Source Protection Committee - SUPPLEMENTARY AGENDA

Supplementary Agenda for the Meeting of the Source Protection Committee (SPC) held on Wednesday, October 9th, 2019 at the Essex Civic Centre, Committee Room C, 360 Fairview Avenue West, Essex, ON, commencing at 4:00 PM.

Item

Report

1. Report SPC 08/19 – Section 39 Amended Order

Recommendation

THAT Report SPC 08/19 be received for information

Katie Stammler,
Source Water Protection, Project Manager/
Water Quality Scientist
FROM: Katie Stammler, Source Water Protection Project Manager

SUBJECT: Section 36 Amended Order

DATE: 8 October, 2019

PURPOSE
To provide the SPC with the amended s.36 Order and present a draft timeline for completion of updates

REPORT SUMMARY
• A Section 36 workplan was submitted to the MECP on November 30, 2018 following consultation with the SPC, municipal staff, and the MECP. It identifies sections of the Assessment Report (AR) and Source Protection Plan (SPP) requiring review, timelines, and consultation information
• The workplan outlined 15 Proposed Updates to the AR and SPP
• An amended s.36 Order was received by the Essex Region SPA on 16 May, 2019, which included mandatory updates, consultation procedures and timeline for submission of all updates

BACKGROUND
In 2018, the ‘Essex Region Source Protection Area Workplan for Comprehensive Review and Update of the Essex Region Source Protection Plan per Clean Water Act (2006) – section 36 (s. 36 workplan)’ was developed and submitted to the MECP on November 30, 2018. This process included extensive review and technical background work by ERSPA staff, and consultation with the SPC, municipal staff and the MECP.

The s.36 workplan included 15 Proposed Updates that are necessary in order to ensure that the sources of drinking water in the ERSPA are adequately protected and that the information in the Assessment Report and Source Protection Plan is up to date and accurate. These updates are related to environmental monitoring programs, growth and infrastructure changes, implementation challenges, and both mandatory and non-mandatory updates related to the Director Technical Rules and Table of Drinking Water (see attached s.36 workplan Executive Summary). The proposed timeline for submission of the complete updated Assessment Report and Source Protection Plan to the MECP was on or before December 31, 2023 following consultation with affected stakeholders.

On 16 May, 2019 the attached amended s.36 Order was received by the ERSPA. While there was ongoing communication with MECP during the preparation of the s.36 workplan, there was no discussion between the MECP and ERSPA staff prior to the issuance of the Order. The Order provides general support for the proposed updates, but only includes the details of specific
updates that are mandatory. For the other proposed updates that are of local interest, the ERSPA is encouraged to work with our community and municipalities to find a cooperative way to move forward with items that are consistent with the Act, its regulations and Technical Rule that are in effect at the time of the updates.

The Order makes no reference to the re-assessment or continued monitoring of identified drinking water issues such as microcystin, despite evidence that it continues to be an issue for both Lake Erie and Lake St. Clair Water Treatment Plants. Additionally, the Order does not require that a Climate Change assessment be completed. Despite these omissions, these activities can be pursued if funding is available from the Province or municipal partners.

The mandatory updates to the Essex Region Assessment Report and Source Protection Plan fall under three main categories (see the attached Order for more detail):

1. Ensure compliance with amendments made to the Director’s Technical Rules including:
   - Changes to the hazard rating for the Handling and Storage of Fuel
   - Addition of liquid hydrocarbon pipelines as a Significant Drinking Water Threat
   - Assessing the vulnerability of Great Lakes intakes
   - Updating the Significant Groundwater Recharge Areas to align with amended Technical Rules

2. Address implementation challenges including:
   - Corrections to the delineation of the Event Based Areas
   - Corrections to NASM policies
   - Consideration of new/amended Transport Pathway polices

3. Include any necessary technical work for new or altered drinking water intakes where appropriate, as necessary under O.Reg 205/18 of the Safe Drinking Water Act

The Order also includes the process for consultation on the amendments to the Assessment Report, Source Protection Plan and the Explanatory Document once all of the updates have been completed. The consultation process is as follows:

1. Early consultation on any draft updates with the Source Protection Program Branch (SPPB)
2. Pre-consultation with all implementing bodies as well as person and businesses engage in SDWTs in the geographic areas affected by the updates
3. Public consultation for a minimum of 35 days

In all steps of consultation, the comments received must be documented, considered and addressed prior to advancing to the next consultation stage, or finalizing the proposed updates to the AR and SPP. The final submission of the updated AR and SPP to the MECP is to be within six (6) months after the completion of all of the required updates and consultation. It should be noted that this general timeline has been provided to all SPA/Rs and provides more flexibility than a set deadline.
The SPC will receive technical reports that detail each of the updates and will have ample opportunity to discuss the outcomes and make recommendations. Once the SPC is satisfied with the proposed updates, it is the intent of ERSPA staff to engage SPPB staff in early consultation upon completion of each update. This will allow both groups to review each update in detail at or near the time the work has been conducted.

The table below provides a proposed timeline for completion of the mandatory updates to the AR and SPP. All updates are tentative pending continued funding from the Province. This timeline is subject to change depending on the outcomes of technical work.

<table>
<thead>
<tr>
<th>Proposed Update</th>
<th>Proposed Update #</th>
<th>Proposed Timeline for completion</th>
<th>Goal for 2019/20</th>
<th>SPC report(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Handling and Storage of Fuel</td>
<td>11</td>
<td>March 31, 2020</td>
<td>Complete updates</td>
<td>13/18 (background) 07/19 (policies)</td>
</tr>
<tr>
<td>Liquid Hydrocarbon Pipelines</td>
<td>10</td>
<td>March 31, 2020</td>
<td>Complete updates</td>
<td>06/18 (background) January 2020</td>
</tr>
<tr>
<td>Vulnerability of Great Lakes intakes</td>
<td>12</td>
<td>March 31, 2021</td>
<td>Determine methodology and determine next steps</td>
<td>01/18 (background)</td>
</tr>
<tr>
<td>SGRA updates</td>
<td>8 and 9</td>
<td>March 31, 2020</td>
<td>Complete updates</td>
<td>January 2020</td>
</tr>
<tr>
<td>Corrections to EBA</td>
<td>6</td>
<td>March 31, 2021</td>
<td>Determine methodology and determine next steps</td>
<td>02/18 (background)</td>
</tr>
<tr>
<td>Transport Pathways</td>
<td>7</td>
<td>March 31, 2021</td>
<td>Determine methodology and determine next steps</td>
<td></td>
</tr>
<tr>
<td>NASM policies</td>
<td>5</td>
<td>December 31, 2019 (s.51)</td>
<td>Complete updates</td>
<td>06/19 (updates)</td>
</tr>
<tr>
<td>Technical work for new intakes</td>
<td>3 and 4</td>
<td>As needed</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Reassess drinking water issues</td>
<td>1 and 2</td>
<td>Pending funding</td>
<td>Continue to acquire microcystin data for WTPs</td>
<td></td>
</tr>
<tr>
<td>Climate Change assessment</td>
<td>14</td>
<td>Pending approval of standard method</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Related edits to AR, SPP, ED, and maps</td>
<td>15</td>
<td>September 1, 2021</td>
<td>Ongoing as needed</td>
<td></td>
</tr>
</tbody>
</table>
RECOMMENDATION

THAT Report SPC 08/19 be received for information

Katie Stammler
Project Manager, Source Water Protection/
Water Quality Scientist

Attachments:

1. Essex Region s.36 Workplan Executive Summary
2. Essex Region s.36 Amended Order
EXECUTIVE SUMMARY

Source water is the water that municipal water treatment plants (WTPs) use to supply us with safe, clean drinking water. Ontario’s Clean Water Act, 2006 helps protect these sources of drinking water through the development of a Source Protection Plan (SPP). The SPP is accompanied by the Explanatory Document that provides the rationale for policy decisions, and the Assessment Report (AR) that contains the technical documents that assess the quantity and quality of the available water supply, and identifies any threats in identified vulnerable areas that may be a risk to drinking water sources.

The Essex Region Source Protection Area (ERSPA) is one of 19 Source Protection Regions and Source Protection Areas in Ontario. There are seven municipal WTPs in the region - Stoney Point and Lakeshore (Belle River) WTPs, have their water intakes located in Lake St. Clair; the A. H. Weeks (Windsor) and Amherstburg WTPs have their intakes in the Detroit River; and the Harrow-Colchester South, Union and Pelee Island West Shore WTPs have their intakes in Lake Erie. Municipal Water Treatment Plants serve over 95 percent of the population in the region. The remaining population depends on groundwater or hauled water.

SPPs and ARs must be comprehensively reviewed and updated per Section 36 (S. 36) of the Clean Water Act in order to ensure sustained protection of the municipal drinking water sources and for the SPPs to stay current. A S. 36 workplan containing necessary updates to the Essex Region Source Protection Plan and/or Assessment Report has been completed following the direction of the Minister’s order to the Essex Region Source Protection Authority (ERSPA) received on April 15, 2015, and guidance received from the Ministry of Environment, Conservation and Parks (MECP). It must be completed by November 30, 2018 and is to include consultation with municipalities, the Source Protection Committee (SPC), and the MECP. Once the MECP has reviewed this workplan, a new S. 36 order will be issued that outlines the updates that must be completed and the date by which they must be completed.

The development of the workplan considered the following elements:

- Results of environmental monitoring programs
- Growth and infrastructure changes
- Council resolutions
- Policy effectiveness
• Implementation challenges
• Impacts of prohibition policies on the agricultural community
• Specific directions in some source protection plan approval letters
• Other local considerations

A thorough analysis of each of these elements was conducted and several necessary updates to the Assessment Report (AR) and Source Protection Plan (SPP) were identified. The resulting workplan includes 15 Proposed Updates that are necessary in order to ensure that the sources of drinking water in the ERSPA are adequately protected and that the information in the Assessment Report and Source Protection Plan is up to date and accurate.

Many of the suggested updates to the SPP and AR are minor corrections that will not affect municipalities or landowners. However, some substantial updates are being recommended. These recommended updates will require further consultation with municipalities and other stakeholders. These updates include:

• A new minimum volume of fuel that is considered a significant drinking water threat in certain vulnerable areas. In the IPZ-1’s of Windsor, Amherstburg and Lakeshore, the new minimum volume will be 2,500L (previously 15,000L). The land area of the IPZ-1’s is small and the impact of this change is expected to be minimal.
• Updates to the delineation of vulnerable areas are required. During implementation of SPP policies, errors in the delineation of some vulnerable areas have been noted. This update may affect new landowners, while others will no longer be impacted.
• Municipalities are required to report any changes to drainage systems (transport pathways) to the SPA and SPC. There will be no impact on landowners, but municipalities may need to adjust their methods for reporting changes to drainage systems.
• The vulnerability score for Lake Erie intakes may be increased based on changes to the Technical Rules. Any changes made to the vulnerability scores will be made in consultation with municipalities and Water Treatment Plant staff. If the vulnerability score is changed, additional significant drinking water threats could be identified that would affect landowners

The overall timeline for submission of the updated Assessment Report and Source Protection Plan to the MECP is expected to be on or before December 31, 2023. Consultation with affected stakeholders will occur during the process of each proposed update and for the whole suite of updates prior to submission. Should any of the proposed updates prove to be more urgent, the ERSPA in consultation with municipalities will determine whether locally initiated amendments under Section 34 of the Clean Water Act are required to address issues prior to the proposed submission of the S. 36 update.
The continuation of support by MECP will be necessary to undertake the proposed updates under S. 36, and the required consultation. This includes ERSPA staff capacity and expertise, SPC meetings, municipal working group meetings, and stakeholder engagement workshops prior to submission of the completed S. 36 update. The ERSPA recommends that current staff levels within be at least maintained in order to carry out the proposed updates through 2023.
### 3.1 Proposed Updates Related to Environmental Monitoring Programs

<table>
<thead>
<tr>
<th>Proposed Update</th>
<th>Documents Affected</th>
<th>Update Procedure</th>
<th>Reference Sections</th>
<th>Expected Timeframe for Completion</th>
</tr>
</thead>
</table>
| Proposed Update 1 | AR, SPP | - Analyze recent DWSP data  
- Complete comprehensive review of available studies and/or reports | 2.1 3.1.1 | 4-6 months |
| Proposed Update 2 | AR, SPP | - Analyze recent microcystin DWSP data  
- Complete comprehensive review of available studies and/or reports | 2.1 2.8 3.1.2 | 6-8 months |

### 3.2 Proposed Updates Related to Growth and Infrastructure Changes

<table>
<thead>
<tr>
<th>Proposed Update</th>
<th>Documents Affected</th>
<th>Update Procedure</th>
<th>Reference Sections</th>
<th>Expected Timeframe for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Update 3</td>
<td>AR</td>
<td>- Edit AR using suggestions/corrections made by municipal staff through surveys and consultation</td>
<td>2.2.1 2.2.2a 3.2.1</td>
<td>1 month</td>
</tr>
<tr>
<td>Proposed Update 4</td>
<td>AR</td>
<td>- Assess and correct delineations of the IPZs for Pelee Island West Shore WTP</td>
<td>2.2.2a 3.2.2</td>
<td>6-8 months</td>
</tr>
</tbody>
</table>

### 3.3 Proposed Updates Related to Implementation Challenges

<table>
<thead>
<tr>
<th>Proposed Update</th>
<th>Documents Affected</th>
<th>Update Procedure</th>
<th>Reference Sections</th>
<th>Expected Timeframe for Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proposed Update 5</td>
<td>SPP</td>
<td>- Edit NSAM polices to provide clarity for implementation</td>
<td>2.5.1 3.3.1</td>
<td>2 months</td>
</tr>
<tr>
<td>Proposed Update 6</td>
<td>AR, SPP</td>
<td>- Correct the delineation of the EBA using an appropriate method for effective and efficient ongoing updates/corrections</td>
<td>2.5.2 2.5.3 2.6.2a 3.3.2</td>
<td>12-18 months</td>
</tr>
<tr>
<td>Proposed Update 7</td>
<td>SPP</td>
<td>- Develop an appropriate method for notification of changes to transport pathways (e.g. internal process, policy)</td>
<td>2.5.3 3.3.3</td>
<td>3 - 4 months</td>
</tr>
<tr>
<td>Proposed Update</td>
<td>Documents Affected</td>
<td>Update Procedure</td>
<td>Reference Sections</td>
<td>Expected Timeframe for Completion</td>
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<tr>
<td>Proposed Update 8</td>
<td>Delineation of Significant Groundwater Recharge Areas</td>
<td>SPP, AR</td>
<td>- Confirm delineation of SGRAs in keeping with changes to the Technical Rules</td>
<td>2.6.1a 3.4.1</td>
</tr>
<tr>
<td>Proposed Update 9</td>
<td>Vulnerability of Significant Groundwater Recharge Areas</td>
<td>SPP, AR</td>
<td>- Remove vulnerability scores of all SGRAs in keeping with changes to the Technical Rules</td>
<td>2.6.1b 3.4.2</td>
</tr>
<tr>
<td>Proposed Update 10</td>
<td>Liquid Hydrocarbon Pipelines</td>
<td>SPP, AR, Explanatory Document</td>
<td>- Complete a risk assessment to determine significant, moderate or low threat conditions in vulnerable areas - Determine whether new policies are required for existing or future threats</td>
<td>2.6.1d 3.4.3</td>
</tr>
<tr>
<td>Proposed Update 11</td>
<td>Handling and Storage of Fuel policies</td>
<td>SPP, AR</td>
<td>- Complete a risk assessment to determine significant, moderate or low threat conditions in vulnerable areas - Update existing policies - Determine if new policies are needed</td>
<td>2.6.1e 3.4.4</td>
</tr>
<tr>
<td>Proposed Update #</td>
<td>Proposed Update</td>
<td>Documents Affected</td>
<td>Update Procedure</td>
<td>Reference Sections</td>
</tr>
<tr>
<td>------------------</td>
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</tbody>
</table>
| **Proposed Update 12** | Application of Technical Rule 95.1 for Great Lakes intakes | SPP, AR, Explanatory Document | - Determine whether the Source Vulnerability Factor (SVF) should be increased for Great Lakes intakes in keeping with the Technical Rule 95.1  
  - Complete a risk assessment to determine significant, moderate or low threats if the SVF is increased  
  - Update existing policies if necessary  
  - Develop new policies if necessary | 2.6.2b 3.5.1 | 18-24 months |
| **Proposed Update 13** | Re-evaluate status of Conditions | AR | - Determine whether the updated Technical Rules would result in any changes to the Assessment Report | 2.6.2c 3.5.2 | 2-3 months |
| **Proposed Update 14** | Incorporation of climate change into water quality risk assessments | AR, SPP | - Implement the new climate change risk assessment, at the discretion of the SPC and pending approval of the method by MECP  
  - Update the Assessment Report to include recently completed and ongoing work on climate change in the Essex Region | 2.6.2f 3.5.3 | 2-3 months |
| **Proposed Update 15** | Minor edits and corrections to the SPP and AR | SPP, AR, Explanatory Document | - Complete minor updates to the SPP and AR as required | 2.9 3.5.4 | concurrently and at the completion of S. 36 workplan |
MAY 16 2019

Irek Kusmierczyk, Chair
Essex Region Source Protection Authority
360 Fairview Avenue West, Suite 311
Essex, ON N8M 1Y6

Tom Fuert, Chair
Essex Region Source Protection Committee
6035 Malden Road, P.O. Box 17
Maidstone, ON N0R 1K0

Dear Mr. Kusmierczyk and Mr. Fuert,

I am following up on your proposed workplan for the review and update of the assessment report and source protection plan for the Essex Region Source Protection Area. The workplan, dated November 30, 2018, was submitted in compliance with the order dated April 15, 2015, issued under section 36 of the Clean Water Act.

I am pleased to note that your workplan confirms that implementation of the source protection plan is going well and I appreciate the level of effort you put into your analysis of your assessment report and plan.

Pursuant to subsection 36 (1) of the Clean Water Act, I am amending the order dated April 15, 2015, to establish requirements governing the content and timelines of the review and the process to be followed for any updates to your assessment report and plan. The source protection committee shall update the assessment report and source protection plan to address the workplan items identified in the attachment to this order and ensure those changes comply with the recent amendments to the General Regulation and Director’s Technical Rules.

I would also like to thank you for your proposed local interest updates which I noticed through my review. While not specifically required, I would encourage you to work with both your community and your municipalities to find cooperative ways to move forward with items that are consistent with the Act, its regulations, and Technical Rules that are in effect at the time of the updates. Staff in the Ministry’s drinking water source protection program are also available to provide you advice on this. You may contact Debbie Scanlon, Manager Approvals Section (416-212-8839) if you have any questions.
When undertaking any updates, the source protection committee and source protection authority must follow the amendment process and consultation requirements set out in the attachment to this letter. All updates carried out under section 36 of the *Clean Water Act* are to be submitted to the Ministry within six (6) months after the completion of the required updates and consultation.

Thank you for the continued efforts of the source protection authorities, committee and local communities to ensure sources of drinking water are protected. Significant progress has been made in source protection and the province looks forward to continuing to work with you and all stakeholders to protect sources of drinking water.

Sincerely,

[Signature]

Rod Phillips
Minister

Enclosure

C: Katie Stammel, Project Manager, Essex Region Conservation Authority
   Richard Wyma, General Manager, Essex Region Conservation Authority
   Susan Ecclestone, Director, Source Protection Programs Branch, MECP
   Debbie Scanlon, Approvals Manager, Source Protection Programs Branch, MECP
   Stacey Baker, Program Analyst, MECP
   Olga Yudina, Liaison Officer, MECP
Attachment: Essex Region Updates under Section 36 of the Clean Water Act

Mandatory Updates to the Essex Region Assessment Report and Source Protection Plan

The Essex Region source protection committee shall ensure that the review includes updates to the assessment report and source protection plan to:

- Comply with the amendments made to the Director’s Technical Rules, published on the Environmental Registry in March 2017 under posting number 012-8507, and the 2018 amendments to the Rules and General Regulation (O.Reg. 287/07). For your source protection area this includes:
  - assessing locations where the above grade handling and storage of fuel, as well as liquid hydrocarbon pipelines, pose a significant, moderate and low risk, and ensuring policies apply to all relevant protection zones;
  - assessing the vulnerability of the Great Lakes intakes that the workplan indicates are vulnerable (Lake Erie intakes for Pelee Island West Shore, Union and Wheatley); and
  - updating the significant groundwater recharge areas to align with the amended Technical Rules.

- Include technical work completed within the timeframe of the comprehensive review for changes to drinking water systems, including the Town of LaSalle, City of Windsor and Pelee Island West Shore drinking water intakes where appropriate, as necessary under O.Reg 205/18 of the Safe Drinking Water Act.
  - The source protection committee, authority and affected municipality should jointly determine if it would be more appropriate to have the source protection authority propose amendments under section 34 of the Clean Water Act to deal with the changes to any drinking water systems, as opposed to including these updates as part of the review under section 36.

- For implementation challenges where the committee, authority and affected municipalities determine it is necessary:
  - adjust the setback distance from a waterbody to ensure that intake protection zones of the modelled spill area (i.e. event based area) are captured accurately and reflect local conditions; and
  - revise policies to improve clarity and effectiveness such as policies for Non-Agricultural Source Material (policy: W2applyNASM-1, W2storageNAMS-1, W1L1A1-applicationNASM-1 and W1L1A1-storageNAMS-1) and to address accurate setback distances as a result of transport pathways.

Amendment Process for Updates including Consultation:

The rules that source protection committees and source protection authorities were required to follow under the Clean Water Act in preparing, consulting on and submitting
assessment reports and source protection plans to the Ministry will generally apply when making updates as part of this review. However, as with locally initiated amendments, any proposed updates to the Essex Region assessment report and plan are to be consulted on concurrently and submitted together as one package to the Ministry by the source protection authority.

Only those provisions of the Clean Water Act and the General Regulation (O. Reg. 287/07) referred to below apply to the update of the assessment report and source protection plan. For example, as no terms of reference is being required for the review and update of the assessment report and plan, subsection 36 (3) of the Clean Water Act does not apply.

Accordingly, for the updates to the assessment report and source protection plan, the following provisions apply:

- Assessment report content outlined in section 15 of the Clean Water Act and sections 11 to 14 of the General Regulation.
- Source protection plan content outlined in subsections 22 (2) to (15) of the Clean Water Act and sections 20 to 34 of the General Regulation.

Updates to the assessment report and source protection plan shall be made in consultation with affected municipalities, the Ministry, and any other bodies responsible for implementing a policy that may be revised as part of the updates. Consultation shall include the following minimum requirements:

- Early consultation on any draft updates to the assessment report and plan with the Source Protection Programs Branch prior to carrying out pre-consultation with other bodies.
- Pre-consultation with all implementing bodies as well as persons and businesses engaged in significant drinking water threats in the geographic areas affected by the updates in accordance with sections 35 to 39 of the General Regulation.
- Consultation for a minimum of 35 days, as outlined below.

The Explanatory Document that accompanies the plan (section 40, General Regulation) shall also be updated to reflect the proposed changes to the plan and made available for consultation.

While consulting on the proposed updates to the assessment report and source protection plan in accordance with the requirements set out above, comments received shall be documented, considered and addressed prior to advancing to the next consultation stage or finalizing the proposed updates to the assessment report and plan.

Notification and publication of the proposed updates shall follow the provisions included in the General Regulation for assessment reports and plans as described below. This includes making the proposed updates available on the Internet and in locations that are accessible to give the public and other interested parties an opportunity to inspect and comment on the updates. Specifically, consultation on the proposed updates to the assessment report and plan shall occur concurrently and sections 23 to 25 of the Clean
Water Act and section 41 of the General Regulation apply with modifications noted below:

- References to a draft or proposed source protection plan shall be read as references to the proposed updates to the assessment reports and source protection plan that result from the review carried out under section 36 of the Clean Water Act.
- Notices shall be provided to the clerk of each municipality and all other persons and bodies listed in section 41 that are affected by the proposed updates. A public meeting referred to in clause (c) of subsection 41 (3) and in subsection 41 (7) is optional as determined by the source protection committee in consideration of the nature and scope of the proposed updates.