

Ministry of the Environment, Conservation and Parks

Water Takings EASR Regulation and Exemptions

Professional Geoscientists Ontario

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Purpose

- To provide an overview of the water taking Environmental Activity and Sector Registry (EASR) regulation and water taking exemptions that came into force on March 29, 2016.
- To provide guidance to the water taking community on eligibility and operating requirements for water taking for road construction purposes and construction site dewatering.
- To provide some details on EASR registration requirements.

Summary of Regulations

- The regulations:
 - clarify or exempt certain activities from the requirement to obtain a Permit to Take Water (PTTW) (activities 1 to 3 below); and
 - require other activities to be registered on the EASR (activities 4 and 5 below).

Activity	Approach	Result
1. Passive in-stream diversion for construction	Clarify 'not a water taking'	No PTTW or registration required, if certain conditions are met
2. Active pumping in-stream diversion for construction	Exempt with discharge measures required	No PTTW or registration required if discharge measures implemented, if certain conditions are met
3. Weirs and restoration of wetlands	Exempt	No PTTW or registration required if definition is met – other leg. and reg. requirements maintained, if certain conditions are met
4. Water takings for road construction	EASR if taken at identified rates and locations, PTTW for others	EASR instead of PTTW if project meets eligibility
5. Construction dewatering	EASR if taking no more than 400,000 litres (L) on any day, PTTW for others.	EASR instead of PTTW if project meets eligibility

Regulatory/Legislative EASR Framework

O. Reg. 245/11: Registrations Under Part II.2 of the Environmental Protection Act – General

- General EASR regulation
- Sets out requirements for the Registry:
 - What information must be filed;
 - Who must certify the registration;
 - Updates to information filed.

EASR Regulations (water taking activities)

- O. Reg. 63/16: Registrations Under Part II.2 of the Environmental Protection Act – Water Taking
 - Prescribed activities (eligibility criteria);
 - Activity requirements (operational parameters).
- Water Taking and Transfer Under the Ontario Water Resources Act
 - O. Reg. 387/04 as amended in 2016 to provide new clarifications/exemptions.

Environmental Activity and Sector Registry

- The EASR is an on-line registry that provides a streamlined system that replaces the requirement to obtain an Environmental Compliance Approval (ECA) or PTTW.
- The EASR allows persons engaged in prescribed activities (in this case, water takings) to register instead of applying for a PTTW. The activity must be registered in the EASR by filing information related to eligibility criteria described in O. Reg. 63/16. The registered water taking must continue to meet the criteria set out in the regulation and the water taker must comply with the operational requirements set out in the regulation including obtaining the required water taking plan and discharge plan where applicable.
- The EASR lays out a set of rules that must be met in order to maintain compliance with the regulations.
 - It is important that the EASR registrant ensure that they meet the rules. For instance, although the regulation does not require a Qualified Professional (QP) assessment prior to registration, it is recommended that the assessment be completed in advance to determine if the activity is eligible for EASR, or whether a PTTW should be applied for.
 - The QP assessment determines the risks associated with the water taking/dewatering. The QP will determine if site specific monitoring is required at the site and may develop a contingency plan that can be implemented if an impact occurs. If the QP determines these are required, they become part of the EASR requirements. The person engaging in the activity is required to follow the water taking and discharge plan.
- All of the current compliance tools used for enforcing conditions in PTTW can be used by an Environmental Officer to enforce the regulatory requirements under EASR.
- There is a registration fee of \$1,190 for water taking EASRs.

EASR: Water Taking for Road Construction Purposes

- The **Water Taking EASR for Road Construction Purposes** is for projects that require more than 50,000 L/day of water for construction, maintenance or repair of a highway.

Eligibility:

- Water is to be used during the construction, maintenance or repair of a highway and only for the following purposes:
 - Hydrodemolition;
 - Cleaning of the highway, including flushing out of culverts;
 - Seeding, mulching, sodding and landscaping;
 - Dust suppression;
 - Compaction of earth and granular materials;
 - On-site preparation of materials to be used in road construction (for example, washing gravel).
- Water may only be taken from one of the following sources:
 - Lake of greater than 10 hectares;
 - Permanent stream with a stream order 3 or higher (maximum taking is 5% of stream flow rate);
 - Pond that is not on stream.
- **Highway**, as defined in the Highway Traffic Act includes a common and public highway, street, avenue, parkway, driveway, square, place, bridge, viaduct or trestle, any part of which is intended for or used by the general public for the passage of vehicles and includes the area between the lateral property lines thereof.

EASR: Water Taking for Road Construction Purposes

Operating Requirements:

- Prior to any water taking, a report must be produced by a QP that indicates the following:
 - Name of water body;
 - Determination of how water body meets the proposed eligibility criteria;
 - If a stream, the methodology to calculate the daily stream flow;
 - Qualifications of QP.
- Local municipalities and conservation authorities must be notified prior to initial water taking.
- Pump refueling is not to occur within 30 metres (m) of water body.
- All complaints relating to the natural environment must be immediately reported to the ministry.
- Records relating to the water taking (i.e., water taking plan and discharge plan) and any complaint following must be kept for a period of 5 years.
- Report water takings annually to the ministry online.

EASR: Construction Site Dewatering

Eligibility Criteria:

- Water must be taken for the purposes of dewatering a construction site.
- Water taking must be less than 400,000 L/day under normal conditions.
 - Normal conditions do not include extreme weather events and heavy rainfall such as the 100 year storm event.
- Water that is taken can be ground water, storm water, or a combination of both.
 - A site that takes 100% storm water is exempt from registering on the EASR but must follow the activity requirements of the regulation to be covered by the Section 53 exemption.
- Construction projects do not include mining development projects, pits or quarries.
- Registration replaces need to obtain PTTW.
- **Note:** there may be need to register for *both* a construction dewatering EASR and a road construction EASR if the site requires both activities.

EASR: Construction Site Dewatering

Operating Requirements (Technical Studies):

- Reports are similar to the reports contained in a PTTW application submission for construction dewatering projects:
 - If water taking volume is noted to be $\leq 400,000$ L/day – apply for dewatering construction EASR;
 - If water taking volume is noted to be $> 400,000$ L/day, or if eligibility or operational requirements cannot be met – apply for a PTTW.
- Prior to any water taking, a water taking plan and a discharge plan must be produced by a QP.
- The **water taking plan** must ensure that the taking will not cause unacceptable impacts and must include, at a minimum:
 - Area of influence expected by the taking.
 - Analysis of the potential impact of soil settlement and impacts to water wells due to the taking.
 - An identification of measures to be implemented if any of these impacts occur.
 - Prepare and implement a water monitoring plan if needed.
- The **discharge plan** must ensure discharge will not result in any adverse impacts to the environment and must identify the following:
 - Maximum volume of water discharged per day;
 - Suitable location of safe discharge;
 - An identification of any discharge measures required to be installed.
- Water is allowed to be discharged to one of the following:
 - A waste management system;
 - Sewage works with an ECA;
 - Municipal sanitary sewer or storm sewer, in accordance with any municipal requirements;
 - To land.

EASR: Construction Site Dewatering

Operating Requirements (discharge, notification and reporting):

- If the discharge is to land or storm sewer, there are more stringent requirements in order to safeguard the environment. These are:
 - Erosion and sedimentation control measures.
 - The discharged water contains no visible petroleum hydrocarbon film or sheen.
 - Notification to the ministry if discharge to land or storm sewer occurs within 30 m of water body.
 - If discharged to land or storm sewer and closer than 30 m from a water body, control measures need to be installed to limit the turbidity of the discharge to 8 Nephelometric Turbidity Units (NTU) above background.
- Water cannot be discharged to land in a WHPA-A zone.
- Local municipalities must be notified prior to initial water taking.
- All complaints relating to natural environment must be immediately reported to the ministry.
- Record keeping requirements that detail dates on which water was taken, rate of taking, and volume of taking for each day.
- Report water takings annually to the ministry online.

EASR Registration Requirement: Water Taking Plan

Water Taking Plan

- The taking of water cannot commence until a water taking plan is completed by a QP.
- At a minimum, the following information and statements must be included in the water taking plan:
 - an identification of the expected area of influence, having regard to the amount of ground water that will be taken;
 - an analysis of the potential impact of the soil settlement that would occur as a result of the proposed water taking, including an assessment of the impact of the soil settlement on the integrity of infrastructure located in the expected area of influence;
 - identification of measures that should be implemented, if any, and the circumstances in which they should be implemented, to address the potential impact of the soil settlement;
 - an analysis of the potential impact of the proposed water taking on other water users in the expected area of influence;
 - identification of measures that should be implemented, if any, and the circumstances in which they should be implemented, to address the potential impact of the proposed water taking on other water users in the expected area of influence;
 - an analysis to determine whether a water monitoring program would be needed, and if needed, a description of the program and the circumstances in which it would be needed;
 - a summary of the qualifications and experience of the person who prepared the water taking plan; and
 - the date the water taking plan is prepared.
- All calculations and assumptions used in the preparation of the water taking plan must be included in the plan.

EASR Registration Requirement: Discharge Plan

Discharge Plan

- The taking of water cannot commence until a discharge plan is completed by a QP.
- At a minimum, the following information and statements must be included in the discharge plan:
 - the maximum quantity of ground water, storm water or both to be discharged each day;
 - clear identification of the discharge location (with UTM coordinates and a site diagram with the location of discharge);
 - an identification of the method of transfer or discharge location that is to be employed under normal operation and in the event of a 100 year storm event;
 - if the method of transfer or discharge is to land or a storm sewer, an identification of the control measures required to minimize erosion and sedimentation from occurring as a result of the discharge of the water or storm water;
 - if the method of transfer or discharge is to land or a storm sewer that is within 30 m of a water body, the turbidity of the discharge shall not exceed 8 NTU above the background level of the nearest water body;
 - if the method of transfer or discharge is to land or a storm sewer, a statement must be provided that the discharge of the ground water, storm water or both will not cause an adverse effect to the environment. Both water quality and quantity need to be considered in this statement;
 - a statement that the temperature of the ground water or storm water to be discharged was considered in determining the method of transfer or discharge under normal operation and in the event of a 100 year storm event;
 - a summary of the qualifications and experience of the person who prepared the discharge plan; and
 - the date the discharge plan is prepared.

EASR Registration Requirement: Discharge Plan (cont.)

Discharge Plan (cont.)

- In order to determine the safe and appropriate location for the discharge, the quantity and quality of the water that is to be taken and ultimately discharged must be determined and characterized.
- The maximum quantity shall be determined by using all ground water taking considerations, including initial storage dewatering and equilibrium flow, and the storm water shall consider all storm water that may need to be dewatered from the site during normal conditions.
- The quality of the water shall be characterized to the appropriate level depending on the type of discharge location. More stringent sampling should be used when discharging to land and/or storm sewers.
 - The characterization should ensure that the water quality analysis is appropriate for both the size of the construction site and the duration of the water taking.
 - Multiple water samples may need to be conducted for the initial characterization of the water to be taken and for on-going water taking as the construction dewatering expands.
 - **It is the responsibility of the QP to ensure that the water quality of the discharge has been determined appropriately and if future analysis is required.**

Reporting Water Takings

- The ministry created an online tool that provides a streamlined, electronic method of reporting water takings to the ministry.
- The water taking reporting system of EASRs, called the **Regulatory Self-Reporting System (RSRS)**, is accessed through the same online system used to register EASRs.
- Data is electronically entered in excel-like tables and submitted to the ministry.
- Water taking records must be submitted by March 31 for the previous year.

QP Qualifications for EASR Regulations

For takings of ground water (construction dewatering EASR):

- The QP is a licensed Professional Geoscientist or Professional Engineer as set out in the Professional Geoscientists Act of Ontario.

For takings of surface water, including storm water (not construction EASR) and for the discharge plan (construction dewatering EASR):

- The QP holds at minimum, a bachelor's degree with specialization in hydrology, aquatic ecology, limnology, biology, physical geography and/or water resource management or engineering.
- The same person can qualify as a QP for both ground water and discharge plan if they have the appropriate education and training as noted above.

Access Environment

- EASRs are searchable through **Access Environment:**
 - “google” Access Environment.
 - Choose Advance Search.



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Please enter one or more search criteria:

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Registering

- There are three key steps to register an EASR:
 - 1) Create a Service Ontario ONE-Key Account.
 - 2) Create and use a Ministry of the Environment, Conservations and Parks Client Account (CAMS).
 - 3) Register an EASR (5 parts).
- The link to the Province's ONE-Key account is:
<https://www.one-key.gov.on.ca/iaalogin/IAALogin.jsp>
- The link to the EASR homepage is:
<https://www.ontario.ca/page/environmental-activity-and-sector-registry>
- Ministry general inquiry line is:
(416) 314-8001 or
1-800-461-6290 (toll free)

Contact Regarding the Regulation and Guides

- Amanda Prelaz, Divisional Program Specialist (PTTW)
Amanda.Prelaz@ontario.ca; (226) 268-7920
- Sarah Raetsen, Senior Program Advisor
Sarah.Raetsen@ontario.ca; (416) 325-7421
- Guidance for the water taking EASRs (including details on water taking plan and discharge plan):
<https://www.Ontario.ca/page/water-taking-user-guide-environmental-activity-and-sector-registry> or “google” *water taking EASR guide*
- Guidance for the Exemptions:
<https://www.Ontario.ca/page/water-taking-and-transer-user-guide-clarifications-and-exemptions> or “google” *water taking exemption guide*