



SPC Subcommittee MEETING MINUTES
JULY 11, 2014
Meeting #59

Bob Bedgood, Chair of the Source Protection Committee called the meeting to order at 9:00 a.m. on July 11, 2014 at the Upper Thames River Conservation Authority Boardroom. The following members and staff were in attendance:

Members

Bob Bedgood	Darrell Randell
Murray Blackie (SPA Liaison)	Joe Salter
Brent Clutterbuck	Charles Sharina
Pat Donnelly	Pat Sobeski
Dean Edwardson	John Trudgen
Patrick Feryn	John Van Dorp
Paul Hymus	Darlene Whitecalf
Carl Kennes	Jim Reffle (HU Liaison)
Earl Morwood	

Regrets:

Kennon Johnson
Joe Kerr
George Marr
James Maudsley
Valerie M'Garry
Don McCabe
Doug McGee
Hugh Moran
Sheldon Parsons
Augustus Tobias
Teresa McLellan (Provincial Liaison)

Staff:

Chris Tasker
Michelle Fletcher
Deb Kirk
Steve Clark
Bonnie Carey
Girish Sankar
Ian Wilcox

The following individuals joined by phone for discussion of Agenda Item 7.a.

Joe Kerr, SPC member
Katie Stammler, Essex Region SP Project Manager
Jason Wintermute, LTVCA

1) Chair's Welcome

Bob Bedggood welcomed the committee and acknowledged a quorum was not achieved. The members present met as a subcommittee. He indicated a few members were planning to participate in the discussion on agenda item 7a by phone. The Wheatley microcystin issue would be the first item to be discussed in order to accommodate those joining by phone.

2) Adoption of the Agenda

The agenda was not approved due to quorum not being achieved. The members present continued with discussion of the agenda items as a sub-committee.

3) Delegations

There were no delegations.

4) Minutes from Previous Meeting

The June 13, 2014 SPC meeting minutes were not approved due to quorum not being achieved.

5) Declaration of Conflict of Interest

No conflict of interest was identified.

6) Business arising from the minutes

a) SPP approval process update

Comments from the Director have been received in a formal letter which was distributed in the meeting package. The comments are similar to the informal ones presented previously. The letter does not include Appendix B comments as expected and the request for additional information on agricultural impacts was removed as the response given to them satisfied the questions asked.

Some additional detail is provided in the letter related to the Waste Threats comment. A note was made of a similar comment being made on the Lake Erie SPP. This seems to be still evolving therefore a discussion on this policy will be deferred until September to determine if there is additional information which

would suggest prohibition of future waste management when it is the small quantities excluded from the PI should be discussed again.

PCB storage which is described in the Lake Erie comment was discussed. MOE is of the opinion that PCBs are better to be retained on site for destruction than transported. A Prescribed Instrument was recommended to be used to allow for this encouraging them to use mobile unit to destruct versus transporting them. Policy developed by the Credit, Toronto and Central Lake Ontario SPC was provided which will require some revisions. The committee was asked to consider this concept. Given that this approach is significantly safer than extracting the PCBs from the equipment and then transporting them off site for disposal the committee agreed provided the MOE can be satisfied it would not be or ever becomes a significant drinking water threat. If not, then alternative tools such as RMO/RMP could be used to deal with it. A note was made of storage facilities that are approved for PCB storage have very little in them, are secure and seldom pose danger. Federal regulation in 2009 prohibits any long term storage of PCB's. The policy wording will be worked on with MOE to ensure everyone is comfortable with the final result.

7) Business

a) Wheatley Microcystin Issue

The Wheatley microcystin issue was discussed at the start of the meeting. A discussion paper was circulated by email and around the table which builds on the work that ERCA did assessing microcystin as an issue for the Lake Erie intakes in the western basin. Much of the work was previously presented to the SPC. The discussion paper was a result of the discussions of the Technical Advisory Committee (TAC) who reviewed the materials from the joint meeting with the Essex TAC. The goal of the meetings was to review the materials and then for each TAC to provide recommendations to their SPC.

Graphs outlining 3 years of data were reviewed including raw water levels, treated water levels at Wheatley and the Chatham/South Kent intake. West Elgin also could be considered but there is no data. The data shows that microcystins are more frequently detected and occasionally reaching $\frac{1}{2}$ MAC or MAC. The connection between microcystin and phosphorus is important if threats are going to be identified based on activities contributing to the issue. Factors such as wind, sunlight, water temperature can also contribute to the increase in blooms. The PWQO for the nuisance growth of algae and papers relating phosphorous and microcystin suggest that the phosphorus concentration of 0.02-.035mg/L are when there is a likelihood of algae growth and microcystin.

It was pointed out that the levels of phosphorus coming out of Muddy Creek are in line with the levels in the lake and that these levels support the blooms. It is contributing to a problem but the high lake levels mean the problem is there already.

Three options presented to the committee for consideration were:

- 1- If the issue is identified in the AR under technical rule 114, then an issue contributing area (ICA) delineation and the identification of Significant Drinking Water Threats (SDWT) within the ICA related to Issue must be included in the AR. Policies to address the threats must be included in the Source Protection Plan (SPP). If this information is not readily available a work plan satisfying rule 116 must be included in the AR.
- 2- If the issue is identified in the AR under the CWA ONLY, then an ICA cannot be delineated nor can SDWTs related to the Issue be identified within the ICA. To address this, the SPC still has the option to write monitoring policy(ies) for the Issue (identified under the CWA) under S. 22(2)-[7] of the CWA.
- 3- If there is no issue identified in the AR, the SPC has the option only to write generic policy such as E&O / Incentive Programs under S.22 [7] of the CWA provided that the policies meet the objectives of the SP plan.

The TAC unanimously supported Option #2 and the Essex TAC came to the same conclusion.

Five recommendations were reviewed as outlined in the discussion paper.

Monitoring policies would be continued in a coordinated manner, maximizing the use of existing data, would be expanded or developed where appropriate, promoting research, and would consider events based monitoring. It should be flexible and based on appropriate available funding.

A question was raised of why the levels are higher at the head waters of Muddy Creek. There are large green house operations in the area.

Promoting best management practices for phosphorous discharge in the western basin of Lake Erie through Education & Outreach was noted under recommendation #5.

The committee was also asked to consider a reference being included in the discretionary inspection program policy. There is a policy which suggests this for Moderate and Low drinking water threats which could be modified to include areas where the failed septic may contribute to an Issue under the Act.

The option of Great Lakes targets and Great Lakes policies was discussed. Setting the targets is a MOE responsibility but previous Directors have suggested it would be done in consultation with local SPC. It was suggested discussions be initiated with the other regions around Lake Erie to determine if there can be a push in the SPP or in the AR.

These items would be documented in the SPP and AR and issues that do not fit into the plan can be incorporated into the letter being sent to the Director when the SPP is submitted.

A question was asked about why algae blooms are only a problem in the western end of Lake Erie and is monitoring being done. Karen Maaskant a water quality specialist from the UTRCA indicated there are several complex factors such as the very shallow depth of the west basin of Lake Erie, combined with some high nutrient inputs from contributing watersheds; the large Maumee River watershed in Ohio has been identified as the main source of nutrients causing algae blooms in the west basin. The “LEEP (*Lake Erie Ecosystem Priority Report*)”, “*A Balanced Diet For Lake Erie*” focuses on not just the phosphorus bound to soil but the dissolved reactive phosphorous; which may be more of a factor.

Jim Reffle of the Elgin-St. Thomas Health Unit reported surveillance on the lakes is being done in coordination with MOE to better understand this issue. The goal is to tighten networks and to work collaboratively including water treatment operators and on the American side as well.

The intent of the recommendation is to strengthen the work and research that is already being done locally and internationally.

The sub-committee agreed to the (5) recommendations of the discussion paper to be endorsed by the committee as a whole at the next SPC meeting when a quorum is achieved. The teleconference portion of the meeting concluded at 10:10 a.m.

Moved by Dean Edwardson-seconded by Joe Salter

“RESOLVED that the SPC sub-committee agreed to (5) recommendation of the discussion paper and selected Option #2 of the MOE’s options presented - identify Microcystin as an issue is under CWA but not under the rules.

CARRIED.

b) Assessment Report Updates

i) SCRSPA Assessment Report revisions

At the previous meeting the revisions to add in Kettle Stoney Point First Nation intake were reviewed and updates which reflect the IPZ-3 work was circulated. The work was reviewed previously by the SPC and has been incorporated into the AR at a summary level.

Changes were presented in a change log table by Steve Clark and Girish Sankar which included mapping that were revised to separate fuel and fertilizer zones and identify the different volumes modelled for each area. The ICA work has not been incorporated yet.

Key Points:

Maps:

- Legends in the maps were revised to differentiate the spill amounts modelled in the IPZ areas to be clearer.
- Where there is overlap in the map areas all the zones will be made visible.
- It was pointed out that the updated work that Girish completed is the 15,000 L zone and the 34,000 L area is the previous work the consultation completed by the consultant. If they were overlaid there are areas of 34,000 that would be visible beyond the 15,000. The area includes IPZ-1 and 2 in with the areas new IPZ-3 connecting to it.
- Map name changes now explain the zones more in detail. A suggestion was given to reference to what the quantities correlate to (i.e. tanker ship, transport truck etc.) and to label the exact location.
- Map 4-3b. Word fuel should be moved down one line to avoid confusion on title.
- Under text changes 4.2.5.4 the dilution factor approach text was included and explained.
- A new IPZ map relating to fertilizer and reference to it is included.

The committee took a break from 10:50-11:00 a.m.

ii) UTRSPA Assessment Report revisions

Revisions to the UTR AR were provided in the same change log format.

Key points:

- Changes have been made to Section 4 vulnerability.
- SGRA updates required some minor edits.
- Oxford technical work to remove transport pathways from private wells at Sweaburg that have been decommissioned. Mapping to be revised to reflect the wells were taken out and while a few properties remain unchanged as they retained their private wells.
- Similar revisions will be made to the vulnerability section and system summaries which will be determined after all the other changes have been made.
- Section 5 is updated to reflect the ICA for Woodstock including adding the new technical reports.
- Additional issues evaluation work will be documented and the issue will be revised to reflect its anthropogenic contributions.
- A section will be added to summarize the ICA report which is provided at the end of the change log.
- The workplan for Thorton as provided by Oxford will be documented.
- Under section 5.6.1 work plan is added from Oxford based on enhanced nutrient management plans and interim measures until the RMPs are in place. Further work will be done to determine if issue remains an issue at the next AR update.
- Updated maps were distributed at the last meeting for section 4 and 7 which added the ICA.
- It was suggested that a sentence should be added in the ICA section that the MAC was established to protect infant health.

iii) Updated Significant Threat Counts

The threats tables were not circulated as planned from Section 7 of all the ARs due to some challenges related to double counting of septic systems related to how pathogen and chemical threats are being characterized. Sanitary sewers counts need to be worked out in terms of capacity and what the circumstance is, but this needs to be related to size so only the ones large enough to be

considered a significant drinking water threat are counted. The numbers will be refined from what the consultants did ensuring that if there is a possibility of an activity going on that the circumstances are considered. The managed land and livestock density for agricultural threats will be considered as this mapping was not available to the consultants at that time.

Fuel suppliers and union gas was contacted to determine the areas that are serviced and resulted in the threats being reduced due to properties using natural gas. Municipalities were contacted to determine if these areas were serviced with private septic or sanitary sewer services.

In summary some numbers have increased and some have decreased. These updated inventories do not replace the need for compliance monitoring as these items will change over time. The RMO/inspectors will need to verify whether there are significant threats that require RMP's.

Changes will also be reflected for the changes in vulnerability in the Sweaburg which resulted in all but a few of the septic systems no longer being a Significant Drinking Water Threat.

A question was asked of how the properties with several threats are shown in the inventories. All the threats that were inventoried are listed for the zone they occur in. The totals include both the number of occurrences of threats and number of locations of threats. If there are multiple threats on one property one RMP would be required.

Threats in the ICA for Woodstock have been added and included in a separate table. Many will be duplicated due to having different circumstances.

Fuel Delivery

During the work done with ERCA for fuel threats for the IPZ3 the question of whether fuel inventories relating to current fuel storage is outside of the delineated vulnerable area should be included was asked. Although we have not extended the IPZ-3 to include tile drained parcels this will be reviewed and the number of fuel threats in IPZ-3 may be reduced further. There are a few additional fuel threats identified in the IPZ-3 for each system.

The committee discussed that even if the quantity of fuel stored on site is not considered a significant threats, a tank truck is on site to fill the tank it could be considered to be a significant threats. Handling of fuel during deliveries where the quantity handled on site during delivery is far greater that the amount stored could be considered. It could be dealt with through RMP with property owner, but should likely be the focus of outreach to the fuel suppliers. It was determined the truck is only there short term and it does not need to be considered as part of the Risk Management Plan.

c) Wallaceburg Nitrate Issue Monitoring Policy

The policy concepts presented at the last SPC have been worked into a policy with some additional background and discussion which assisted in drafting the policy.

Since developing the discussion paper MOE is suggesting that nitrate be identified as an issue under the CWA rather than rule 114. If this is done a work plan is not required. This will be discussed further with MOE to resolve whether to proceed as proposed in this discussion paper or to use the same approach as Option #2 for the Wheatley microcystin issue.

The committee supported the policy outlined subject to MOE giving direction that this course is not appropriate. Oxford is taking the same approach with their (their wellfield with a nitrate issue but without a ICA).

A comment was made that the nitrate issue is a drinking water issue in Wallaceburg and it needs to be monitored.

8) Information

a) Updated/Revised meeting Schedule

A revised meeting schedule was distributed. The location for our September meeting is now the UTRCA as the construction at SCRCA has been delayed. The November meeting is scheduled to be at the St. Clair Conservation Authority board room.

b) Consultation Update

At the previous meeting an update was given on the consultation plans. The communications team has been working on preparing for the local consultation and a table was distributed identifying the planned dates and locations and the topics that are planned to be discussed at each session. The communications team is working on the ads and letters to municipalities. The committee was advised if interested they may attend any of the meetings.

9) In Camera Session

None.

10) Other Business

None.



11) MOE Liaison report

Teresa McClellan was not present. No update was given.

12) Members reports

Charles Sharina- commented on a new technology of drone copters that are able to do aerial photography and have been doing so for pollution, locally. He reported this has become big out west and a unit can go upward to 500 feet and they are working on having them go up to 1000 feet.

13) Adjournment

There being no further business, the meeting was adjourned at 11:45 a.m. PLEASE NOTE: The next SPC meeting is scheduled for **September 12, 2014** and will be held at the Upper Thames River Conservation Authority office due to construction continuing to take place at the St. Clair Conservation office.