





Thames – Sydenham and Region Source Protection Committee



Please be advised that a meeting of the Thames-Sydenham and Region Source Protection Committee has been called for the following time. Please confirm attendance with Deb Kirk at 519-451-2800 x256.

Meeting Date: October 20, 2017

Meeting Time: 10:00 am -12:00 p.m.

Meeting Location: St. Clair Conservation Authority Board Room

Proposed Agenda

1	Chair's Welcome and Introductions	10:00		
2	Adoption of the Agenda			
3	Delegations – none			
4	Declaration of Conflict of Interest			
5	Business arising from the minutes			
5a		10:00- 10:05		
6	Business			
6a	Chairs Update from October Chairs Meeting (10 min)	10:05-10:15		
6b	New Provincial Threats Tool Presentation (15 min)	10:15-10:30		
6c	Wallaceburg Nitrate Issue Update (20 min)	10:30-10:50		
6d	Agricultural Policy Challenges (45 min)	10:50-11:35		
6e	Drinking Water System Changes in the TSR (15 min)	11:35-11:55		
Break for Lunch				
6f	UTRCA Education Campaign and Risk Management Services (15 min)	12:15-12:30		
6g	Overview of SPC Membership Terms (15 min)	12:30-12:45		
6h	Thank you presentation to Outgoing SPC Members	12:45-1:00		
7	Information			
7a	Oil Spill Liability ArticleGreely, Ontario Water Supply Article	1:00		
8	In Camera Session (not planned)			
9	Other Business	1:10		
10	MOE Liaison report			
11	Member Reports			
12	Adjournment	1:30		
	Next Meeting: Friday, March 23rd (SCRCA)			

Thames – Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper

Report to	Chair and members		
	Thames – Sydenham and Region		
	Source Protection Committee		

Prepared By Girish Sankar, Director of Water

Resources

Date October 12, 2017

Re: Issue Contributing Area Monitoring work

Background

- 1. The approved Assessment Report (AR) for the St Clair Region Source Protection Area (SPA) identifies Nitrate as an Issue for the Wallaceburg surface water intake.
- 2. Modelling work was carried out and identified that all the subwatersheds of the Sydenham watershed contribute to the issue of Nitrates at the Wallaceburg Intake.
- Since that time the Chatham Kent Public Utilities Commission (PUC) had initiated an Environmental Assessment (EA) on the Wallaceburg and Area Water Supply Review (2014-2016). This review assessed the various water supply alternatives within the study area. The EA concluded, September 2016 with the recommendation to rehabilitate the existing water treatment plant.

Direction from the TAC (2014)

- 1) Monitor the nitrate levels at the Intake and in the surrounding area.
- 2) Reassess the issue of nitrates
- 3) Delineate ICA and include the entire watershed to be an ICA, all activities contributing to the issue, become significant drinking water threat.

Discussion

1. Previous work in 2013 had identified an increasing trend in nitrates at the raw water intake. Monthly samples – 1990- 1992, weekly samples 2005- 2017)



Figure 1. Nitrate trends at Wallaceburg Intake

2. Staff continue to review trends in nitrate from weekly samples taken by the Wallaceburg Water Treatment Plant. The data shown in the graph below show one exceedance in 2013 and 2014 respectively.



Nitrate trend (2011 - 2017)

Figure 2. Nitrate trends at Wallaceburg Intake

ICA monitoring: A number of sites were selected for grab sample monitoring around the Wallaceburg intake in 2013. 13 sites were chosen.



Figure 3: Grab sampling locations around the Wallaceburg Intake



Figure 4: Wallaceburg Grab Sampling results

Committee Considerations

- 1) Continue to Monitor for Nitrates
- 2) Remove Nitrate as an issue

Thames - Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper

Report to	Chair and members Thames – Sydenham and Region Source Protection Committee	Agenda #	2017.10.20 6d
Cc	SP Management Committee	Date	October 10, 2017
Prepared By Jenna Allain, Source Protection Coordinator			
Re:	Agricultural Policy Challenges		

Background

Issue #1

The Nutrient Management Act (NMA) prohibits the application and storage of ASMs, NASMs, and the application of commercial fertilizers within the 100 m zone of municipal wells. The Source Protection Plan policies for the Thames-Sydenham Region outside of Oxford (Policy 2.21, 2.22, 2.24, 2.26, 2.27, and 2.51) refer to managing rather than prohibiting these activities. However, these management policies require that NMA principals, *including any NMA prohibitions*, form the basis of the RMP. The intent of this was to allow for consistency with the NMA in prohibiting the activities within the WHPA-A while managing in WHPA-B with a vulnerability score of 10. Policy 2.26 is provided below for reference:

Policy 2.26 Application of Commercial Fertilizer – Management

To reduce the risk to municipal drinking water sources from the application of commercial fertilizer, this activity shall be managed where it is or would be a significant drinking water threat.

This activity shall be designated for the purposes of Section 58 of the Clean Water Act and a Risk Management Plan shall be required. Nutrient Management Act principles (including NMA prohibitions) shall form the basis of the risk Management Plan, provided the Risk Management Official is satisfied these principles adequately manage the activity so that it ceases to be or never becomes a significant drinking water threat.

Any Prescribed Instrument related to the Application of Commercial fertilizer that is created, amended, or used as part of a notice for the purpose of a Section 61 exemption, shall manage the activity so that it ceases to be or never becomes a significant drinking water threat. OMAFRA is expected to review all Prescribed Instruments issued under the Nutrient Management Act in areas where the activities they regulate are, or would be, significant drinking water threats to ensure the Prescribed Instruments contain such terms and conditions. This review is expected include Prescribed Instruments that are not directly created or issued by OMAFRA, such as Nutrient Management Plans.

Further, OMAFRA and other Prescribed Instrument creators/issuers are expected to consult with the Risk Management Official with respect to any modifications or requirements that may need to be incorporated into the Prescribed Instruments under the Nutrient Management Act to ensure the activities they regulate cease to be or never become significant drinking water threats. However, nothing in this policy grants the Risk Management Official authority to specify requirements for a prescribed instrument issued under the Nutrient Management Act, or where a person is seeking an exemption from a risk management plan under section 61 or O. Reg. 287/07.

Issue #2

Section 58(15) of the Clean Water Act sets out the following criteria for agreeing to or establishing a risk management plan:

(15) Subject to subsection (16), a risk management official shall agree to or establish a risk management plan for an activity at a location under this section if, and only if, all applicable fees have been paid and,

(a) the risk management official,

(i) is satisfied that the risk management plan complies with the requirements, if any, of the regulations, rules and source protection plan, and

(ii) is satisfied that the activity will not be a significant drinking water threat if it is engaged in at that location in accordance with the risk management plan;

The highlighted provision above allows Risk Management Officials to use their judgement to determine whether a threat activity can be successfully managed to reduce risk.

Discussion

Issue #1

The use of a management tool (Risk Management Plan policies 2.21, 2.22, 2.24, 2.26, 2.27 and 2.51) to prohibit activities (as prohibited by the NMA) has been very challenging for Risk Management Officials to implement. In several WHPA's within the TSR, the only portion of the WHPA that has a vulnerability score of 10 is the WHPA-A. In those cases, RMO's are approaching farmers to negotiate a risk management plan for the portion of their property that falls into a WHPA-A, only to find that all of the threat activities for the property would be prohibited according to the policy, thereby negating the need for a management plan. Communicating to farmers that the policies say to risk manage, but there is a caveat in the policies which dictates prohibitions, has been extremely challenging. It also creates some challenges for monitoring and enforcement. In light of these challenges, it is recommended that the Source Protection Committee review the wording of risk management plan polices directed at agricultural threats.

Issue #2

Based on a number of factors affecting the vulnerability of the St. Marys wellhead protection area, including: the presence of fractured bedrock; the presence of exposed bedrock in, and adjacent to Trout Creek; and the historical documented evidence of microbial contamination for the municipal groundwater supply wells within this WHPA, it was concluded by UTRCA Risk Management Officials that the threat of livestock grazing and pasturing cannot be reasonably managed through a risk management plan in the St. Marys WHPA. Farmers have been asked to fence cattle out of the most vulnerable parts of the WHPA (WHPA-A and B with a vulnerability score of 10). This decision affects several farms in St. Marys and neighouring farms in the Township of Perth South which fall within the St. Marys WHPA. Given this decision by local Risk Management Officials, it would be prudent for the Source Protection Committee to review the agricultural policies in the source protection plan and discuss whether separate policies for the St. Marys WHPA should be considered.

It is anticipated that these issues will be reviewed and considered by the Source Protection Committee as part of the preparation of the workplan for the next amendment to the Source Protection Plan under Section 36 of the Clean Water Act which is due November 30th, 2018. In the interim, staff felt it was important to present these issues to the Source Protection Committee for consideration and discussion.

Thames - Sydenham and Region Drinking Water Source Protection Source Protection Committee Discussion Paper								
Report to	Chair and members Thames – Sydenham and Region Source Protection Committee	Agenda #	2017.10.20 6e					
Cc	SP Management Committee	Date	October 10, 2017					
Prepared By	Jenna Allain, Source Protection Coordinator							
Re:	Drinking Water System Changes in the	TSR						

Background

Changes to drinking water systems within the Thames-Sydenham Region will need to be incorporated into the Source Protection Plan through an amendment. The next scheduled amendment to the plan will be the amendment resulting from a review of the plan under Section 36 of the Clean Water Act. The review will be undertaken in 2018 and a workplan for the amendment is required to be submitted to the Ministry of the Environment and Climate Change by November 30th, 2018. The timing of when the amendment will actually be completed is uncertain, but could be as late as 2022.

The Source Protection Authorities may initiate an amendment to the source protection plan ahead of the scheduled Section 36 amendment under Section 34 of the Clean Water Act. However, a Section 34 amendment may only be initiated if the revisions to the plan are of an urgent nature that cannot wait for the Section 36 amendment. An example of this would be a new drinking water system.

Discussion

Staff are aware of a few changes to drinking water systems in the Thames-Sydenham Region:

- 1. The Highgate well in the Municipality of Chatham-Kent is scheduled to be decommissioned in January 2018. The policies of the source protection plan will still apply to Highgate until such time as the system has been removed from the plan.
- 2. The Melrose well in the Municipality of Middlesex-Centre is planned for decommissioning. The timing of the decommission is funding dependent and unknown at this time. As noted above, despite the timing for the decommissioning, the policies of the plan will still apply to Melrose until such time as the system has been removed from the plan.
- 3. A new well has been drilled as a back-up supply for the Shakespeare well system in the Township of Perth East. The back-up well has been drilled on the same site as the production well and there is no change to the pumping rates for the system. Staff are awaiting the well record to confirm the exact location and depth of the well, but it is unlikely that any remodelling of the WHPA delineation will be required. It is anticipated that the mapping for Shakespeare will need to be updated to identify the new well and to expand the WHPA-A depending on the location of the new well.

Based on the changes noted above, staff have been considering the need for a Section 34 amendment to incorporate these changes to the source protection plan.



Discussion

Education Campaign Targeting Small Quantities of Hazardous Waste

Policy 2.45 of the Source Protection Plan requires municipalities to work in collaboration with the conservation authorities to implement an education and outreach program targeted at the handling and storage of Dense Non-Aqueous Phase Liquids, in concentrations typical of household use. Source Protection staff have developed an educational campaign that will fulfill this policy requirement. The door hanger flyers shown below are being delivered door to door to residential properties in wellhead protection areas.





The flyers have a peel off magnet attached (shown below) that references a new website created as part of the campaign. The flyers are being delivered throughout the fall to all residential properties in wellhead protection areas where UTRCA is providing risk management services. The flyers to be delivered in the City of London will vary slightly to reflect the fact that the groundwater wells are emergency supply only. A promotional video has also being produced as part of the campaign which can be viewed on the campaign website or UTRCA's YouTube channel.



Risk Management Services Renewal

UTRCA has been providing risk management services for seven municipalities within the Thames-Sydenham Region since 2014. The service agreement was for an initial period of three years (September 1st, 2014 – August 31st, 2017). Agreement amendments have recently been signed to renew the services for an additional three years and four months covering the period of September 1st, 2017 to December 31st, 2020. The Municipality of Chatham-Kent, the Township of Perth East, the Town of St. Marys, the City of Stratford, and the Municipality of West Perth have renewed services and signed amended agreements with UTRCA. The City of London has advised of their intent to renew the agreement, and is in the process of signing the amendment, while the Township of Perth South has chosen not to renew the agreement.



Oil Spill Liability - Kawartha Lakes Continues

By <u>Donna Shier</u>, Partner and Certified Environmental Law Specialist, <u>Joanna Vince</u>, Senior Associate and Raeya Jackiw, Student-at-Law. © Willms & Shier Environmental Lawyers LLP.

September 20, 2017

Background

In the most recent <u>decision</u> in the ongoing Kawartha Lakes saga,¹ the Superior Court of Justice found homeowner Mr. Wayne Gendron partly responsible for an oil spill that destroyed his lakeside property. The Court also found Mr. Gendron's fuel distributor liable for a portion of the costs.

This decision serves to warn homeowners that a distributor's delivery of fuel does not mean that their tanks are safe. It also cautions fuel distributors that they may be liable for spills brought about by a homeowner's negligence.

The Facts

Thompson Fuels ("Thompson") supplied 700 liters of fuel oil to two tanks in Mr. Gendron's basement. Mr. Gendron had installed the fuel tanks himself without proper shut off valves, contrary to industry standards.

During a period of financial difficulty, Mr. Gendron filled these fuel tanks with less expensive stove oil. The stove oil introduced water and microbes into the tanks, causing the tanks to corrode.² When Thomspon delivered the fuel oil one of the tanks leaked, spilling approximately 600 liters.

In the hours following the fuel delivery Mr. Gendron tried to manage the spill on his own by collecting what he believed to be all of the leaking oil in Tupperware containers. Approximately 24 hours later, Mr. Gendron called Thompson to complain that it had not delivered his entire shipment of fuel oil – he was short about 600 liters. Mr. Gendron never called to report the spill to the MOECC's Spills Action Centre hotline.³

The fuel oil migrated under Mr. Gendron's house, through the City of Kawartha Lake's drainage system, and into nearby Sturgeon Lake. The MOECC ordered Mr. Gendron and his wife to "ameliorate the adverse effects caused by the discharge of the furnace oil" and "restore the natural environment... to the extent practicable."⁴ Mr. Gendron began remediation of the contamination of his property and the contamination of Sturgeon Lake.

¹ Gendron v Thompson Fuels, 2017 ONSC 4009 [Gendron].

² Gendron at para 46.

³ Gendron at para 301.

⁴ Gendron at para 179.

Early remediation efforts were complicated by the frozen lake and soil. Mr. Gendron's personal insurance was rapidly exhausted. His insurer eventually refused to fund further off-site remediation of Sturgeon Lake.

The remediation efforts cost nearly \$2M and required the demolition of Mr. Gendron's home.

The City's MOECC Order

The MOECC ordered the City of Kawartha Lakes to clean up any fuel oil remaining in the City's culverts and sewers that could recontaminate Sturgeon Lake. The City appealed the order first to the Environmental Review Tribunal, then to the Divisional Court, and ultimately to the Ontario Court of Appeal, losing each time. (See our previous article on the Court of Appeal's decision <u>here.</u>)

Environmental Protection Act Claims

Using its powers under the *Environmental Protection Act* ("EPA"),⁵ s. 100.1 the City ordered compensation for its remediation costs from Mr. Gendron, Thompson and the Technical Standards and Safety Authority ("TSSA").⁶

Mr. Gendron, Thompson and the TSSA appealed the order to the Environmental Review Tribunal. Thompson and the TSSA settled with the City and withdrew their appeals. Mr. Gendron's appeal was unsuccessful and he was required to pay more than \$300,000 of the City's costs.⁷

Mr. Gendron then brought a claim for contribution and indemnity against Thompson under EPA, s. 100.1(6). In this most recent case, the Court found that Mr. Gendron could not make out his EPA claim because ownership and control of the fuel oil had transferred to him when the fuel oil was delivered to him by Thompson. Mr. Gendron's claim for contribution under the EPA was dismissed.⁸

Civil Claims

The City of Kawartha Lakes brought civil proceedings against multiple parties including Mr. Gendron to recoup its remediation costs.

Mr. Gendron also sued Thompson, the TSSA, and the manufacturer of the tank, a company called les Resevoirs D'Acier de Granby Inc ("Granby"), for the damage caused by the spill.

The Court dismissed Mr. Gendron's claims against Granby and the TSSA but in passing criticized the TSSA for issuing a "baffling," "confusing," and "unhelpful" order.⁹

While the Court ultimately found for Mr. Gendron, it apportioned 60% of the liability to him and only 40% of the liability to Thompson.¹⁰

The Court found that Mr. Gendron contributed to the spill by improperly installing the tanks, failing to maintain the tanks by having annual inspections, improperly introducing water into the

⁵ RSO 1990, c E 19.

⁶ Gendron at para 387.

⁷ Gendron at para 394.

⁸ Gendron at para 422.

⁹ Gendron at para 148, 152, and 260.

¹⁰ Gendron at para 313.

tank, and failing to promptly report the leak. Mr. Gendron's contribution was not a "minor inadvertent lapse" but a "series of actions" that contributed to the damage.¹¹ The Court said that a reasonable person would not have tried to deal with the spill on their own.

The Court also found that Thompson failed to conduct a comprehensive inspection, as required by law, due to a computer glitch.¹² The court held that this failure contributed to the spill.

The Court concluded that it would be contrary to public policy to allow Thompson to contract out of its obligation to perform the inspection through an exclusionary clause in its customer service agreement.¹³

Civil Contributory Negligence versus Contribution in the EPA

Mr. Gendron sought contribution from Thompson two ways, under the common law contributory negligence framework and under the contribution and indemnity section of the EPA. There are advantages and disadvantages of seeking contribution under each.

- 1 Contribution under the EPA can only be sought from the "owner" or "person having control" of the pollutant.¹⁴ That limitation is not found at common law.
- 2 To be successful in a common law contribution claim the plaintiff must prove damages. The EPA does not require proof of damages but rather relies on a cost assessment made by the Environmental Review Tribunal.

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The information and comments herein are for the general information of the reader only and do not constitute legal advice or opinion. The reader should seek specific legal advice for particular applications of the law to specific situations.

Document #: 1257671

¹¹ Gendron at para 310.

¹² Gendron at para 94.

¹³ Gendron at para 223.

¹⁴ EPA s. 99.1(1).

News / Ottawa

The water in Greely is getting more toxic

For at least five years, the city has known that nitrate levels were a problem at a well in Greely. Now, with a new 103-unit subdivision about to be built, the levels are still rising.



PHOTODESK EMAIL Levels of nitrate are rising in the water at the Shadow Ridge well system, which serves the Greely area. Dreamstime

By: Metro, Published on Sun Sep 17 2017

Some residents of Greely are facing rising levels of nitrate in their drinking water as a housing development that the city previously rejected based on threat of contamination gets set to begin construction.

According to the 2016 drinking-water quality-management report, which will go before the city's environment and climate change committee on Tuesday, the nitrate level in the city-operated Shadow Ridge well system had reached 4.5 mg/L—nearly halfway to 10 mg/L, at which point the water is considered dangerous to drink.

High nitrate concentration has been identified as a cause of "blue baby syndrome," a potentially fatal illness that causes babies to turn blue from lack of oxygen.

There is reason to believe that the 4.5 mg/L number may be low. In 2014, a developer, Stanley Farm Developments, commissioned independent groundwater tests in preparing an application to construct a 103-unit subdivision in the area. The results varied widely, with some tests finding nitrate levels as high as 9.21 mg/L.

But in a subsequent report, the Paterson Group, the Ottawa engineering firm that conducted the tests, concludes that the area's nitrate levels were declining as the impacts of prior farming dissipated.

"It is our opinion that once development proceeds and agricultural activities cease, these nitrate impacts from agriculture should diminish," the report reads.

Still, concerns over nitrates led the city, in 2015, to reject Stanley Farm's application. An agriculture and rural affairs committee report from that year notes that, with regard to nitrate levels, "the lot density currently being developed in Greely is expected to be problematic in the long term."

At the time, the city's senior legal counsel Tim Marc advised that the city would have a strong case should the developer appeal the rejection to the Ontario Municipal Board, a provincial tribunal that reviews development applications.

As things turned out, Stanley Farm did appeal, and the OMB approved the project in 2016. As part of the OMB agreement, homebuyers would agree to a clause saying "the City does not guarantee the quality or quantity of groundwater," and said that the city "bears no responsibility, financial or otherwise, to provide solutions" to water contamination.

http://www.metronews.ca/news/ottawa/2017/09/17/the-water-in-greely-is-getting-more-toxic.print.html

The new subdivision, which is planned for land immediately to the east of the Shadow Ridge system, will have its own well. But, according the 2015 city staff report, the nitrate levels in the groundwater could be adversely affected by increased demand on the area's sewage systems. Which, in turn, could raise nitrate levels in Shadow Ridge.

The city has been aware of the problem since at least 2012, when the Raisin River Conservation Authority recommended that a deeper well be dug for the nearly 500 residents on the Shadow Ridge system.

Adam Brown, manager of development review at the city, says that it is currently "exploring an option" to dig a deeper well but could not supply details about any specific plans or agreements.

When asked about the level of concern over nitrate levels, Tammy Rose, director of water services, said that "Ottawa has some of the safest and highest-quality drinking water."

- Note: On Tuesday, September 19, the city revised its measurements from the Shadow Ridge well system during the Environment and Climate Protection Committee meeting. In 2016, the nitrate level was 4.5 mg/L, not 5.1 mg/L as initially contained in a staff report and subsequently reported by Metro. The online version of this story has been updated, and an update to the story will be printed in the Wednesday, September 20 print edition.

Related

- Before Canada 150, more than 150 drinking water advisories listed online
- Lowering of lead levels in Toronto water 'promising' but still work to be done
- Expert declares gualified end to water crisis in Flint