

May 13, 2020

Ministry of Natural Resources and Forestry  
Branch – Resource Development Section  
300 Water Street, 2<sup>nd</sup> Floor, South Tower  
Peterborough, ON K9J 3C7

**Re: Proposed amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (ERO # 019-1303)**

Thank you for the opportunity to provide comments on the proposed amendments to Ontario Regulation 244/97 and the Aggregate Resource of Ontario Provincial Standards under the Aggregate Resources Act. I am writing to you on behalf of the Lake Erie Region Source Protection Committee overseeing the implementation and update of Source Protection Plans in the Lake Erie Source Protection Region to protect municipal drinking water sources.

The Lake Erie Region Source Protection Committee, at its meeting on April 30, 2020, passed the following resolution:

*THAT the Lake Erie Region Source Protection Committee receives report SPC-20-04-14 – Proposals to amend O.Reg.244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (EBR 019-1303) – for information;*

*AND THAT this report be forwarded to the Ministry of Natural Resources and Forestry through Environmental Registry Number 019-1303.*

The Lake Erie Region Source Protection Committee report (SPC-20-04-14), including detailed comments in Appendix A, is attached to this letter for your consideration.

If you require further information, please contact me at 519-240-7922 or mkeller@grandriver.ca

Sincerely,



Martin Keller, M. Sc.  
Program Manager, Lake Erie Source Protection Region

cc:

Wendy Wright-Cascaden, Chair, Lake Erie Region Source Protection Committee

## LAKE ERIE REGION SOURCE PROTECTION COMMITTEE

**REPORT NO. SPC-20-04-14**

**DATE:** April 30, 2020

**TO:** Members of the Lake Erie Region Source Protection Committee

**SUBJECT: Proposals to amend O.Reg.244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (EBR 019-1303)**

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### **RECOMMENDATION:**

THAT the Lake Erie Region Source Protection Committee receives report SPC-20-04-14 – Proposals to amend O.Reg.244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (EBR 019-1303) – for information;

AND THAT this report be forwarded to the Ministry of Natural Resources and Forestry through Environmental Registry Number 019-1303.

### **REPORT:**

On September 20, 2019, the Ministry of Natural Resources and Forestry (MNRF) released a proposal on the Environmental Registry (ERO 019-0556) recommending changes to the provincial aggregate resources framework. Changes to the Aggregate Resources Act were made effective December 10, 2019.

On February 12, 2020, the MNRF posted a proposal on the Environmental Registry (ERO 019-1303) recommending amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act. The proposal recommends changes for applications to establish a new aggregate extraction sites, prescribed rules for minor excavations, and how new and existing sites are managed and operated, including amendments to expand an existing site below the water table.

The public comment period for the proposed changes initially was open until March 30, 2020. The commenting period has been extended until May 15, 2020. A description of the currently proposed amendments can be found on the Environmental Registry of Ontario (<https://ero.ontario.ca/notice/019-1303>).

Impacts from quarrying activities on sources of municipal drinking water have been a longstanding concern of the Lake Erie Source Protection Committee (SPC). A letter, dated March 31, 2010, was sent to the Honourable John Gerretsen, Minister of the Environment, requesting that O. Reg. 287/07 be amended to add *excavation below the water table that breaches the confining layer protecting an aquifer* to the list of drinking water threats. The Ministry denied the request in a letter dated September 2, 2010, stating that aggregate operations alone are not associated with pathogens or chemicals that could impact municipal drinking water sources.

On February 3, 2011, the SPC requested that the Province identify rehabilitation activities at an aggregate operation within a vulnerable area of a municipal drinking water system where fill material is placed, or that allows ponding of water, as a local drinking water threat. The placement of fill as a local threat was denied by the Ministry in a letter dated July 19, 2011. A response to the request for a local threat with respect to ponding of water is still outstanding.

Over the years, the SPC has continued to emphasize the importance of addressing aggregate extraction activities below the water table within vulnerable areas of a municipal drinking water supply. On April 30, 2015, the SPC sent a letter to the Honourable Bill Mauro, Minister of Natural Resources and Forestry, on behalf of all 19 Source Protection Committee chairs, expressing concern that the Clean Water Act has failed to adequately consider aggregate extraction activities that break through an aquitard and into the water table or which alter the vulnerability of wellhead protection areas or intake protection zones.

More recently, the discussions have centred around the ongoing review of the Aggregate Resources Act and regulations. In December 2015, the SPC provided comments on the “Blueprint for Change – A proposal to modernize and strengthen the Aggregate Resources Act policy framework”. Two of the key recommendations included the prohibition of extraction activities within the 2 year time of travel (WHPA-A and B) of municipal drinking water wells and the prohibition of extraction below the water table where a breach of the aquitard could impact municipal drinking water sources (report SPC-15-12-03). The SPC reiterated its comments in December 2016 as part of commenting on Bill 39 that proposed changes to the Aggregate Resources Act (report SPC-16-12-06).

The current proposal does not appear to provide any actual changes to the Aggregate Resources Act (ARA) Regulations. It provides a summary of proposed changes to the ‘Standards’ for ARA applications. As a result, it is challenging to assess the potential effect the proposal may have on water and natural resource systems within the watershed.

There are some changes in this proposal related to a new requirement for a document called a ‘Water Report’. This report appears to replace and incorporate the Hydrogeological Report that is currently a requirement in the Standards. The ERO document identifies a proposal to require a qualified professional to complete the Water Report. Lake Erie Region staff support this recommendation. In addition, the proposal appears to require various technical studies for below water table applications including new or amended applications.

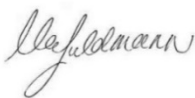
Please note that comments provided in this report include both Grand River Conservation Authority (GRCA) comments as well as specific comments related to the protection of municipal drinking water sources. A similar report including these comments has been presented to the GRCA board on April 24, 2020. Below is a brief summary of key comments:

- Pre-consultation with agencies such as conservation authorities and municipalities should be a mandatory requirement to ensure that ‘terms of reference’ for technical reports are completed or new aggregate or quarry sites or amendments to existing applications to go below the water table. This would ensure that applications include the required technical information prior to municipal and agency review and that they can be reviewed in a timely and efficient manner.
- MNRF should develop cumulative effects assessment and data collection and sharing regulations and criteria for new aggregate or quarry sites for below water table extraction. At this time, there is no mention of cumulative effects assessments in the ERO proposal.

- In 2010, a document entitled “Cumulative Effects Assessment Best Practices Paper for Below-Water Sand and Gravel Extraction Operations in Priority Subwatersheds in the Grand River Watershed” was released. The document was completed in consultation with various provincial ministries and representatives of the Ontario Stone Sand and Gravel Association. It provides a framework for cumulative impacts to be assessed in a consistent manner and to guide decisions makers, such as municipal governments and the MNRF and Ministry of Environment, Conservation and Parks with responsibilities in this area. Eleven priority subwatersheds within the Grand River watershed were identified.
- The Best Practices Paper identified the need for a comprehensive data collection and data management process. This was to be developed and maintained by MNRF in consultation with the partners to facilitate collecting the appropriate data and sharing this information with aggregate resource applicants. This data process has yet to be established and it would provide an opportunity for a transparent and open-data sharing framework to permit all external stakeholders with access to information related to below water table aggregate and quarry applications and operations.
- A requirement for applications to be consistent with provincial or local Technical Guidelines needs to be included in the ARA Technical Standards. This would include studies that identify and evaluate impacts to water or natural environment resource systems.
- Lake Erie Region staff support the identification of source protection vulnerable areas and activities and how source protection plans and policies are addressed. To better protect municipal drinking water supplies, staff recommend the Ministry consider the following:
  - A water budget should be required for all applications proposing below water extraction
  - Water Report requirements should include an assessment of potential impacts to sources of drinking water, in particular for proposed below water extraction (e.g., breaching of aquitard), and propose any necessary measures to prevent, where possible, mitigate, or remediate any negative impacts.
  - All aggregate extraction should be prohibited in Wellhead Protection Area (WHPA) A and B, not just extraction activities by private land owners and farm businesses
  - Chloride based dust suppressants should be prohibited where dust suppression is required at aggregate sites located within source water protection areas

In addition to this report, **Appendix A** provides detailed comments on the proposal and we request the Province consider the Lake Erie Region Source Protection Committee comments in their review of the ARA Standards.

Prepared by:




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Ilona Feldmann  
Source Protection Program Assistant

Approved by:




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Martin Keller, M. Sc.  
Source Protection Program Manager

## **Appendix A**

Detailed comments on the proposal to amend O.Reg.244/97  
and the Aggregate Resources of Ontario Provincial  
Standards under the Aggregate Resources Act (EBR 019-  
1303)

**Attachment 1 – SPC-04-13**

**Proposed amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act**

(ERO#019-1303)

<b>Section 1 – Proposed Changes for Applications to Establish a New Site Part 1.1: Study and Information Requirements</b>	
<b>Missing from Proposal</b>	
<p>Cumulative Effects Assessment for below water table applications</p>	<ul style="list-style-type: none"> <li>• Cumulative effects assessments should be conducted in areas of the province where there are concentrations of existing licences or new applications for licences to extract below the water table. The detailed water and hydrogeological assessments prepared by qualified professionals should be conducted for any existing licence that applies for an amendment of a license to extract below the water table and for new below water table applications. This would demonstrate that there will be no offsite or onsite impacts to the quantity and quality of local water resources that sustain natural environment features and address municipal interests in the protection of local municipal drinking water sources. These studies should also prescribe detailed pre and post extraction water and natural environment monitoring requirements for these areas. Depending on site characteristics, other studies should also be required for below water table extraction such as Environmental Impact Studies and other evaluations.</li> <li>• Examples of cumulative effects assessment include:               <ul style="list-style-type: none"> <li>○ the measurement of cumulative effects, e.g. multiple water taking impacts related to staging of extraction from license to license (not only within the limit of a single license);</li> <li>○ a subwatershed scale study for areas of the province under pressure for below water table extraction, with consistent baseline monitoring prior to an application and initiation of extraction;</li> <li>○ monitoring reports that are compatible from license to license in scope and criteria that will be consolidated by MNRF, or another agency, to ensure that short and long term impacts are measured, evaluated and mitigated and information is shared on an open data platform.</li> </ul> </li> </ul>
<p><b>Data Management and Provincial Open Data Directive</b></p>	<ul style="list-style-type: none"> <li>• This proposal includes an option to use data from other applications (see notes below). The Standards should include a requirement for applicants to provide their data to the province in an electronic submission and they should also be granted access to data collected by other parties in the vicinity of an application.</li> <li>• The province has establish an Open Data Directive and should implement a comprehensive data collection and data management process for current aggregate sites monitoring information and</li> </ul>

	<p>information submitted with Aggregate Resources Act (ARA) applications. In 2010 the province, the Ontario Stone Sand and Gravel Association (OSSGA) and GRCA released a paper that includes data management “Cumulative Effects Assessment Best Practices Paper for Below-Water Sand and Gravel Extraction Operations in Priority Subwatersheds in the Grand River Watershed”. It was proposed that this database be developed by MNR in consultation with various stakeholders to facilitate collecting the appropriate data and sharing this information with aggregate resource applicants. This data process has yet to be established and it would provide an opportunity for a transparent and open data sharing framework to permit external stakeholders with access to information related to below water table aggregate and quarry applications and operations. The standards should include a requirement for application information to be submitted electronically and agreement that it will be shared with other parties.</p>
<p><b>Technical Guidelines</b></p>	<ul style="list-style-type: none"> <li>• The standards provide a base list of information to be provided and a list of the type of analysis that should be provided to support an amendment or new application. Although it is proposed that a Qualified Person complete reports, there is a wide variation in the information that is collected and analysed. This leads to delays in the review and commenting process that could be avoided or minimized through clearer requirements. The standards should be amended to include a requirement for studies to be completed in accordance with provincial Technical Guidelines (as update). Examples include: Natural Heritage Reference Manual, Technical Guide - River &amp; Stream Systems: Erosion Hazard Limit, Technical Guide - River &amp; Stream Systems: Flooding Hazard Limit, etc.</li> <li>• Where there is a gap or no Provincial technical guidelines (e.g. water budget, cumulative effects assessment, hydrogeological assessment) a Technical Guideline that has been approved by a municipality and/or Conservation Authority should be considered as technical guideline that is applicable to ARA applications. The standards should include a reference to this effect.</li> </ul>
<p><b>Pre-consultation Requirement in the Consultation process</b></p>	<ul style="list-style-type: none"> <li>• Pre-consultation with agencies such as conservation authorities and municipalities should be a mandatory requirement to ensure that satisfactory terms of reference are prepared for technical reports for new aggregate or quarry sites. This would ensure that applications are complete i.e. include the appropriate pre-extraction monitoring, plans, technical information etc. This activity is required in similar applications processes such as a subdivision application under the Planning Act and it enables an efficient and timely review of applications by municipalities and agencies.</li> </ul>
<p><b>Proposal</b></p>	<p><b>GRCA Comments</b></p>
<p>1.1.1 Water Report</p>	<p><b>Determination of Water Table:</b></p> <ul style="list-style-type: none"> <li>• Support that water table must be determined for all applications and determined based on maximum predicted elevation of the water</li> </ul>

table

- There can be significant variations in the natural environment from year to year and an evaluation based on one year of data can be misleading. Many technical reports to support planning applications and other proposals of a similar scale to most aggregate applications are based on two to five years of data collection. The proposal to only require one year minimum groundwater monitoring to establish level of water table (and other water and natural features) should require a minimum two (2) years of surface water and natural resources monitoring and continuous groundwater level monitoring for proposed above water extraction, and a minimum three (3) years of this monitoring for proposed below water extraction.
- The current wording in the proposal to allow determination of the water table from existing monitoring data and from adjacent sites is problematic. How old can existing monitoring data be? How far away can adjacent monitoring sites be? Water table should be determined on the basis of current monitoring on site.

**Requirement of a Water Report:**

- It is unclear what is proposed: Will the Provincial Standards be revised to eliminate the requirement for a Hydrogeological 1 and 2 report and require a new Water Report? Will the natural environment report requirements be modified? The province should clearly define the level of detail and assessment of impacts, in particular with respect to protecting municipal drinking water sources, water budget, and cumulative impacts.
- Proposed Water Report should require avoidance of impacts where possible, or mitigation, not just feasibility of mitigation. The PPS requires that municipalities protect, improve and restore the quality and quantity of water. Since land use planning mechanisms for review of ARA applications have been modified, the ARA standards and technical guidelines will need to be in line with PPS requirements to ensure the appropriate criteria is in place to protect for an adequate quality and quantity of water in communities and assess and prevent any potential threat or impacts to source water and local municipal drinking water supplies.
- Assessment of impacts should be in line and defined with the same criteria as the current growth plan requirements for natural resource systems (that relate to water, e.g. fish habitat) and assessment of water resource systems, e.g. seepage areas, wetlands, significant groundwater recharge areas and highly vulnerable aquifers including some source water protection areas. These areas include 'key hydrological features' such as all wetlands including unevaluated wetlands. An analysis completed in 2016 in the Grand River watershed reviewed the wetlands mapped by the GRCA and MNRF, and there are approximately 12,255 hectares of wetlands in the Grand River watershed that have not been evaluated by MNRF. There may be a minor variation in this statistic due to work



	<p>completed in Aylmer District. It is likely that some wetland areas in or near known aggregate resource areas would be evaluated as Provincially Significant Wetlands and the absence of evaluation at this time may result in the inadequate assessment of these features if the standards only refer to Provincially Significant Wetlands. An option for the province to consider is completing the evaluations in south-central Ontario where wetland loss has been most significant over the past several decades with a focus on areas with aggregate resources.</p> <ul style="list-style-type: none"> <li>• Content requirement for Water Report should spell out and include criteria for when a water budget is required. E.g., applications proposing below water extraction should always require a water budget. Water budgets should include the full extent of the proposed excavation and use best available modelling techniques for a comprehensive and up to date assessment. A Technical Guideline for Water Budget analysis is required and this guideline should be included by reference in the Standards.</li> <li>• GRCA supports the proposal that a qualified person to prepare a water report must be a P.Geo or P.Eng. However, the impact analysis of the application in relation to water and natural features will require a qualified person in ecology as well.</li> <li>• GRCA supports the identification of source protection vulnerable areas and activities and how source protection plans and policies are addressed. In addition, Water Report requirements should include an assessment of potential impacts to sources of drinking water, in particular for proposed below water extraction (e.g., breaching of aquitard), and propose any necessary measures to prevent, where possible, mitigate, or remediate any negative impacts.</li> <li>• The standards should include the identification of the presence of an aquitard to a municipal drinking water supply on or near the site and a detailed assessment on how the application will avoid any impacts to the aquitard.</li> </ul>
<p>1.1.3 Natural Environment Report</p>	<ul style="list-style-type: none"> <li>• GRCA is concerned that only ‘significant’ features need to be identified and assessed. For proposed sites in Southern Ontario, all natural heritage features (e.g., all wetlands including unevaluated wetlands) should be identified and assessed as part of the Natural Environment Report.</li> <li>• It is unclear how the Natural Environment Report will align with the PPS and the four Provincial Plans. Requirements that are the same as other provincial plans that are related to Water or the Natural Environment Report should be included in the revised Provincial Standards.</li> </ul>
<p>1.1.6 Summary Statement</p>	<ul style="list-style-type: none"> <li>• It is unclear what planning and land use considerations will be included in the summary statement and how they will be addressed should they not align.</li> <li>• If a new pit or quarry application creates a new Significant Drinking Water Threat under the Clean Water Act, this information and how it</li> </ul>

	<p>will be addressed should be included in the Summary Statement.</p> <ul style="list-style-type: none"> <li>• Site plans for existing sites should be updated to include the same information as required in the Summary Statement for new sites. This should include the identification of Significant Drinking Water Threats under the Clean Water Act and how they will be addressed.</li> </ul>
<b>Part 1.2: Site Plan and Licence/Permit Conditions</b>	
1.2.1 Site Plan Standards – Improving Flexibility	<ul style="list-style-type: none"> <li>• In addition to setbacks, listed items (e.g., scrap storage area) should still be required to not be located within natural features</li> </ul>
1.2.2 Site Plan Standards – Modernization	<ul style="list-style-type: none"> <li>• If a new pit or quarry imports excess soil to facilitate rehabilitation on site and is located within a Wellhead Protection Area A or B, the standard will need to specify that excess soil importation must be ‘clean’ fill. This may require a reference to a specific Table or MECP criteria in the standards.</li> </ul>
1.2.4 Prescribed Licence and Permit Conditions (New Sites)	<ul style="list-style-type: none"> <li>• Monitoring, threshold exceedance actions and notification requirements should be included as a mandatory condition for new licences and permits.</li> </ul>
<b>Part 1.3: Notification and Consultation Requirements</b>	
1.3.2 Notification and Consultation Process	<ul style="list-style-type: none"> <li>• Pre-consultation should be a mandatory requirement for all new applications to ensure the applicant and agencies (province, municipalities, conservation authorities) can discuss the proposed extraction activities and ensure the application will be complete when submitted (see comments above).</li> </ul>
1.3.3 Objection Process on Private Land	<ul style="list-style-type: none"> <li>• Only the Ministry of Natural Resources and Forestry may refer outstanding objections to the Local Planning and Appeal Tribunal (LPAT). Persons and agencies (e.g. conservation authorities and municipalities) should be given the right to appeal the Ministry’s decision to the LPAT if their concerns, e.g., protecting the natural environment or municipal drinking water sources, have not been adequately addressed through the application process.</li> </ul>
1.3.4 Circulating New Applications to Agencies	<ul style="list-style-type: none"> <li>• Proposal includes circulation to conservation authorities for them to determine whether the application has the potential to impact the control of flooding, erosion or other natural hazards. Under agreements with municipalities, conservation authorities may also provide further comments to a municipality for their consideration. Conservation authorities may also be adjacent landowners or provide comments as a watershed management agency; e.g. cumulative effects within a basin or subwatershed.</li> <li>• Conservation authorities, in their capacity as a source protection authority, should also comment on any potential impact to sources of municipal drinking water, given that the protection of sources of drinking water has been included as a mandatory program under the Conservation Authorities Act.</li> </ul>

<b>Section 2 – Prescribed Rules for Minor Excavations</b>	
<b>Part 2.1: Excavation from Private Land or Land Owned by a Farm Business</b>	
	<ul style="list-style-type: none"> <li>The Ministry is proposing that private land owners and farm operations be allowed to extract aggregates if they meet certain rules set out in regulation. Among other requirements, aggregate extraction would not be allowed in a Wellhead Protection Area (WHPA) A and B. To strengthen the protection of municipal drinking water sources, <u>all</u> aggregate extraction activities should be prohibited in a WHPA A and B.</li> </ul>
<b>Section 3 – Proposed Changes to How New and Existing Sites are Managed and Operated</b>	
<b>Part 3.1: Operating Requirements for All Sites (New and Existing)</b>	
3.1.2 Dust	<ul style="list-style-type: none"> <li>The proposal would require all licence holders to mitigate dust to prevent it from leaving the site. Dust suppressants are often chloride based. The application of these chemicals would result in chloride leaching into the ground, recharging water supply aquifers, and increasing chloride levels in private and municipal supply wells. Where dust suppression is required at aggregate sites located within source water protection areas, chloride based dust suppressants should be prohibited.</li> </ul>
<b>Part 3.3: Site Plan Amendments</b>	
3.3.1 Site Plan Amendment Process	<ul style="list-style-type: none"> <li>Site plan amendments should also be able to be initiated by the Province, in cases where new information becomes available. The Province should have the ability to require the licensee or permit holder to complete technical studies to address new information. For example, for existing licence or permit holder that never had any technical reports, i.e., dormant or inactive licenses (for a number of years) or very old licences/permits or where the technical reports are outdated, the Province should have the ability to require new technical assessments to address changing and new information.</li> <li>To prevent licences/permits from getting outdated, licenses/permits should have expiry dates. Renewal periods could be up to 10 years similar to PTTW, ensuring site plans reflect changing environmental and regulatory conditions.</li> </ul>
3.3.3 Amendment to Expand on Existing Site Below the Water Table	<ul style="list-style-type: none"> <li>Supplemental report to widen existing below water extraction area should only be allowed for limited widening of area, e.g. widening into road allowance. Larger scale widening should be considered the same as a new application. Clarification on what is intended by the term ‘widening’ is needed, i.e. should not include adjacent private lands.</li> <li>There should be no exemption to preparing a Natural Environment Report as expanding extraction to below the water table may impact natural features and their function, e.g., fish habitat impact; items that are likely addressed in the Natural Environment Report.</li> </ul>

	<ul style="list-style-type: none"> <li>• It is unclear what happens after the two (2) year period when the applicant submits documentation. Other than - the Ministry may refer outstanding objections to the Local Planning and Appeal Tribunal (LPAT), the proposal is silent on how and when the Ministry will make a decision on the site plan amendment, the role of Ministry staff and criteria for referring outstanding objections to the LPAT.</li> <li>• The proposal is also unclear whether the reference to the LPAT removes the Environmental Tribunal approval role.</li> </ul>
<p><b>General Comments</b></p>	
<p><b>Proposed amendments to Ontario Regulation 244/97 and the Aggregate Resources of Ontario Provincial Standards under the Aggregate Resources Act (<a href="#">ERO#019-1303</a>)</b></p>	<ul style="list-style-type: none"> <li>• It is anticipated that the general concepts outlined in the consultation paper will be incorporated into draft Provincial Standards. As a next step the province is encouraged to provide the proposed draft Provincial Standards as they would appear in provincial documents for public consultation. This would provide an opportunity for a comprehensive review to determine if there are components of the standards that need clarification to achieve the desired result of a streamlined review process that also protects the natural environment. It is clear that Technical Guidelines are necessary components of the ARA process and should be updated or created in several areas.</li> <li>• Several municipalities and conservation authorities have developed technical guidelines that could be accessed and modified as required to accelerate the development of MNRF technical guidelines for ARA applications.</li> </ul>