Chair's Welcome

Disclosure of Conflict of Interest

Agenda

Agenda for the Meeting of the Essex Region Source Protection Committee (SPC) held on Wednesday, October 10, 2018.

Recommendation

THAT the Agenda for the Wednesday, October 10, 2018, Meeting of the Essex Region Source Protection Committee (SPC) be approved.

Minutes

Minutes for the Meeting of the Essex Region Source Protection Committee (SPC) held on Wednesday, April 11, 2018.

Recommendation

THAT the Minutes for the Wednesday, April 11, 2018, Meeting of the Essex Region Source Protection Committee (SPC) be approved as presented.

Minutes Continued

Minutes for the Meeting of the Essex Region Source Protection Committee (SPC) held on Wednesday, August 08, 2018.

Recommendation

THAT the Minutes for the Wednesday, August 08, 2018, Meeting of the Essex Region Source Protection Committee (SPC) be approved as presented.

Correspondence

None
Source Protection Authority (SPA) Information

Minutes for the Meeting of the Essex Region Source Protection Authority (SPA) held on Thursday, December 14th, 2017

Recommendation

THAT the Minutes for Thursday, December 14th, 2017 be received.

MOE Liaison’s Update

Olga Yudina, Liaison Officer, Ministry of Environment, Conservation and Parks (MECP) will provide a brief update to the SPC.

Presentation

None

Reports

1. Report SPC 14/18 – Consultation responses to draft Section 36 Workplan

Recommendation

THAT Administration update 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 to incorporate comments received during consultation and recommendations from the SPC; and further,

THAT Administration present the updated Workplan to the SPA for endorsement; and further

THAT Administration submit the Workplan to the MECP on or before November 30, 2018 in keeping with identified timelines.

Other Business

None

New Business

None

Date – Next Meeting

The next meeting of the Source Protection Committee (SPC) is to be determined.
Conclusion of Meeting

Katie Stammler,
Source Water Protection Project Manager/
Water Quality Scientist
Minutes of Meeting of the Essex Region Source Protection Committee (SPC) held on **Wednesday, April 11, 2018**, in the Essex Civic Centre, Committee Room E, 360 Fairview Avenue West, Essex, Ontario.

<table>
<thead>
<tr>
<th>Members Present:</th>
<th>Ron Barrette</th>
<th>Tim Mousseau</th>
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<tr>
<td></td>
<td>John Barnett</td>
<td>Cynthia Ouellet</td>
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<td></td>
<td>Jean-Marc Beneteau</td>
<td>Hans Peter Pfeifer</td>
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<td>Bill Dukes</td>
<td>Justine Taylor</td>
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<td>Tom Fuerth (Chair)</td>
<td>Mike Tudor (Health Unit Liaison)</td>
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<td>Antonietta Giofu</td>
<td>Olga Udina (MOECC Liaison)</td>
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<td>Dave Monk</td>
<td>Larry Verbeke (SPA Liaison)</td>
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<td>Ian Wilson</td>
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**Absent:** Nelson Santos

**Regrets:** Paul Drca, Thom Hunt

**Staff:**
- Katie Stammler, Project Manager, Source Water Protection/Water Quality Scientist
- Candice Kondratowicz, Administrative Associate: Corporate Services
- Sam Dundas, Water Quality Technician
- Brittany Hayward, Risk Management Assistant
- Laura Monforton, Risk Management Official

**Delegates:** None

**Guests:** None
CALL TO ORDER

The Chair of the SPC, Tom Fuerth, called the meeting to order at 4:10PM.

CHAIRS WELCOME

Good afternoon.

Today I would like to welcome Olga Yudina our new MOECC Liaison Officer. Olga is replacing Brian Wright who was with us for a little bit of time. Also with us is Sam Dundas, ERCA’s Water Quality Technician.

We are currently in the process of completing the review of the year end report which will be submitted to MOECC for May 1st.

Tim Mousseau attended the Chair’s meeting in March in my absence and I will ask him to provide an update to the SPC. Mr. Mousseau advised that it was an extensive agenda along with an in camera session where Chairs were allowed to speak their concerns with problems that they have come across. There was a very good Social Media Plan presentation provided by Chitra Gowda of Conservation Ontario.

DISCLOSURE OF CONFLICT OF INTEREST

None

AGENDA

1. The Agenda for the Meeting of the Essex Region Source Protection Committee (SPC) held on Wednesday, April 11, 2018.

   Resolution SPC15/18 Moved by Ron Barrette
   Seconded by Ian Wilson

   THAT the Agenda for the Wednesday, April 11, 2018, Meeting of the Essex Region Source Protection Committee (SPC) be approved. - CARRIED

MINUTES

1. Minutes of the Meeting of the Source Protection Committee (SPC) held on Wednesday, February 14, 2018.

   Resolution SPC16/18 Moved by David Monk
   Seconded by Tim Mousseau

   THAT the Minutes for the Wednesday, February 14, 2018, Meeting of the Essex Region Source Protection Committee (SPC) be approved as presented. - CARRIED
CORRESPONDENCE

Resolution SPC17/18   Moved by  Ron Barrette
                     Seconded by  Bill Dukes

THAT the correspondence be received.  - CARRIED

SOURCE PROTECTION AUTHORITY (SPA) INFORMATION

Minutes for the Meeting of the Essex Region Source Protection Authority (SPA) held on September 15, 2016 and June 22, 2017.

Resolution SPC18/18   Moved by  Antonietta Giofu
                     Seconded by  Ian Wilson

THAT the Minutes for Thursday, September 15, 2016 and Thursday, June 22, 2017 be received. - CARRIED

MOECC LIAISON’S UPDATE

Olga Yudina, Liaison Officer provided a brief update to the SPC.

The MOECC currently has two Liaison officers taking care of all of the SPC’s across the Province.

I’ve be involved with Source Water for 3 years now but not in the Liaison position. I’ve supported the SPC but was working more on the Policy side rather than with the Committee itself.

Regulatory amendments were filed and come into effect as of July 1st. This involves expanding minor amendments, Section 51, changes to terminology in the Plan.

Liquid Hydro Carbon Pipelines has been added.

PRESENTATION

None

REPORTS

A PowerPoint summary presentation provided by Katie Stammler is attached.

1. Report SPC 09/18 – Draft responses for the 2017 Annual Reporting template

   A handout was provided to the SPC for Section II – A message from the SPC (attached). The SPC was asked to provide any updates by April 16th to provide sufficient time for consideration and submission.

Resolution SPC19/18   Moved by  Dave Monk
Seconded by Bill Dukes

THAT the 2017 Essex Region Source Protection Area Annual Progress Report be submitted to the SPA on April 12, 2018 with suggested changes for endorsement by the SPA and then to MOECC on or before May 1, 2018 pending suggested changes and additions made by the SPC.

- CARRIED

2. **Report SPC 10/18 – Section 36 Workplan and 2018/19 SPC Meeting Schedule**
   
   Resolution SPC20/18
   
   Moved by Cynthia Ouellet
   
   Seconded by Tim Mousseau

   THAT Report SPC10/18 be received for information.

- CARRIED

3. **Report SPC 11/18 – Update on Water Quality Monitoring Projects**
   
   Resolution SPC21/18
   
   Moved by Jean-Marc Beneteau
   
   Seconded by Ian Wilson

   THAT Report SPC 11/18 be received for information.

- CARRIED

**OTHER BUSINESS**

1. SPC Membership – There have no applications received for the replacement of the vacant Other Section position on the committee that was recently vacated. Discussion must occur to determine the next steps for the SPC, whether that is a decrease in membership size or recirculating the ad to try to fill the position.

   At this time, no members are wanting to step down and believe that the size of each section should remain the same. Katie reminded the SPC that it’s difficult to find quorum without a full Committee.

**NEW BUSINESS**

None

**MEETING ADJOURNMENT**

Resolution SPC22/18

Moved by Tim Mousseau

Seconded by Ron Barrette

THAT the meeting be adjourned.

- CARRIED

**DATE – NEXT MEETING**

The next meeting of the SPC will be held in June or July 2018. Date to be confirmed.
CONCLUSION OF MEETING

Katie Stammler,
Project Manager, Source Water Protection/
Water Quality Scientist
Among the 44 policies in the Essex Region Source Protection Plan (SPP) that address significant drinking water threats, 30% are fully implemented and 68% are in progress and on target to be fully implemented within the time frame set out in the SPP. Only one policy has not yet been addressed, which is related to airplane deicer chemicals. This policy is applicable in areas where these chemicals are not used.

ERCA staff will continue to address outstanding policies and work with implementing bodies to ensure that all policies in the SPP are fully implemented in a timely manner.

(Of the remaining 6 policies, 3 are in progress and 3 are not in progress. All are non-legally binding)

Source Protection Plan Policies

P – Progressing Well (suggested)

- Municipalities have:
  - Delegated Part IV to ERCA
  - Have screening mechanisms in place for s.59 policies
  - Completed or working on OP and ZBL updates
  - Completed or working on road sign installation

Municipal Implementation Progress

P – Progressing Well (suggested)

- Provincially, ERCA staff have:
  - Established a mechanism to screen new applications for all Provincial Instruments and have incorporated SWP into their processes
  - Are in the process of reviewing existing PIs to ensure the intent of SWP policies is met
  - In the Essex Region, 58% of identified existing provincial instruments have been reviewed. Only one was determined to be a significant drinking water threat requiring an amendment to the existing permit.

- The remaining PIs to be reviewed are wastewater/sewage permits
- The Province has until 2020 to address existing threats
Overall Score - TBD by SPC

Draft comments from SPC:

The Source Protection Committee has reviewed this report at their meeting of April 11, 2018. It is the (unanimous?) opinion of the Committee that the report accurately reflects implementation progress to date. Further, the Committee notes that continued vigilance must be maintained to ensure the targets for implementation noted in the report as ‘in progress’ or ‘no information reported’ are reasonably expected to be in compliance within the time frames expected.

It is of concern to the Committee that the review expected to be undertaken in 2018/2019 include provisions to review assumptions made in the original Assessment Report so that activities deemed to be under threat thresholds continue to be at those levels (eg e-coli from point sources).

Although blue-green algae does affect drinking water sources, the GLWQA has undertaken to address the international nature of that issue including local practices that are suspected to be contributing. The policies in the SPP related to the use of phosphorus in production environments need to be reviewed in order to reflect the expanding nature of those operations.

Report 11.18

Threat vs. Issue

- There are 21 prescribed drinking water threats
  - e.g. waste disposal, sewage, agricultural applications (fertilizers, pesticides), road salt, snow storage, fuel, hazardous chemicals

- A drinking water issue is designated as such by the SPC if:
  - There is a known dangerous substance present at a surface water intake or in a well, and
  - (a) the parameter is present at a concentration that may result in the deterioration of the quality of the water for use as a source of drinking water, or
  - (b) there is a trend of increasing concentrations of the parameter and a continuation of that trend would result in the deterioration of the quality of the water for use as a source of drinking water

Microcystin

- Microcystin was present at concentrations at or near the Maximum Allowable Concentration for drinking water
- Water treatment operators have to adjust their operations to account for harmful algae
  - e.g. increased filtration, backwashing, carbon filters, etc.
- A Technical Advisory Committee including Essex Region and TSR SPC members reviewed available data and information and determined that the following option was appropriate (See SPC report 02/14 for more information)
  - Identify microcystin as issue under the CWA ONLY. An Issues Contributing Area cannot be delineated nor SDWTs be identified within the ICA related to the Issue. To address the issue, the SPC including a monitoring policy and E&O policy.

Why Phosphorus

- Phosphorus is a nutrient (food) that all living things need to grow
GLASI- PSP Wigle Creek
- Over $400,000 invested in 90+ agricultural BMPS aimed at reducing phosphorus
- Monitoring and modelling are still underway

Watershed Report Card – Surface Water
- Average Grade Across Ontario: C
- Average Grade in the Essex Region: D-

Average Phosphorus in Essex Region watersheds (2010-2016)
Minutes of Meeting of the Essex Region Source Protection Committee (SPC) held on
**Wednesday, August 8, 2018**, in the Essex Civic Centre, Committee Room C, 360 Fairview
Avenue West, Essex, Ontario.

**Members Present:**
- Ron Barrette – carrying proxy for Dave Monk
- John Barnett – carrying proxy for Antonietta Giofu
- Jean-Marc Beneteau – carrying proxy for Nelson Santos
- Paul Drca – carrying proxy for Thom Hunt
- Tom Fuerth (Chair) at 5:15

**Absent:**
- Bill Dukes
- Antonietta Giofu
- Thom Hunt
- Dave Monk
- Cynthia Ouellet
- Nelson Santos
- Olga Yudina (MECP Liaison)

**Staff:**
- Katie Stammler, Project Manager, Source Water Protection/Water Quality Scientist
- Laura Monforton, Risk Management Official/Inspector
- Brittany Hayward, Program Support Associate

**Delegates:**
- Jim Drummond, Nathan Warkentin, Warren Higgins

**Regrets:**
- Hans Peter Pfeifer
- Justine Taylor – carrying proxy for Cynthia Ouellet
- Mike Tudor (Health Unit Liaison)
- Larry Verbeke (SPA Liaison)
- Ian Wilson
CALL TO ORDER

In the absence of the Chair, SPC member, Tim Mousseau was nominated as the Acting Chair and called the meeting to order at 4:30 pm.

ACTING CHAIRS WELCOME

Good afternoon.

Acting Chair, Tim Mousseau, welcomed the SPC to the meeting.

Acting Chair Mousseau noted that several people have sent in their regrets, Bill Dukes, Antonietta Giofu, Thom Hunt, Nelson Santos, Dave Monk, and Cynthia Ouellet. John Barnet is carrying the proxy for Antonietta Giofu, Paul Drca is carrying the proxy for Thom Hunt, Jean-Marc Beneteau is carrying the proxy for Nelson Santos, Ron Barrette is carrying the proxy for Dave Monk, and Justine Taylor is carrying the proxy for Cynthia Ouellet. Our MECP Liaison, Olga Yudina, unavoidably could not attend the meeting in time as a result of traffic delays.

Acting Chair Mousseau sent former ERCA staff member Candice Kondratowiz off with thanks for her time spent with the SPC and welcomed Jim Drummond, Warren Higgins, Process and Compliance Tech from the Ontario Clean Water Agency and Nathan Warkentin from the Ontario Greenhouse Vegetable Growers as our guests to the meeting.

Acting Chair Mousseau advised that this meeting is being held to provide the SPC with an update on the changes made to the Technical Rules, the Table of Drinking Water Threats and the new policy needs for the handling and storage of liquid fuel. In addition, development of the Section 36 workplan will be discussed in detail for the SPC to provide comments and updates to the draft workplan for the final submission to the MECP on November 30, 2018.

DISCLOSURE OF CONFLICT OF INTEREST

None

AGENDA

1. The Agenda for the Meeting of the Essex Region Source Protection Committee (SPC) held on Wednesday, August 8, 2018.

Resolution SPC 23/18 Moved by John Barnett
Seconded by Hans Peter Pfeifer

THAT the Agenda for the Wednesday, August 8, 2018, Meeting of the Essex Region Source Protection Committee (SPC) be approved, as amended to reflect the new order of SPC Reports.

- CARRIED
MECP LIAISON’S UPDATE

Project Manager Katie Stammler shared the following note on behalf of the MECP Liaison Officer:

(1) The Ministry of Environment and Climate Change (MOECC) has a new title and is officially called the Ministry of Environment, Conservation and Parks (MECP)

PRESENTATION

None

REPORTS

A PowerPoint summary presentation provided by Katie Stammler is attached.

1. **Report SPC 13/18** – Fuel Policy Update

   Resolution SPC 24/18 Moved by Ian Wilson
   Seconded by Ron Barrette

   **THAT Report 13/18 be received for information.** - CARRIED

   Chair Fuertt arrives

2. **Report SPC 12/18** – Draft Section 36 Workplan

   Resolution SPC 25/18 Moved by Jean – Marc Beneteau
   Seconded by Ron Barrette

   **THAT Report 12/18 be received for information;**

   **THAT the SPC approve the draft Essex Region Section 36 Workplan as amended for circulation and consultation, and further;**

   **That SPA staff present the SPC with the comments received and edits made to the draft Essex region Section 36 Workplan for final approval for submission to the Source Protection Authority for endorsement** - CARRIED
OTHER BUSINESS

None

NEW BUSINESS

1. Chair Fuerth noted that the new government’s fiscal policies have begun, and as a consequence, Walkerton’s Chair could not get the ministry’s approval for a guest speaker. We continue to wait on funding.

2. Chair Fuerth noted that there was a recent letter supporting the Source Protection Program in light of the change in government. Chair John Williamson from the Cartaraqui Source Protection Committee, on behalf of the 19 Chairs of Source Protection Committees, sent the letter for review and consensus prior to being sent to the new Minister of Environment, Conservation and Parks.

MEETING ADJOURNMENT

Resolution SPC 26/18 Moved by Jean - Marc Beneteau
Seconded by Hans Peter Pfeifer

THAT the meeting be adjourned.

DATE – NEXT MEETING

The next meeting of the SPC will be held on October 10th, 2018 at 4:00 PM at the Essex County Civic Centre, Committee Room C.

CONCLUSION OF MEETING

Katie Stammler,
Project Manager, Source Water Protection/
Water Quality Scientist
Handling and Storage of Fuel

- The Director Technical Rules and Table of Drinking Water Threats (TDWT) were updated in March 2017
- The hazard rating for the handling and storage of fuel for surface water was increased from 8 to 10
- This activity is now a significant drinking water threat in IPZ-s with vulnerability scores of 9 or 10
- There are no IPZ’s with a vulnerability score of 10
- There are three IPZ’s with a vulnerability Score 9:
  - Lakeshore IPZ-1
  - Windsor IPZ-1
  - Amherstburg IPZ-1

Handling and Storage of Fuel

Updates to the TDWT result in the following new circumstances where fuel is considered a SDWT in the above listed IPZ’s

- The above grade handling and storage of liquid fuel at a bulk plant or facility as defined in O.Reg 217 (i.e. where gasoline or an associated product is handled other than in portable containers) in volumes greater than 2500L
- The storage of liquid fuel in a tank partially below grade at a bulk plant or facility as defined in O.Reg 217, or at a facility defined under O.Reg 213 in volumes greater than 2500L

Affected Vulnerable Areas

Amherstburg IPZ-1

Lakeshore IPZ-1

Windsor IPZ-1

Partially below grade tanks
Policy needs

• Policy for above grade handling and storage of fuel can be updated to include the new circumstance for Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1
• A new policy will need to be developed for partially below grade storage of fuel
  - Policies from other SPAs will be reviewed
  - Further consultation and discussion with SPC will be required
• Both policy needs will be included in the s. 36 workplan

Section 36 Workplan

• The CWA requires that, upon approval of a source protection plan, the Minister issue an order under s. 36 that establishes the content and timing of future plan review including updates.
• The Ministry has adopted a "workplan approach", through the issuance of s. 36 Minister’s orders
• The SPA creates a workplan outlining the scope and scale of the review, along with supporting rationale and any updates, which is developed in consultation with the SPC, municipalities and MECP.
• Once the workplan is reviewed, a further order can be issued under s. 36 that specifies the content and timeframes for any further review of the plan as well as necessary updates
• The Essex Region s. 36 workplan is due November 30, 2018

Section Title

• Rationale/Analysis
• Proposed Updates
  - Description: outlines the issue and why the update is necessary
  - Expected actions: briefly describe how the issue will be resolved
  - Expected timeframe for completion: an estimate for the time required to complete the task from the time it is started.
  - Expected expenditures: includes a listing of potential line items, not actual or estimated budgets.

*note, specific SPC costs are not yet included, but the SPC will be involved in every update

Workplan development

• The MECP issued guidance in December 2016 that outlined the following required elements for the development of the workplan
  A. Results of Environmental Monitoring Programs
  B. Growth / Infrastructure Changes
  C. Council Resolutions for Systems
  D. Policy Effectiveness
  E. Implementation Challenges
  F. Technical Rule Changes
  G. Impacts of prohibition policies on the agricultural community
  H. Specific directions in SPP approval letters
  I. Other local considerations

• The SPC will discuss the result of the review of each element along with any resulting necessary updates to the AR and/or SPP

Results of Environmental Monitoring Programs

Content not completed at this time. Further consultation with municipalities and drinking water operators is required. Considerations will include:
• Identification of water quality issues by drinking water operators
• Trends in DWSP or other monitoring data
• Analysis of whether current policies address identified issues
• Content is likely to have some crossover with 2.1.H (specific directions in approval letter)
• Additional updates may result from this analysis and consultation
Growth / Infrastructure Changes

2.1.B

- A survey was circulated to municipalities on June 22, 2018
- 7 of 10 municipalities have provided a response
- Growth:
  - No municipalities have indicated any change in population growth or any effects of population growth on the ability to supply water to their communities
  - Pelee indicated that upgrades to their WTP have allowed greater access to treated water but no new connections
- Infrastructure:
  - 3 municipalities have indicated upgrades to their water treatment and/or distribution systems
- New systems:
  - No new systems have been reported to date

Growth / Infrastructure Changes

3.1

Proposed Update 1

Expected Actions:
The AR must be updated to reflect changes to drinking water systems, including updates to the text and maps. No change to the SPP or policies is anticipated.
Further consultation with municipalities will be conducted to determine the extent of the changes made. Staff will be asked to review the sections of the AR describing their water treatment plant to ensure the accuracy of its contents. ERSPA will then make the necessary edits to the AR and update any associated maps as necessary.

Expected Timeframe for completion:
This update can be completed within 2 - 3 months, with the majority of time being spent on consultation with the municipalities.

Expected Expenditures:
ERSPA Staff time

Council Resolutions for Systems

2.1.C

- To date no municipalities have identified any intentions to add new drinking water systems in the timeframe of this update (within 5 years) and no plans to include other types of drinking water systems
- No further action is required at this time

Policy Effectiveness

2.1.D

- Content to be completed following consultation with SPC and municipalities
- To date, no municipalities have indicated any issues with policy effectiveness. They were asked to identify:
  - Existing policies that are ineffective (i.e. does not allow for mitigation or prohibition of an existing threat)
  - Policy gaps (i.e. activities that result in drinking water threats that aren't addressed by any policies)
  - Implementation challenges
- Assessment of the Annual Progress Report did not reveal any concerns with policy effectiveness to date
- Additional updates may result from consultation

Implementation Challenges

2.1.E

Provincial instrument policies:
- Policies 8-12 address the application and/or storage of Non-Agricultural Source Material (NASM) by managing the activity using existing provincial instrument (e.g. Environmental Compliance Approval) in certain vulnerable areas.
- The Ministry of the Environment was erroneously named as the Implementing Body of theses policies.
- The implementing body should be the Ontario Ministry of Agriculture, Food and Rural Affairs. OMAFRA has developed a standard operating procedure for all NASM policies, but has not included the Essex Region in their response to date

Implementation Challenges

3.2

Proposed Update 2

Expected Actions:
ERSPA staff will correct the policies and circulate them via email for a 30 day consultation period with the appropriate Ministry as the implementing body.

Expected Timeframe for completion:
This update can be completed within 2 months, with the majority of time being spent on consultation.

Expected Expenditures:
ERSPA Staff time (minimal)
Implementation Challenges

Transport pathways:

- O.Reg 287/07 s. 27(3) requires municipalities to notify the SPA and SPC of proposals to engage in an activity that may result in the creation of a new transport pathway or the modification an existing transport pathway.
- To date, few notifications have been received, except through the Municipal Class EA process.
- The Essex Region SPP does not contain any policies related to transport pathways and a formal notification process has not been established.

Proposed Update 3

Expected Actions:
Risk Management staff will continue to ground truth the delineation of the EBA and note where errors occur.
Internal discussions will continue to determine a method streamline notification of changes to transport pathways.
Consideration will be made in regards to enabling provisions in the Technical Rules.
Early and continuing consultation with local drainage superintendents will be conducted to ensure we have the most up to date drainage mapping and that any corrections we make are mutually agreed upon.
GIS staff will then use the gathered information to correct the existing drainage layer and adjust the delineation of the IPZs.
Consultation with newly affected landowners will be conducted once the delineation of the area is complete.

Expected Timeframe for completion:
It is expected that this task will take 8-12 months to complete including time for consultation.

Expected Expenditures:
Staff time, postal costs for consultation with land owners (if meetings are held, costs would be restricted to light refreshments and printed material – e.g. maps), travel within the ERSPA for staff to meet with municipal representatives.

Technical Rule Changes - Enabling

Intake Protection Zones
The updated Technical Rules includes several enabling provisions that could affect the delineation of Intake Protection Zones. This includes:

- New definition for transport pathways for surface water intakes: “in respect of an intake protection zone means works or any other thing that reduces the time it takes for a contaminant to reach a surface water intake and may include storm sewers, discharge pipes, utility trenches, ditches, swales, drainage works or any other types of drains;”
- The addition of “and Natural Surface Water Features”, which allows natural features to be considered when assessing transport pathways.
- The addition of a definition for high water marks used in the delineation of IPZs
- Amended rules allowing the setback from a water body to be reduced based on local conditions, which allows the SPA to determine if areas currently included in IPZs should be removed.

Delineation of Significant Groundwater Recharge Areas

- Rule 45 was updated to exclude the delineation of SGRAs in the following bodies of surface water: a Great Lake, Connecting Channel, Lake Simcoe, Lake Nipissing, Lake St. Clair or the Ottawa River.
- There are several SGRAs in the Essex Region, all of which will need to be re-evaluated to determine whether this edited Rule has an impact on their delineation.
- This will result in the need to update mapping in the AR and SPP with any modifications made to the delineation of SGRAs.
However, this update to the CWA includes a provision that new circumstances for liquid hydrocarbon pipelines result in the handling and storage of fuel in portable containers (i.e. gasoline or an associated product is handled other than in portable containers) in volumes greater than 2500L.

Expected Timeframe for completion:
This update can be completed within 5-6 months. Proposed Update 3.5 and Proposed Update 3.6 are closely linked and may be completed simultaneously or consecutively depending on the nature and complexity of work required. Expected Expenditures:
ERSPA Staff time; potential consultation with hydrogeologist to assess hydrological connectivity.

Proposed Update 6

Expected Actions:
A GIS exercise can be completed to merge existing polygons for each SGRA into a single polygon with no associated vulnerability score. Maps in the AR, SPP and online will then be updated with this new information. Policies in the SPP will be updated to remove any reference to SGRAs and the AR will be updated to reflect these changes.

Expected Timeframe for completion:
This update can be completed within 1-2 months. Proposed Update 3.5 and Proposed Update 3.6 are closely linked and may be completed simultaneously or consecutively depending on the nature and complexity of work required.

Expected Expenditures:
ERSPA Staff time; potential consultation with hydrogeologist to assess hydrological connectivity.

Proposed Update 7

Expected Actions:
Existing policies for the above grade handling and storage of fuel will be updated to include the newly identified circumstances. New policies will need to be developed for the storage of fuel in below grade tanks. Once the policies are established, the AR will be updated with the new information related to these threats, including the identification of existing threats.

Expected Timeframe for completion:
This update can be completed within 2-3 months, with the majority of time being spent on consultation. New policies for below grade fuel storage may require additional time and consultation.

Expected Expenditures:
ERSPA Staff time.

Technical Rule Changes - Mandatory

Scoring of Significant Groundwater Recharge Areas

- Technical Rules 80 and 81, which determine the vulnerability score of SGRAs, have been removed.
- While these areas will still be delineated, they will no longer have an associated vulnerability score and therefore no identified drinking water threats.
- Mapping in the AR and SPP will need to be updated to remove scoring, as well as online mapping that is available to municipalities and the public.
- Policies will also need to be updated to remove any reference to SGRAs, and the AR will need to be updated to reflect these changes.

Technical Rule Changes - Mandatory

Proposed Update 5

Expected Actions:
Hydrological connections to sources of drinking water (both groundwater and surface water including private wells) will be assessed. The AR will be updated to reflect new methodology and explanation for any changes to SGRAs. ERSBA staff will consult and collaborate with other SPAs affected by this rule change and particularly with other Lake Erie SPAs to ensure a consistent and defensible approach with respect to any changes to the delineation of SGRAs.

Expected Timeframe for completion:
This update can be completed within 2 months. Proposed Update 3.5 and Proposed Update 3.6 are closely linked and may be completed simultaneously or consecutively depending on the nature and complexity of work required.

Expected Expenditures:
ERSPA Staff time; potential consultation with hydrogeologist to assess hydrological connectivity.

Proposed Update 8

The handling and storage of fuel (See also SPC report 11/18)
Updates to the TDWT result in the following new circumstances where fuel is considered a SDWT:

- The above grade handling and storage of liquid fuel at a bulk plant or facility as defined in O.Reg 217 (i.e. where gasoline or an associated product is handled other than in portable containers) in volumes greater than 2500L.

- The storage of liquid fuel in a tank partially below grade at a bulk plant or facility as defined in O.Reg 217, or at a facility defined under O.Reg 213 in volumes greater than 2500L.

Technical Rule Changes - Mandatory

Proposed Update 9

Liquid hydrocarbon pipelines

- Discussed in SPC report 06/18
- New circumstances for liquid hydrocarbon pipelines result in it being a SDWT in Stoney Point IPZ-1, Lakeshore IPZ-1, Windsor IPZ-1 and Amherstburg IPZ-1.
- However, this update to the CWA includes a provision that no new policies are required if this threat does not nor is ever anticipated to occur in the identified vulnerable areas.
- The SPC requested further guidance for proceeding under these circumstances.
- No further assessment is required at this time.
Technical Rule Changes - Mandatory  
2.1.F - p.7

Sewage/Septic Systems

- No longer considered a contributing factor to sodium and chloride issues in the TDWT

Application and storage of NASM

- The term ‘dairy producer’ has been removed from the TDWT

Neither change has an effect on the Essex Region AR or SPP

No further assessment is required.

Technical Rule Changes - Enabling  
2.1.F - p.8

Vulnerability scores for Great Lakes intakes

Vulnerability Score = Area vulnerability factor x Source Vulnerability Factor

<table>
<thead>
<tr>
<th>MWP</th>
<th>Original SVF</th>
<th>New SVF</th>
<th>2017 SVF</th>
<th>2018 SVF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wheatley (Windsor) East Intake</td>
<td>7.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Wheatley (Windsor) West Intake</td>
<td>7.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Harrow</td>
<td>6.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Pelee West Shore WTP</td>
<td>6.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Union Emergency Intake</td>
<td>6.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Union Primary Intake</td>
<td>6.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Pelee Island West Shore</td>
<td>5.0</td>
<td>8.0</td>
<td>0.9</td>
<td>0.9</td>
</tr>
<tr>
<td>A H Weeks (Windsor) West Intake</td>
<td>0.0</td>
<td>9.0</td>
<td>0.7</td>
<td>0.7</td>
</tr>
</tbody>
</table>

Technical Rule Changes - Enabling  
2.1.F - p.9

Conditions resulting from past activities

- The 2017 version of the Director Technical Rules includes clarification of several rules related to the identification of preexisting sediment and groundwater Conditions as SDWTs.
- These changes are in accordance with previous guidance issued by the Ministry to clarify the intent of these rules.
- At present, there are no Conditions identified in the Essex Region AR or SPP
- The Essex Region AR and SPP will be reviewed to ensure there is no impact of these updated rules.

Technical Rule Changes - Enabling  
3.8

Proposed Update 8

Expected Actions:

Any new methodology for scoring will be applied to Great Lakes intakes in consultation with local drinking water operators, other appropriate municipal staff and neighbouring SPAs.

If the SVF for any intake is changed, the threat look up tool will be used to identify SDWTs, and the SPC will determine appropriate policy approaches to address these threats.

The preliminary analysis of this rule change suggests that the SVF may be increased for the Wheatley WTP, Pelee West Shore WTP, and the Union Water Supply System WTP.

Expected Timeframe for completion:

It is expected that this task will take 18-24 months to complete including time for consultation and the development of new or updated policies. If the initial analysis reveals that there is no need to change the SVF for our intakes, this task will be completed in a shorter time frame.

Expected Expenditures:
ERSPA staff, MECP staff, travel to in-person working group meetings

Technical Rule Changes - Enabling  
3.9

Proposed Update 9

Expected Actions:
ERSPA will review previous documentation related to the identification of Conditions to determine whether the updated rules would result in any changes. Consultation with Water Treatment Operators and/or municipalities is already planned for other Proposed Updates and will include discussion of the presence and impact of any known Conditions.

Expected Timeframe for completion:

It is expected that this task will take 2-3 months to complete and will be done concurrently with other updates.

Expected Expenditures:
ERSPA staff time
Technical Rule Changes - Enabling

Incorporation of climate change into water quality risk assessments

- A technical working group that has been compiling guidance and worksheet to evaluate climate change impacts on drinking water systems.
- Still in preparation and have been reviewed by academic consultants led by the Ontario Climate Change Consortium.
- Designed to be completed by SPA staff and include analyses to identify climate change exposure, evaluate sensitivity, analyze adaptive capacity and vulnerability and incorporate climate change into water quantity risk for each drinking water intake.
- Workshops are expected in the Fall of 2018 to further explain this exercise and its impact on the SPP and AR.
- Completion of this exercise is optional.

Technical Rule Changes - Enabling

Proposed Update 10

Expected Actions:
Once provided, the worksheets will be evaluated and completed to determine the risk factors associated with climate change for the drinking water intakes in the Essex Region SPA. Any resulting updates to AR and SPP will be made at that time.

Expected Timeframe for completion:
Unknown at this time.

Expected Expenditures:
Unknown at this time.

Impacts of prohibition policies on the agricultural community

- Policies that prohibit agricultural activities occur in areas that are not zoned for agricultural use.
- There are no impacts of prohibition policies on the agricultural community in the Essex Region.
- No further assessment is required.

<table>
<thead>
<tr>
<th>Vulnerable Area</th>
<th>Prohibition Policies</th>
<th>Zoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lakeshore (Belle River) IPZ</td>
<td>ASM, NASM, Pesticides</td>
<td>Commercial</td>
</tr>
<tr>
<td>Windsor IPZ-1</td>
<td>ASM, NASM, Pesticides</td>
<td>Residential, commercial, industrial and manufacturing</td>
</tr>
<tr>
<td>Windsor IPZ-2</td>
<td>ASM, Pesticides</td>
<td>Residential, commercial, industrial and manufacturing</td>
</tr>
<tr>
<td>Amherstburg IPZ-1</td>
<td>ASM, NASM, Pesticides</td>
<td>Residential, Commercial Neighbourhood, Light Industrial/Industrial, and Environmental Protection</td>
</tr>
</tbody>
</table>

Specific directions

- The S. 36 Order issued to the Essex Region SPA required that the following be considered in the workplan:
  - Results of monitoring programs and phosphorus loading data from local tributaries
  - Effectiveness of education and outreach policies aimed at reducing blue-green algae (microcystin-LR), and the contributions in Lake Erie.
  - Content for this section will be developed from the Annual Progress Report, SPC report 11/18, and ERCA's water quality reports for ongoing projects

Other local considerations

- Content yet to be developed by can include such elements as:
  - Consideration of updated floodplain mapping
  - Updating a low vulnerability score to a higher score based on better scientific data
  - Inclusion of new transportation corridor threats
  - Increase in vulnerability score based on a cluster of transport pathways
  - Considering climate change impacts based on improved data
  - Policy adjustments for improvement e.g.: targeted education and outreach program rather than broad based program
Consultation

- SPC
  - meetings in January, April, August and October 2018
  - Opportunities for feedback
- Municipalities
  - Survey July 9
  - Individual meetings as requested
  - Opportunity to review and provide feedback on draft workplan (late August, minimum 30 day period)
- MECP
  - Early consultation teleconference
  - Opportunity to review and provide feedback on draft workplan (late August, minimum 30 day period)

Next Steps

- Complete content for sections noted in report and presentation (e.g. environmental monitoring)
- Edit and update workplan based on comments from SPC, internal review and early discussions with MECP
- Circulate workplan to municipalities and MECP for formal consultation
- Next SPC meeting: Oct 10, 2018 to review updated draft, provide final comments
- SPA endorsement: November 8, 2018
- Submission to MECP: November 30, 2018 (or sooner!)
Minutes for the Essex Region Source Protection Authority (ERSPA) meeting held Thursday, December 14, 2017, Council Chambers, Essex Civic Centre, 360 Fairview Avenue West, Essex, ON, following the ERCA Board of Directors’ Meeting.

**Members Present:**
Steve Bjorkman  
Susanne Coghill  
Fred Francis  
Rick Fryer (Chair)  
John Jacobs  
Len Janisse  
Tania Jobin  
Irek Kusmierczyk  
Rick Masse  
Rita Ossington  
Larry Patterson  
Hilary Payne  
Ed Sleiman  
Larry Snively  
Ron Sutherland  
Larry Verbeke

**Absent:**

**Regrets:**
Terry Burns  
Al Fazio  
Jeff Renaud

**Staff:**
Richard Wyma, General Manager/Secretary-Treasurer  
Candice Kondratowicz, Corporate Services Assistant  
Tim Byrne, Director, Watershed Management Services  
Danielle Breault Stuebing, Director, Community Outreach Services  
Shelley McMullen, Director, Finance and Corporate Services  
Kevin Money, Director, Conservation Services  
Katie Stammler, Source Water Project Manager

**Guests:**
Tom Fuerth, Chair, SPC

1. **CALL TO ORDER**

The Chair of ERSPA, Rick Fryer, called the Meeting to Order

I would like to welcome the Chair of our Essex Region Source Protection Committee, Tom Fuerth and Katie Stammler, SWP Project Manager to the meeting tonight.

2. **DISCLOSURE OF CONFLICT OF INTEREST**

None

3. **AGENDA**

Agenda for the Meeting of the Essex Region Source Protection Authority (ERSPA) held on Thursday, December 14, 2017

Resolution SPA06/17  
Moved by Larry Verbeke
4. MINUTES

(a). Source Protection Authority (SPA)

Resolution SPA07/17 Moved by Rick Masse

Seconded by John Jacobs

THAT the Agenda for the Thursday, December 14, 2017 Meeting of the Essex Region Source Protection Authority (ERSPA) be approved. - CARRIED

5. REPORTS

(a). Report SPA02/17 – Annual Reporting

Resolution SPA08/17 Moved by Ed Sleiman

Seconded by Larry Verbeke

THAT Report SPA02/17 be received for information. - CARRIED

6. NEW BUSINESS

None

7. CLOSED – IN CAMERA SESSION

Regarding a personnel related matter for the Source Protection Committee (SPC) Membership

Resolution SPA09/17 Moved by Fred Francis

Seconded by Irek Kusmierczyk

THAT meeting move from Source Protection Authority to Committee of the Whole. - CARRIED
Meeting moved from Closed Session to Source Protection Authority’s Open Session

Moved by Larry Verbeke

Seconded by Larry Patterson

THAT the actions of the Source Protection Authority (SPA) Committee of the Whole be endorsed. - CARRIED

8. MEETING ADJOURNMENT

Resolution SPA10/17

Moved by Ed Sleiman

Seconded by Tania Jobin

THAT the Meeting be adjourned. - CARRIED

9. DATE – NEXT MEETING

The next meeting of the ERSPA will be scheduled as required.

10. CONCLUSION OF MEETING

Richard J.H. Wyma
General Manager/Secretary-Treasurer
FROM: Katie Stammler, Project Manager

SUBJECT: Consultation responses to draft Section 36 Workplan

DATE: October 4, 2018

PURPOSE

To provide the SPC with responses provided during the consultation period for the Essex Region Section 36 workplan, for discussion and comment.

SUMMARY

• A Section 36 workplan must be submitted to the MOECC by November 30, 2018. It identifies sections of the AR and SPP requiring review, timelines, and consultation information

• A draft version of the workplan was developed and circulated to the SPC, municipal staff, and the MECP for comment during a consultation period from September 6, 2018 to September 28, 2018

• A second questionnaire with detailed questions related to drinking water intakes was also circulated to municipal staff at this time. To date, 6 of 7 questionnaires have been received.

• Comments were received from MECP, SPC members and municipalities

BACKGROUND

Further to SPC report 12/18, the draft Essex Region Source Protection Area Section 36 Workplan that was developed for comprehensive review and update of the Essex Region Source Protection Plan as per the requirement under the Clean Water Act (2006), was circulated for consultation on September 6, 2018 following a comprehensive internal staff review. The draft workplan was sent to the Ministry of Environment, Conservation and Parks, municipal staff and members of the SPC with a request for comments by September 28, 2018. Responses were receive from the MECP, three municipalities and four SPC members. In addition, a second questionnaire was circulated to municipal staff with detailed questions related to Water Treatment Plants (WTPs). The questionnaires had a high response rate with 6 of 7 questionnaires returned to date and the last questionnaire expected.

SPC comments

Most of the SPC comments were editorial in nature. All edits will be incorporated and efforts made to clarify certain sections identified as needing work. One member asked whether there had been any comment from the MECP regarding the proposed updates to NASM polices (Proposed Update 2). The MECP has provided comment on these policies and the Project Manager is working with them to ensure the policies are updated in a manner that ensures the correct Ministry will implement them and provide a response for annual reporting. Another
member asked whether funding had been secured for updates to the EBA (Proposed Update 3). The completion of this and all updates are dependant on receiving funding. No funding has been secured at this point, but the work for the updates will be included in the ERSPA’s future budgets.

**Municipal comments**

Windsor and Lakeshore responded that they had reviewed the document and had no comments.

The Town of Essex provided comment on the climate change section of the workplan. They noted their own investment in upgrades to storm water management systems to handle predictably larger rainfall occurrences, as well as the need for buy-in from other municipalities in order to be better prepared for major events and permanent disturbances to our economy and our social well-being. They suggested that the workplan take into account the challenge of resistance by the general public and multiple levels of government to adaptations required to face an “uncomfortable” future as a result of climate change. They acknowledged the identification of hazards like harmful algal blooms as a way to facilitate discussions about climate change and highlighted the need for comprehensive watershed management plans to help address several factors including Source Water Protection.

The draft workplan included a very brief discussion on climate change. Since the writing of this draft, the Project Manager has attended a workshop to discuss a new potential climate change tool that can be used to assess risks to our drinking water sources. The City of Windsor also recently consulted with ERCA on their upcoming revision to the Climate Change Adaptation Plan. In addition, a new project will be beginning in the coming months to facilitate a regional climate change adaptation plan that will be developed by ERCA in consultation with municipalities. The workplan will be updated to provide further information and to address the comments provided by the Town of Essex.

**Water Treatment Plant questionnaires**

A questionnaire aimed to gather more detailed information related to WTPs in the Essex Region was prepared with the aid of Warren Higgins, a Process and Compliance Technician at the Harrow-Colchester South Water Treatment Plant. Municipal staff were asked to review the description of the WTPs that is included in the Assessment Report (AR), as well as to indicate whether there are any planned changes to drinking water intakes. The questionnaire also included information related to drinking water quantity and quality concerns, microcystin and pre-existing conditions that can affect sources of drinking water. They were also asked to indicate any concerns related to policies in the Essex Region Source Protection Plan (SPP). The information gathered from these questionnaires will be included in the s.36 workplan to indicate where updates to the AR or SPP are necessary. To date, six questionnaires have been received. The Project Manager has been in communication with the remaining WTP.

A summary of the responses is provided in the attached table as well as the full questionnaires. None of the WTPs reported any planned changes to their drinking water intakes, no new
drinking water issues were reported and no pre-existing conditions were identified. Four of the responders indicated some edits to the description of the WTPs in the AR. Responses for the Pelee Island WTP indicated that there were issues with water quantity, which were resolved when the WTP was upgraded in 2015. They also indicated a concern with a specific potential significant drinking water threat that ERCA’s RMO is looking into. Three of the responders indicated that there may be some changes to the drinking water issues identified in the AR and all of the responders indicated that microcystin is an operational concern. Based on these responses, some updates to the AR will be necessary. The s.36 workplan will also indicate the need to further explore the status of drinking water issues for each of the WTPs and the addition of microcystin as a drinking water issue for WTPs in Lake St.Clair and the Detroit River.

Ministry of Environment, Conservation and Parks

The MECP provided a thorough review of the draft s.36 Workplan that was provided to them. Their comments were received on September 27, 2018 and are attached to this report. There are a number of items that the Project Manager is seeking clarity on with the MECP. These items and other responses to the MECP comments will provided where possible during the SPC meeting on October 10, 2018. Please review the attached document for discussion.

Next steps

The draft workplan will be updated to address all submitted comments. Once complete, ERSPA will circulate the final draft to the SPC via email and the SPA will receive the workplan for endorsement at their meeting on November 8, 2018. Their will be some opportunity for additional minor comments prior to the final submission to MECP on or before November 30, 2018.

RECOMMENDATION

THAT Administration update 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 to incorporate comments received during consultation and recommendations from the SPC; and further,

THAT Administration present the updated Workplan to the SPA for endorsement; and further

THAT Administration submit the Workplan to the MECP on or before November 30, 2018 in keeping with identified timelines.

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

1. Summary of responses to Water Treatment Plant questionnaires
2. Responses to Water Treatment Plant questionnaires
   Branch Staff Assessment & Comments
Introduction

Thank you for submitting your draft section 36 (s36) workplan to the Source Protection Programs Branch (SPPB) of the Ministry of the Environment, Conservation and Parks (MECP or Ministry) on August 29, 2018. The SPPB will continue to support source protection authority staff as they work to submit their completed workplan on or before November 30, 2018.

On April 15, 2015, the Minister issued an order requiring Essex Region source protection committee and authority to submit a workplan to the Ministry by November 30, 2018. The order specified that the workplan propose which portions of the source protection plans needed to be reviewed, including timeframes, consultation to be undertaken as well as rationale to support the workplan. The workplan must also take into account experiences gained from implementing the source protection plans and information from the first annual progress report. The s36 workplan will help the Ministry understand what the source protection authority believes is in need of updating at the local level, which will help inform a decision by the Minister on a subsequent s36 Order under the Clean Water Act (the Act).

Ministry Comments on Essex Region’s Draft s36 Workplan

General Comments

- We acknowledge that the workplan includes the content recommended by SPPB and was completed using the template created by Conservation Ontario. There are several instances (the executive summary on page 2, introduction section on page 6, and proposed review and updates section on page 20) where the ‘approval’ of the workplan by MECP is referenced. As a reminder, the Ministry does not approve/reject a workplan. The Ministry uses the workplan contents to help inform a revised s36 order for the source protection authority. The revised order will also include a date for when updates need to be completed. Source protection authorities may proceed to do work included in the workplan in consultation with their local municipalities at any time. Please consider revising these sections for accuracy.

- Roles and Responsibilities – As a reminder, municipalities have the option of leading work required for assessment reports and plan updates. During consultation on the development of the workplan, municipalities should have been provided the opportunity to identify such work. Section 3 (proposed review and updates) indicates Essex Region Source Protection Authority staff will complete the proposed changes. Despite this, in the event a municipality wishes to lead specific work, they should continue to be provided that opportunity. It may be helpful to mention this in the workplan for clarity.
• It is Ministry’s expectation that all technical work outlined in the workplan will meet the requirements of the Director’s Technical Rules that are in effect at the time the updated assessment report and source protection plan are finalized for submission.
• Please feel welcome to contact your Liaison Officer whenever you require further clarification or support.

1. Executive summary
• This section indicates that the vulnerability score for Lake Erie intakes may be increased based on changes to the Technical Rules (rule 95.1), that “further guidance has been requested from the MECP”, and related to this, proposed update 8 discusses the “need for further guidance”. The information about this rule change is well summarized in section 2 (page 15). As shared at project manager and chair meetings, local source protection authorities may increase the vulnerability score when an intake is in shallow water or close to shore coupled with local information that indicates the intake is vulnerable to contamination provided they document their approach and include justification that aligns with the rules. While a Technical Working Group to assist authorities in this process may be helpful (proposed update #8), it is not required. In addition, since this workplan is a one-time document that is also available to stakeholders and the public upon request, this kind of time-limited statement (i.e., ‘has been requested’) can become out of date. For these reasons, we suggest removing this statement from the Executive Summary and page 3. Please note that additional comments are provided below under Hydrocarbon Pipelines.

2. Workplan Development
• Section 2.1.1 (Growth)
  o The draft workplan indicates that only one municipality has indicated any change in population growth; however, we understand that the source protection authority is still acquiring responses from municipal stakeholders as part of the workplan review. For this section, please consider also including a reference or table of projected population growth forecasting the next several years for each municipality if available.

• Section 2.2.2 (Infrastructure)
  o As of July 1, 2018, municipalities will be required to ensure an approved source protection plan is in place for new or amended municipal residential drinking water systems before water is provided to the public. This means that municipalities will need to engage with the source protection authority early in the planning process to avoid potential delays in bringing systems on-line.
  o This section indicates a number of existing systems that may be changing in the next five (5) years. Just a reminder that a primary focus of the regulation and the workplan is on new or changing sources of water in existing systems (i.e. a new well within a drinking water system), rather than changes in the distribution systems themselves.
For new systems, the draft workplan appears to be considering a new intake pipe in the Township of LaSalle. Given that the workplan is a stand-alone document, it may be helpful to mention the water body the intake would draw from for reference – the Detroit River.

- Section 2.6.1 (Mandatory Updates)
  **Significant Groundwater Recharge Areas**
  - The amendment to technical rule 45 was to clarify the intent of the existing rule and to align it with the approach applied by source protection authorities in the first round of source protection planning. Currently, this section seems to imply that SPPB changed the *science* of SGRAs delineation, rather than aligning the *approach* and methods used to delineate SGRAs with previously approved assessment reports. Please consider revising this section and proposed update #5 for accuracy.

  **Hydrocarbon Pipelines**
  - The draft workplan indicates that it was determined that there are no liquid hydrocarbon pipelines in any of the identified Intake Protection Zones (IPZs) in the Essex Region where they would be considered a significant threat, and it is the source protection committees understanding, that no new policies would be required. As a reminder, now that pipelines are a prescribed threat (liquid hydrocarbon pipelines - circumstances 1972-1979), a risk assessment using a threat scoring approach still needs to be included in the assessment report for any drinking water systems, and this should include a table or map to indicate where a pipeline could be a low, moderate or significant risk – similar to what the source protection authorities did in the first round of planning.
  - Additionally, this section indicates that the source protection committee requested further guidance and “*until or unless further guidance is received, no further action is required*”. As a reminder, a guidance bulletin was provided to the PMs and Chairs August 23, 2018 (and posted on the RMO forum) - *Source Protection Bulletin: New Administrative Amendments and Prescribed Threats under the Clean Water Act – August 2018*. To summarize, if there is a potential for pipelines to be a significant threat anywhere based on vulnerable area scores (i.e., IPZ scores of 9), the source protection committee needs to examine this and consider if future policies are warranted. Unless there is something that would preclude pipelines ever being located in the applicable high scoring areas in the future (i.e. the area is already developed such that there is no reasonable prospect that a future pipeline would be built), future policies are required. If this risk assessment determines there is no reasonable prospect in the applicable locations, the source protection authority / committee must include their reasons for concluding this in the explanatory document, as well as the process used to reach this conclusion (i.e. land use planning documents). Please remove reference to the ‘waiting for further guidance’ and consider this information in this section and/or under proposed updates (such as update #8).
**Fuel Handling and Storage**

- A reminder for the source protection authority that the changes to handling and storage of fuel (above grade and partially below grade) circumstances (handling: 112-191 and storage: 1289-1408) were made not only for significant drinking water risks but also for low and moderate risks (a vulnerability score of 4.5 is now a low risk). Therefore, while updating the assessment reports and source protection plans to capture significant threats, please verify all tables or maps where low/moderate threats of fuel handling and storage are listed to ensure the updates to the rules are correctly captured. It would be helpful to include information in this section of the workplan and/or in update #7 to explain whether any further revisions to your assessment report and/or plan will be required.

- **Section 2.8 (Specific Directions from Source Protection Plan Approval Letter)**
  - The information provided in the workplan regarding the specific directions for the source protection plan approval letter to include the results of monitoring programs and phosphorus loading data from tributaries as well as an analysis of the effectiveness of education and outreach policies aimed at reducing blue-green algae (microcystin-LR) and contributions in Lake Erie is very informative.
  - The draft workplan notes that the effectiveness of education and outreach campaigns are difficult to determine, but that the source protection committee feels that residents are more aware. If you have any supporting information regarding this observation, it would be helpful to include. For example, have any surveys been conducted at the conferences or courses mentioned, or a pre/post awareness campaign?
  - Proposed update #11 and Appendix 3 includes documents related to Essex Region Conservation Authority’s water quality program, including a summary report, 2018 Watershed Report Card and a recently published journal article. As the source protection authority has been monitoring microcystin for several years, it would helpful for the workplan to specify that updates to the assessment report, beyond the an analysis of the monitoring data, will also consider if identifying the parameter as an ‘issue’ under the CWA has added any new value beyond what is already happening through other tools.

3. **Proposed Review and Updates**

- **Proposed Update #1 (Assessment Report Updates Related to Descriptions of DWS)**
  - In the description of this item, the workplan indicates when the assessment report needs to be updated to reflect changes to drinking water systems. Please note that changes in distribution networks or the addition of a reservoir is not expected to impact the delineation of the vulnerable areas and therefore, an update to the assessment report is likely not required. A decommissioned water treatment plant would require an update to the assessment report as the relevant IPZs would be removed. Additionally, when the IPZs for a decommissioned intake are removed, the
source protection authority should consider if any Event Based Areas (EBAs) may be affected or require adjustment.

- **Proposed Update #2 (NASM Policy Updates)**
  - It is proposed that the implementing body for a number of policies related to the application and/or storage non-agricultural source material (NASM) be changed from MECP to the Ministry of Agriculture, Food and Rural Affairs (OMAFRA) due to reporting deficiencies. We believe there may be a misunderstanding of previous information provided to the source protection authority which may warrant a different approach than is currently outlined in the workplan.
  - NASM applied **on-farm** would fall under a NASM plan and implemented by OMAFRA. We understand from Table 1 in the workplan that there are no agricultural properties affected by significant threat policies in Essex, therefore changing the policy wording to OMAFRA may leave an unintentional gap. This is because NASM applied **off-farm** is also considered process organic waste (POW), often referred to as biosolids, and requires an Environmental Compliance Approval (ECA) issued by MECP. It is our understanding based on the draft workplan and rationale in Essex source protection plan that these policies are intended to capture application and storage of NASM material on **off-farm** land, therefore MECP is the correct implementing body.
  - For the storage of NASM, under O. Reg. 347, a waste disposal site is exempt from Part V of the Act and from this Regulation if, it is a **NASM plan area** (i.e. on-farm). Therefore, if it is not a “NASM Plan Area”, the site is considered a waste disposal site and requires an ECA.
  - As part of the identification of land application of nutrients (i.e. NASM, ASM and fertilizers), SPPB asked source protection authorities to count any application of **off-farm** nutrients as a threat, summed up as **managed land**. During the development of the assessment reports and source protection plans, some source protection authorities also wanted to have policies to capture this type of land application and therefore included policies for **off-farm** land application of NASM as POW/biosolids, which noted above, requires an ECA.
  - Committees typically have a complimentary policy for **on-farm** land application of NASM (i.e. NASM plan) directed to OMAFRA; however, since Essex Region does not have any agricultural land where the application of NASM would be a significant drinking water threat, it does not require a NASM-plan policy directed at OMAFRA.
  - We acknowledge that the Table of Drinking Water Threats (chemicals) currently include circumstances for NASM application which tends to be linked with agricultural lands (i.e., livestock density must be greater than 1.0 nutrient unit per acre when percent managed lands is 40% or greater, in IPZ scoring 9 for application of NASM to be a significant threat), and is therefore disconnected from policy language and approaches to managing POW/biosolids **off-farm**. Circumstances 1968 and 1971 in the pathogen table identify significant threat circumstances that more readily apply to NASM storage and application both on- and off-farms in IPZs. As part of our ongoing work to review the Director Technical Rules and Tables of Drinking Water Threats, we
are considering amendments to align the threat circumstances with how these materials are classified and regulated on agricultural versus non-agricultural land.

- We also understand that the supplemental information provided through annual reporting in April 2018 did not explicitly mention the above.
- Given there is no agricultural land in Essex, and until such time as the Tables of Drinking Water Threats are updated to more explicitly address NASM application off-farm in the form of POW/biosolids, we suggest the source protection plan consider retaining MECP as the implementing body for the NASM policies. The authority may also wish to consider including the phrase "off-farm application and/or storage of NASM as processed organic waste (i.e. biosolids)" to add further clarity. If there is any potential for future agricultural lands in Essex where NASM may be applied or stored, then a policy targeted to OMAFRA would be appropriate to include; however if there is no reasonable prospect of this, a policy for on-farm NASM can be omitted provided the explanatory document includes rationale and summaries how this was determined.

- Proposed Update #3 (Proposed Updates to EBA Delineations)
  - The draft workplan notes a number of errors in the delineation of Event Based Areas (EBA) in the IPZ-3 as reported by Risk Management Officials (RMO) through ground-truthing. This update indicates that Type III errors occur where a stream channel may have been modified through artificial drainage. Further clarification would be helpful to understand if the source protection authority also intends to review the mean flow discharge used in the modelling or if other work needs to be completed pertaining to changes in artificial drainage. In order for the text-based policy approach (further comments provided below) to be workable and meet the requirements of the regulation for public consultation, it may be necessary to expand the IPZ-3 further to include even more of the source protection area, while the policy wording clarifies that the Risk Management Plan only applies within the Limit of Regulated Area or 120m setback, whichever is greater. In this way, any possible landowner would be included in consultations on the proposed updates, and during implementation, the policies would only apply if their RMP activity is located in the regulated area or 120m setback.
  - On page 24 and section 2.5.2, the workplan indicates that given the scale of the EBAs and frequency of municipal drain alterations, text-based policies that define the setback from the watercourse (e.g. municipal drains) where the EBA policies apply would benefit Essex Region and address challenges when EBA/IPZ-3 delineations do not align with ground–truthing. This is not clearly conveyed solely by reading the information on page 24 and it would be helpful to elaborate somewhat and cross reference to the implementation challenges section for improved clarity.
Timeframes

- In some proposed updates, reference is made to how long certain tasks are anticipated to complete. Some of the updates are listed as two to five months, whereas the completed submission is indicated to be 2023. The SPA in consultation with local municipalities may wish to consider if there are any items that should be prepared as locally initiated amendments under section 34 of the Clean Water Act, as opposed to waiting five years to capture this information.

- While the workplan includes an anticipated completion date of 2023, it is not clear if this would correspond to a proposed submission date for the comprehensive updates under s.36 of the Clean Water Act. Although timeline to complete specific updates may be staggered, overall the updates carried out under s.36 would be publically consulted upon and submitted to the Ministry as one package.

- It would be helpful if the workplan includes an anticipated date for the submission of updates under s36, assuming a development and consultation process similar to locally initiated amendments carried out under s34. As noted previously, source protection authorities may proceed anytime to carry out necessary reviews and updates in consultation with their local municipalities.

Minor typographical errors appear in the following locations:

- Technical rule changes (page 11) supplemental bulletin #3 was released in August 2018 (rather than July as indicated in the draft workplan).

- On page 16, conditions resulting from past activities, the first two technical rule amendments have a typographical error - they should read 126(5) and 126(6).