



Thames – Sydenham and Region Source Protection Committee

Meeting Notice

Please be advised that a meeting of the Thames-Sydenham and Region Source Protection Committee has been called for the following time. If you are unable to attend please contact Deb Kirk at 519-245-3710 x46.

Meeting Date: June 25, 2010

Meeting Time: 9:00 am to 3:00 pm

Meeting Location: St. Clair Conservation Authority office

Proposed Agenda

Item	Time
1. Chair's Welcome	9:00
2. Adoption of the Agenda	
3. Delegations	
4. Minutes From the Previous Meeting	
5. Declaration of Conflict of Interest	
6. Business arising from the minutes	
a.	
7. Business	9:30
a. SCRSPA Assessment Report update	
b. UTRSPA Assessment Report	
i. Consultation Schedule update	
ii. Maps	
Lunch	12:00
iii. Section Summaries	
iv. Sections	
c. August 20 Source Protection Committee meeting	2:00
8. Information	
a. MOE Liaison Program Update	
b. Member appointment extensions	
9. In Camera Session	
10. Other business	
11. MOE Liaison report	
12. Members reports	
13. Adjournment (next meeting July 9)	3:00



Meeting Materials

Agenda Item	Description
4.	<ul style="list-style-type: none"> • SPC Meeting Minutes, April 30, 2010 • SPC Meeting Minutes, May 14, 2010
7ii. Maps	<ul style="list-style-type: none"> • UTRSPA AR Maps
7iii.	<ul style="list-style-type: none"> • UTR AR Section Summaries 1.0, 2.0, 5.0, 6.0, 8.0, 9.0
7 iv.	<ul style="list-style-type: none"> • UTRSPA AR Section 6.0 Conditions Assessment • UTRSPA AR Section 8.0 Great Lakes • UTRSPA AR Section 9.0 Data Gaps and Next Steps • UTRSPA AR Appendix 5 Addendum • UTRSPA AR Appendix 9 Flagged and Noted Parameters
8.a	<ul style="list-style-type: none"> • MOE Liaison Officer Program Update-May 27, 2010



SPC MEETING MINUTES
JUNE 25, 2010
Meeting #27

Bob Bedggood, Chair of the Source Protection Committee called the meeting to order at 9:00 a.m. on June 25, 2010 at the St. Clair Region Conservation Authority (SCRCA) Boardroom. The following members and staff were in attendance:

Members

Bob Bedggood	Sheldon Parsons
Murray Blackie (SPA Liaison)	Richard Philp
Pat Donnelly	Darrell Randell
Dean Edwardson	Jim Reffle (Liaison)
Pat Feryn	Joe Salter
Paul Hymus	Charles Sharina
Carl Kennes	Pat Sobeski
Joe Kerr	John Van Dorp
James Maudsley	Joe Van Overberghe
Valerie M'Garry	Lisa Ross, (MOE-fill in for Teresa)
Marg Misek-Evans	

Regrets:

Brent Clutterbuck
Don McCabe
Doug McGee
Keenon Johnson
Earl Morwood
Robert Olivier
Augustus Tobias
Teresa McLennan (Provincial Liaison)

Staff:

Rick Battson	Chitra Gowda
Steve Clark	Girish Sankar
Ralph Coe	Chris Tasker
Linda Nicks	Deb Kirk
Derekica Snake	Ingrid Vanderschot



1) Chair's Welcome

Bob Bedggood welcomed the committee. The members present agreed to proceed as a subcommittee and report to the full Source Protection Committee when quorum is reached.

A question was raised to whether the quorum number can be reduced. Quorum is set in the regulation as 2/3 of the members that the SPA can appoint and cannot be changed without changing the regulation.

moved by Jim Maudsley-seconded by Darrell Randall

“Resolved that the members meet as a sub-committee until a quorum is reached and report to the SPC.”

CARRIED.

2) Adoption of the Agenda

A motion to approve the agenda was requested. A few changes to the agenda were identified including adding a status update relating to item 7b.UTRSPA AR and item 8b.was requested to be moved up to the beginning of the meeting.

moved by Charles Sharina-seconded by Valerie M’Garry

“Resolved that the agenda be approved with the revisions identified above.”

CARRIED.

8b) Member Appointment Extensions

Bob advised the SPC members of the letter circulated today pertaining to the committee’s appointment terms. The original appointment was a three year term which expires in October of 2010. As such, the extension of the terms is outlined for the next three years. Bob expressed the hope of having the members remain on the committee for this next term. The time frame is a reasonable time beyond the plan being approved. If a member decides to not remain on the committee, they were requested to notify Deb Kirk by July 30, 2010.

A question was raised of whether the process may be pre-mature for municipal representatives who may not be re-elected. It was noted the initial municipal nomination included involvement until the end of the SPP. If a council member is not re-elected, and the municipalities jointly indicate they want to nominate a new SPC member, the selection process would occur as before.



3) Delegations

None

4) Minutes from the May 14, 2010 meeting were considered.

moved by Jim Maudsley-seconded by Paul Hymus

“Resolved that the May 14, 2010 minutes be approved.”

CARRIED.

Minutes from the April 30, 2010 meeting were considered.

moved by Dean Edwardson-seconded by John Van Dorp

“Resolved that the April 30, 2010 minutes be approved.”

CARRIED.

Quorum reached. No questions or concerns with the materials discussed by the sub-committee were identified.

moved by Joe Van Overberghe-seconded by Joe Kerr

“Resolved that the activities of the sub-committee be endorsed by the SPC members and that the committee proceed with the agenda as approved by the sub-committee.”

CARRIED.

5) Declaration of Conflict of Interest

No conflict of interest was identified.

6) Business arising from the minutes

None

7) Business

a) SCRCSPA Assessment Report Update

The SCRCSPA proposed AR Report was posted on May 14 for comment. There were no comments received. To date both the LTVSPA and SCRSPA reports have been submitted to the Ministry of Environment for approval.

b) UTRSPA Assessment Report

i. Consultation Schedule update-

Teresa Hollingsworth gave a report on the consultation meetings and thanked the committee members who attended them. Upcoming meetings are scheduled for June 28 in Mount Elgin and July 6 in Woodstock.

A Municipal Forum was held in St. Mary's on June 24 to prepare municipalities for receiving the assessment report and advise them of the letters being sent to land owners. There are twenty-two systems in the UTRCA. Draft system summaries that show counts of significant threats will be included with the letters. Twelve municipal staff attended the forum. Each municipality will receive a copy of the AR CD when the notice is sent to the clerks.

Tier 1 and 2 water budget process was reviewed at the forum; the afternoon session was focused on the municipalities that will be involved in Tier 3 work who were all represented at the forum. The importance of having full partnerships with municipalities was emphasized.

A member pointed out that the letters distributed in the Woodstock area brought awareness to the Source Protection process.

Bob introduced Ingrid Vanderschot as the new TSR Source Protection Policy Advisor.

ii. Maps

Suggested Edits/Revisions:

Vulnerability Maps

- *4-1-1 Birr*. Scale is different on top right, need to standardize. Legend needs to be clear for the vulnerability score. A question was asked of why the ground water vulnerability score is low around the well? It was explained it is based on the ISI score and then an overlay with WHPAs. WHPA-A

automatically scores a 10. In the WHPA-B, a high ISI gets a vulnerability score of 10, medium is 8, low is 6.

- 4-1-3 *Komoka*. Scale issue noted. This well is being closed; connection being made to the pipeline. Title changed to Kilworth-Komoka.
- 4-1-4 *Fanshawe London*. No edits.
- 4-1-6 *Melrose*. A question of what the red blip is? This is an area of high vulnerability due to materials in the ground; sand and gravel deposits. Flow paths were discussed and how this determination is made. How can it be indicated with a straight line in areas with sand? It was explained sand is higher up and does not affect the flow. Lines define areas where particles end up in a well. WHPA-A through D can not be extended to consider transport pathways as can be done with IPZ-2 or 3. The hydrogeology can be looked at to increase vulnerability score slightly to account for the transport pathways but not extend the area.
- 4-1-10 *Hickson*. This is a system where adjustments were made based on transport pathways and text for this map will describe this. Scale to be changed.
- 4-1-12 *Innerkip*. More patchwork in sandy areas. Label Hickson on all maps.
- 4-1-19 *Sebringville*. Adjustment to vulnerability score north of Hwy #8, from 2 to 4 due to a transport pathway. It was noted WHP- B is entirely included within WHPA-A. It was asked how common is it to have WHPA-A & B overlap to that extent? It depends on size of the system and the hydrogeology.
- 4-1-20 *Shakespeare*. Map on top right to include title GW Vulnerability. The well is north of Hwy #7. The modeling is based on 25 year forecast of future pump rate conditions. All it would take is one large industry to change this forecast. A question was asked of whether these are based on water taking permits. Not generally, because it is not a scenario where you would pump at your maximum every day of the year. These were done on an average use.
- 4-1-22 *St. Paul's*. Small system with 90 people. Top right WHPA-B is only a small sliver.
- 4-1-23 *Stratford*. Add names to each. Groundwater vulnerability areas of transport pathways were adjusted from low to medium in those areas, based on well records. It is unknown if the wells still exist.

Threats Maps

- 7-3-20 *Sebringville*. It was suggested that we remove “Related to pathogens, chemicals or DNAPL” in title.

- 7-3-21 *Shakespeare*. No edits.
- 7-3-22 *St. Paul's*. Scores on DNAPL can only be significant in WHPA-A, B, C. Circumstances determine whether it is moderate or low in WHPA-D. Preference is to keep tables standardized, consistent.
- 7-3-23 *Stratford*. No edits.

iii. Section Summaries

Section 1 -Introduction and Background

- Same format, adjust colors so they are similar.

Section 2 -Watershed Characterization

- Table on Page 3 -Municipal Drinking Water Systems, include Hyde Park/Fanshawe instead of calling them backup wells.

Section 5 -Issues Evaluation

- This section was distributed to the Municipal operators for comment. Many on the list are naturally occurring. The paragraph relating to Thamesford on nitrates, Well 3, from the Oxford Issues Report, will be re-worded.

Section 6 -Conditions Assessment

- Additional recent information from the consultant has been added for potential conditions in Mitchell and Stratford WHPAs. There are four systems with potential conditions to be considered: Komoka, Mitchell, St. Mary's and Stratford WHPAs. Grammatical change to read "no data are available" versus "is", on back page.

Section 8 -Great Lakes

- There were discussions on the relevance of including Great Lakes since we do not have a shoreline. It was noted half the population in SWP region receives drinking water from the Great Lakes. Discussions need to happen with neighboring regions that use Lake Erie water, either through a proposed or informal working group. A group may be beneficial for Lake Huron, although at this stage it is not thought to be necessary. It was noted that it is important to look at Lake St. Clair as well, however, for now it is being considered within the proposed Lake Erie group, and the TSR continues to discuss Lake St. Clair issues with the Essex Region SPA, which has intakes in Lake St. Clair. Great Lakes targets are meant for bigger systematic issues where the province needs to be involved and individual SPR can't deal with the issues on their own. The proposed Lake Erie working group would be focused only on SWP and not broader Great Lakes water quality. It was suggested to

change the title ‘Lake Erie Basin Working Group’ to “*Proposed Working Group*” to be clear on what it is, add notes on a possible Lake Huron working group and note that Lake St. Clair issues are discussed with the neighboring SPA. The Lake St. Clair Management Plan is a separate entity and will be discussed at a future meeting. Rick Battson reported there are representatives from the Ministry of Environment, Environment Canada and the American government who are involved and conferences have been held relating to this for seven to eight years.

Section 9 -Data Gaps

- A question was asked of whether work has been started on IPZ-3s. Wallaceburg studies will be started. The Lake St. Clair studies are being done through Essex Region using Baird Consulting and this methodology will be applied to Lake Erie intakes. Discussions have been started with West Elgin. Girish and Brian are working on a proposal. Wallaceburg would benefit from the involvement of some SPC members through a steering committee. Grammatical change on last paragraph, line six should read “the Director in the approval” versus “it’s.”

The committee took a break from 10:45 a.m to 11:00 a.m

iv.Sections

Section 6 Conditions Assessment

- Second paragraph is wordy and not clear. Change fifth line “*significant threats be managed to the point they are no longer significant versus no longer become.*” Tenth line down, reduce “*as a result of*” to “*because*”. It was noted that conditions are reserved for an activity that is no longer being undertaken. There was some discussion as to whether this might apply to residuals from pesticides which are no longer used. If an activity is still going on, then it may not be able to be considered a condition. Chris will look into this. This is intended for industrial activity, such as with Brownfields.

Section 6.0 Conditions Assessment Methodology

- Section 6.2 Conditions. Page 6-7 last paragraph, St. Mary’s River needs to be Trout Creek or Thames River. Page 6-6 to 6-7 and Page 6-7 to 6-8 line breaks to be changed.
- Section 6.3 Data Gaps and Next Steps; a paragraph was added at the bottom based on data from the Ministry’s regional files. Data gaps will be prioritized.

- Section 8.0 Great Lakes- requires edits as per those identified for Section 8 Summary.
- Section 8.1 Impact of Considering Great Lakes-paragraph was added based on information from Pat D. relating to Lake Huron Bi-National Partnership Action Plan, 2008-2010. A website link is provided.
- Section 8.2 Page 8-5 information from Pat D. Lake Huron 2008-2010 plan from website. Use same wording as in summaries concerning Lake Erie.
- 8.2.3 First paragraph second line and second paragraph last line, remove “Government” of Quebec.
- 8.3 Lake Erie Basin Working Group. Qualify first sentence indicating specific work being outside SPC mandate, not relevant to drinking water. Chitra and Pat D. will work on this.
- 9.0 Data Gaps. Recent discussions with MNR on the Tier 3 Water Budget and what the Province is looking for in a work plan need to be reflected in this section? Data gaps need to be acknowledged and a work plan provided. The stages will be highly dependent on funding and the scope of the work. A few extra lines will be added to reflect their needs. Page 9-3 add hyphen to first column for word understanding.

Appendix 5

- Appendix 5 has been updated since LTVCA AR report. A comment was made of fluoride concentrations being “considered to be” naturally elevated yet on page A9-15 in the last line it indicates they are “believed to be”. Column headings should be identified on each page. Page 9-2 table lists iron is titled Komoka wells in first column and shows Birr on second column. Names of the wells need to be consistent. A note will be added to Section 5 in the preamble outlining what someone can do if there is a “yes.” A question was raised on the Thorndale well and ecoli found being caused by a transport pathway. Amount of verbiage on this to be reduced and will add references to the discussions with operators since technical report. Comments from operators to be submitted next week.

Status Update- UTRSPA AR

Chris Tasker reported most of the UTRSPA sections are completed; however work being still being done on the St. Mary’s WHPA. The consultants are running additional model scenarios based on new interpretation from geologic cross- sections to explore uncertainties with their work. Reports on the quarries and surrounding area have been obtained to decrease uncertainty. Site visits were carried out The consultants revised the original single layer model and constructed a ten layer model. Based on their research, the consultants determined the water is coming from three bedding plane aquifers



between the different confining layers. The model is more complex and therefore there are more parameters which could affect the WHPA. The original WHPA lines were not only based on a simple hydrogeologic model, but also on maximum allowable pumping rates over 365 days. However St Mary's has experienced a decline in water use over the past few years due to declining usage in industry and conservation efforts. The rules require use of future rates. The rates utilized in the updated model reflect more realistic pumping rates. Therefore, not all the changes to the revised model are a result of an improved the structure of the model but also lower, but more realistic, pumping rates.

A map of the new WHPAs was reviewed and Chris explained the dashed lines where the consultant delineated where the majority of particles (95%) show up and that the proposed WHPA includes an envelope around that area, where erratic particles could travel or uncertainty exists. The three wells were modeled together with distinct zones delineated around each of them. There are examples where buffers were applied to account for uncertainty, but to include the area between distinct capture zones seems excessive. The distance between the two zones is 300-400 meters. It was discussed that the WHPA-E and F are likely to fill in some of the gaps between the distinct capture zones in the updated AR. Chris relayed his discomfort with straying from what the model predicted by that much.

In summary, the expectation is to move forward with WHPA A through D for the AR. The question to the committee today is whether to keep the area in between the two plumes or consider the consultants and peer reviewer's caution and uncertainty in doing so. Consensus of the committee was further work is required to improve the confidence in the map lines. This information will be presented at the next committee meeting, July 9, 2010. It was noted that the timing will be critical with the AR being posted July 15, 2010.

The committee broke for lunch from 12:15 p.m.-1:00 p.m.

Tier 2 Water Budget

An update was given on the Tier 2 Water Budget work to date. A peer review teleconference is planned for July 7, 2010. Technical memos have been going to the reviewers on each subject and consultants have taken the comments and have been incorporating them into the memos. The last memo, stress assessment, is being reviewed currently and will be incorporated into the AR. Significant Groundwater Recharge Area (SGRA) maps will be distributed at the next meeting. A challenge faced by this region will be having some areas defined using methodologies used in Tier 1 and Tier 2, then being refined in Tier 3 and how these will be pieced together. Chris pointed out that there is a big difference in recharge between the sub-watersheds of the north and south branches of the Thames. The solution was to compare it to the Upper Thames overall average and this same methodology will be revisited for the Lower Thames and St. Clair reports.

Chris reported there is one outstanding report needed from Oxford County pertaining to revisions to the Vulnerability Report, based on peer reviewers' comment. The vulnerable areas are not changing;



it is more based on the documentation. The outputs from that work are being incorporated into the section 4.

In summary, Section 3 and 4 for the UTRSPA AR will be completed and include the St. Mary's information, stress assessment results from the Tier 2 Water Budget work and the Oxford report.

c) August 20 Source Protection Committee Meeting

Bob advised the committee he will not be at the August 20, 2010 SPC meeting. A motion was brought forward to have Marg Misesk-Evans, the vice chair, act as Chair at that meeting.

moved by Carl Kennes-seconded by John Van Dorp

“Resolved that Marg Misesk-Evans, will chair the August 2010 meeting in Bob’s absence.”

CARRIED.

Early Response Program

Teresa Hollingsworth gave a report on the Ontario Drinking Water Stewardship program which is moving from Early Actions (EA) to the Early Response (ER), based on feedback from the SPC Chairs in the fall of 2009. Significant threats will be prioritized locally. Applications for ER can be started when the Draft Proposed AR is posted. It is expected that the applications will be due by September 30 and funds can be offered until August 2012. Eligible projects will be outlined in a broad catalogue. At the August 20 SPC meeting, the goal is to summarize the list of potential ways to approach this application. Special Projects will be offered for any action that has a cost of more than \$100,000 to the landowner and also for Municipal securement. The applications are not available yet, but may be in the next few weeks. The program mirrors the EA model and involves local priorities as established by the SPC. Five million dollars will be available across the province and the province will rank priority to distribute available funds across the province based on applications. The program is restricted to significant threats.

8) Information

a) MOE Liaison Program Update

A concern was raised about the regulation limit and 120 m setback outlined on Page 19, 20, 21. Technically you can go to 120 meters as used in Wallaceburg.

Lisa Ross gave a report in Teresa McLellan's absence, on the Regulation being adopted into law that amends Regulation # 287/07 and can be found on eLaws under Source law #24610. This comes into affect July 1, 2010.

Key components of Regulation:

- Gives authority to write source protection plans (SPP).
- What the plans have to address.
- What you cannot address.
- Provides a number of tools to use from a catalogue of policies to deal with threats; includes prescription tools for prohibition and softer Education and Outreach.
- Sets out rules, consultation/meeting requirements etc.

Teresa McLellan will discuss details with Chris Tasker of the delivery of this training for the SPC. If you have any questions please contact Chris or Teresa. There is no detailed guidance at this point; but training sessions are being planned for the fall. Lisa encouraged the SPC to read the regulations; there are many cross references to the CWA.

Joe Kerr wanted clarification on what a contaminant is defined as, under Rule 130. The definition generally is "a chemical or pathogen which can cause an adverse affect." Further clarification is sought from MOE on what can be considered a contaminant.

b) Membership appointment extensions

7b. was dealt with at the beginning of meeting. Refer to Page 5 of minutes.

9) In Camera Session

None

10) Other Business

11) MOE Liaison Report

The members were referred to the Liaison Program update as discussed earlier in the meeting.

12) Members Reports

Joe Kerr-attended a meeting in Ridgetown on biomass for energy. He noted the SPC will need to address the benefits on water quality by making improvement on the landscape, using buffers strips. The deadline for Ontario Power Generation for using biomass for electricity is



2014. He noted as a society we will be sharing more of the costs for energy, solar, wind etc. He noted the complication of class 1 and 2 land not to be used for bio-mass production and most land where we live is deemed such. He suggested encouraging groups such as MOE, MNR and OMAFRA to work together to show the benefits of having buffers strips along the ditch drains rather than having a 100 acre farms with switch grass.

Charles Sharina- asked about the status of wind turbine issue. Letters have been distributed.

Adjournment

There being no further business, the meeting was adjourned at 1:45 p.m. Next SPC meeting is scheduled for July 9, 2010 in the St. Clair Region CA Board Room.