

Ministry of the Environment,
Conservation and Parks



**Proposed Amendments to Regulations under
the *Environmental Protection Act* and the
Ontario Water Resources Act to make
modifications to Environmental Activity and
Sector Registry requirements and
exemptions for low risk short-term water
taking activities**

October 2020

Discussion Paper

Proposed Amendments to Regulations made under the Environmental Protection Act

The ministry is proposing amendments to Ontario Regulation 63/16 - *Registrations under Part II.2 of the Act - Water Taking* (“EASR Regulation”) to allow a greater number of low risk short-term water taking activities to register on the Environmental Activity and Sector Registry instead of obtaining a Permit to Take Water or Environmental Compliance Approval.

These amendments include introducing low risk pumping tests with well understood impacts as a new prescribed activity for registration on the Environmental Activity and Sector Registry. In addition, the amendments would remove certain Environmental Activity and Sector Registry restrictions related to construction site dewatering and road construction activities that do not further environmental outcomes and create undue burden for businesses and individuals.

To ensure that we continue to protect the environment and human health, the following requirements would still apply to all registered water taking activities:

- Follow applicable regulatory requirements;
- Comply with operating criteria identified in the EASR regulation;
- Be conducted in accordance with a water taking design report and discharge report that is prepared by a Qualified Person; and
- Comply with all necessary legal requirements, with oversight, including inspections from the ministry when necessary.

PROPOSED REGULATORY REQUIREMENTS FOR NEW PRESCRIBED ACTIVITY: PUMPING TESTS

Description of Prescribed Activity

Pumping tests that take more than 50,000 L/day and up to 3,000,000 L/day in a period of 7 days or less within a single 30-day period are proposed as a new prescribed activity in the regulation.

Pumping tests are short-term groundwater field experiments conducted to obtain information about the groundwater source (i.e. aquifer) from which the water is being taken. These tests are typically used to assess an aquifer’s suitability for future proposed activities and to determine what conditions may be encountered at the site.

The prescribed activity under the regulation is the removal of water from the groundwater source during the pumping test.

Eligibility Criteria

To register on the Environmental Activity and Sector Registry, pumping tests would need to meet the following eligibility criteria:

- Pumping tests must not be located on land that is used for mining exploration or mining activities;
- Pumping tests must not be located in a contaminated area, and must not cause the movement of contaminants from a source of contaminants across a property boundary;
- Pumping tests must only take water from wells;
- The pumping test must not involve a transfer from a water basin located in the Great Lakes-St. Lawrence River Basin, the Nelson Basin, the Hudson Bay Basin or the Great Lakes watersheds.

Activity Requirements

All registered pumping tests would need to comply with the requirements under the Water Taking EASR Regulation.

Prior to registering the pumping test on the Environmental Activity and Sector Registry, a pumping test design report would need to be completed by a Qualified Person. The Qualified Person has to meet the same qualifications listed in the current regulatory requirements for construction site dewatering.

The pumping test design report would be required to include the following:

- A summary of the qualifications of the Qualified Person that prepared the report.
- The date of the report.
- A description of the pumping test, including information such as the duration and the flow rate of the test.
- A site-specific impact assessment of the surrounding groundwater and surface water features, including assessment of impacts on other water users and the quantity or quality of the water that is discharged.
- A notification protocol that identifies water users or property owners with water resources that have the potential to be impacted by the water taking and pumping test related discharge. The notification protocol must include the requirement to provide written notice. The notice would be required to include, at minimum, a description of where and when the water taking is to occur, the approximate time and duration of takings, the Environmental Activity and Sector

Registry registration number for the activity, and the contact information of a person who can be reached to report any interferences with water supplies.

- A detailed monitoring plan that describes how the effects of the pumping test will be recorded and how the potential impacts will be measured. This includes the monitoring of groundwater levels, discharge and impacts to other area water resources, as applicable.
- A contingency plan that outlines measures that will be implemented to address the potential impacts of the pumping test on water users and property owners in the area, including any measures to address site-specific impacts. A test shutdown protocol would also be included if the Qualified Person recommends that one is required.
- A discharge plan that identifies the quantity and quality of the water that is taken during the pumping test and recommends the method of its discharge.
- If the method of discharge is overland to a water body or to a storm sewer, the Qualified Person would be required to include treatment or control measures to ensure that the discharge to the natural environment does not result in:
 - scouring, erosion or the physical alteration of stream channels or banks
 - does not cause or worsen any flooding in the receiving area.
- A site map that shows the location of all the pertinent features that were considered in the development of the pumping test design report, including pumping wells, monitoring wells, water supply wells, surface water monitoring locations, locations of other area sensitive features and discharge locations, as applicable.

A copy of the pumping test design report would need to be provided to the person carrying out the work prior to the registration of the activity. The pumping test would need to be performed in accordance with the pumping test design report. This includes monitoring and contingency plans, notification protocols and discharge recommendations.

The pumping test design report would need to be retained for a period of 5 years after the completion of the pumping test. The pumping test design report would need to be made available to ministry staff upon request.

Notice would need to be provided in writing to water users that have the potential to be impacted by the water taking. In addition, the local ministry District Office would need to be notified at least 48 hours prior to the commencement of the pumping test.

The District Office would also need to be notified of any complaints that are received related to the pumping test activity on an ongoing basis. The registrant would need to retain the following information for each complaint:

- The date and time when the complaint was received;
- A copy of the complaint if it is in writing;
- A summary of any measures taken to address the complaint; and
- A record of all communication with the ministry regarding the complaint.

In the event that the water supply is affected for water users in the area, the registrant would need to make available a supply of water that is equivalent in quantity and quality to their normal takings (or reasonable compensation for their costs of doing so). The registrant would also be required to undertake measures to alleviate the negative impact.

Any discharge of water as a result of the pumping test would be required to adhere to the recommendations included within the pumping test design report and would need to comply with any applicable regulations.

In addition to the pumping test design report, the registrant would need to ensure that the following information is retained for a minimum of five years:

- The wells from which water is being taken, including well tag numbers where available;
- The date and duration of each water taking;
- The rate of water taking in litres per second for each water taking;
- The total volume of groundwater taken per day in litres for each water taking;
- Well depth and groundwater levels before, during and after the pumping test;
- Any other data that is recommended to be monitored in the pumping test design report; and
- A copy of all notifications sent in accordance with the notification protocol included in the pumping test design report.

PROPOSED MODIFICATIONS TO REGULATORY REQUIREMENTS FOR CONSTRUCTION SITE DEWATERING

Description of Prescribed Activity

During construction at a given site, groundwater seeps into pits and is removed through methods such as pumping or wells, which results in the creation of a dewatered work area. The prescribed activity under the regulation is the removal of groundwater and stormwater from the pit to create a dewatered work area in each pit.

Pursuant to the current regulatory requirements, the prescribed activity for construction site dewatering is limited to a maximum of 400,000 L/day of water taking from the construction site, including a combination of groundwater and stormwater contribution. This reduces the number of construction dewatering projects that are eligible for registration on the Environmental Activity and Sector Registry. In addition, the lack of clarity related to the registration of multiple pits and related to the concepts of “construction project” and “construction site” results in registrants registering each dewatering pit separately on the Environmental Activity and Sector Registry, resulting in multiple Environmental Activity and Sector Registry registrations for construction dewatering of the same project.

Modifications to Eligibility Criteria

The ministry is proposing modified eligibility criteria where the 400,000 L/day water taking limit would only apply to groundwater taking and would apply to each individual pit and the corresponding area of influence in the construction site rather than the entire site. If there is overlap between the areas of influence related to the dewatering pits, the combined water taking from the overlapping areas of influence would be limited to a maximum of 400,000 L/day of groundwater to be eligible for Environmental Activity and Sector Registry registration. If the total amount of water to be taken from each individual dewatering pit exceeds the water taking limit, the water taking activity would be ineligible for registration on the Environmental Activity and Sector Registry and a Permit to Take Water may be required.

Since the 400,000 L/day eligibility criteria is proposed to pertain to the taking of groundwater only, contribution from stormwater would no longer be included in determining eligibility. Instead, contribution from stormwater would be addressed as part of the modifications made to the operating requirements (discussed below) to minimize adverse impact on human health and the environment.

As a result of these proposed modifications, registrants would be required to register only once for construction dewatering activities at a given construction site for a given construction project. This means that multiple dewatering pits that are part of the same construction project at a given construction site could be included under one Environmental Activity and Sector Registry registration, avoiding the registration of each dewatering pit separately. This provides clarity for proponents that have construction dewatering activities for large construction projects as well as for linear projects such as transit systems and pipelines.

The ministry is proposing to provide definitions on what constitutes a “construction project” and “construction site” which are terms that are relevant to the eligibility criteria and are unclear in the current regulatory requirements. Clarifying these terms is

particularly important in the context of linear projects. The definitions would reflect that a construction site means the site(s) at which a construction project will be constructed. A construction project would include all aspects of construction dewatering related to the same project within a construction site, including linear projects such as transit and pipeline systems. If a new construction project starts at a site, a new Environmental Activity and Sector Registry registration would be required.

Modifications to Activity Requirements

All registered construction dewatering activities would be required to abide by the requirements proposed to be included in the EASR regulation.

Pursuant to the current regulatory requirements, the water taking report and discharge report may be prepared by the Qualified Person after the Environmental Activity and Sector Registry registration is completed. The proposed amendments to the EASR regulation would require that the water taking report and discharge report be completed by the Qualified Persons prior to registering the activity on the Environmental Activity and Sector Registry. This requirement is consistent with other Environmental Activity and Sector Registry regulations and ensures that assessments related to the proposed activity are completed prior to registration. Similar to current requirements, the dewatering work would need to be performed in accordance with the water taking and discharge reports. This includes but is not limited to water taking, monitoring and contingency plans, notification protocols and discharge recommendations.

A copy of the reports would need to be provided to the person conducting the construction dewatering prior to the commencement of the activity. Further, a copy of the reports would need to be made available to ministry staff upon request. The reports would need to be available on-site, whether in hard copy or electronic format. The reports would need to be retained for a period of 5 years after the completion of the activity.

To support the proposed modifications to the eligibility criteria and to ensure that environmental protection is maintained, the requirements for the water taking and discharge reports are proposed to be amended.

The requirements pertaining to the water taking report are proposed to be amended as follows:

- The Qualified Person would be required to calculate the expected areas of influence for each pit with respect to the amount of groundwater that will be taken.

- If there are multiple dewatering pits as part of the registration, the Qualified Person would need to assess whether water taking from more than one could occur simultaneously and the circumstances under which that may occur.
- A notification protocol would need to be included that identifies water users or property owners with water resources that have the potential to be impacted by the water taking and discharge associated with the construction dewatering (typically those that are located within the area of influence). The notification protocol would need to include the requirement to provide written notice to these persons. This notice would need to, at minimum, include a description of where and when the water takings are to occur, the approximate time and duration of takings, the Environmental Activity and Sector Registry registration number for the activity, and the contact information of a person who can be reached to report any interferences with water supplies.
- A contingency plan would need to be included that outlines measures to be implemented to address the potential impacts of the activity on water users and property owners in the area, including any measures to address site-specific impacts. A shutdown protocol would also need to be included if the Qualified Person recommends that one is required.

The requirements pertaining to the discharge report would be modified as follows:

- The Qualified Person would need to recommend best management practices to address the management and discharge of stormwater generated as a result of precipitation that enters the dewatering pits. This would need to include considerations to flooding and the quality of discharge.
- If the method of transfer or discharge is to land, a watercourse or a storm sewer, the Qualified Person would need to assess the potential impact of the discharge on the natural environment and recommend best management practices including discharge criteria and monitoring requirements, as applicable.
- The current turbidity-based discharge requirements would be replaced with a fixed limit for total suspended solids of 25 mg/L or turbidity of 8 NTU and would apply to all discharges (groundwater and stormwater) to land, a watercourse or a storm sewer, regardless of the distance between the discharge point and the watercourse.
- Any required consent or authorizations would need to be obtained from the owners of the works or location where the water is intended to be discharged, which may have stricter discharge quality criteria than stipulated above.
- An analysis to determine whether a monitoring plan is required to address the impacts of the discharge and evaluate the efficiency of any treatment and control measures, if applicable.

- Implementation of a contingency plan that identifies any measures that should be implemented and the circumstances under which they should be implemented to address any identified potential impacts.
- The current requirement for the Qualified Person to state that discharge temperature was considered in determining the discharge method would be removed.

The current record keeping requirements would be modified as follows:

- The record keeping requirements would be extended to ensure that water taking volumes from all dewatering pits that are covered by the Environmental Activity and Sector Registry registration at a given construction site for a given construction project are reported annually.
- A record (date and general amount) of precipitation events and the impact of the generated stormwater on the water taking activity and discharge. This shall include any periods of increased discharge and any contingencies that were implemented if needed.
- Any other data that is recommended to be monitored in the design and discharge reports; and
- A copy of all notifications sent in accordance with the notification protocol included in the design report.

The current notification requirements to the municipality and the conservation authority would be removed from the EASR regulation. Instead, the regulation would be updated to align with the notification requirements stipulated in Ontario Regulation 387/04 where only water takings over a duration of 365 days require notification. The ministry would also no longer require prior notification if the discharge is within 30m of a water body.

Transitional clauses would be included in the regulation to ensure smooth transition for current Environmental Activity and Sector Registry registrations and Permits to Take Water.

MODIFICATIONS TO REGULATORY REQUIREMENTS FOR ROAD CONSTRUCTION

Description of Prescribed Activity

During road construction at a given site, water is withdrawn from surface water sources such as ponds, lakes and rivers that meet specific criteria for use in road construction activities for the purposes of:

- hydro-demolition;
- cleaning of the highway, including the cleaning and flushing of culverts;

- seeding, mulching, sodding or landscaping;
- dust suppression;
- compaction of earth and granular materials; and
- on-site preparation of materials to be used in the construction, maintenance or repair of the road.

The prescribed activity is the removal of water from surface water sources for use in road construction purposes.

Modifications to Eligibility Criteria

The current regulation only applies to water taking activities related to the construction, maintenance or repair of “highways”, as defined in the *Highway Traffic Act*.

The proposed regulatory modifications would expand the eligibility criteria such that surface water taking activities related to the construction, maintenance or repair of public transit projects such as Light Rail Transit would be eligible for registration on the Environmental Activity and Sector Registry. In addition, water taking activities related to the construction, maintenance or repair of access roads would be eligible for registration on the Environmental Activity and Sector Registry if the access road is related to a road construction project for public use.

Discussion Question: The description of the prescribed activity for road construction lists specific purposes for which the water can be used. Should this list be expanded, particularly considering that water takings for the construction of transit projects are proposed to be eligible for registration on the Environmental Activity and Sector Registry?

Modifications to Activity Criteria

All registered road construction activities would be required to abide by the requirements proposed to be included in the EASR regulation.

Pursuant to the current regulatory requirements, the water taking report may be prepared by the Qualified Person after the Environmental Activity and Sector Registry registration is completed. The proposed amendments to the EASR regulation would require that the water taking report be completed by the Qualified Person prior to registering the activity on the Environmental Activity and Sector Registry. For registrations that have specified water takings from specific sources over a longer period of time, the water taking report would need to be updated by a Qualified Person every 10 years.

A copy of the reports would need to be provided to the person conducting the water taking activity prior to the commencement of the activity. Further, a copy of the reports would need to be made available to ministry staff upon request. The reports would need to be available on-site, whether in hard copy or electronic format. The water taking report would need to be retained for a period of 5 years after the completion of the activity.

The regulation currently stipulates minimum criteria that must be met to qualify for the activity. Clarification would be provided to allow the Qualified Person report to include additional restrictions on the water taking to protect the natural environment if required (e.g. restrict daily water taking volume, require monitoring, etc.). The record keeping provisions would be similarly updated to ensure that any additional information required by the Qualified Person is recorded by the person performing the work.

The current activity requirements require the person conducting the activity to ensure that equipment refuelling does not occur within 30 metres of any water body. Since refuelling requirements are handled by other authorities, the reference to this requirement is proposed to be removed from the EASR regulation to reduce duplicity.

The current notification requirements to the municipality and the conservation authority would be removed from the EASR regulation. Instead, the regulation would be updated to align with the notification requirements stipulated in Ontario Regulation 387/04 where only water takings over a duration of 365 days require notification. The ministry would also no longer require prior notification if the discharge is within 30 metres of a water body.

Transitional clauses would be included in the regulation to ensure smooth transition for current Environmental Activity and Sector Registry registrations and Permits to Take Water.

Proposed Amendments to Regulations made under the Ontario Water Resources Act

The ministry is proposing amendments to Ontario Regulation 387/04 - *Water Taking and Transfer* (“the Water Taking Regulation”) to exempt low risk short-term water taking activities from the requirement to obtain a PTTW if they meet specific criteria. The proposed modifications include introducing well development as a new exemption activity and removing current restrictions related to the diversion exemption. These water taking activities pose little to no adverse impacts.

These proposed exemptions allow the proponent to conduct the activity without obtaining a Permit to Take Water or registering on the Environmental Activity and Sector Registry.

The ministry will maintain the authority to inspect the activities and ensure compliance with all legislative and regulatory requirements.

New Exempted Activity: Well Development

As per s.14.8 of Ontario Regulation 903 (Wells), the person constructing a well is required to remove any debris, including well cuttings and drilling fluids, from the well by developing the well until the well water is clear and free of sand.

The new exemption applies to the taking of water during well development. No eligibility criteria are proposed for this exemption.

Modifications to: Active and Passive Diversions

When construction occurs in a water body, the water body may need to be diverted around the construction area. This diversion can be accomplished using pumps (active diversion) or using the natural flow of the water (passive diversion).

The ministry is proposing to expand the current regulatory exemption related to diversions. The current restrictions related to construction methods would be removed so that all construction methods (i.e. open-cut trench techniques) would be eligible for exemption. In addition, the ministry is proposing to exempt surface water seepage coming in through the barriers of the dewatered work area from Permit To Take Water requirements. However, the pumping of seepage from the dewatered work area would be required to meet a fixed limit for total suspended solids of 25 mg/L or turbidity of 8 NTU.

The current exemption eligibility criteria for active diversions require the registrant to ensure that pump refuelling does not occur within 30 metres of any water body. Since re-fuelling requirements are handled by other authorities, the reference to this requirement is proposed to be removed from the eligibility criteria to reduce duplicity allowing for more flexibility for proponents.

We Want to Hear from You

You are invited to submit your comments on this proposal online through the Environmental Registry website: <https://ero.ontario.ca/>. Search by registry number 019-2525.

You can also send your comments by email to: juwairia.obaid@ontario.ca.

The public comment period for the proposal will close on November 20, 2020.

We will review and consider all the received comments on the discussion paper through the Environmental Registry and the Ontario Regulatory Registry, via email, and from our meetings with stakeholders and Indigenous communities.

Based on the feedback received on both the proposal and the discussion paper, we will make decisions about our next steps in streamlining the permissions for low risk, short-term water taking activities.