



Source Protection Committee

Wednesday January 30, 2008

10:00 a.m. to 1:00 p.m.

Clinton Community Centre & Arena, Clinton

Meeting Minutes

MEMBERS PRESENT

Ian Brebner, Larry Brown, Al Hamilton, Don Jones, Mike McElhone, Marilyn Miltenburg, Jim Nelemans, Matt Pearson, Mike Strang, Bill Rowat, Gerry Rupke, Rowena Wallace

LIAISONS PRESENT

Jennifer Arthur, Bob Worsell

WITH REGRETS

SPC Members Keith Black, Gib Dow, Karen Galbraith, and Mert Schneider; Kettle and Stony Point Liaison Bob Bresette; and SPA Liaison Jim Ginn

DWSP STAFF PRESENT

Sue Brocklebank, Cathie Brown, Tim Cumming

OTHERS PRESENT

Rick Steele (MVCA), Mari Veliz (ABCA)

CALL TO ORDER

Larry Brown, Chair of the Source Protection Committee, called the meeting to order at 10:10 a.m.

AGENDA

MOTION # SPC: 2008-01-01

Moved by Gerry Rupke
Seconded by Don Jones

That the agenda be approved as circulated.

Carried by Consensus.

MINUTES OF NOVEMBER 28, 2008

MOTION # SPC: 2008-01-02

Moved by Rowena Wallace
Seconded by Ian Brebner

That the minutes from November 28, 2008 be approved as circulated.

Carried by Consensus.

DECLARATION OF PECUNIARY INTEREST

None

WATER QUALITY PRESENTATION

Surface Water Quality

For determining the quality of surface water, the indicators recommended were chloride, nitrate, total phosphorous, total copper, suspended sediment and *E. coli*. Indicators can show impairment with their presence or lack thereof, or may be related to the behaviour of chemicals or pathogens of interest. The indicators chosen all have a guideline for determining the impacts on humans and the ecosystem. These six indicators were analyzed temporally at six sites: Ausable River, Bayfield River, Blyth Brook, Maitland River, Nine Mile River and Parkhill Creek. In addition, a spatial comparison of 46 locations was undertaken for nitrate, total phosphorous and *E. coli*.

Copper was found to have decreasing trend over time and all sites were below the Provincial Water Quality Objective (PWQO).

Bacteria (*E. coli*) had no obvious trends over time. There are periods of both high and low bacterial concentrations from the period of 1966 to 2005. Spatial trends for *E. coli* were not prepared for the Watershed Characterization but are shown in slides 23-25. Graphs are shown using a log scale on the y-axis for *E. coli* concentration (colony forming units/100 ml) because of the range of values. Spatially, *E. coli* is above the recreation guideline of 100 cfu/100ml. Unfortunately, there is not enough information in some parts of the region (slide 25). Some groups like the Ashfield Colborne Lakefront Association (ACLA) collect information in the shoreline streams, and this data is used. Other groups, like the Bluewater Shoreline Residents Association (BSRA), sample water at the mouth of the watercourse at the lake, not in the watercourse itself, and this data is not used. The ABCA Watershed Report Card uses different monitoring stations that combine data from more than one monitoring station (e.g., data from the Steenstra Drain and Varna Station are used to produce information on the Main Bayfield River). The data from the ABCA Report Card is different than what was measured in this analysis.

Nitrate - All stations show an increase in nitrate concentration over time. Perhaps there may have been a widespread adoption or practice that has allowed nitrate to get to water. Since 1990, however, nitrate concentrations have declined in the Nine Mile River, Maitland River and Blyth Brook. The two dotted lines on the nitrate temporal trend graph (slide 11) show the guideline for protecting aquatic life (2.93 mg/L) and drinking water quality (10 mg/L). The box and whisker graphs (slides 12) aggregate the data. The box represents 50% of the samples. The more samples that are taken, the more reliable the median. In looking at spatial trends for nitrate (slide 13)) none of the medians approach the drinking water standard. But when considering headwater streams (slide 14), on average their medians are higher and two streams are above the drinking water standard showing a difference in upstream versus downstream concentrations.

Phosphorous – Parkhill Creek is the site with the highest phosphorous (slide 16). The dotted line on the temporal trend graph refers to the guideline for aquatic protection. Overall, there is a decreasing trend for phosphorous at the six sites analyzed for temporal trends and Bayfield is the only system that shows an increase in phosphorous since 1994. Spatial trends are shown on slides 17-20. Phosphorous occurs in surface water and allows blue green algae and its associated toxins to thrive. Phosphorous is more of an aquatic and stream system concern as it decreases the amount of oxygen in the water, which affects the entire food chain. In relation to human consumption, increase algae growth affects the taste of the water.

Chloride – Temporally, all sites are below the Ontario Drinking Water Standard and well below the BC Aquatic guideline (slide 21).

Sediment - Most stations have had a declining trend. Parkhill Creek has increased slightly over time and is above the aquatic guideline (slide 22).

Unlike Lake Huron, other Great Lake regions have RAPs (Remedial Action Plans) and LaMPs (Lakewide Management Plans). None of the indicators discussed has been an issue for Lake Huron. Table 2-4 of the Watershed Characterization (slide 26) show the current water quality values for nitrate, phosphorous and *E. coli*. The values are colour-coded to show how they relate to provincial water quality standards.

Lake Huron Intakes

A comparison was made between the intakes at Port Blake, north of Grand Bend, and at Goderich. Temporal trends were analyzed for chloride, nitrate and phosphorous, and the current levels of *E. coli* were compared. Neither intake had median nitrate concentrations near the drinking water standard for nitrate (10 mg/L), nor close to the guideline for aquatic protection (2.93mg/L). However, Goderich was significantly higher than Port Blake and approached the standard for eutrophication (0.9 mg/L). Similarly, the median concentrations of chloride at the two intakes were no where near the drinking water standard of 250 mg/L, although the Goderich intake was higher than Port Blake. The median concentration for total phosphorous at Goderich was at approximately the same value for the standard to prevent eutrophication in the lakes (0.02 mg/L). The median concentrations of total phosphorous for Port Blake were consistently lower than Goderich, although Port Blake concentrations also approached this standard.

E. coli concentrations have been collected by the intakes since 2005, which does not provide for temporal analysis. Spatially, however, the concentration of *E. coli* at Goderich tends to be higher than the drinking water standard about 20% of the time. In addition, Goderich is frequently above 0 cfu/100mL (the drinking water standard) and is more often above zero as compared to Port Blake. There is a difference in indicator concentrations between the intakes at Port Blake and Goderich. There are many factors that contribute to the nearshore environment including local currents, wind, local tributaries, storm events and sediment. These factors and their relationships to the indicators within the intake protection zones need more analysis and review.

Groundwater Quality

B. Luinstra was unable to attend the meeting due the weather, and may provide a more fulsome report at a later date.

Different indicators were used for groundwater quality (slide 37) than surface water quality. Groundwater is associated with three of the four vulnerable areas defined in the Clean Water Act:

- Wellhead Protection Areas (WHPAs)
- Significant Groundwater Recharge Areas (SGRAs)
- Highly Vulnerable Aquifers (HVAs)

There is a variation of bedrock geology – groups and formations – across the region, and this influences groundwater quality (see Map WC 1-2). The geology is sloped towards the lake in a north-east to south-west direction. Slides 41 and 42 list the bedrock and overburden aquifers in the region, as well as the key issues and water quality associated with each aquifer. Theoretically, bacteria should not more through soil and into the bedrock.

A summary of water quality results, recommendations and data gaps is listed from slides 43 to 48. Raw water information was recently obtained in November 2007 and will be analyzed.

The water quality analysis was preliminary and was essentially a summary of what is known to date over space and time. There may be seasonal trends for indicators, although this is not on the work plan immediately. When the ToR is developed, this will outline tasks that need to be covered in the Assessment Report. Out of all the list of ideas, questions and recommendations that come forward, a prioritization will occur to determine what needs to followed through.

POLICIES AND PROCEDURES

Due to inclement weather, the meeting was necessitated to adjourn early. Items 6, 9, and 10 from the agenda are postponed to the next SPC meeting on February 27, 2008.

Chair Brown attended an SPC Chairs' meeting at the beginning of December where other SPC Chairs and their Project Managers critiqued the Procedural Manual of the ABMV SPR. Aside from minor editorial comments, the main critique was that the legislation does not provide for a role of Vice-Chair of the SPC.

MOTION # SPC: 2008-01-03

Moved by Marilyn Miltenburg
Seconded by Rowena Wallace

That the SPC Procedural Manual be amended to change the title of Vice-Chair to Acting Chair.

Carried by Consensus.

Recorded Vote

The Committee agreed that members can ask for objections on critical votes to be recorded. The outcome of the motion will read 'carried by consensus' or 'carried by majority' or 'lost' depending on the outcome of the motion.

Proxy Form

There is a proxy form available for members to use. If there is a significant vote, the proxy form will be used to indicate the vote for a particular motion.

TERMS OF REFERENCE UPDATE

A notice on the commencement of work on the Terms of Reference was sent to Municipalities in mid-January. This notice outlined a number of questions for municipalities to contemplate and provided two tables for information. The first table outlines all of the municipal residential systems that will automatically be included in the Terms of Reference. The second table lists all of the systems that the municipalities may choose to include in the Terms of Reference. The definitions of the different types of systems are listed under the MOE drinking water portal at

http://www.ontario.ca/ONT/portal51/drinkingwater/kcxml/04_Sj9SPykssy0xPLMnMz0vM0Y_QjzKLd4s3CTADSYGZboH6kRhiAQixIH1vfV-P_NxU_QD9gtzQiHJHR0UAjCsrxA!!/delta/base64xml/L3dJdyEvd0ZNQUFzQUMvNEIVRS82X0ZfNEIW?lang=en

The province will be putting forward a guidance document that details a number of criteria that municipalities should consider when deciding to include a system. Such criteria include the number of exceedances in the system and growth pressures of the area. The screening of a system may result in a recommendation for the system to be included in the Terms of Reference, or may recommend a change of planning documents or an update to a Certificate of Approval or a gap analysis without elevation the system. The SPC is neither encouraging nor discouraging municipalities to include systems, but is providing questions for the municipalities to contemplate.

In addition, an invitation letter was sent to municipalities for a workshop on the Clean Water Act and an opportunity to discuss the Terms of Reference. This workshop will be held on Thursday, March 6, from 9:00 a.m. to 2:00 p.m. at the Huron County Health Unit. SPC members are not required to attend this meeting.

The timeline for the Terms of Reference has been moved forward from the outline given at the November 28, 2007, meeting. The reasoning behind this move is to allow for a cushion of time before the deadline of August 20th in case there are major changes that need to be made or unanticipated delays.

Ideal ToR Timeline

Municipal Meeting on CWA and ToR	March 6
Chair and Project Manager to meeting with Municipalities and First Nations, if required	Feb-Mar-Apr
Municipal resolutions due, if required	April 25

Draft ToR prepared for SPC review	April 26
Draft ToR available for public comments (35 days)	May 7 – June 10
SPC to review public comments to date	May 28
Public consultation (21 days after notice is published)	May 28/29
SPC to review all public comments and make changes to ToR if desired	June 25
SPC to submit proposed ToR to SPAs	July-August 20

CORRESPONDENCE AND DELEGATIONS

1.

From: Jo-Anne Rzađki, Conservation Ontario

To: Kevin Webster, Senior Policy Coordinator, MOE

Date: December 21, 2007

Re: EBR Posting #010-1436 An Improved Regulatory Framework for the Management of Non-agricultural Source Materials (NASM)

To indicate support for the NASM framework to minimize or eliminate the current overlapping approval requirements; develop and review existing standards for NASM under the NMA to focus on the quality of the materials; and expand the existing framework to include all agricultural land where NASM will be applied in Ontario. Also, the letter encourages the eventual alignment of nutrient management plans and source protection plans.

2.

From: Water Guardians Network

To: SPC Environmental Members

Date: December 2007

Re: Source Water Protection Bursaries Application

A limited number of bursaries are available for 2008 and 2009 to eligible Network members. The bursaries are to support and heighten the Network members to educate, consult and communicate with the broader non-governmental community throughout the start of the SPC process.

3.

From: Ian Smith, Director, Source Protection Program Branch, MOE

To: SPC Chairs and Project Managers

Date: January 18, 2008

Re: Other Legislative Safety Measures in place that protect Ontario's Drinking Water

Lists the legislative measures that the Ministry has in place to protect Ontario's water. In addition, it describes the purpose of the Safe Drinking Water Act and details the two regulations that govern the testing of drinking water systems – O. Reg 170/03 and O. Reg 232/05. Appendix 1 provides definitions of drinking water systems under the SDWA. This list will be posted online.

4.

From: Ian Smith, Director, Source Protection Program Branch, MOE

To: SPC Chairs and Project Managers

Date: January 18, 2008

Re: Inclusion of a Drinking Water System under the Source Protection Planning process through Municipal Council Resolution.

The Ministry recommends that any decision to include other systems in the source protection planning process be deferred until after the ministry provides guidance that is anticipated for spring 2008. The guidance will include a decision matrix and speak to potential responsibilities of including another drinking water system. As for maintenance of elevated drinking water systems, taking actions to protect the source of these systems does not require the municipality to take over the system. The individual system owner is responsible for the proper function of the drinking water system. While the focus of the technical studies funding in the past has been mainly around municipal residential drinking water systems, the province is evaluating options for supporting planning for other drinking water systems.

5.

From: Ian Smith, Director, Source Protection Program Branch, MOE

To: SPC Chairs and Project Managers

Date: January 18, 2008

Re: Clarifying and using proxies in accordance to the Source Protection regulation (O. Reg 288/07)

The ability of a member to use a proxy is set out under the O. Reg 288/07 and cannot be removed by the rules of procedure by a local SPC. In addition, the proxy does count for quorum. While the regulation does not define who the proxy may be, the MOE strongly advises that the proxy be another existing member of the SPC.

LIAISON UPDATES AND OTHER BUSINESS

Health – Clarification is being sought from the Huron County Health Unit regarding the comments made by Health Liaison Worsell.

AGENDA ITEMS FOR NEXT MEETING

The next meeting will begin a half hour earlier to accommodate for the items that are being postponed.

- Curriculum Module Three – Water Quality
- Watershed Characterization
- Introduction to Conceptual Water Budget
- Working Group / Municipal Sub-Committee Report

ADJOURNMENT

Chair Brown adjourned the meeting at 1:00 p.m. due to inclement weather.

Larry Brown
Chair

Sue Brocklebank
Recording Secretary