long-term environmental, social and economic well-being” as is required under the Ontario Water Resources Act.

Significant Drinking Water Threats

For most construction dewatering operations, the water taking activity would be a prescribed drinking water threat ([Clean Water Act, Section 1.1](#)):

- Threat #19 - An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.
- Threat #20 - An activity that reduces the recharge of an aquifer.

The water taking activity would be considered a Significant Drinking Water Threat in an area where there is a significant water quantity stress (i.e., WHPA-Q). Since the Ministry is proposing to remove the water quantity restriction on construction dewatering wherein a PTTW would be required, the Ministry is removing a potential source protection policy tool; a Prescribed Instrument policy would no longer apply to the drinking water threat activity.

The Ministry has stated that “the proposed amendments will ensure appropriate environmental protections are in place...” but with the removal of a source protection tool, the Ministry should explain how appropriate environmental protections are assured for these SDWT’s. If the City needs to compensate for the loss of this policy tool, the City will need to develop, approve and implement new water quantity policy tools to address foundation drains. The City recommends that the Ministry maintain the upper limit of 400,000 L/day and provide for PTTW’s above the limit, in order to ensure appropriate environmental protections are in place.

Pumping Rates

The City has been accepting, generally, of construction dewatering proposals in the past because of the short-term duration and the limited withdrawal rate. However, the proposal for construction dewatering will remove the upper limit of 400,000 L/day and provide, essentially, an unrestricted water taking rate. The City has seen dewatering proposals of up to 16,000,000 L/day, and with higher withdrawal rates there is a greater potential for impacts to water users and environmental resources. EASR’s provide less scrutiny and oversight on the water taking and therefore greater risk. The City recommends that the Ministry consider retaining an upper limit of 400,000 L/day in a WHPA-Q where the water taking would be considered a SDWT.

Time Limits

The Ministry should also consider adding a time limit on the EASR in a WHPA-Q where the water taking would be considered a SDWT, such as limiting it to less than two years to ensure that long-term or perpetual dewatering does not occur and that the EASR and its water taking can be reviewed if a longer time period is required.

Consultation/Notification

The Ministry should consider improving the consultation/notification process for EASR's in construction dewatering, particularly in a WHPA-Q where there is a significant water quantity stress and where the water taking would be considered a SDWT. The Qualified Person (QP) should be required to contact the appropriate Risk Management Official (RMO) for the local water system operator for the WHPA-Q. Notification should include providing a copy of the water taking and discharge reports to the RMO. Notice, within a WHPA-Q, should be increased to 30 days to allow the RMO to review the water taking report and to flag any concerns on the proposal. The Ministry should add directions to [O.Reg. 63/16](#) for contacting the RMO in advance of the preparation of the water taking report to ensure that the QP is fully informed on the implications of the proposed water taking with respect to the municipal water supplies in the WHPA-Q and that the QP addresses any concerns identified by the RMO.

The City expects that some consultation with the City will likely occur if there is to be a discharge to municipal sanitary or storm sewer system and this early consultation with the RMO would not be expected to delay the dewatering operations.

Cumulative Impacts

As noted above, the City has particular concerns with respect to water takings that may increase the water quantity stress in the WHPA-Q. The [Ministry's Permit to Take Water \(PTTW\) Manual \(2005\)](#) related to "Evaluating PTTW – Water Balance and Sustainability" (p. 23), states: "In most cases an applicant is not responsible for larger scale assessments that extend beyond the individual water takings' area of impact. However, the Director may consider the need for a larger scale assessment to be conducted based on impacts to natural functions of the ecosystem, water availability, use of water, and other issues as relevant." The City is concerned that use of an EASR and self-regulation does not appropriately address the potential for cumulative impacts of water takings if there is no prior review of the water taking. The QP may not be fully aware of the implications of water quantity stress associated with dewatering and may not incorporate the necessary reviews of existing water takings in an area, may not provide appropriate notifications to potential affected water users and may not be fully aware of impacts resulting from the water taking, particularly if the water taking is proposed at a high rate of taking and for a long duration. The City recommends that, where there is the potential for cumulative impacts, such as in a water quantity stressed area, the EASR for construction dewatering should be limited to the 400,000 L/day and for a period of less than two years.

Foundation Drains:

Increased Municipal Burden

By exempting foundation drainage from a PTTW process up to 379,000 L/day, the Ministry proposal removes the technical and regulatory oversight associated with the water taking activity. The City is concerned that the exemption transfers some of the responsibility for technical reviews to the municipality in its site plan approval process for building construction. PTTW's are typically assessed by the Ministry for technical feasibility and environmental impacts and can provide conditions for monitoring and record keeping; the exemption will remove these requirements. Additional effort will now be required by municipalities to review the proposals and provide for appropriate management of the water taking and its associated discharge. With provincial direction to increase housing densities within its municipal boundaries, the City expects more requests for this type of water taking activity as more high-rise development with deeper foundations occur in the City. The City is concerned that the exemption will increase the burden on municipalities to assume some of the oversight responsibilities that are more appropriately the responsibilities of the Ministry.

Storm Sewer Capacity

The exemption of foundation drainage from the PTTW process up to 379,000 L/day is expected to put additional stress on municipal storm sewer capacities. Storm sewers are normally reserved for storm water and not groundwater. The City discourages discharges of groundwater to storm sewers to reserve capacity for stormwater. With an exemption, developers are more likely to promote foundation drainage and to seek permissions from municipalities to discharge the water to municipal storm sewers. As demands on municipal infrastructure increase, municipalities may need to expand storm sewer systems to accommodate, the costs of which may not be recovered from the developer. Rather than promoting exemptions of water takings for foundation drains, the City would prefer that the Ministry promoted at-source management in order to conserve and protect limited water resources.

Significant Drinking Water Threats

As noted above, for foundation drains, the water taking activity would be a prescribed drinking water threat under the Clean Water Act, Section 1.1 and Threat #19 - An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body. The water taking activity would be considered a Significant Drinking Water Threat in an area where there is a significant water quantity stress (i.e., WHPA-Q). Since the Ministry is proposing to exempt foundation drains from the PTTW process, the Ministry is removing a potential source protection policy tool; a Prescribed Instrument policy

would no longer apply to the drinking water threat activity. The Ministry has stated that “the proposed amendments will ensure appropriate environmental protections are in place...” but with the removal of a source protection tool, the Ministry should explain how appropriate environmental protections are assured for these SDWT’s. If the City needs to compensate for the loss of this policy tool, the City will need to develop, approve and implement new water quantity policy tools to address foundation drains.

The City recommends that the Ministry not exempt foundation drains from the PTTW process where the water taking activity is located in a WHPA-Q and the water taking activity would be considered a SDWT.

Permanent Dewatering

Foundation drains result in permanent dewatering for the life of the building in which case, the water table in the area of the building is lowered and groundwater flow is directed to the foundation drains. As a result, the natural groundwater flow patterns are affected which may result in environmental impacts. Where foundation drains are directed to surface water, there is a loss of water from the local water budget which can affect natural features such as wetlands and streams. By removing the PTTW reporting of water taking up to 379,000 L/day, rather than promoting permanent dewatering, the province should consider alternatives to permanent dewatering such as waterproof foundations and recharge systems. Waterproof foundations and construction above the water table would negate the need for foundation drains. Design alternatives for foundation drains such as discharge to surface and re-infiltration in soakaway pits, dry wells and infiltration trenches would promote maintenance of the water budget. We note that the [Ministry’s Stormwater Management Planning and Design Manual \(2003\)](#) contains recommendations for foundation drainage discharge to re-infiltration systems. The City would prefer that the Ministry promote effective water conservation and protection rather than removing permissions for the water takings for the purposes of foundation drainage.

Cumulative Impacts

Similar to the construction dewatering noted above, the City is concerned about the cumulative effects that may occur if the regulatory oversight is removed for foundation drainage up to 379,000 L/day. As property densities increase in urban settings with more high-rise development and deeper foundations, foundation drainage is likely to be more prevalent. With more foundation drains in place, the cumulative impacts will increase and, with less regulatory oversight from the permit exemption, there will be less record keeping on water quantities lost from the groundwater system. The City can envision a number of foundation drains on adjacent properties all contributing to general dewatering of the area. With less

regulatory oversight and cumulative effects, the City is concerned that water quantities will be depleted at a rate faster than they can be replenished resulting in further increases in the City's water quantity stress. To ensure that there is appropriate monitoring and record keeping, the City would recommend that the PTTW requirements for foundation drainage remain in place to track and monitor potential cumulative impacts.

Water Quality Monitoring and Sewer Use Bylaw

In the ERO notice, the Ministry has asked why municipalities are imposing stringent discharge criteria for foundation drains and whether the province should play a role in limiting what criteria must be met when a building's foundation drains are discharging uncontaminated groundwater into a municipal system. As is a common municipal requirement for discharges to municipal storm or sanitary sewers, the Sewer Use Bylaw governs water quality of the discharge. The Sewer Use By-law prohibits discharges that may cause the sewage works effluent to contravene any requirement by or under the Ontario Water Resources Act or the Environmental Protection Act. The water quality requirements are usually defined based on the ultimate discharge location for the sewer systems. Discharges to surface water courses usually require compliance with Provincial Water Quality Objectives (PWQO) and/or the Environmental Compliance Approvals (ECA) of the municipal storm or sanitary sewer systems. PWQO's and ECA's, in some cases, may be more stringent than drinking water quality standards for some naturally occurring groundwater parameters. As such, the Ministry already plays a significant role in defining discharge criteria through the PWQO's. The City would be interested in hearing what the Ministry might propose to limit criteria for discharges into a municipal sewer system. Until the Ministry proposes to change the regulatory requirements of discharges into the environment (i.e., the PWQO's, ECA's), the City will maintain its Sewer Use By-law and require treatment, where necessary, for compliance with its sewer system approvals.

Final Recommendations:

For the reasons stated above, the City of Guelph recommends the following:

- For construction dewatering, where the water taking is located in a WHPA-Q and would be considered a Significant Drinking Water Threat, the Ministry should not remove the limit of 400,000 L/day, maintain requirements for a PTTW for water taking above 400,000 L/day, add two-year limits within the EASR process for construction dewatering and improve communications/consultations with the Risk Management Official.
- For Foundation Drainage, where the water taking is located in a WHPA-Q and would be considered a Significant Drinking Water Threat, the Ministry should not



provide the exemption for water takings up to 379,000 L/day and should maintain requirements for PTTW's for foundation drains.

We appreciate the opportunity to provide input and trust that our comments and recommendations will be considered by the Ministry. Should you have any questions, please do not hesitate to reach out.

Sincerely,

Jayne Holmes, P. Eng., PMP, Deputy Chief Administrative Officer
Infrastructure, Development and Enterprise
Location: 1 Carden Street, Guelph, ON N1H 3A1

T 519-822-1260 extension 2248

TTY 519-826-9771

E jayne.holmes@guelph.ca

guelph.ca