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## 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 Erin Carroll at 519-245-3710 x46.

**Meeting Date:** November 13, 2009

**Meeting Time:** 9:00 am to 2:30 pm

**Meeting Location:** St. Clair Region Conservation Authority office board room

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### *Proposed Agenda*

<b>Item</b>	<b>Time</b>
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	9:15
a. Wallaceburg update (verbal)	
7. Business	9:45
a. AR Overview and format (presentation)	
b. St. Marys Workplan (discussion paper)	
c. AR Data Gaps and Deficiencies (presentation)	
d. AR extension (discussion paper)	
e. Assessment Report Consultation Update	
f. Tier 1 Water Budget	
Lunch	12:00
g. Groundwater Vulnerability	12:30
i. Stratford	
ii. Mitchell	
iii. St. Pauls	
iv. Sebringville	
v. Shakespeare	
vi. Hyde Park	
vii. Fanshawe	
viii. Birr	
ix. Melrose	
x. Killworth	
xi. Ridgetown	
xii. Highgate	
h. Surface Water Vulnerability	
8. For Information	4:30
a. ADM Chief Drinking Water Inspector visit	
9. In Camera Session	
10. Other business	
11. MOE Liaison report	
a. September 2009 Liaison Newsletter (#4)	
12. Members reports	
13. Adjournment	

## Meeting Materials

	Agenda Item	Description
Discussion Papers	2009.11a.7b St Marys Workplan	<ul style="list-style-type: none"> <li>Discussion on work plan and schedule for reducing the uncertainty in WHPA delineation in St Marys</li> </ul>
	2009.11a.7d. AR extension	<ul style="list-style-type: none"> <li>discussion on dealing with the significant data gaps especially those pertaining to the Thames AR.</li> <li>to be distributed later</li> </ul>
Other materials	2009.11a.2. Adoption of the Agenda	<ul style="list-style-type: none"> <li>November 13 agenda</li> <li>Preliminary Nov 19 and 20 agendas</li> </ul>
	2009.11a.4. October Minutes	<ul style="list-style-type: none"> <li>for review and approval</li> </ul>
	2009.11a.7e. Phase 1 Open House Comments	<ul style="list-style-type: none"> <li>phase one open house comments</li> <li>to be distributed later</li> </ul>
	2009.11a.7g. Groundwater Vulnerability	<ul style="list-style-type: none"> <li>WHPA delineation and vulnerability assessments maps</li> </ul>
	2009.11a.7h Surface Water Vulnerability	<ul style="list-style-type: none"> <li>Revised IPZ maps for review and discussion if time permits</li> <li>Will be part of November 19 meeting</li> </ul>
	2009.11a.11a September 2009 Liaison Newsletter (#4)	<ul style="list-style-type: none"> <li>for review</li> </ul>

SPC MEETING MINUTES  
FRIDAY, November 13, 2009  
Meeting #19

Bob Bedggood, Chair of the Source Protection Committee called the meeting to order at 9:00 a.m. on Friday, November 13, 2009 at the St. Clair Region Conservation Authority Board Room. The following members and staff were in attendance:

**Members:**

Bob Bedggood	Sheldon Parsons
Brent Clutterbuck	Richard Philp
Pat Donnelly	Darrell Randell
Dean Edwardson	Joe Salter
Patrick Feryn	Charles Sharina
Carl Kennes	Pat Sobeski
Joe Kerr	Joe VanOverberghe
Doug McGee	Murray Blackie (Liason)
Don McCabe	Teresa McLellan (MOE-Provincial Liaison)
Valerie M'Garry	Robert Olivier (FN Liaison)
Marg Misek-Evans	Derekica Snake (FN Liaison)
Earl Morwood	

**Regrets:**

Paul Hymus	John Van Dorp
James Maudsley	Jim Reffle (Liason)

**Others in attendance:**

Erin Harkins

**Staff:**

Rick Battson	Teresa Hollingsworth
Erin Carroll	Brian McDougall
Steve Clark	Linda Nicks
Ralph Coe	Garish Sankar
Chitra Gowda	Chris Tasker
Mark Helsten	Ian Wilcox

1) Chair's Welcome

a) Introductions

Bob introduced Erin Carroll, who's filling in for Debbie, and Girish Sankar, Water Resources Engineer.

2) Adoption of the Agenda

Bob added an additional item under 7 to form a Working Group/Sub Committee for the review of Assessment Report materials. He also added the First Nation's update, 8b, which was missed.

Moved by Joe Salter – seconded by Sheldon Parsons

*“that the committee approve the agenda with the two additions”*

*CARRIED.*

3) Delegations

None

4) Minutes from the Previous Meeting

Bob asked if there were any errors or changes to the previous meeting minutes.

Moved by Doug McGee – seconded by Darrell Randell

*“that the minutes be approved as distributed.”*

*CARRIED.*

5) Declaration of Conflict of Interest

No conflict of interest was identified.

6) Business arising from the minutes

a) Wallaceburg update

*Extent upstream – Brian McDougall* Brian explained that the issue in Wallaceburg is how to determine the upstream boundary of IPZ-2 on the Chanel Ecarte as well as the pumped drains. In order to resolve this question, Brian hosted a meeting with pump operators, drainage commissioners, municipal staff of Chatham Kent, and some SPC members to garner more information.

It was learned that:

- pump capacity is up to 66,000 gallon per minute on each specific pumped drain.
- watercourse acts as storage area that is pumped out as necessary, as suits operator (i.e., not recorded information, no specific operating plan).

As a result, Stantec is now working on expanding out IPZ-2, to properly capture the storm-sewershed and the watershed of pumped drains.

To determine the up-channel extent of IPZ-2, Baird, sub-consultant of Stantec, is working on additional run of the hydrodynamic model to capture the upstream boundary on the Chanel Ecarte.

Concern was expressed as to whether we are capturing all the variables in the IPZ-2 (e.g., lake and wind condition)? The consultant suggested that we look at a one in ten year low-flow on Sydenham and simultaneously run the ten year high flow on the Chanel Ecarte to capture conditions not yet accounted for in previous two model runs.

Concerns were raised by the SPC about protocol for reporting of a spill. It was suggested that might be beyond the scope of the Committee at this point and that it be re-examined at the policy development stage.

It will take five calendar days to run the model. If the boundary extends as far upsteam as suggested, additional land will have to be added to the IPZ. It is unlikely that the information will be available to SPC at the 19<sup>th</sup> and 20<sup>th</sup> meeting.

#### b) Petrolia update

The committee was informed that additional information was obtained from the municipality suggesting that the provincial watercourse information was not accurate on the eastern end of the IPZ. This information was requested in response to a comment received at the phase 1 open house. This will require a revision to the IPZ-2 in this area.

### 7) Business

#### Working Group/Sub-Committee

Bob Bedggood noted that we may have a problem attaining quorum for the meeting on the 19<sup>th</sup>. He suggested that a working group/subcommittee be formed to continue with the review of materials for the Assessment Report. The committee would bring recommendations forward to the Source Protection Committee at their following meeting. It was suggested that all that are available participate in the meeting and comments from those who are not able to attend can be submitted through someone else participating in the meeting.

Moved by Darrell Randell - seconded by Earl Morwood

*“that those who are able to attend on Nov 19 meet as a sub committee and bring their recommendation back to the Source Protection Committee.”*

*CARRIED.*

## a) Assessment Report (AR) Overview and Format

*Presentation – Chris Tasker (copy of presentation distributed on the 13<sup>th</sup>):*

Chris presented an overview of the AR. He outlined the number of reports, requirements, general outline, sections, high level details, look at mapping products, and focus on section and municipal summaries over next three days. He also discussed the distribution plans for the Assessment Reports which include the primary mode of distribution being on CD.

Chris stressed the significant amount of work to pull all of the pieces together. Completion of the Assessment Report is an uphill battle, complicated by the fact that some pieces are just being received. Peer review has taken considerably more time and effort than projected. Receiving materials to be peer reviewed has been a challenge. Consultants have been requested to submit interim deliverables so that they can be incorporated into consultation materials and Assessment Report. The final reports will be received after the Assessment Report is drafted. Focus will be on the minimum required content rather than bulk – no time for extras. The details will be contained in the various referenced documents. It is likely that some material will be missed, that can be incorporated into the amended Assessment Report. Consistent with previous message to MOE – focus on delivering an Assessment Report, but it will not be complete. This was reflected in rules by allowing for some major gaps, but more have developed, which will be covered later. It was identified that the current schedule does not allow for adequate quality control.

The group agreed that assessment reports have to be a “living documents,” evolving as the information that they are based upon changes.

It was suggested the reports be provided to committee members on memory stick or made available through a secure FTP site.

## b) St Marys work plan

With reference to *Assessment Report Extension*, first line of table, page 3 (Agenda7d) there is a revised work-plan based on discussions with the consultant and the town. End of March 2010 anticipated timeline for filling this gap. The remaining question is the required data collection to be completed as part of the study.

## c) Assessment Report Data Gaps

Discussion of significant gaps followed from table from *Assessment Report Extension* discussion paper (Agenda7d.)

- *Items 2, 3 Woodstock/Mount Elgin planned systems:* Clarification was provided that the Municipality is seeking permit to take water which is required to do pump tests.
- *Item 5 Wallaceburg IPZ-2:* Presents the greatest challenge, doing what we can to get it done on time. Completion in time for Assessment Report due date is uncertain.

- *Discussion on wildlife management:* How to consider wildlife's (e.g., geese) impact on managed lands. It was suggested that managed land/wildlife impact should be recognized in the same way as livestock density. It was suggested that this should be captured in the policy development phase. It was pointed out that not much can be done at this point about natural threats as policies are focused on prescribed activities that can be considered threats.

*MOE continuing to change rules:* Incredible amount of resources going into complying with continuing changes (e.g., livestock density). MOE has made changes at the Minister's level to proposed rules. Within days we should know the final revisions.

*Biosolids:* Question about application of biosolids as pelletized fertilizer (i.e., sold commercially no traceability/questions asked). Chris T noted that both biosolids and fertilizers are considered in looking at "managed land."

It was suggested that Nutrient Management Plans are available and could be used in determining livestock density and managed land, however only ones that have expanded since 2002 and those over a certain number of nutrient units would have nutrient management plans. It was noted that currently this level of investigation is unnecessary, but will may be helpful at the tier 2 stage.

- *Item 9, Komoka-Killworth:* Not really a data gap, challenge the municipality is moving towards Lake Huron pipe supply. Included in phase 2 open house consultation. Moving forward, trying to set up meeting with municipality before consultation.
- *Item 10, Mt. Brydges:* Not really a data gap in assessment report, but does require a change in our terms of reference to exclude the Mount Bridges system.

It was noted that Oxford, Dorchester and Thorndale have yet to be peer reviewed, and they would also benefit from an extension, although not specifically identified as a gap.

It is important to focus on portions of work that can be completed, so the quality of the work is not compromised.

#### d) Assessment Report extension

It was noted that following the completion of the work to fill the gaps, as discussed in the previous item, a month is required to prepare the Assessment Report for posting and an additional 3 months are required from the first posting to the submission of the Assessment Reports for consultation and consideration of comments.

Following some discussion the Source Protection Committee first considered the Upper Thames River Source Protection Area Assessment Report. While the identified data gaps are forecast to be

filled by the end of May, 4 months are needed to prepare and consult on the proposed Assessment Report. The committee discussed an extension until the end of September or October.

Moved by Valerie M'Garry - seconded by Doug McGee.

*“Bearing in mind that*

- some of the information required for the Upper Thames Assessment Report will not be available until late in May 2010;*
- report compilation and consultation are required beyond that time;*
- that consultant submission of work is beyond the control of the Source Protection Committee;*
- there have been recent changes to the rules which affect the completion of the Assessment Report; and*
- unforeseen and other eventualities can and have occurred and the Source Protection Committee does not wish to have to ask for a further extension,*

*we believe that the end of October is a reasonable timeline for the submission of the Assessment Report. It is therefore moved that the Source Protection Committee request an extension for the submission of the Upper Thames River Source Protection Area Assessment Report until the end of October, 2010.*

*CARRIED.*

The committee discussed the materials which would be able to be included in the Assessment Report based on the revised schedule. For the Upper Thames we will be able to address livestock densities and Tier 2 water budget extension with the proposed timeline. The pressure will continue to be applied to the consultants to keep the momentum going. It is expected that, to some degree, the consultant backlog will be alleviated by the revised timelines. Many of the other projects will be wrapping up prior to their completion of these remaining items.

*Process for 15.1 approval of methodologies for Wallaceburg IPZ-2:* Wallaceburg had own rules to account for the extensive regulatory flood limits, with the proposed amendment to the rules, those exclusions are removed in favor of rule 15.1. This rule allows the Director to approve alternative methods for any of the requirements in the rules. The process for receiving the approval of the Director for 15.1 is similar to the Assessment Report extension request process (i.e., request to go through Teresa to the Director and Source Protection staff at MOE).

*St. Clair Assessment Report extension:* Realistically, once the IPZ-2 moves up the Chanel Ecarte, it will take time to sort out and identify land to be included in the IPZ-2 including the effect of the private pumping schemes. There was discussion on whether or not to submit the Assessment Report without Wallaceburg and then submit an amended Assessment Report including Wallaceburg. Chris noted that this is the same as the discussion with MOE about St. Marys. (i.e., Should we submit the Assessment Report with significant deficiencies?). It is not likely that MOE would be satisfied with an incomplete report. Teresa and Chris suggested it would be better to extend the deadline for the entire report.

Moved by Sheldon Parsons- seconded by Dean Edwardson

*“that an extension of two months be requested for the submission of the St. Clair Region Source Protection Area Assessment Report which would result in the submission of the report at the end of June.”*

CARRIED.

Chris clarified whether staff should adjust work plans for completion of Assessment Report based on new dates identified in the motions and focus on the submission of the Lower Thames Valley Source Protection Area Assessment Report. Consensus of group was to craft a letter to the Ministry of Environment to let them know that work plans have been adjusted to reflect the submission dates identified in the motions.

LTVCA AR is currently planned to be submitted on time (April 20, 2009).

#### e) Assessment Report Consultation update

Bob and Chitra gave an overview of the open house scheduling (referring to an updated schedule that was distributed). Peer review of Oxford, Thorndale is planned for November 23 with Dorchester to follow. Subsequently, Ph1 and Ph2 open houses will be scheduled for the Oxford and Thames Centre systems. The extension discussed earlier for the Upper Thames River Source Protection Area Assessment Report consultation will allow this consultation to be planned for New Year rather than the end of December.

Summary tables, including those Ph2 consultation comments where available, will be to SPC for the next meeting.

Bob noted that overall the consultations have gone well. He explained that lead from the rifle range is a re-occurring topic at the Chatham/South Kent intake and has been address by the SPC in a letter. Bullets fired into water are not currently identified as an issue, but continued monitoring of the levels is prudent. Another political issue came up at consultation meetings in Bright’s Grove related to private sanitary sewer connections which had accidentally connected to storm sewers. This resulted in significant financial hardship for current owner and others are likely also affected.

#### f) T1WB presentation – Mark Helsten

Mark Helsten summarized the progress with the T1WB to-date. The report is nearing completion, but still requires peer review. Authority staff is working with peer reviewers in an ongoing manner. It has been a considerable challenge to have T1 and T2 ongoing at the same time. It is difficult to complete T1 knowing the additional detail from T2 but not continuously update T1 with the T2 information. Also, it is likely that additional T2 work will have to be undertaken as a result of identifying an additional watershed not included in T2 contract. Work will be completed as per existing contract and then the consultant would be requested to consider the additional area in an update to the T2 work.

The group discussed use of water for agriculture (e.g., consumptive factors for permits, livestock consumption, evapo-transpiration and irrigation). Considerable discussion on how water used in crops was considered in the water budget and whether the amount used by different crops was significant. It was pointed out that the water budget was based on long term averages and steady state conditions and crop rotation negates the value of considering specific crops on specific fields. Tier 1 gives a general picture of how agricultural water use effects the water budget. Precipitation used by crops is included in ET calculations whereas irrigation is reflected in the water taking permits.

*Discussion around HVAs:* HVAs that have a hydrologic connection to *any* drinking water system are identified in the mapping. It was underlined that this is the only level of protection for private wells outside of those which are in WHPA for a municipal system. Discussion also covered scoring (i.e., a score of six cannot result in a significant risk) and it was explained that issues related to these systems can be considered but do not elevate activities contributing to them to a significant risk.

The question was posed: Why is Walpole information available in this analysis and not in other mapping products? Information that is available is considered across the entire region, however certain types of information which the First Nation has not shared with us cannot be considered in the work.

*Action Item:* This presentation will be made available to SPC members.

There was discussion around whether 1-2 years of water usage data from the PTTW program is enough to base assumptions, since reporting is a relatively new Ministry of Environment requirement and data may be atypical. This is the best available data for use at this time. As with all of the work being undertaken for the Assessment Report updates and amendments can be made when the Source Protection Committee believes that they are required based on changes or updated information. As well periodic updates to the Source Protection Plan will facilitate updates to the Assessment Report.

## g) GW vulnerability

### i. Stratford

Reference was made to the methodology for determination of vertical transport pathways for Stratford (and the rest of the Perth systems). Based on MOE well records, an arbitrary radius (50m based on consultant recommendation) was drawn around transport pathways. This is similar to, a 100m radius drawn around municipal wells and defined as WHPA-A.

Within the buffered area for transport pathways, the vulnerability score is higher. There may be wells with no well record that are not identified. The map only identified as transport pathways wells that go to the same depth (i.e., same aquifer) as the municipal well (not shallower wells). Variables such as the age of well and maintenance to reg 903 standards are not considered in identifying the pathways.

It was brought up that there might be too much confidence in the well locations in determining vulnerability score, should look at age and accuracy of location. Most of the MOE well records are off (some up to 300 meters off). Age filter will help to address current problem.

*Well-decommissioning:* It was noted that even when the well is properly decommissioned, a policy mechanism will be required so that the vulnerability can be restored to the original (intrinsic) level. It is risky to take wells off list, since non-existence is difficult to prove. There must be some proof that it was properly decommissioned rather than just burying the wellhead. The point was underlined that these wells should not be ignored.

There was a discussion on how to approach in-use versus abandoned wells? Also, how to encourage these wells to be properly decommissioned if no longer needed? Suggestion was made that we should go and decommission those wells we can see today, before they too get lost, however it was pointed out that many of these wells are currently in use. Unless we have something to say that it is not there. MOE can follow-up (call into district office, have ability to act under regulation 903 – for municipal wells only). These types of issues need to be considered at the policy stage. There was some discussion as to whether policies can be included in the Source Protection Plan related to transport pathways which are not seen as threats (prescribed activities).

ii. Killworth

Municipality is working to take off line (moving towards hookup to Lake Huron). There are still a couple hurdles so we have been requested to continue with the work. Still considerable work to be done as this is a GUDI system immediately adjacent to the Thames River. Proceeding with consultation combined with London, Birr and Melrose. Only planning a single meeting at this time.

iii. Ridgetown

Different in that they have applied SWAT analysis rather than the ISI used on most of the studies reviewed to date (Oxford also uses SWAT for some of their systems).

It was asked, why have the wells (transport pathways) have not been identified as they were in the Stratford system? Chris explained, Chatham Kent is not a concerned about the wells as a threat. This decision was made by municipal operators.

There was some discussion on concerns raised as the consultation sessions about water quality at the tap resulting from dead-end water lines. The distribution system concerns fall far outside SPC responsibility. Our focus is on the source water quality before it enters the treatment and distribution system.

8) Information

a) Visit by the Assistant Deputy Minister/Chief Drinking Water Inspector

The ADM/CDWI was very interested in the work we are doing and the process we are involved in. He was very appreciative of the co-operation between our staff and MOE especially related to data management. He was also quite interested in First Nations relations and Derekica's efforts to engage the FN communities

b) FN Update

*First Nations Liaison/Source Protection Technician* package distributed which is a summary of October 2009 activities. It was noted that Rick Robbins wants to extend drinking water stewardship and an education program for schools. Efforts continue to seek for official membership on the Committee.

9) In-Camera

None

10) Other business

None

11) MOE report

- Commended technical staff and Derekica on presentation to Chief Drinking water inspector, he was impressed by information put forth.
- Kettle-Stoney meeting held with chief, MOE and Source Protection staff from the 2 regions. Discussed long term plan for inclusion of that system into the Clean Water Act. Partnership effort to draft a regulation, and bring include them in the amended Assessment Report.
- Regional project manager meeting, four groups sit together and determine joint solutions
- Director will highlight Thames-Sydenham and Region in Latornell presentation.
- Internally looking at Assessment Report review process.

12) Members' Report

None

13) Adjournment

Next meeting Thursday November 19 9:00 at Gemini Centre. There being no further business, the meeting was adjourned at 2:30 p.m.