



Ministry of the Environment (MOE) Liaison Program Update No. 10
Date: November 16, 2011

Note: Please see Appendix 1 for acronym list

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MOE Liaison Officer Program Update No. 10

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This is the 10th in a series of MOE Liaison Officer Program Updates. Update No. 9 was dated March 25, 2011. All Questions and Answers presented here have been provided since Update No. 9, and all Questions and Answers in previous Updates are excluded.

1 Assessment Reports (AR)

The table below provides an overall summary of the current status of AR preparations and submissions:

	Proposed ARs submitted to MOE for review and approval	Director Decisions made on submitted ARs		Director Decisions made on updated ARs	
		Under review	Approved	Under review	Approved
No. of SPAs at Each Stage of AR Preparation	38	9	29	5	2

As can be seen in the table, all ARs have now been submitted to the Director for review and approval and 29 of those ARs have been formally approved (as of October 20, 2011).

The ARs can be accessed from the Conservation Ontario Website at:

http://www.conservationontario.ca/source_protection/otherswpreionsindex.htm

Local Threat Requests

A number of SPCs have submitted requests to add specified local threats to their Assessment Report in accordance with rule #119 of the Technical Rules. The table below summarizes those requests along with the Director's decision. The wording of the requests and Director's approval has been paraphrased for the purpose of readability.

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SPC Name	Type of Threat, as requested	Director's Opinion
Mattagami Region	N/A	N/A
Mississippi-Rideau	N/A	N/A
Niagara Peninsula	Specified substances (includes organic solvents, DNAPLs, fuels, pesticides, metals, ions, and pathogens) transported along specified corridors.	Approved with alternate wording
Sudbury	Specified hazardous substances transported along certain railway and roadway corridors within specified WHPAs and IPZs	Approved with alternate wording
North Bay-Mattawa	Transportation of hazardous substances along the rail line and highway that lie within the IPZ-1 adjacent to Delaney Bay	Approved with alternate wording
Quinte	N/A	N/A
Raisin Region-South Nation	N/A	N/A
Saugeen, Grey Sauble, Northern Bruce Peninsula	Tritium associated with nuclear generating station	Approved with alternate wording
Sault Ste. Marie	Specified hazardous substances transported along certain railway, roadway and shipping corridors within specified WHPAs and IPZs	Approved with alternate wording
South Georgian Bay-Lake Simcoe	N/A	N/A
Thames-Sydenham and Region	Transportation of fuel and fertilizers along the rail line, shipping lines and highway that lie within vulnerable areas.	Approved with alternate wording
	Fuel pipelines passing through specified vulnerable areas	Approved with alternate wording



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SPC Name	Type of Threat, as requested	Director's Opinion
Trent Conservation Coalition	Maintaining open areas of mown grass for recreational activities that promote the congregation of waterfowl within or near surface water bodies	Approved
	Fuel pipeline - The conveyance of gasoline (containing benzene) through a pipeline at an average flow of 450 m ³ /day and where the pipeline rupture spans a period of at least 6 hours. Applies to pipeline crossing specific tributaries flowing into Lake Ontario impacting the Port Hope, Cobourg, Newcastle, and Bowmanville surface water intakes.	Approved with alternate wording

New or Revised Technical Bulletins for the Preparation of Assessment Reports:

- Technical Bulletin: Dense Non-Aqueous Phase Liquids and Organic Solvents (September 2011)

Technical Bulletins for the Preparation of Assessment Reports Completed and Sent to PMs, Listed In Previous Program Updates:

- Delineation of Vulnerable Areas Crossing Jurisdictional Boundaries (September, 2010)
- Groundwater Vulnerability (June 2010)
- Part IX Local Area Risk Level (April 2010)
- Water Budget and Water Quantity Risk Assessment Tier 2 Subwatershed Stress Assessment and Tier 3 Local Area Risk Assessment Surface Water Drought Scenarios (April 2010)
- Provincial Tables of Circumstances: Understanding the provincial tables (March 2010)
- Provincial Tables of Circumstances (March 2010)



- Threats Assessment and Issues Evaluation (March 2010)
- Burial of Animals on Farms as a Drinking Water Threat (Deadstock Disposal) (December 2009)
- Methodology for Calculating Percentage of Managed Lands and Livestock Density for Land Application of ASM, NASM and Commercial Fertilizers (December 2009)
- Earth (Geothermal) Energy Systems (November 2009)
- Climate Change and the Director's Technical Rules (August 2009)
- Groundwater Road Map (July 2009)
- Surface Water Road Map (July 2009)
- Delineation of IPZ-3, Using the Event Based Approach (EBA) (July 2009)
- Water Budget and Water Quantity Risk Assessment Tier 2 Subwatershed Stress Assessment Groundwater Drought Scenarios (July 2009)
- Addressing Transportation Threats (April 2009)
- Delineation of Significant Groundwater Recharge Areas (April 2009)

All of the approved technical documents listed above along with MOE's Table of Drinking Water Threats, Director's Technical Rules and the CWA Mapping Symbology are posted on the MOE web site at

http://www.ene.gov.on.ca/environment/en/subject/protection/STDPROD_080600

2 Source Protection Plans (SPP)

The province amended *Ontario Regulation 287/07 – General* to include requirements for the preparation and implementation of source water protection plans under the Clean Water Act. The amendments to the Regulation took effect on July 1, 2010.

MOE delivered regional training sessions across the Province during the fall of 2010 for key stakeholders, which focused on the preparation of Source Protection Plans.

MOE has also developed and released a series of bulletins intended to assist local source protection committees in preparing source protection plans and policies as summarized below.

New Bulletins released by SPPB that relate to Source Protection Planning:

The following bulletins were released between April 2011 and September 2011:

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- Source Protection Planning Bulletin – Section 56 (Interim) Risk Management Plans (July 29, 2011)
- Source Protection Planning Bulletin – Overview of O.Reg. 287/07 s. 26 p. 1 Tools (May 5, 2011)
- Source Protection Planning Bulletin – Permits to Take Water (May 4, 2011)
- Source Protection Planning Bulletin – Threat Policies and Aboriginal and Treaty Rights (April 21, 2011)
- Source Protection Planning Bulletin – Land Use Planning Approaches (April 18, 2011)

SPP Related Bulletins That Have Been Previously Released and Were Listed in Program Update No. 9:

- Source Protection Planning Bulletin – Certificates of Approval (March 2011)
- Source Protection Planning Bulletin – Aggregate Resources Act Instruments (March 2011)
- Source Protection Planning Bulletin – Overview of Requirements for Pre-Consultation with Stakeholders (March 2011)
- Source Protection Planning Bulletin – Preparing the Explanatory Document (February 2011)
- Source Protection Planning Bulletin – Threats related to on-site sewage (septic) systems (January 26, 2011)
- Source Protection Planning Bulletin: Section 57 Prohibition (December 22, 2010)
- Source Protection Planning Bulletin: Section 58 Risk Management Plans (December 22, 2010)
- Source Protection Planning Bulletin – Technical Standards and Safety Authority (December 2010)
- Source Protection Planning Bulletin – Overview of Prescribed Instruments (December 2010)
- Source Protection Planning Bulletin – Municipal Drinking Water Licence and Drinking Water Works Permit (December 2010)
- Source Protection Planning Bulletin – Nutrient Management Instruments (December 2010)
- Source Protection Planning Bulletin – Pesticide Permits (December 2010)
- Source Protection Planning Bulletin – Renewable Energy Approval (December 2010)



- Source Protection Planning Bulletin - Notice When Plan Preparation Begins (October 7, 2010)
- Source Protection Planning Bulletin - Overview of Source Protection Plan Requirements (September 15, 2010)
- Source Protection Committee Backgrounder: Existing Municipal Authorities and Land Use Planning (August 2010)

SPC members can obtain a copy of these documents by contacting their SPC Chair/Project Manager, their local Ministry Liaison Officer, or by visiting the Conservation Ontario internal SPC member website.

3 Information management

Source Protection Policy Database

The Source Protection Policy Database (SPPDB) was launched to the PMs on September 22, 2011. The SPPDB is a central repository for policies that helps SPCs and the province ensure policies are complete, and also allows for the sharing of policies between PMs and SPCs, and to expedite review and commenting by agencies.

Training has been provided to PMs and SPA staff, as well as SPPB branch staff and the SPP government review team.

PM and their SPA staff user IDs and passwords are issued by CO. All PMs have the authority to issue user IDs for either read only or read/write access to their own staff or municipal representatives if necessary.

Water Quantity / Water Budget Database

The Water Quantity / Water Budget Database, which is being administered by the MNR, is now available for upload of information from the SPAs. Upon approval of an assessment report, SPCs/SPAs will be directed to upload all water quantity information to the Crown within a certain time period. A letter advising PMs that the database is ready was sent from the Director on October 5, 2011. Water Quantity and policy data will be combined with Water Quality (WHPAs, IPZs, threats) information at the MOE GIS Portal

Assessment Report Database

The Assessment Report Database contains submissions of scientific data from the Assessments Reports and is currently being populated with draft and approved assessment report data. SPCs have four months after approval of their AR to provide data to Conservation Ontario, who then forwards the data to the MOE. The information



is continuously updated as new data arrive. CAs can access the data from the Assessment Report Database at CAMaps.ca (Conservation Ontario).

Executive Summaries

As part of the branch information management (IM) data collection strategy, AR Executive Summaries were requested to be completed by all SPAs. Requests to PMs to update the AR Executive Summaries will be sent as the ARs are approved. Initial submissions were based on the best available data and may not be complete as many ARs are still being developed and are in draft stages.

As of October 2011, 35 of 38 SPAs have provided SPPB with a report of identified threats and the remaining reports are expected shortly. The table below shows the top six significant threats, based on the number of SPAs reporting the threat. Data in the table will be updated as new information is made available, and should be considered interim. Finalized threats information will be collected in the Assessment Report Database.

A ranking of the 6 most frequently appearing threats by Source Protection Area. (current Sept./2011) (35 of 38 SPAs reporting)					
Rank	Prescribed Threat	Threat Subcategory	Total Number of Sig. Threats	# SPAs reporting Threat	% of total Threats
1	The application of agricultural source material to land.	Application Of Agricultural Source Material (ASM) To Land	1151	25	2.9
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.	Sewage System Or Sewage Works - Septic System	3921	23	10.0
3	The application of pesticide to land.	Application Of Pesticide To Land	773	23	2.0
4	The storage of agricultural source material.	Storage Of Agricultural Source Material (ASM)	809	22	2.1
5	The handling and storage of fuel.	Storage Of Fuel	2582	21	6.6



6	The handling and storage of pesticide.	Storage Of A Pesticide	294	18	0.8
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Note: (Mississippi-Rideau - GW Threats only)

3.1 Upgraded MOE and DWPB Web Sites

A project was recently launched between Source Protection Programs Branch and Drinking Water Programs Branch (DWPB) identifying areas for improvement to source protection information on the public facing MOE and Drinking Water Portal sites.

A project charter was developed to identify redundancies on the sites and redirect all searches for water related information from the MOE site to the DWPB, reducing confusion and ensuring all available information is current and relevant. Timing for completion of the project is March 31, 2012.

It should also be noted that MOE's web site has been recently upgraded and a number of the hyperlinks to various MOE documents have changed.

In general, it is best practice when creating public documents to use generic high-level links, since the technology behind websites is always changing and links become outdated within a year or two. Provincial websites have been adopting program keywords, e.g. "clean water" or "environment" after "www.ontario.ca/". To avoid having to update links in documents such as assessment reports, SPCs can include a generic link (e.g. www.ontario.ca/cleanwater) and instructions on finding specific items.

A list of key new hyperlinks is provided in the table below.

Topic	New Link
Clean Water Act	www.ontario.ca/cleanwater (the same as before)
General Source Protection	http://www.ene.gov.on.ca/environment/en/subject/protection/index.htm
The Act	http://www.ene.gov.on.ca/environment/en/legislation/clean_water_act/index.htm
Publications & Resources	http://www.ene.gov.on.ca/environment/en/subject/protection/STD_PROD_080601.html
Source Protection Planning	http://www.ene.gov.on.ca/environment/en/subject/protection/STD_PROD_080598.html
Stewardship	http://www.ene.gov.on.ca/environment/en/subject/protection/STD_PROD_080599.html
Tables of Circumstances	http://www.ene.gov.on.ca/environment/en/legislation/clean_water_act/STDPROD_081301.html



The Science Behind Source Protection (Technical Rules & Bulletins)	http://www.ene.gov.on.ca/environment/en/subject/protection/STD_PROD_080600
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Please note that SPCs will likely have to update their links and bookmarks to other program areas at the MOE.

Updated hyperlinks are used throughout this LO Program Update Note.

4 Recent letters/memos

- Email dated October 7, 2011 from the Acting Director to SPC PMs with an updated pre-consultation contacts list.
- Email dated October 5, 2011 from the Acting Director to SPC PMs and Chairs regarding water budget assessment reporting requirements and the requirement to submit water quantity data to the Water Quantity Geodatabase.
- Email dated September 14, 2011 from the Acting Director to SPC PMs and Chairs regarding the official launch of the SPPDB.
- Email dated August 23, 2011 from the Acting Director to SPC PMs including the Director’s instructions for SPCs on how to comply with section 34 of O.Reg. 287/07 (the need to identify the applicable legal provisions of the policies in the source protection plan). The email also referenced how this was mentioned at the recent SPPAC teleconference on August 18, 2011.
- Email dated July 29, 2011 from the Acting Director to Conservation Ontario and to SPC PMs (via MOE Liaison Officers) including a document entitled “Administering & Enforcing Part IV under the Clean Water Act,” to provide information and guidance to municipalities on Part IV of the Clean Water Act (CWA), the associated roles and responsibilities of municipalities, as well as an overview of MOE’s technical training courses that have been developed to satisfy the requirements for appointing risk management officials and risk management inspectors under Part IV, and for exercising entry powers under the CWA.
- Letter dated July 20, 2011 from the Acting Director to SPC PMs regarding beta testing of the policy database.
- Email dated July 18, 2011 from the Acting Director to SPC PMs with an updated pre-consultation contacts list.

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- Email dated April 13, 2011 from OMAFRA (Hugh Simpson) to SPC PMs advising them of technical support from OMAFRA during the preparation of SPP policies. Two documents were attached: one detailing prescribed instruments issued by OMAFRA and BMPs, and another providing one-window contacts for SPCs.
- Email dated April 11, 2011 from Melanie Ward to SPC PMs (via MOE Liaison Officers) providing the updated Table 2 (Prescribed Instruments – Management of Drinking Water Threats) that accompanies the PI Overview bulletin.

5 Ontario Drinking Water Stewardship Program (ODWSP)

- The ODWSP, established by the CWA, 2006, provides financial assistance to eligible persons and groups interested in taking immediate actions to protect their sources of municipal drinking water supplies.
- To date, more than 2,000 projects have been carried out through funding from the ODWSP.
- Conservation authorities (CA) currently have about \$1.4 million in Early Actions funding available for landowners. The Ontario Federation of Agriculture (OFA), through the Ontario Soil and Crop Improvement Association (OSCIA), also has approximately \$43K for farmers.
- The 2010-11 ODWSP consisted of three components:
 - Early Response program with funds prioritized to address significant drinking water threats (SDWTs) that are identified in ARs. Funds will be used to assist those landowners that agree to take early measures to respond to the identified significant threats and to reduce the risk to our drinking water sources;
 - Special Projects Early Response program to address Early Response type projects with a total value of over \$100,000; and
 - Special Projects Land Securement to provide funding for municipalities to purchase lands within 100m of municipal wells to control the activities on these lands.
- With the award of 2010-11 ODWSP funding, CAs currently have about \$5.1 million in Early Response funding available for landowners through to December 2012. The OFA, through OSCIA, did not receive Early Response funding but farmers are encouraged to work through their local CA to access eligible funds under Early Response.
- In addition, the 2010-11 ODWSP awarded just over \$1.0 million for six Special Projects Land Securement and three Special Projects Early Response projects.



- Funding for Education & Outreach and Early Actions has been phased out. Despite this and as noted above, landowners can still obtain funding for eligible Early Actions projects through the CA or the OSCIA.
- For funding information contact SourceProtectionFunding@ontario.ca

6 First Nations Drinking Water Systems – Update

- Chippewas of Rama First Nation submitted a Band Council Resolution in February of 2011 to have their system included in the SPP process. A request to amend O.Reg. 287/07 to include the system is underway. The technical work on the Rama system has already been completed and is being reviewed by the MOE
- Technical work is now complete for Kettle and Stony Point and is being reviewed by the community; no significant threats were identified
- MOE has received five additional applications for Capacity Funding – one from the Chippewas of Rama and four from First Nations located within the Thames-Sydenham and Region SPR who participate in the First Nations Liaison Committee to provide feedback to the SPC through the First Nation representatives that sit on the SPC. The Chippewas of Rama received funding on October 25, 2011. The remaining applications are being processed.
- Jennifer Arthur, SPPB, has given presentations on First Nations Involvement in Source Water Protection to the Ontario First Nations Technical Services Corporation and to an Interdepartmental Committee including Federal representatives. She presented on July 27, 2011 to the Interdepartmental Coordinating Committee on Water; on August 3, 2011 to the Ontario First Nations Technical Services Corporation (OFNTSC); and on October 27, at the OFNTSC Southern Tribal Council and Large/Unaffiliated First Nations Annual meeting..

7 Recent Questions and Answers

The following questions were raised and answered March 26, 2011 and October 31, 2011.

7.1 *Assessment Report – General*

7.1.1 **Question: Risk management measure numbers in policy?**

How should risk management measures be referenced in a source protection plan policy? Should we reference the number and title of the risk management measure in the policy?



Response:

While it is often simpler to keep policies at a general level and not list specific risk management measures, there may be instances where policy developers feel strongly about including reference to a (or several) specific risk management measure(s) in a source protection plan policy. When referencing specific risk management measures, policy developers should keep in mind that the Risk Management Measures Catalogue is currently undergoing revisions, and that there is no guarantee that numbers relating to risk management measures (or even the titles of measures) will stay the same between versions. Committees should also remember that they may include risk management measures in a policy that are not listed in the Catalogue.

If an SPC feels strongly about including measure names and numbers in a policy, it would be wise to reference the version number of the catalogue along with the risk management measure ID number they are referring to. However, it would be more prudent to provide a brief description of the measure in the policy (rather than referencing ID numbers), so that the policy can stand alone and isn't tied to a specific version of the Catalogue. This would also allow for the inclusion of measures that are not within the Catalogue.

7.2 Assessment Report - Threats and Issues

7.2.1 Question: Can two non-significant activities be jointly considered a SDWT?

When there are 2 activities next to each other that are not significant threats individually, but together they are – this may be a potential gap?

Response:

This question seems to be asking about a scenario where two low or moderate threats are together and, if considered together, they would meet the circumstances associated with a significant threat.

There are some activities where cumulative effects have been considered in the circumstances themselves, specifically, activities related to the broad scale application of chemicals or pathogens. In these cases, chemicals or pathogens are intentionally released into the environment and it is known that they, as a group, have a cumulative impact. Recall that for managed lands and impervious surfaces the cumulative impacts of an activity are considered in the threats assessment. As fertilizers contribute nutrients to land, they are considered in the managed lands calculations.



For other threats, the activity is considered on its own – i.e., there is no consideration of cumulative effects. These are generally activities that are related to storage of chemicals or pathogen sources. For these types of activities, the risk is based on the potential for a release of the chemical or pathogen to the environment. The potential for release on one property is not linked to something happening on another property. For example, chemical storage on one site is not affected by the method of storage on a neighbouring site. In other words, the risk posed by an activity does not change as a result of a neighbour's operations. The issues approach was added to the technical rules in recognition that sometimes the risk approach does not reflect the reality of an area. If there is evidence that multiple activities are having a cumulative impact on a source of drinking water, then SPCs can capture the activities as SDWTs through this approach.

Where there are no issues, the SPCs could consider writing policies to address the moderate or low threats.

7.2.2 Question: Are the 11 pesticides in the MOE Tables of DWT comprehensive?

Are the 11 pesticides in the MOE Tables of Drinking Water Threats the only threats? Or surrogates for a broader list?

Response:

The circumstances of the MOE Tables of Drinking Water Threats contain 11 different pesticides that may trigger significant drinking water threats. MOE is aware that there are many other pesticides in use in the province. The reason there are only 11 in the tables has to do with how the tables were generated in the first place.

When MOE developed the tables, we worked with government experts to determine all threats. As with all threats, we evaluated the most common pesticides with the highest toxicity for humans.

More specifically, the pesticides selected for inclusion in the list of source water contaminants of concern were based on the top 10 highest use pesticides on Field Crops, Fruit and Vegetable Crops, and Other Agricultural Crops (2004 OMAFRA survey). Mecoprop was also added since it is used in high amounts on golf courses.

In capturing the 11 chemicals, it was determined that other pesticides are associated with the 11. So by identifying these 11, other pesticides can also be addressed.



MOE recognized that there may be some rare cases where chemicals were not included in the tables. This is why SPCs are able to request the addition of local threats.

7.2.3 Question: What is the rationale for lack of a threshold quantity for DNAPLs?

DNAPLs - What is the rationale for lack of a threshold quantity?

Response:

Given the persistent nature of DNAPLs and the difficulty in cleaning them up, there is no minimal threshold established for what makes DNAPLs a significant drinking water threat.

7.2.4 Question: Request for clarification on organic solvents threat

The threat is “handling and storage of an organic solvent” but there appears to only be circumstances given for the storage. There are not only no significant threat circumstances for handling but there are no circumstances for moderate or low either. Why is it mentioned as part of the threat if there are no circumstances where it can be a threat?

Response:

That’s correct, the Threat Category is called “Handling and Storage of Organic Solvents”, however; the circumstances associated to the threat refer only to the spill of chemical from the storage of an organic solvent. The intent is still that it’s not just the storage on its own, it’s the storage and handling related to the storage that’s considered a threat. The rationale for explicitly stating it with other activities was linked to how the prescribed instruments worked for those activities. It is implicit in this threat that storage is storage and handling related to the storage (i.e. if accessing the storage tanks/containers to get solvents for use causes a spill, it is still a threat). The same approach is followed in the table for “handling and storage” of DNAPLs, pesticides, commercial fertilizers, fuel, NASM and road salts.

7.2.5 Question: Is there a definition of what constitutes “snow storage”?

For the purposes of the CWA and the MOE Drinking Water Tables/Tables of Circumstances, is there a definition of what constitutes “snow storage”? Do snow banks at the side of a roadway/parking lot count as snow storage? Even if a property owner removed all the “bulk” snow ploughed at a site there will still be snow banks at the



edges of the parking lot and driveway...are these properties considered “snow storage” sites under the CWA?

Response:

According to the Tables of Drinking Water Threats the circumstances associated with the snow storage are based on two (2) factors;

1. Is the snow is stored above or below grade, and
2. The area upon which the snow is stored (i.e. at least 0.01, but not more than 0.5 hectares).

We didn't intend to capture snow banks on the side of the road as a result of the plow. They would be captured by impervious surfaces and road salt application. Parking lot snow storage could be captured if the size of the snow storage area meets the criteria. The snow storage area does not include the cleared area (it's not the full parking lot).

The following is Guideline on Snow Disposal and De-icing Operations in Ontario dated Feb 2011 that can be shared with your PMs.

http://www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/std01_079661.pdf

7.2.6 Question: % Impervious Surface Calculations - change to circumstances?

Based on the circumstances tables for road salt, the current impervious surface is currently based on 80%. Is the MOE considering reducing the % of impervious surface during this round of planning?

Response:

MOE is not considering changing the circumstances in our Tables for Road Salt application for this round of planning. The province may explore other approaches to road salt in future rounds of planning. There are alternate methods being used in some source protection areas, which, depending on timing, SPCs may be able to apply to use this round of planning.

7.2.7 Question: Bulk fuel facilities - why not significant threats in IPZs?

What is the rationale for not including bulk plants and facilities that manufacture or refine fuel as significant threats in the IPZs?

Response:

The reasons for the different hazard ratings, and therefore, vulnerability scores needed to make something significant, is that the RIM scores (release and impact modifier) for the activities are different. The RIM is lower for the bulk plants and refineries and higher for smaller facilities. This reflects the potential for a release, which is lower for a bulk plant/refinery just by the nature of their operations (less handling and less chance of a release) versus the smaller facilities where there are so many things going on the potential for a release is actually higher.

Additionally, the refined fuel is considered a floater (LNAPL) and floaters rarely impact surface water quality as the intakes are usually not affected by surface contamination.

7.2.8 Question: Minimum setback distance for a gas tank from a municipal well

Is there a minimum distance permitted between a municipal well head and buried gas tanks?

Response:

O Reg. 903 requires that new wells have minimum horizontal setback distance from source of contaminants; other than sewage systems (i.e. fuel) of 15 m (50 feet) for a drilled well and 30 m (100 feet) from any other well (i.e. dug well).

See excerpt from Water Supply Wells - Requirements and Best Management Practices (December 2009), Chapter 4 – Sitting of Wells

http://www.ene.gov.on.ca/stdprodconsume/groups/lr/@ene/@resources/documents/resource/std01_076333.pdf

The Liquid Fuels Handling Code, 2007 states under s. 2.2, subs. 2.2.1 – Location of tanks that an underground storage tank shall not be installed:

- a) inside or under any building;
- b) less than 1 m from a building;
- c) less than 1.5 m from a property line;
- d) less than 60 cm from an adjacent underground storage tank;

- e) less than 15 m from drilled water wells;
- f) less than 30 m from a dug water well or waterway; and
- g) where the loads carried by a building foundation or supports could be transmitted to the tank.

TSSA codes are consistent with O.Reg. 903 and address setback requirements of new sources of contaminants to both existing and new water wells.

7.2.9 Question: Fuel storage and identification as a SDWT activity.

Suppose an individual or company had a 50,000 L fuel storage tank on a single parcel of land which was enumerated as a SDWT and then removed that storage tank and replaced it with one thousand 50L storage drums instead. Would they still be a SDWT or would they now be exempt?

Response:

Splitting up a large tank as suggested would mean that the SDWT circumstances no longer apply. If this type of approach is being considered by a land owner, they will have to determine if this is legally allowed under other legislation governing the storage and handling of fuels, including but not limited to: the Liquid Fuel Handling Code (TSSA) and Ontario Regulations 213/01 and 217/01 made under the TSSA.

7.2.10 Question: Are transfer stations a prescribed waste threat?

Are transfer stations considered a waste under Threat Sub-category Waste Disposal Site – Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste?

Response:

Yes, transfer stations are considered a waste under Threat Sub-category Waste Disposal Site – Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste. The intent is to capture sites that have hazardous waste but are exempt from managing it as a hazardous waste.

Note: A transfer station is considered a waste disposal site. Under O. Reg 347 (General Waste) “transfer station” means a waste disposal site used for the purpose of transferring waste from one vehicle to another for transportation to another waste disposal site.



It is important to distinguish between the threat "Storage Of Hazardous Waste At Disposal Sites" and "Storage of wastes described in clauses (p), (q), (r), (s), (t) or (u) of the definition of hazardous waste" because in legal terms, this distinguishes between storage of hazardous waste (the former) and storage of non- hazardous waste (the latter).

7.2.11 Question: How can one animal pose a significant pathogen DWT?

How can one animal pose a significant pathogen drinking water threat?

Response:

For threats 1945 and 1946 (relating to livestock grazing or pasturing, an outdoor confinement areas or farm-animal yards), the establishment of the quantity circumstances in the Table of Drinking Water Threats for pathogens is based on scientific information gathered by extensive literature review and discussion during consultation with technical experts. Some of the scientific information is summarized below. Further details can be found in the references, which have been provided below.

- Unlike nutrients, the occurrence and concentration of pathogens in the manure of domestic farm animals can vary greatly. Many farm animals can be infected with more than one pathogen at one time. Many farm animals can be carriers of pathogens, meaning they continually excrete pathogens in their fecal matter.
- When an animal is infected with a pathogen, that one animal can excrete a high concentration of pathogens in its fecal matter. In most animals, pathogens are transient—an animal is infected for a limited period of time. In many instances, infected animals do not show signs of illness; therefore, it may not be possible to know if pathogens are being excreted from one particular animal. In addition, infection and excretion rates can change throughout the year and can differ with the age, stress level and living conditions of an animal.
- As reported by the U.S. EPA, the waste produced per day by one dairy cow is equal to that of 20-40 people and others report that a single dairy cow produces approximately 55 kg (120 pounds) of wet manure per day. Due to the high excretion rates, the potential exists for a large number of pathogens to be excreted from a single infected animal. For example, when an animal produces 23 to 50 kg of waste per day (beef and dairy cattle), one infected animal can potentially shed millions of pathogens into the environment in one day alone.

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- Cryptosporidium, a pathogen that was responsible for the largest drinking water outbreak in North America (infecting over 400,000 people in Milwaukee Wisconsin in 1993) can be excreted from infected adult cattle (beef) at an estimated rate of 3,900 to 170,000 per day per animal. Excretion rates can be much higher in younger animals. Although calves produce less manure than adult cattle, the greater shedding rates of calves can result in a greater daily production of these pathogens. For example, an infected dairy calf can excrete in excess of 1,000,000 Cryptosporidium per day per animal.
- Pathogens such as Salmonella spp., pathogenic E. coli (e.g. E. coli O157:H7, which was the pathogen in the Walkerton tragedy) and Campylobacter spp. can be excreted from a range of livestock including cattle (dairy and beef), sheep, swine and poultry. Infected animals can excrete tens to thousands of these pathogens per gram of fecal matter.
- As shown in the Table of Drinking Water Threats for pathogens (Table 2), the use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard can be a significant drinking water threat in a WHPA-A and/or WHPA-B with a vulnerability score of 10 only, as well as an IPZ-1, IPZ-2, IPZ-3 and WHPA-E with a vulnerability score of 8 to 10.

REFERENCES:

Atwill ER, B Hoar, M das Gracas Cabral Pereira, KW Tate, F Rulofson and G Nader. 2003. Improved Quantitative Estimates of Low Environmental Loading and Sporadic Periparturient Shedding of Cryptosporidium parvum in Adult Beef Cattle. Appl Environ Microbiol. 69: 4604–4610

Dorner SM, PM Huck and RM Slawson. 2004. Estimating potential environmental loadings of Cryptosporidium spp. and Campylobacter spp. from livestock in the Grand River watershed, Ontario, Canada. Environ. Sci. Technol., 38: 3370– 3380.

Ferguson CM, K Charles and DA Deere. 2004. Quantification of Microbial Sources in Drinking-Water Catchments. Critical Reviews in Environmental Science and Technology. 39:1-40



Hoar B, ER Atwill and TB Farver. 2000. Estimating maximum possible environmental loading amounts of *Cryptosporidium parvum* attributable to adult beef cattle. *Quant. Microbiol.* 2:21–36

Hutchison ML, LD Walters, SM Avery, BA Synge and A Moore. 2004. Levels of zoonotic agents in British livestock manures. *Lett Appl Microbiol.* 39: 207–214

<http://www.epa.gov/region9/animalwaste/problem.html>

7.2.12 Question: Confirming definition of storm water management facility.

We understand that the term stormwater management facility is defined the same as S. 1 of O.Reg 525/98 (Approval exemptions) made under the Ontario Water Resources Act. Specifically, a stormwater management facility “means a facility for the treatment, retention, infiltration or control of storm water.”

Would the “control” of stormwater included in the definition above apply to a very simple stormwater management system, such as a series of catch basins and storm pipes that discharge directly to a stream?

Response:

Yes, a series of catch basins and stormwater pipes that discharge to a ditch or stream would be considered to be a “stormwater management facility” as this simple type of system does control the flow of stormwater.

7.2.13 Question: Is a quarry a storm water management facility?

Would quarry pits be captured under the stormwater management facility definition? If not, how are they regulated by the MOE?

Response:

No, quarry pits would not be captured under the definition of a stormwater management facility as stormwater management is not their primary function. However, an inactive quarry pit could be repurposed for stormwater management. At that point it would no longer be considered a quarry pit, it would be considered to be a stormwater



management facility. In this case, the suitability of the pit as a SWM facility would have to be evaluated to confirm if the proper design and water quality targets can be met.

It should be noted that if a pit or quarry engages in dewatering activities or takes water for other purposes (e.g. processing and/or cooling water) a Permit to Take Water issued under the OWRA is typically required. A sewage certificate of approval issued under S. 53 of the OWRA would typically be required for the discharge of effluent from a pit or quarry that engages in any of the water taking activities described above. Effluent discharges from these facilities may also be regulated under the Industrial Minerals Regulation (MISA Reg. O. 561/94) made under the EPA.

7.2.14 Question: Do all storm water systems need a Certificate of Approval?

Do all stormwater management systems require a sewage approval issued under s. 53 of the OWRA (i.e. a sewage certificate of approval)?

Response:

No, not all stormwater management systems require a sewage Certificate of Approval issued under S. 53 of the OWRA. There are some exemptions from the need for a sewage Certificate of Approval provided by O.Reg. 525/98 ("Approval Exemptions"). Specifically O.Reg. 525/98 states the following:

3. Subsections 53 (1) and (3) of the Act do not apply to the establishment, alteration, extension or replacement of or a change in a storm water management facility that,

- (a) is designed to service one lot or parcel of land;*
- (b) discharges into a storm sewer that is not a combined sewer;*
- (c) does not service industrial land or a structure located on industrial land; and*
- (d) is not located on industrial land. O.Reg. 525/98, s. 3.*

7.2.15 Question: Sodium listed as threat via issues approach & resulting policies

In the context of a SPC listing sodium as an 'issue' in an assessment report:



- A. Could road salt then be dealt with as a threat through an issues approach and policies added to the source protection plan?
- B. Furthermore, can source protection plan policies be developed for any issue identified in the assessment report?
- C. Are the SPP policies different for 'issues' approach versus 'threats' approach?

Response:

(Part A) Yes – sodium can be dealt with through the issues approach as long as the issue meets the tests in rule 114, and all work required by rule 115 has been completed. If sodium is an issue, then any activity or condition associated with the issues that is located in the Issues Contributing Area (ICA) becomes either a significant drinking water threat (for systems in the terms of reference) or a moderate drinking water threat (for systems not in the terms of reference). If there is no information available to identify the ICA, the rules require that you include a plan to identify the area within the assessment report and timelines for implementation. You can not infer where the lines should be drawn unless you have some information to back this up. The plan can include sampling to identify the upstream area where appropriate.

(Part B): If the work required under rule 115 is completed, and significant drinking water threats are identified, then the source protection plan must include policies to address these significant threats. For moderate threats identified through the issues approach, there is the option of including policies to address these threats. Where the work under rule 115 has not been completed the only types of polices permitted in a SPP relate to the monitoring of the issue (as per s. 22 (2) 7 of the CWA).

(Part C): As a point of clarification, if the SPC has identified an issue under rule 114 and completed the work under rule 115, then threats identified in the issue contributing area are treated the same as any other threat, in that the CWA requires the source protection plan to include policies to address every area where a threat is or would become significant if established in the future. Where the work under rule 115 is not completed, or the issue does not meet the tests under rule 114, then the only policies that directly related to issues are "monitoring" type policies.

7.2.16 Question: Issues contributing area - limited to WHPA?

Is the delineation of an issues contributing area (ICA) limited to wellhead protection areas?



Response:

An issues contributing area is an “area within a vulnerable area” - see technical rule 115(3). Thus, the area delineated as an issues contributing area has to fall within what has already been established as a vulnerable area. This could include wellhead protection areas (WHPAs), intake protection zones (IPZs), highly vulnerable aquifers (HVAs) and significant groundwater recharge areas (SGRAs).

7.2.17 Question: Can deadstock be included as a threat using issues approach?

- A. Can deadstock be identified as a significant drinking water threat (SDWT) activity if the storage/management of deadstock is believed to be linked to a drinking water issue (e.g. elevated pathogens in a water supply)?
- B. Even if the management/disposal of deadstock isn’t connected to an “issue”, can a Source Protection Plan (SPP) include a recommendation regarding this activity to ensure it does not lead to negative impacts on the raw water supply?

Response:

Response to question A:

The CWA and Director’s Technical Rules (see rules 114 and 115) describe the process for identifying an “issue” in the raw water supply of a groundwater well or surface water intake. Once an “issue” has been identified it can be included in the Assessment Report (AR) if it is the result of, or partially the result of anthropogenic causes (i.e. related to human activities). The Director’s Rules require that the types of anthropogenic activities that can be linked to an issue must fall into one of the following three categories:

- i) be a prescribed threat activity
- ii) be a local threat activity that has been approved by the Director, or
- iii) be the result of a “condition” (i.e. contamination related to historical human activities)

For category (i), the management/disposal of deadstock does not fall within any of the 21 prescribed threat activities listed in O.Reg. 287/07 (note, the management and disposal of deadstock is exempt from Part V of the EPA and, therefore, it is not



considered to be a waste disposal threat activity under the CWA and O.Reg. 287/07). The disposal of dead farm animals (including rules for disposal, storage/management) is regulated by O.Reg. 106/09 made under the Nutrient Management Act, 2002.

For category (ii), a SPC does have the option of applying to the director to have the management/disposal of deadstock approved as a local threat in a particular location(s). If approved, that activity could then be linked to an “issue”, if there is sufficient information available to support that conclusion. The Director’s Rules require that, if an activity that is not prescribed to be a drinking water threat (DWT) under O.Reg. 287/07 is listed as an activity that is or would be a drinking water threat, the following information shall be provided (Rule 125):

- 1) The circumstances that make the activity a DWT shall be specified; and
- 2) The hazard rating of the activity shall be determined in accordance with Rule 120 (chemical threat) or 121 (pathogen threat) or both.

For category (iii), in the event that the historical management/disposal of deadstock has led to contamination at a site, then it is conceivable that the site could be identified as a “condition” and again, the condition could then be linked to an “issue” if there is sufficient information available to support that conclusion. To identify contaminated sites as conditions, one or more of the listed threats in Rule 126 as per clause 15(2)(g)(ii) of the CWA should exist and that should be linked to the issue identified at the drinking water source. If there is sufficient information to link that site to the issue, the site is identified as SDWT. Note: Contaminated sites that do not contain one or more of the threats prescribed in Rule 126 can not be added as a local threat.

Response to question B:

A SPC cannot write a source protection plan policy to deal with activities that fall outside the scope of the CWA. Unless the management/disposal of deadstock at a particular location(s) has been approved as a local threat or identified as a condition according to the Director’s Technical Rules, then the SPP cannot include a policy to address this activity.

7.3 Assessment Report – Amended/Updated ARs

7.3.1 Question: Timelines in AR for updates

- A. On several topics (tier 3 water budgets, WHPA E, F, issues), the technical rules require that, if a task has not been completed, a work plan be included in the

assessment report noting “an estimate of the date by which the source protection committee expects an updated assessment report would be submitted to the Director under s. 19 of the Act.” If this work will not be ready for the first updated assessment report, which is due in June 2011, what date should be put in the assessment report? Could a general reference to updating the assessment report in the future suffice for this requirement, rather than a concrete date?

- B. If this type of work is ongoing and will be completed within the next year or year and a half, at what point can an updated assessment report be submitted? For example, if the tier 3 water budget work is completed late in 2011 or early 2012, when can it be submitted in an updated assessment report? (note: we do understand that no planning will be done for these threats in this first round of source protection plans)

Response:

(Part A): While the rules do require an estimated date, there are no clear timelines around the submission of updated assessment reports after the June 2011 deadline. When attempting to meet this requirement, SPCs should consider what makes sense locally. They should also consider the answer to question b.

(Part B): There is nothing in the legislation that stipulates any dates for submission of an updated assessment report. However, anything submitted after June 2011 will most likely not be approved in time for corresponding policies to be included in the first source protection plan. If a second updated assessment report is submitted after June 30, 2011 but before the source protection plan is submitted, this could lead to public confusion about versions of the AR and which version the source protection plan policies relate to. One preferable course of action would be to identify areas of new/improved knowledge that would trigger an updated AR in the letter of transmittal of the source protection plan to the Minister. Then when the Minister approves the plan, the S 36 Order can also order the SPA to do the updated work (which they might already have completed).

7.4 Source Protection Plan – General

7.4.1 Question: Using a two-pronged policy approach for SDWTs

Can a “two-pronged” policy approach be used when writing policy to address a given threat (e.g., storage of ASM)? In particular, the scenario presented was outreach & education coupled with an incentive program (in particular, the Environmental Farm Plan) [Phase 1], and then to implement a “harder” policy approach—Risk Management



Plan—if the monitoring of Phase 1 failed to meet the stated criteria (e.g., 100% adoption of EFPs within WHPA-A within 2 years).

Response:

Yes, it is possible for an SPC to write a policy requiring only education and outreach to address significant drinking water threats, but the SPC would have to be prepared to defend and justify its decision for doing so (i.e. for satisfying s. 22 of the Clean Water Act).

It is also possible for an SPC to write a phased policy approach in which one policy approach (e.g., outreach & education) is implemented for a certain time period (e.g., two years), after which another policy approach or tool (e.g., RMP) is implemented. However, this phased approach cannot have the second policy tool be implemented only if the first is “unsuccessful”—in that it fails to meet the criteria during monitoring—because this would suggest that the SPC is not fully confident that the first policy approach would be successful in satisfying s. 22 of the Act; in which case, an alternative policy approach is recommended from the outset in order to ensure that SDWTs cease to be significant and that future drinking water threats do not become significant.

In addition, the EFP is voluntary and private. An SPC cannot write a policy requiring a farmer to adopt an EFP and that failing to do so would result in the farmer being required to undertake a Risk Management Plan. This runs counter to the voluntary nature of the EFP.

7.4.2 Question: Consultation package submission with source protection plan

1. The regulation states the Plan requires inclusion of summaries of consultation on TOR, AR and SPP. The AR is an appendix of the SPP and consultation is recorded therein, is this sufficient or do we need text in the SPP?
2. Page 2 of the administrative checklist indicates that a table summarizing comments received and how they were addressed will be submitted with the SPP as part of a consultation package. The regulation states the explanatory document must include a summary of the comments received during pre-consultation and an explanation of how the comments affected the policies presented in the draft SPP. In addition, prior to consulting on the proposed SPP, the explanatory document must be updated to also include a brief explanation of the effect of comments received during consultation on the draft plan. Is the MOE

expecting something very brief (i.e., comments were received from agencies and considered during finalization of the policies) in the explanatory document since they will have all the comments in a table?

3. The administrative checklist indicates that we have to submit a consultation package expected to contain mailing lists, samples of notices, table summarizing comments received and how they were addressed/changes made, public meeting data). Does the consultation package only include text or documents not included in the Plan or Explanatory Document to avoid duplication and excess work for us? What does a mailing list include? We don't give out addresses for our residents due to privacy concerns. Is the mailing list just a list of landowner's names or company names for the hundreds of people that receive a notice, letter, phone call, email, etc? What is the MOE expecting?

Response:

- A. A summary of the consultation activities that have taken place for the ToR, AR and SPP is required as text in the SPP. This is to present a complete picture of consultation throughout the entire process in one centralized location for any reader, regardless of whether they were following the process from the beginning.
- B. The explanatory document is expected to tell the story behind each policy or set of policies to the public. Thus, it should contain more detail than merely stating that comments were received and considered. This documentation will also be used by MOE to address questions from the Minister or to inform the Minister during to plan review and approval process and thus it is very important to tell a complete story. However, the format (for example, a table of comments) is not prescribed for the explanatory document.

The consultation package referred to in the checklist is intended to assist with demonstrating compliance with the regulatory requirement that each SPC considers comments received (as a result of both the pre-consultation phase and posting of the draft SPP). A table format which groups and summarizes comments by topic area, and explains how each was addressed by the SPC in either the initial development of the policy or by modifications of the policy, would be a useful means to demonstrate this need. If an SPC chooses to use the same format in satisfying the explanatory document requirements, they can simply reference the page number of the explanatory document as an alternative.

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- C. For the ToR submission, the Ministry requested that, whenever possible, the SPCs provide documentation to demonstrate how the legislative requirements for consultation were met. This included documentation of newspaper notices and internet postings of consultation periods, showing publication dates, public notice of council resolutions for exempted systems and circulation of draft proposed and proposed ToR to stakeholders and partners (e.g., municipalities, bands, SPA, SPC, etc.). Similarly, for the AR submission, the Ministry requested that SPCs provide proof of the consultation undertaken on the AR, as per the guidance in the AR checklist.

The Ministry anticipates receiving similar documentation from the SPCs along with the submission of the SPPs in order to be able to demonstrate compliance with the consultation and process requirements of the legislation. The Ministry expects supporting documents to be submitted along with the SPP. The full package is expected to include:

- Letter from SPA to Minister, together with:
 - proposed SPP
 - explanatory document
 - summary of unresolved municipal and band comments on the draft SPP (same as provided within letter from SPC to SPA – see below)
 - any comments the SPA wishes to make about the proposed SPP
 - any written comments received by the SPA after publication of the proposed SPP
 - any municipal council resolutions submitted to the SPA related to the proposed SPP
- Supporting Documentation:
 - Notice when plan preparation begins sample
 - Pre-consultation notice sample
 - Internet posting sample(draft and proposed SPP postings)
 - Newspaper notice sample
 - Summary of posting dates, locations and name of publications (if this is included in the SPP text, would not need to be provided separately – as an alternative may provide SPP page reference)
 - Mailing lists for all parties that were required to receive notices – see checklist (can be a list of names not including mailing addresses if there are privacy concerns)
 - Public meetings – dates, locations, number per SPA

- Summary table which groups comments by topic area, and explains how each topic was addressed by the SPC in either the initial development of the policy or by modifications of the policy (this table includes comments from both the pre-consultation phase and consultation on the draft plan) – this may mirror explanatory document content – if so, provide page reference as an alternative
- Letter from SPC to SPA, which includes summary of unresolved municipal and band comments on the draft SPP
- Summary¹ of the outstanding topics of concern from the written comments received during the 30-day consultation period on the proposed SPP, and the SPCs / SPAs perspective on these topics (e.g., why they feel they have adequately addressed a concern in the past and how they did so; why they feel the topic is out of scope, etc).

The supporting documentation is not meant to create unnecessary additional work for SPCs, but rather is necessary for demonstrating compliance with the legislation. Not submitting this material will result in delays during the review and approval as MOE will have to contact the SPC/SPA to get copies as documentation of compliance.

This kind of documentation or proof would not necessarily be part of the textual description of consultation activities included in the SPP itself (see response to question A).

7.4.3 Question: Why salvage yards not prescribed threat/how address in plan?

Why are private salvage yards not included in the list of waste disposal threat activities? Is there a way that the associated threats could be addressed under the CWA? Can Part IV powers under the Clean Water Act be used for certain threats perceived to be waste disposal sites (i.e. a salvage yard)?

Response:

The prescribed threats list was never intended to be all encompassing as there was no way that the ministry could capture all potential threats. This is why the legislation provides SPCs with the ability to add local threats.

¹ Note: this is an analysis of any written comments received by the SPA after publication of the proposed SPP.



For an activity to be included as a prescribed waste threat in an AR, that activity must be considered a waste disposal site within the meaning of Part V of the EPA (see ss 1.1(1) of O.Reg. 287/07). The reason that derelict motor vehicle sites cannot be considered a prescribed waste threat is that these sites are specifically exempt from Part V of the EPA.

While this activity cannot be included as a prescribed waste threat, other prescribed threat activities may be associated with the operation (e.g. storage and handling of DNAPLs or fuels.) These types of activities, if identified as a significant threat, can be dealt with using part IV tools. A RMP can address handling and storage of organic solvents, DNAPLs, and fuels. Also s. 57 prohibition can apply to prohibit threats on that portion of the site where the threats are or would be significant. Also expansions to the operation involving those activities could be prohibited using zoning (but that wouldn't get at existing threats).

It should also be noted that there are some circumstances where part IV tools can be used with prescribed waste threat activities. Subs. 23(2) of O.Reg. 287 prohibits the use of part IV powers (Prohibition, Risk Management Plans and Restricted Land Uses) under the Clean Water Act to deal with significant threats at waste disposal sites within the meaning of Part V of the EPA if a certificate of approval is required for that activity. If the activity is subject to Part V of the EPA but does not require a certificate of approval (CofA), then the part IV tools can be used. Most waste activities are covered by Part V of the EPA and the majority of those activities do require a CofA. However, there are a number of activities that, while subject to Part V of the EPA, are exempt from the requirement for a CofA (e.g. most PCB storage sites). Refer to S. 2.5 of the MOE CofA bulletin for more information on activities exempt from Part V of the EPA and/or exempt from the requirement for a CofA.

Finally, it should be noted that, although derelict motor vehicle sites are not subject to Part V of the EPA, they are subject to S 14 of the EPA; that s. prohibits the discharge of contaminants to the environment that causes or is likely to cause an adverse effect. MOE District offices can deal with derelict motor vehicle sites under this provision of the EPA if it is deemed appropriate to do so.

7.4.4 Question: Expansion of existing land use

Is an expansion of an existing facility considered new construction; thus would be required to comply with future threat policies? For example; current large fertilizer depot identified as a significant drinking water threat submits an application to expand the operation. Is this considered a "new use" and thus comply with future threat policies?



Response:

The answer depends on whether the SPP policy to address expansions to uses/activities will be addressed under the Planning Act or under Part IV, CWA. The differences are described below, however it is important to establish or define existing and future in the SPP policy if the tools are different for each activity, in order to determine the appropriate regulatory regime. To do this, a policy could establish a date in the policy itself to establish/ define existing vs. future. For example, a policy would say that an activity is considered to be “existing” if it lawfully occurred on August 20, 2012. Usually the property tax assessment will identify uses for taxation. A person engaging in an activity may also hold a license or permit, or there could be other records. Generally speaking, the benefit of the doubt goes to the person engaging in the activity if they are engaged in an activity that is lawfully permitted to occur on the site. Future activities then, would be activities that are established after that date. This grandfathering is commonly used in land use planning. Expansions to existing uses are discussed below.

- Prohibition of future uses and expansions to existing uses using land use planning (zoning):

Recall that land use planning tools can address future uses, rather than activities and is therefore a “blunt tool.” Land use planning can prohibit new uses from being established but cannot prohibit (or shut down) existing lawfully operating uses. Expansions to existing lawful uses are addressed in the Planning Act. In land use planning, if a use exists under the zoning by-law, it can expand as-of-right providing it meets the provisions (such as setbacks) in the zoning by-law. An SPC may direct a municipality to amend its zoning by-law to remove certain permitted uses, such as auto wrecking yards, dry cleaning establishments, and furniture strippers/finishers from its list of permitted uses in certain areas. If there are existing businesses established based on the previous zoning permissions, then according to the Planning Act, the existing occurrences are permitted to continue. Under the new zoning, the existing uses become “lawful non-conforming”. Lawful non-conforming uses may be permitted to expand, provided they get approval from the Committee of Adjustment through the minor variance process (see s. 45 (2) of the Planning Act). For example, if a furniture manufacturer and finisher (using organic solvents in the finishing process) was lawfully established, and the SPC directs the municipality to amend its zoning by-law to prohibit furniture stripping and finishing, then the use becomes “lawful non-conforming”. In order to expand, the use would need to be reviewed by the Committee of Adjustment (or Council) because the zoning has a different vision for the area. Another example: If a corner store is located in a community in an

older neighbourhood, and the zoning today blankets the neighbourhood as residential, and commercial uses are not permitted, then the store cannot expand without being reviewed by the committee of adjustment/Council, because the vision for that property in the community has changed. The committee of adjustment would have the opportunity to review the expansion and could approve or refuse the request. Expanding uses are considered future uses because they do not presently occur on the site. A committee of adjustment makes decisions under the Planning Act and therefore the conformity provisions still apply (i.e. the expanded use would have to conform with significant threat policies).

- Prohibition of future uses and expansions to existing uses using Part IV tools:

If Part IV tools are used, an SPC may wish to regulate an existing activity using RMPs, and prohibit future establishments using s. 57. In this case, the SPC must clearly define when the activity is considered to be existing. Again, this could be achieved by clearly stating a date in the policy. Under Part IV, a prohibition of an activity would include expansions of existing activities.

7.4.5 Question: Can a policy be contingent on provincial funding?

1. Can a policy say, “contingent on provincial funding?”
2. Can a policy have an option A and an option B – for example, saying something like, the municipality shall implement x or y.

Response:

For both questions one and two, as a starting point, SPCs must remember the requirement that the SPP policy ensures the threat ceases to be significant (s. 22 of the CWA). If a policy is written in such a manner that it could not be implemented, for example due to funding not being available, then the policy will fail to satisfy the test in s. 22. SPCs should remember that the language in their policies is to be compelling – i.e., to be sure that the policy is written in such a way to ensure that something will be done to address the threat. Allowing options within a policy may be vague and more difficult to implement and ensure compliance.

Looking at question one more closely, if the SPC only includes a policy that is contingent on (provincial) funding, and that funding is not / never available, then the policy would not be able to meet the required objectives for significant drinking water



threats (cease to be / not become), and the policy is vague. Therefore, it is not recommended that “contingent on funding” be included in the policy text.

For question two, it is possible to have flexibility in how a policy is implemented, but the threat approach should be clear. In other words, SPCs should write their policy in such a way that it is clear who the implementing body is and what policy approach is being used (e.g. RMPs). Once the policy approach has been decided upon by the SPC, it may be possible to include options within that selected approach. For example, if the policy approach is education and outreach, the policy itself could include provisions allowing the education and outreach plan to be implemented by a municipality (for example) in a number of different ways (depending on resources, need, etc.). Similarly, if an SPC writes a policy using RMPs, they could specify that the RMO should consider including measure x or measure y in the RMP.

So overall, while it is possible to build in some flexibility into the language of the policy, the policy must be written in such a way to ensure that if either option is chosen then the S 22 test is met.

7.4.6 Question: Restricted Land Use policy, use of a "master policy"

Can a Restricted Land Use policy (linked to a s57 prohibition or s58 RMP) refer back to a master s59 RLU policy in the Source Protection Plan?

Response:

Yes. The s. 59 restricted land use “flag” may apply to a number of threat activities in the plan that are subject to s. 58 or s. 57 and therefore one master s. 59 policy may apply. For example, the plan may contain a list of threat activities that will be subject to s. 58, the areas where the RMP will be required, and the land uses that are affected. Alternatively, if one of the parameters (area, use) is different, then there may be more than one s. 59 policy. For example, if 5 threat activities (DNAPLS, organic solvents, ASM, NASM and fuel) will be subject to RMPs in the same areas and the same land uses, then the SPC could write a s. 59 policy that would address that group of threats. However if the committee doesn’t want to include residential (domestic) uses for DNAPLS and fuels, then they would write a separate policy for the s.59 policy that applies to DNAPLS and fuels.

If the committee is sending out individual policies, it would assist the reader to provide the s. 59 policy with the s. 58 policy, understanding that the policies may be grouped when the plan is compiled. Recall that the RLU policies will flag new building permit applications and new Planning Act applications. The building official or municipal



planner will first determine if the application is subject to the RLU policies (area and use), and if so, will direct the applicant to the Risk Management Official (RMO). At this point, the RMO will determine whether the application includes a threat activity subject to S. 57 (prohibition) or S. 58 (risk management plans). If the application is not associated with activities that are subject to prohibition or risk management planning, then the applicant receives a notice from the RMO to proceed. On the other hand, if the application is associated with an activity that is prohibited or requires a risk management plan, then the RMO would inform the applicant of the prohibited activities, and would negotiate a risk management plan if required, and when the RMP is established, the applicant would then obtain a notice from the RMO allowing them to proceed with their application.

7.4.7 Question: Can s 57 & s 58 policies be used for same activity at 1 site?

Is it true that a s. 57 prohibition and s. 58 risk management plan policy tools cannot both be used to deal with the same activity on a single parcel of land? Does this mean that we can't prohibit a future activity while managing an existing activity?

Response:

S. 22(11) of the CWA does not allow policies which apply both s. 57 prohibition and require a risk management plan for the same significant drinking water threat (SDWT) activity in the same area. The intent was to prevent a SPP from requiring a risk management plan initially, followed by s. 57 prohibition at a later date, for the same SDWT at the same location.

It is reasonable for a source protection plan to apply one of the Part IV tools to existing occurrences and another for future occurrences of a SDWT in any given area designated for this purpose. Therefore, it is important that the wording of the policy be clear in distinguishing which policy tool is being applied in a designated area where the threat existed at the time the plan is approved by the Minister and takes effect, and which tool is being applied in the same area to threats that do not exist when the plan is approved and takes effect.

7.4.8 Question: Can the SPC relocate the drinking water source?

Can the SPC write a policy to relocate the drinking water source?



Response:

Relocating a water source cannot be a policy in a Source Protection Plan (s. 26 of O.Reg. 287/07) because it does not deal with a specific drinking water threat. However, a municipality could decide to decommission an existing well/intake or system and construct or expand a well/intake or construct an entirely new system, thus eliminating all of the threats associated with the original well/intake. However, by establishing a new well/intake, the SPC must update its Terms of Reference (ToR), write an updated assessment report on the “new” system, and ultimately write an updated SPP for the new water system. Funding is available only for well decommissioning; all other associated costs must be borne by the municipality.

7.4.9 Question: Policies involving Niagara Escarpment Planning Area (NEPA)?

What are the types and legal effect of policies available in the Niagara Escarpment Planning Area (NEPA)?

Response:

The Niagara Escarpment Planning and Development Act (NEPDA) was passed by Cabinet in 1973 and authorized the establishment of the Niagara Escarpment Commission (NEC) and the preparation of the Niagara Escarpment Plan (NEP). The NEP was approved by Cabinet in 1985 and again in June 2005. The NEP has a degree of detail similar to that of an official plan. There are areas within the Niagara Escarpment Plan Area (NEPA) where development control is in effect; in these development control areas, zoning by-laws are suspended. In lieu of zoning in these areas, the NEC operates under the authority of the NEPDA and issues development permits, which include conditions and are more detailed than official plans or the NEP.

The Planning Act applies in all areas of the NEPA which are not subject to development control. Most municipalities in the NEPA have official plan policies that reflect the Niagara Escarpment Plan (NEP) but defer the zoning to the NEP because it is very detailed and requires development permits in addition to building permits. The NEP, like a municipal official plan, can be amended or updated to incorporate new directions or new information. If an activity has been identified as a significant drinking water threat within the development control area, Planning Act tools cannot be relied upon to deal with such a threat.



A development permit under the NEPDA has not been prescribed as a "prescribed instrument" under the Clean Water Act (CWA). Because development permits under the NEPDA are not prescribed instruments for the SPP, SPP policies cannot manage or prohibit activities using the NEC's development permits. In addition, the Niagara Escarpment Commission is a Crown agent and is therefore not subject to s. 38 of the CWA as it is neither a municipality, local board, nor a source protection authority.

Part IV tools could be used to address threats where they are or could be significant, as well as the remaining tools, such as education and outreach.

Because NEPDA development permits are not prescribed instruments under the CWA, because Planning Act tools cannot apply to NEPA development control areas, and because the NEC is neither a municipality, local board or a source protection authority, then any policy identifying the NEC as the implementing body can only be strategic in nature—representing a non-legally binding commitment.

7.4.10 Question: Prescribed Instrument Policies

- A. What s. of the legislation does a source protection committee use to write a PI policy for existing and future? Is it S. 26 specifying action policy for the Crown to review, amend, add conditions, etc?
- B. S. 43(1) of the Act states "Subject to a regulation made under clause 109(1)(k),1(m), a person or body that issued or otherwise created a prescribed instrument before the source protection plan took effect shall amend the instrument to conform with the significant threat policies and designated Great Lakes policies set out in a source protection plan." What about future threats where an SPC doesn't want the province to issue a CofA or other instrument for certain activities?

Response:

Part A: No – the authority to write a prescribed instrument policy comes from S. 43(1) of the Clean Water Act (CWA) and s. 1.0.1 of the regulation (O.Reg. 287/07) lists those instruments that are prescribed for use under S. 43 of the CWA.

Part B: S. 39 (7) of the CWA states "a decision to issue, otherwise create or amend a prescribed instrument" includes making a decision to not issue an instrument (i.e. future situation). This section of the CWA allows SPCs to write policies for future prescribed instruments which would prohibit the Crown from issuing a certificate of approval for activities identified to be a significant threat in vulnerable areas. This type of policy



would have the effect of prohibition - just not using s. 57 which is not enabled for Prescribed threats #1 (waste) and #2 (sewage).

7.4.11 Question: Difference between an implementing body & an impacted body

What is the difference between an implementing body and an impacted body? What are the requirements to consult with implementing bodies versus with impacted bodies?

Response:

An implementing body is the body or organization that is responsible for one or more aspects of implementing a source protection plan policy. If a source protection plan policy requires an education and outreach program to be undertaken, the implementing body is the body that would be responsible for developing the program, ensuring the program is distributed, and recording the program for reporting purposes to the SPA. An example would be a policy that requires a municipality to undertake an education and outreach program to advise of the proper care and maintenance of septic systems. The municipality would be required to develop, distribute and report to the SPA on the implementation of that program in fulfilling that policy requirement. **Source protection committees are required to consult on policies with implementing bodies at all stages of policy development** – prior to publicly posting the plan (during pre-consultation), as well as during draft and proposed plan consultation.

There are other bodies with interests that may be impacted by SPP policies. An impacted body is a body or organization that, while they may not be implementing a program or policy, has an interest in that policy because they regulate in the field. Using the above example, where a municipality is required to develop and deliver an education and outreach program to address the septic threat, the impacted bodies would include the Ministry of Municipal Affairs and Housing, which is the provincial Ministry responsible for the standards for constructing septic systems. The Ministry of the Environment may also have an interest as some larger systems may be regulated under the Ontario Water Resources Act. **While regulators are generally not required to be consulted during pre-consultation under s. 35-39**, they may provide expert advice and it would be beneficial to seek feedback from these agencies early in the policy development process, and throughout the remaining consultation stages as well.

Some impacted bodies may be consulted because they are engaged in a threat activity, and are therefore, operators in that field. For example, the Ministry of Transportation should be notified of threat policies that address road salt application.



Impacted bodies may also include trade associations and professional organizations. These organizations have policy interests and are generally captured during broader consultation on the internet and in newspapers.

* During pre-consultation MMAH is required to be notified of all policies that will be implemented using the Planning Act or Condominium Act authorities.

7.4.12 Question: How to write policies for future SDWT threats alone?

What should policies look like if there are no known existing significant threats, only potential future significant threats?

Response:

Remember that to meet the objectives of the Clean Water Act the policies in the plan must achieve the following objectives for every **area** identified in the Assessment Report as an area where an activity **is or would be** a significant drinking water threat:

- That the activity never becomes a significant threat, or
- That if the activity is occurring when the plan takes effect it ceases to be a significant threat.

It would also be pertinent to recall that during the Assessment Report phase Committees were instructed to identify areas where activities might be occurring that would be a significant threat for the purposes of 15 (2)(g). However, the methodology used to identify and list these activities did not include groundtruthing. Furthermore, in the time since the assessment report was compiled there may have been changes on the landscape that has permitted the development or expansion of new activities within these areas that could also be a significant drinking water threat. Given the potential for there to be occurrences of a significant threat that the SPC is unaware of they should be developing policies that would address *both* future and existing occurrences of activities even if the Assessment Report did not enumerate an occurrence within an area.

For example, the SPC may have determined that there were no instances of storage of fuel in WHPA A and decided only to write a policy for future occurrences which restricted *future* development (i.e. a Planning Act type policy) that relied upon oil for home heating. However, if it was later determined that a century home within the area had not been converted and was still using fuel oil from a basement tank, the “future” policy wouldn’t apply, leaving a significant threat within the WHPA A that had not been addressed. In this instance, if the committee had known that there was an existing use the policy tool selected may have been different; perhaps requiring Risk Management



Plans or offering incentives for conversion as well as prohibiting future development that relied on oil heat.

7.4.13 Question: What rationale should accompany pre-consultation notices?

When my committee is sending out policies for consultation, what should be included in the rationale section?

Response:

The rationale should explain why the particular policy option(s) was chosen to address the threat. It should include the committee's consideration of the matter and how local considerations influenced the policy development. For example, the farming community uses state of the art measures when storing ASM and NASM and these measures could be readily reflected in a risk management plan, without imposing other restrictions on the farming operation. If a soft tool was chosen to address a significant drinking water threat, the rationale must justify this decision. For example, the committee believes it is unlikely that an airport will be constructed in the location, and therefore, the policy requires the conservation authority to deliver an education and outreach program to Transport Canada. If the soft approach is the only approach taken, then ss. 40(2) p.6 of the regulation requires that the rationale justifies how a soft tool could ensure the drinking water threat will not become significant, and how a policy to regulate or prohibit is not necessary to achieve that objective.

7.4.14 Question: Prohibiting without using S. 57 CWA tool.

During training, we were told that we could achieve the outcome of "prohibit" using several different policy tools. How do we write policies to prohibit a threat using the different tools like s. 57 prohibition, land use planning and prescribed instruments?

Response:

As always, it is important for a policy to be complete, including a description of the area where a threat is, or would be, significant, as well as any implementation timelines or implementing bodies if these aren't already set out in the legislation. Let's take fuel storage for example.

To prohibit this threat using the authority of s. 57 of the Clean Water Act, a policy might look like this:



Policy ABC-1 (s. 57 prohibition)

For Fuel Storage Tanks (>2500 litres) – Below or Above Grade

- The installation of new fuel tanks larger than 2500 litres capacity below or above grade in WHPA A & B & IPZ 1 (vulnerability score of 10) is designated as prohibited under s. 57 of the CWA.

The source protection plan would include this policy reference/ code (ABC-1) in List G of the appendix at the end of their source protection plan (Director's instructions under s. 34 of the regulation). List G is the list of policies that relate to s. 57 of the CWA.

Implementation considerations: It is recommended that a s. 59 policy (Restricted Land Uses) complement all s. 57 and s. 58 policies. For more information, see the s. 59 Q and A below.

Policy ABC-2 (Planning Act)

For Fuel Storage Tanks (>2500 litres) – Below or Above Grade - in WHPA A & B & IPZ 1 (vulnerability score of 10)

- Wherever possible, fuel storage, either above or below grade shall be directed away from areas where the threat is or would be significant (WHPA A & B and IPZ 1 where the vulnerability score is 10),
- An application to establish a new use may be permitted subject to demonstrating that the fuel for the use is only for the purposes of heating and cooking, and other minor ancillary uses.
- A disclosure report for major development detailing the nature of the heating system, safeguards of that system, volumes of fuels required and measures taken to mitigate risks.

The source protection plan would include this policy in List A (Director's instructions) to indicate that clause 39 (1)(a) and sections 40 and 42 of the CWA apply to this policy.

Implementation considerations: It may be difficult for a municipality to screen land uses and potential planning approvals for this threat activity. Part of the policy includes direction to disclose the nature of the application when reviewing major development applications (most people understand how small scale heating works).

Policy ABC-3 (Prescribed Instrument)

For Fuel Storage Tanks (>2500 litres) – Below or Above Grade - in WHPA A & B & IPZ 1 (vulnerability score of 10)



- The storage of fuel in quantities that make this threat significant (>2500 L) and at locations where it could be significant (WHPA A & B and IPZ 1 where the vulnerability score is 10) is prohibited.² Accordingly, decisions to issue, amend or otherwise create prescribed instruments under the Aggregate Resources Act shall conform with this policy.

The source protection plan would include this policy in List C (Director's instructions) to indicate that clause 39 (7)(a), s. 43, subs. 44 (1) and subsection 39 (6) of the CWA apply to this policy.

Implementation considerations: The prescribed instrument does not catch all occurrences of this type of threat activity.

7.4.15 Question: Are s. 59 policies mandatory with s. 57 and/or s. 58 policies?

Do I need to write a s. 59 policy to accompany s. 57 prohibitions or s. 58 risk management plans?

Response:

While the legislation does not require a s. 59 policy when using Part IV, it would benefit the municipality. Remember that a s. 59 policy enables a process to be established that links the threats activities affected by s. 57 and s. 58 with building permits and planning applications. This would help "catch" proposals at the planning approval application or building permit application stage, before the threat is established, as the s. 59 notice is required up front. Without designating policies for the purpose of s. 59, the municipality would not have the benefit of this process to catch these proposals. Remember that the RMO is only looking at these applications in the areas where the Part IV policies are in effect, so not all of the building permits or the planning applications will need to be screened.

If a s. 59 policy is not included, then the chief building official is obligated to issue a permit³ without the benefit of the RMO's review. This may make it difficult for the municipality to ensure that threat activities do not become established. If a s. 59 is not included, then the municipality may have to amend its official plan and pass a

² This policy would be listed on the List C, the list of policies which require provincial instruments to conform.

³

Provided that the permit satisfies the requirements of the Building Code Act



procedural by-law to require development applications be reviewed by the RMO. These processes may be subject to lengthy and costly appeals. Therefore, if s. 57 prohibition or s. 58 RMPs are required, it is strongly recommended that a s. 59 policy be included to assist the municipality with implementation. While not all activities that proceed on the landscape require building permits or planning applications, a large portion of new uses/activities would be caught (required to be reviewed).

7.4.16 Question: Part IV policy tools & “applicable law” under the Building Code

What part of Part IV is applicable law under the Building Code Act and how is this linked with building permits and development applications?

Response:

The s. 59 notice will be the applicable law flag. S. 57 and 58 are not “applicable law” under the BCA and we are not aware of any intention to prescribe them as such. The s. 59 CWA notice will be the applicable law flag that links in the s. 57 prohibition and s. 58 RMP with building permit review and applications under the Planning Act. Here are a couple of real world examples:

- a) A person inquires about a building permit for a gas station in an area where s. 57 applies to the handling and storage of fuel. The CBO checks the s. 59 map and advises (flags) that the property is within an area where threats to drinking water could be significant, and that there are restrictions on activities at the property and the person needs a s. 59 notice to proceed from the RMO before he can consider the permit application. The person checks with the RMO and the RMO advises that the fuel storage is prohibited on the site, and will not issue the s. 59 notice. The applicant cannot proceed.
- b) A carpenter wishes to construct a workshop to build and finish cabinets, and includes an area where furniture will be stripped using organic solvents. The property is within an area where the threat to drinking water is or would be significant and s. 58 RMPs are required for organic solvents. The CBO checks the s. 59 map and advises the applicant to check with the RMO that he needs a s. 59 notice to proceed with the building permit application. The applicant goes to the RMO and the RMO advises that a RMP is required for the use of organic solvents on the site. The person negotiates the RMP and the RMO attaches the s. 59 notice to the s. 58 RMP and the person takes the notice to the CBO who can then complete the processing of the building permit application.



- c) A person wishes to rezone a property to allow a number of commercial uses to be permitted, including a dry cleaning establishment. The property is within an area where s. 57 applies to DNAPLS. As part of the complete application requirements for the rezoning application, the Planning Department checks the s. 59 map and advised the applicant that they need a s. 59 notice to proceed and is advised to go and speak to the RMO. The RMO advises that DNAPLS are prohibited on site and the applicant amends the application to exclude the dry cleaning establishment, but other uses are satisfactory from a Part IV review, and the applicant obtains a s. 59 notice from the RMO to proceed with the amended application.

7.4.17 Question: Use of effective dates with Part IV policies.

What could a Part IV policy look like and what is a reasonable effective date?

Response:

A policy that uses Part IV could simply state that:

Risk Management Plans are required for handling and storage of fuel for all areas where the threat is or would be significant. Therefore, handling and storage of fuel are designated activities for the purpose of s. 58 of the CWA.

Another way of stating this would be:

The handling and storage of fuel is designated for the purpose of s. 58 of the CWA, requiring risk management plans in areas where the threat is or would be significant.

The associated s. 59 “flag” policy could state that:

All lands uses in zoning by-law 2009-xx, as amended (or the zoning by-laws within the ABC source protection area) are designated for the purpose of s. 59 restricted land uses under the CWA in all areas where the handling and storage of fuel is or would be a significant threat.

If a committee decided to use Part IV to require s. 58 RMPs for DNAPLS in areas where DNAPLS are or would be a significant threat, the policy could look something like this:

The handling and storage of DNAPLS are designated for the purpose of s. 58 under the CWA, requiring risk management plans, in all areas where the threat is or would be significant, except for residential uses.



When this policy takes effect (see effective date below), all persons who are using DNAPLS (either existing or future) would be required to do so only in accordance with an approved RMP.

The accompanying s. 59 policy could look something like this:

All land uses within the XYZ source protection area, except residential, are designated for the purpose of s. 59 restricted land uses under the CWA, in all areas where the handling and storage of DNAPLS is or would be a significant threat.

This means that anyone applying for a building permit or a development application in the area, except residential, where the threat from DNAPLS is or would be significant, would first be required to have their proposal reviewed by the RMO. If they are proposing to use DNAPLS, the RMO would negotiate an RMP with the individual (or the individual would amend their application to eliminate the use of DNAPLS). When the RMP is agreed upon (or the proposal amended to eliminate DNAPLS) then the RMO would issue a notice to proceed with the application. This notice would be attached to the RMP, and the person would then submit the proposal with the notice to proceed with the building permit or development application.

If the building permit or development application is for residential uses, then the application could proceed without being reviewed by the RMO. This allows a person to add an addition to their house (or build a new house) without requiring their application to be screened through the RMO process. The municipality may provide a brochure or information about the sensitive drinking water area.

New Example:

SPC wishes to prohibit the handling and storage of fuel in quantities greater than XX (whatever quantities are significant) everywhere this drinking water threat is significant, including residential.

The s. 57 policy may look like this:

The handling and storage of fuel in quantities greater than XX is prohibited and therefore designated for the purpose of s. 57 under the CWA in all areas where the threat is or would be significant.

The accompanying s. 59 policy could look something like this:

All land uses within the XYZ source protection area are designated for the purpose of s. 59 restricted land uses under the CWA, in all areas where the handling and storage of fuel is or would be a significant threat.



Effective Date of Part IV Policies: Immediately on approval of source protection plan (with exceptions provided for existing activities).

Policies that use Part IV authorities must be implemented on approval of the source protection plan, with some phase in considerations for existing activities. This means that the responsible municipality must either have an RMO office set up or have an agreement with another body (permitted under sections 47 – 48 of the CWA) to implement Part IV when the source protection plan is approved. This means that an activity that is prohibited under s. 57 cannot be established immediately on approval of the source protection plan.

The CWA contains phase in provisions for existing significant threat activities that are designated as prohibited under s. 57 or require a risk management plan under s. 58 of the CWA. The CWA provides a minimum of 180 days for s. 57 prohibition to take effect when it applies to existing threat activities occurring on the landscape. Alternatively, a policy can specify a later date, such as one or two years. This means that the existing threat activity must be stopped within that time. Where a policy in a source protection plan requires a risk management plan for an existing threat activity, the CWA allows (defaults to) the RMO to determine the implementation date on a case by case (or property by property) basis. Alternatively, the source protection plan can specify the date when the RMP is required.

7.4.18 Question: Do policies apply to existing activities not enumerated in the AR?

If a source protection plan policy is written to address a specified prescribed threat activity in a specified vulnerable area does that policy apply to all properties in that vulnerable area where the activity in question is being practiced or only to those properties where that activity was enumerated in the approved assessment report (AR)?

Response:

The policy would apply to all properties in that vulnerable area where the activity in question is being practiced regardless of whether it was enumerated (i.e. counted) in the approved AR.

It is recognized that approved ARs are unlikely to precisely identify/enumerate all existing significant drinking water threats within designated vulnerable areas. In some cases properties may have been incorrectly identified as undertaking a significant threat activity while in other instances properties that are undertaking the activity may have



been missed. The CWA and O.Reg. 287/07 allow policies to be written in a manner that they apply to drinking water threat activities whether or not they were enumerated in the approved AR.

Under the CWA legislation there are a number of key elements that every policy in a source protection plan must include:

- First it must designate the 'activity' (or activities) – from the list of the 21 prescribed threats or other locally approved threats - to which the policy will apply.
- Second, the policy has to clearly designate the vulnerable geographic area (location) where the policy applies.
- Third the policy must clearly indicate what policy tool is being used and what its legal effect will be, that is, which sections of Part III of the CWA apply (for guidance on identifying legal effect refer to the Director's Instructions dated August 31, 2011, a copy of which has been attached).
- Fourth the policy writers must determine and indicate whether the policy applies to existing threat activities only (i.e., those commenced before the SPP policy takes effect), future threat activities only (those commencing on or after the day the SPP policy takes effect), or to both existing and future activities.

Once these elements are addressed in the source protection plan policy, all of the designated activities that occur within those designated areas are covered by the policy, whether or not the activities were identified/enumerated in the AR or not.

For example, a SPC might choose to write a risk management plan policy (under S. 58 of the CWA) to manage below grade fuel storage where the volume stored is >2500L. The SPC elects to write the policy so that it applies to all WHPA- As within the watershed and all WHPA - Bs within the watershed where the vulnerability is 10. Furthermore, the policy is written in such a manner that it applies to both existing and future threat activities. During the implementation of the approved source protection plan, if a risk management official or inspector becomes aware of a previously unknown property where below grade fuel storage of a volume >2500L is taking place and that property is located in either a WHPA-A or a WHPA-B with a vulnerability of 10, then that newly identified property is required to develop a risk management plan agreed to by the risk management official in order for that activity to be allowed to continue at the property in question.

Where risk management inspectors and/or officials become aware of significant drinking water threat activities taking place at previously unidentified properties such as in the



example above, the RMO/RMI is encouraged to provide that information to the SPC/SPA so that it can: i) be incorporated into an updated version of the AR at some point in the future; and ii) potentially be included in the annual progress report submitted to the Ministry by the SPA.

7.5 Source Protection Plan - Specific Threat Policies

7.5.1 Question: TSSA policies and fuel threats

Can we write a policy that requires the TSSA to report to the Source Protection Authority on compliance and inspections that reveal unsafe conditions in relation to their regulations? This would be so we can know if there are any issues within the vulnerable zones.

Response:

TSSA is not a public body under the CWA – meaning that they can not be the implementing body for monitoring policies or threat policies (ss 22(5) of the CWA). TSSA may only be impacted by s. 26 policies that specify action (i.e., s. 26, p. 1). If TSSA were identified as the implementing body for a “specify action” policy, the policy would be strategic in nature – resulting in a non-legally binding commitment. This means that policies that specify TSSA to undertake some sort of action (i.e., inspection program) would not be a requirement. Should s. 26 policies be written with TSSA as the implementing body they would need to be consulted under s. 35 of O.Reg 287/07 (pre-consultation). Any comments made by TSSA in response to this pre-consultation must be considered by the SPC in the future development and modification of the policy.

7.5.2 Question: Policies for tailings from mines.

Should the Threat Sub-category: Storage, Treatment and Discharge of Tailings from Mines be included in the Waste Disposal Threat regarding Part V of the Environmental Protection Act? What policy approaches can a SPC consider for this threat?

Response:

Mining operations are linked to two prescribed threats (numbers 1 and 2). Under the waste disposal threat, the subcategory that could be significant is the “Storage, Treatment and Discharge of Tailings from Mines”. Under the sewage threat, the subcategory that could be significant is “Sewage System or Sewage Works – Industrial Effluent Discharges”.



Typically, mined materials are crushed and processed on site and the wastewater tailings from this processing are discharged to a tailings pond for permanent storage. While these tailings are considered a “waste” in O.Reg. 347 under the Environmental Protection Act (EPA), they are exempt from the requirements for a waste disposal site certificate of approval (CofA). Therefore, the prescribed instrument CofA under s. 39 of the EPA should not be used as a policy tool to address the “waste” aspects of mining operations.

The Ministry of the Environment has traditionally regulated the effluent discharges from the processing of mined materials under their industrial sewage program. As such, the Prescribed Instrument sewage CofA issued under s. 53 of OWRA is a policy tool that is available for source protection plan policies. The terms and conditions of operation specified in s. 53 OWRA CsofA can extend to include the “care and feeding” (operation, maintenance) of the tailings storage pond as well, and also include closure plan details once the storage pond reaches capacity. Therefore, this prescribed instrument can be relied upon to address drinking water threats number 1 and 2 in relation to mining operations. If the SPC intends to use this policy tool to address both threats, the text of the policy should explicitly refer to both drinking water threats/threat subcategories in relation to the mining operations being addressed.

Policy Approaches

In summary, given that the activity of storage of mine tailings is exempt from the requirement for a waste Certificate of Approval under the Environmental Protection Act, the following policy approaches are available for a SPC to consider:

- 1) OWRA S. 53 Certificates of Approval
- 2) Land use planning tools (by-laws, site control)
- 3) All other tools (outreach/education, incentives, BMP, etc.)

SPCs are encouraged to discuss their options with their LO to determine the preferred local approach.

7.5.3 Question: Can write Part IV policy for storm facility if no CoA required?

If a storm water management system does not require sewage approval issued under s. 53 of the OWRA and it is identified as a SDWT activity, can an SPC utilize a Part IV CWA policy tool to prohibit or manage the threat?



Response:

In most cases, sewage systems are either regulated under the Building Code Act (e.g. small residential septic systems) or they require a sewage Certificate of Approval (CoA) issued under S. 53 of the OWRA. For these types of sewage systems, an SPC is not permitted to utilize Part IV CWA policy tools to prohibit or manage the threat.

In those relatively rare instances where a sewage system is neither regulated under the Building Code Act nor requires a sewage CoA issued under S 53 of the OWRA, then Part IV CWA policies can be written if the sewage system in question has been identified as a significant drinking water threat activity.

7.6 Source Protection Plan – Conditions

7.6.1 Question: Why are conditions policies not mandatory?

Why does the Clean Water Act (CWA) make it mandatory for SPCs to write policies to manage activities that are significant drinking water threats, but does not make it mandatory to write policies to manage conditions that are significant drinking water threats?

Response:

One of the principles of the source protection planning process is prevention. Committees must write policies to ensure that activities are managed to prevent or minimise the chance of an activity impacting drinking water, and they can use a number of preventative tools to manage these activities. By their nature, conditions exist where an activity has already caused contamination so they can no longer be prevented.

All threat policies (for activities or conditions) in the source protection plan must have as their objective that the threat ceases to be a significant drinking water threat. For some particular “condition” sites, the extent of contamination may lead the SPC to determine that there is no appropriate policy option or tool available to meet the objective that it ceases to be a significant threat. For this reason, it is optional for source protection plans to include policies to address conditions. This does not imply that conditions resulting from past activities are any less important than threat activities, but relates rather to the complicated situations that can arise from the presence of a contaminant in the environment. It underscores the simple fact that it is easier to prevent threats to drinking water than to address them once they have occurred.

Further, threats under the Clean Water Act are associated with persons or bodies engaging in an activity. Conditions cannot always be linked to any person or body.



Note: Under specified circumstances the Ministry has the legislative authority to deal with contaminated sites using tools available under the Environmental Protection Act (EPA). Typically, these tools may be used when the Ministry has reasonable grounds to believe that contamination is present in the environment and that the contamination in question is causing or may cause an “adverse effect” as defined under the EPA. Similar tools are available under the Ontario Water Resources Act (OWRA) when the Ministry has reasonable grounds to believe that contamination is present that impairs or may impair the quality of water.

7.6.2 Question: What does it mean for a condition to “cease to be significant”?

What does it mean for a condition to “cease to be significant”?

Response:

If an SPC decides to write policies for conditions that are significant threats, they must include in their source protection plan that an objective of the plan is to ensure that these conditions cease to be significant drinking water threats (see O.Reg. 287/07 s. 22 (2)).

Under the CWA, “cease to be significant” does not mean that the circumstances that make it a significant threat must be changed or modified. Rather, it is up to the judgement of a source protection committee to determine that a policy in the source protection plan adequately addresses the condition, making it no longer an unacceptable risk to a municipal drinking water source. If evidence shows that natural attenuation or remediation activities, either alone or in combination, are/would prevent(ing) the contaminants from impacting a drinking water system, then the condition could justifiably be considered to have “ceased to be a significant” threat with regard to the requirements of the Clean Water Act.

In some cases, it will be possible to demonstrate that existing measures (either human or natural) are sufficient to make the condition “cease to be significant”. In other cases new measures will need to be included in the policy for a condition to cease to be a significant threat.

In some cases an SPC may encounter situations where there appear to be no policy options that would allow a significant threat condition to cease to be a significant threat. This could be the case in situations where the condition contributes to a drinking water issue and there are no existing measures or feasible additional measures that could



adequately manage the contamination. The SPC would have the option not to include threat policies relating to these particular significant threat condition sites (see related Q/A 1.6.1).

7.6.3 Question: What policy options are there for conditions?

What policy options are there for conditions?

Response:

Source protection plans must include policies governing the monitoring of conditions in areas where the assessment report shows they are a significant threat. Plans may include policies to address significant threat conditions resulting from a past activity (see Q/A 1.6.11). There are a limited number of policy tools under the CWA to manage significant conditions, some of which may be more suitable for use than others depending on the local situation. Examples of the kind of threat policies that could apply to conditions are listed below:

- I. Direct MOE to advise the SPA of any changes known to the MOE in relation to the contaminated site that is identified as a significant threat condition in the assessment report, including levels of contamination and contamination migration and whether such changes may result in a drinking water issue as defined in Part XI.1 of the Technical Rules (specify-actions policy). This approach may be suitable whether or not the ministry is already involved in addressing the condition, and whether or not monitoring is ongoing (i.e., by owner or other body). If considering this option, it would be advisable for the SPC to discuss the proposed approach with the local MOE district office as early in the planning process as possible. District staff may be able to provide feedback and additional information about the scope of work already done in these areas – this will help avoid creating a situation where past remediation activities/successes are inadvertently undermined.
- II. Direct the local planning authority to require that where a development is being proposed on a contaminated site identified as a significant drinking water threat in the assessment report, the site shall be remediated as necessary before any activities are carried out in relation to the proposed use.
- III. Direct the local planning authority to use “community improvement plans” under the Planning Act⁴ to provide incentives for redevelopment and cleanup of contaminated sites. This may require the local planning authority to amend their official plan.

⁴ For more information, community improvement plans are further described in the Land Use Planning Bulletin and Existing Municipal Authorities documents, released in April 2011.



It should be noted that managing the risk presented by significant threat conditions will typically require a long term effort; this should be considered during policy development. Throughout various rounds of source protection planning there should be an opportunity to manage conditions with progressively refined policies.

When considering policy options for any threat, the SPC is encouraged to consider the detailed policy review criteria that the Ministry is proposing to use when MOE reviews and approves source protection plans (a draft of these have been circulated to SPC chairs and project managers). For example, policies will be evaluated in terms of how reasonable, implementable, effective, economical, acceptable and consistent they are.

As outlined in question 1.6.2, an SPC may encounter situations where there appear to be no feasible policy options that would allow a significant threat condition to cease to be a significant threat. In such cases, an SPC can decide not to include threat policies in the source protection plan relating to those particular condition sites, and instead rely on the monitoring policies that must be included in the plan (see Q/A 1.6.12). The SPC may decide to include an explanation in the plan as to the context of the condition, the reason for their decision, as well as any actions that are being taken outside of source protection to deal with the site and/or its impacts to drinking water (e.g., see answer to Q/A 1.6.4).

7.6.4 Question: Can a conditions policy require a municipality to move a well?

Given that there are limited policy options to manage significant threat conditions, can a policy in a source protection plan require a municipality to move a drinking water well to a location further from the condition?

Response:

Under the CWA, an SPC does not have the authority to require a municipality to move a well for any reason; the scope of the policy is to manage threats. However, there may be some situations that an SPC encounters where there appear to be no policy options that could make a condition cease to be a significant threat; under these circumstances ceasing to use the existing well as a drinking water supply and drilling a new well in a different location may be identified as a reasonable solution (or the only reasonable solution) to problems posed by conditions in areas where the conditions are significant drinking water threats.



In this case, the SPC would not include this as an actual policy in a source protection plan, but would rather discuss this option outside of the plan with the municipality. If a municipality decided to decommission or repurpose a well and establish a new well in another location, the assessment report would need to be updated to identify the location of the planned well (after the necessary Environmental Assessment Act requirements are satisfied), delineate the associated vulnerable areas and identify any new threats. The activities and conditions that were previously identified as significant threats at the old location would no longer be identified in the assessment report once the old well is properly de-commissioned.

7.6.5 Question: Why can't Part IV CWA tools be used with SDWT conditions?

Why are the Part IV tools in the CWA not available for SPCs to use when writing policies to address significant drinking water threat conditions?

Response:

The suite of tools provided in Part IV of the CWA, including prohibition, risk management plans, and restricted land uses, were designed to address threat activities rather than conditions resulting from past activities. Since the tools under Part IV of the CWA were intended to address and prevent threat activities from becoming risks to drinking water, they would not apply to a site where the activities that caused the contamination are no longer occurring. A site with conditions may have no threat activities on it to manage, thus the risk management plan tool would not have the ability to alter these non-existent activities.

7.6.6 Question: Conditions policy & management of off-site contamination?

How does an SPC develop a policy to require property owners to manage an off-site contaminant plume within an appropriate distance?

Response:

The CWA does not provide SPCs with the authority to require this. There are no policy options available for conditions that can directly and legally bind an individual or private company to carry out an action, including monitoring actions. See Q/A 1.6.3, as well as Q/A 1.6.9 and 1.6.11.



7.6.7 Question: Can SPC write policy referencing s 44(2) of CWA?

Can a source protection plan policy reference s. 44(2) of the CWA, which allows the Minister to request the issuance or creation of a prescribed instrument under any Act to assist in ensuring that a condition ceases to be a significant threat?

Response:

The authority in s. 44(2) of the CWA is entirely a permissive authority – meaning the Minister can choose to use this authority at any time. The Minister is not limited to using this authority by the presence or absence of source protection plan policies – it is a free-standing authority that the Minister may use when in the Minister’s opinion, the issuance or creation of an instrument would assist in ensuring that a condition cease to be a significant drinking water threat. It is not within the authority of the SPC to require the Minister to use his/her authority under s. 44(2) through a source protection plan policy. However, in relation to a contaminated site that is a significant threat condition for example, the plan may include policies that direct the ministry to advise the SPA of any changes in the contaminated site (see Q/A #3) and report to the SPA on actions taken in relation to the condition (see Q/A #12). A SPC may, at any time, send a letter to the Minister asking the Minister to consider the information in the assessment report and any other specified information and ask the Minister to decide if it is appropriate to exercise his/her authority under s. 44(2) to direct further steps be taken under the authority of the Environmental Protection Act (or other legislation) to manage the contamination.

7.6.8 Question: Use of prescribed instrument identified under CWA s. 44(2)

If the Minister decides to invoke his/her authority under s. 44(2) of the CWA and identifies an instrument to be a prescribed instrument for the purposes of dealing with a contaminated site (e.g., a Provincial Officer Order issued under s. 157.1(1) of the EPA), does this mean the SPC can write a policy that could affect that “new” prescribed instrument?

Response:

The SPC would not be able to write a prescribed instrument-type policy for any instrument other than those that are prescribed in s. 1.0.1 of the General Regulation (O.Reg. 287/07).



7.6.9 Question: Can SPC require a condition property owner to do monitoring?

Can a condition property owner be required to carry out monitoring?

Response:

Under the CWA, only a public body can be required to comply with the obligations of a monitoring policy (s. 45). The monitoring policies required by the CWA, including policies governing the monitoring of conditions that are a significant drinking water threat, must designate a public body that will be responsible for implementing the policy (ss. 22(5)). See also question 1.6.11.

7.6.10 Question: Can SPC require MOE to do monitoring at a condition site?

Can an SPC create a monitoring policy that requires MOE to carry out monitoring activities?

Response:

Yes, public bodies must be designated in a SPP to carry out the monitoring policies that SPCs are required to include in their SPP (ss. 22(5)). Public body is defined in s. 2 of the CWA and means a municipality, local board or conservation authority; a ministry, board, commission, agency or official of the Government of Ontario; or, a body prescribed by the regulations (none are presently prescribed). Where feasible, it may be most appropriate for the body responsible for implementing a threat policy to be the same as the body responsible for implementing the corresponding monitoring policy.

Under s. 35 of O.Reg. 287/07, SPCs must share draft monitoring policies and invite feedback from all public bodies that have been identified as responsible for implementing these policies. They must also consider any comment received.

7.6.11 Question: How to apply a conditions policy with multiple parties involved?

At a number of properties there is a site owner and a “contaminant” owner. In other cases there are multiple suspect contributors to the contamination in the aquifer and there is no certainty as to who is contributing how much contaminant to the aquifer. In these cases, who does the policy apply to?



Response:

Most threat policies in source protection plans will be directed at a public body for implementation. However, it is conceivable that a policy resulting in a non-legally binding commitment (i.e., strategic) could be created directing a site or contaminant owner to undertake a specific action. This approach would not necessarily be effective (since the party would be under no obligation to take the specified action) on its own and should only be considered after exploring other options with public bodies and in consideration of the receptiveness of the site or contaminant owner.

7.6.12 Question: Monitoring policies and conditions.

What kind of monitoring policies should be written to address conditions?

Response:

The source protection plan is required to contain monitoring policies in areas where conditions have been identified as significant drinking water threats, whether or not a threat management policy to address the condition is included in the plan.

Where there are no threat policies that address conditions in the plan:

Where a threat policy to address a significant condition is not included in the plan, monitoring policies for significant conditions identified in the assessment report could require reporting by public bodies on the actions, if any, they or others they are working with have taken outside the CWA to address the condition, and a description of the results of those actions. For example, directing MOE to provide each year to the SPA a report of actions taken, if any, in relation to the contaminated site that has been identified as a significant threat, by MOE or other persons or bodies over the previous calendar year.

The committee may also consider a monitoring policy which requires the local planning authority to give notice to the SPA of any applications under the Planning Act to redevelop a site identified as a significant threat condition in the assessment report. (Note that Policy 3.2.2 of the Provincial Policy Statement (PPS) directs that contaminated sites shall be remediated as necessary prior to any activities related to the redevelopment proposal proceeding). This redevelopment proposal may ultimately resolve the condition and therefore no more monitoring of this condition is necessary.

The SPC may also consider discussing with the municipality the feasibility of including a monitoring policy that directs the municipality to install sentry wells, where advisable, at a safe distance from its well location (e.g., 2 year Time-of-Travel). In deciding to include



these policies, the SPC should consider what would happen if the sentry well indicated the contaminants were getting closer to the well. If it would not lead to any new actions to address a threat, and may only lead to an early warning regarding the treatment system design, or the siting of a new well, then this may be better left outside of a SPP and left to the municipality as its not about protecting source water. If the monitoring could trigger a different approach to managing a condition, through remediation, then the policy may be appropriate for the SPP. This would enable them to detect if contaminants resulting from conditions (e.g., contaminated sites) in the source protection area have moved to a point where there is a potential concern they may reach the well. Where the municipality does not own the property where they determine it is ideal to install the sentry wells, siting the wells on municipal road right of ways may be a feasible alternative. .

Where there are threat policies that address conditions in the plan:

Where a threat policy is included in the plan to address the condition, the monitoring policy could require reporting on the implementation and/or compliance with the policy. Some examples are listed below, related to the examples in Q/A 1.6.3.

<p><i>I. Threat policy directed the Ministry of the Environment (MOE) to advise the SPA of any changes known to the MOE in relation to the contaminated site identified as a significant threat condition in the assessment report, including levels of contamination and contamination migration and whether such changes may result in a drinking water issue as defined in Part XI.1 of the Technical Rules.</i></p>	<p>The monitoring policy might direct MOE to report to the SPA each year on the actions taken, if any, by MOE or other persons or bodies in the previous calendar year, to manage the contamination at the contaminated sites identified in the assessment report as a significant drinking water threat.</p>
<p><i>II. Threat policy directed the local planning authority to require that when development is being proposed on a contaminated site identified as SDWT in the AR, the site shall be remediated as necessary before any activities are carried out in relation to the proposed use.</i></p>	<p>The monitoring policy might require the local planning authority to track development applications in relation to contaminated sites that have been identified as significant threats in the assessment report, and to report annually to the SPA on those findings.</p>
<p><i>III. Threat policy directed the local planning authority to use community improvement plans under the Planning Act to provide an incentive for</i></p>	<p>The monitoring policy might require the local planning authority to report on the status of its actions to establish the CIP area and promote the incentive</p>



<i>redevelopment and cleanup.</i>	opportunity, as well as describe the uptake (results) of the CIP incentive program.
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7.6.13 Question: Managing a site with historical contamination & threat activity

How should an SPC treat a site that is both engaged in a prescribed threat activity and has historical contamination? For example, an operating gas station (therefore engaged in fuel handling/storage activity) that has a contaminant plume in the subsurface which resulted from a historical activity (e.g., an old underground tank that has been subsequently decommissioned).

Response:

In some of these cases, the contamination is actually part of an ongoing “threat activity”. Policies are required to address threat activities. If certain tools are used, such as CWA s. 58 risk management plans, the policy could also include remediation actions be part of the risk management plan.

In other cases where the historical contamination on the site results from a separate activity that is no longer ongoing, the site would contain both an activity and a condition (or more than one of either) that are significant threats.

7.6.14 Question: Can policy be written for conditions not enumerated in AR?

Can an SPC write a policy to address-conditions that have not yet been enumerated in the assessment report, or were noted in the assessment report as moderate risk because of a lack of information to substantiate off-site movement of contaminants?

Response:

The CWA only permits SPCs to include policies for significant, moderate or low threat conditions that have been identified in the assessment report (s. 22 (6)). SPCs may only include policies relating to conditions for areas that have actually been identified in the assessment report. If new information becomes available to the SPC in the future, the assessment report and source protection plan may be amended to identify conditions and associated policies where appropriate.



7.6.15 Question: Notification of conditions property owners

Do SPCs have to notify the owners of properties that have been identified as having conditions that are significant threats when consulting on an updated assessment report?

Response:

S. 18 of O.Reg. 287/07 outlines the consultation requirements for an updated assessment report. The requirements for consultation include giving notice of the internet posting of the draft updated assessment report “in such a manner as, in the opinion of the source protection committee, is sufficient to bring the notice to the attention of the public in the part of the source protection area that is affected by the proposed changes...”. While this requirement is rather broad, the SPC should be mindful of the consultation that was undertaken for the initial assessment report and should aim to give a similar level of input to new persons affected by the updates to the assessment report.

For the initial assessment report, SPCs were required (as per s. 15 of O.Reg. 287/07) to notify “every person who the SPC believes could be engaging in one or more activities that are or would be significant drinking water threats according to the information contained in the draft of the proposed assessment report....”. Notices to these persons had to identify that “the committee is giving the person the notice because the committee believes the person could be engaging in one or more activities that are or would be significant drinking water threats...”. While no such notifications are required under s. 18 for an updated assessment report, it would be reasonable to assume that new people whose activities are being identified as significant drinking water threats are included under “the public in the part of the source protection area that is affected by the proposed changes” and that they should receive the same treatment as those who received letters during the initial assessment report consultation.

The regulation does not contain a specific reference to notifying the owners of properties that are identified in the assessment report as containing conditions that are significant drinking water threats, either in relation to the initial assessment report or the updated assessment report. However, the definition of a significant threat under the Clean Water Act, 2006 does include both activities and conditions that result from past activities. Thus, it would be reasonable for an SPC to provide a similar notification and opportunity to comment to property owners of significant threat conditions as they are required to do for those engaged in significant threat activities (however, there may be



cases where the owner of such a site is unknown). Similarly, it would be difficult to argue that people whose properties are being identified as containing significant threat conditions do not fall under the category of “the public in the part of the source protection area that is affected by the proposed changes” in the updated assessment report.

In the end, it is up to the SPC how to interpret these consultation requirements in the local context. The Ministry encourages SPCs to consider the points mentioned above and to thoughtfully decide how best to consult the public affected by information in their assessment reports. The Ministry also encourages the SPC to carefully consider the language in any notification to landowners to avoid raising unnecessary concern. In the case of notices to owners of properties containing conditions that are significant threats, the Ministry encourages the SPC to collaborate with the local District Office in drafting any notifications or notices regarding public consultation – in many cases, local MOE staff will have had experience working with these stakeholders and can provide valuable insight into how source protection messages will be received.

We acknowledge that in many cases timelines are tight in relation to scheduled public consultation and that the collaboration required to draft sensitive notices for these parties takes time. It should be noted that the reference to notices being sent out “as soon as reasonably possible” (18(2)) does not imply that notices must be sent out the day the public consultation period begins. Nevertheless, when deciding when to send out notifications, the SPC should ensure that stakeholders receive adequate time to comment on the posted assessment report.

7.6.16 Question: Notifications for conditions with multiple parties involved

If the decision is made to carry out notifications for conditions that are significant threats, in the case of multiple contributors to contamination or a different site owner and "contaminant owner", who should be notified?

Response:

It would be the decision of the SPC regarding who to notify (see question 15). In making the decision, the SPC should consider who would want to comment on the assessment report and source protection plan and the availability of contact information.



7.7 Source Protection Plan - Monitoring Policies

7.7.1 Question: Policies for Issues that don't meet tests in Rule 114 & 115

Can a source protection committee include a monitoring policy for an "issue" as defined in the CWA that does not meet the tests of Rule 114 and 115?

Response:

Yes, a source protection committee may include a monitoring policies for issues identified in the approved assessment report that did not meet the test of rule 114 and 115, as long as they can demonstrate the monitoring is warranted (for example, to confirm if a contaminant is naturally occurring or anthropogenic or if there is a potential for the trend in water quality to change).

7.7.2 Question: Policies for Issues that meet Rule 114/115, no ICA delineated

If a source protection committee identifies an issue in their approved assessment report that met the tests set out in Rule 114 and 115, but did not complete the issue contributing area and threats assessment for this around of planning, can they include monitoring policies in their source protection plan?

Response:

The CWA gives the source protection committee flexibility to decide when monitoring of a drinking water issue is advisable (ss 22 (2) p. 7). Therefore a source protection committee has the option to include or not include a monitoring policy in this situation. Monitoring the raw water quality may only confirm what the committee already knows. A policy for off site monitoring may be warranted to help understand the contributing area of the issue. Monitoring of the municipal well or intake, might help understand the seasonality of the issue, which may also help understand the contributing areas.

7.7.3 Question: Policies for Emerging Issues or Parameters of Concern

Can you include a source protection monitoring policy for a parameter or issue of emerging concern (i.e. emerging contaminants, pharmaceuticals, personal care products, etc.) which has been identified in the approved assessment report?

Response:

If a source protection committee identifies a parameter as an "issue" as defined in the Clean Water Act regardless if it meets the tests in Rule 114 or 115, a committee may



include a monitoring policy. However, if a committee identified a “parameter of concern” or “emerging contaminant of concern” they can not include a monitoring policy. The Ministry is working with Conservation Ontario to help source protection committee write some context information around emerging contaminants and parameters of concern and committees concerns, but this can not be part of the source protection plan at this time.

7.8 Implementing Source Protection Plans

7.8.1 Question: Will RMOs need to be an employee of the municipality?

Will risk management officials need to be an employee of the municipality or could they be from the Conservation Authority?

Response:

Under S. 47 of the Clean Water Act (CWA), it directs the council of a municipality for enforcement of risk management plans. It also directs the council of a municipality to appoint a risk management official and risk management inspectors. In the CWA the municipalities also have the option of delegating the authority of risk management plans to conservation authorities, planning boards, health boards and as such those agencies would employ risk management officials and inspectors.

7.8.2 Question: Risk management plan - specifying details

Can a source protection plan policy only specify a minimum requirement of risk management measures that would be in a risk management plan (RMP) (e.g., must include risk management measures a, b and c) or could it also specify the maximum number of measures (e.g., RMP can include nothing but a, b, and c risk management measures)?

Response:

Every risk management plan (RMP) must meet the statutory test set out in subsection 58 (15) of the Clean Water Act. This section indicates that the Risk Management Official (RMO; or person with qualifications) must be satisfied that the activity will not become a significant drinking water threat if it is engaged in at the location in accordance with the risk management plan. Therefore, if the SPC says in a source protection policy that an RMP may only require certain risk management measures, and the RMO believes that the only measure that will satisfy the test set out in sub-clause 58 (15) (a) (ii) is one that is not included in the list set out in the policy, then the SPC has set up an impossible



situation for the Risk RMO – the rules for RMPs set by the SPC would conflict with the statute.

Thus, an SPC can specify rules for RMPs in a source protection plan policy so long as they do not conflict with the test that the RMO has to be satisfied is met – as set out in sub-clause 58 (15) (a) (ii). While it is perfectly legitimate to circumscribe to some degree the discretion of the RMO to negotiate a RMP, it would be wise for the SPC not to tie the hands of the RMO to such an extent that they make the RMP negotiations exceedingly difficult, not leaving them enough leeway to deal with site-specific situations.

7.8.3 Question: How RMO informed when party transfers ownership of property?

How will landowners know that they need to inform the RMO when they transfer ownership of (sell) their property?

Response:

S. 60 in O.Reg. 287/07 states: “Every RMP shall contain a provision stating that it cannot be transferred to another person without the written consent of the RMO”.

Therefore this provision will appear in each and every RMP that is developed across the province. Be virtue of this provision being included in every RMP, this effectively serves as the mechanism to ensure that whomever is transferring ownership needs to let the RMO know before the RMP can be transferred.

The landowner ought to be aware as it will be directly in his or her RMP.

7.8.4 Question: Are risk management plans (once signed) a public document?

Are RMPs (once signed off by both parties) public documents? If so are they subject to the Municipal Freedom of Information and Protection of Privacy Act (MFIPPA)?

Response:

S. 53 of Ontario Reg. 287/07 read in conjunction with S 54 of the CWA definitely states that Risk Management Plans are public documents. As such, we would expect they would be subject to MFIPPA, but to confirm this SPCs should check with an appropriate knowledgeable party at the municipal level who has expertise in MFIPPA legislation.



Under the CWA and O.Reg. 287/07 there are no requirements to post RMPs; however, under S 54 of the Act, the onus is placed on the person or body who holds these records to make them available to the public.

7.8.5 Question: Does RMP stay in force if party engaged in SDWT changes?

Would an RMP in effect at a property continue to be in force in the event that a property owner and/or the party engaged in a SDWT activity changes?

Response:

The key thing addressed by the legislation is not ownership of the site, but rather who is engaged in a SDWT activity as SPP policies apply to “persons engaged in a SDWT”. Therefore, if there is a policy that requires an RMP to be in place for a specified SDWT activity to be carried out in a specified geographic area, then should the party engaging in that activity at a subject property change, the requirement of the SPP policy would still apply (assuming that the new party is engaging in the same SDWT activity at the same location). That is, the new party would also require an approved RMP be in place before engaging in the SDWT activity.

As for a specific RMP that has been agreed to at a specific site by a particular party and a RMO, S. 60 of the Regulation requires that every RMP contain a provision stating that it cannot be transferred to another person without the written consent of the RMO. Therefore, an RMP does not automatically transfer to a new party, but it can be transferred to a new party if written consent is obtained from an RMO. If written consent is not obtained, then a new RMP will need to be negotiated and approved by the RMO before the new party can engage in the SDWT activity.

7.8.6 Question: Transfer of RMO Responsibility to Crown

I am preparing a level of effort document related to Part IV of the Clean Water Act for our municipalities. Can you provide the Ministry’s interpretation of s. 49(2) of the Clean Water Act? My reading is that councils may enter into agreements to transfer Part IV enforcement responsibility to the Crown for agreed upon activities.

Response:

S. 49(2) of the Clean Water Act allows for a Council of a single, upper or lower-tier municipality that has the authority to pass by-laws respecting water production,



treatment and storage under the Municipal Act, 2001 and is responsible for the enforcement of Part IV under the CWA to enter into an agreement with the Crown to transfer the Part IV enforcement responsibilities for agreed upon activities. The transfer of responsibility agreement would require mutual consent by both the Council and the Crown for the agreement to be valid and credible.

7.8.7 Question: Can upper and low tier municipality deliver RMO/RMI program?

According to the Municipal Act, lower tier municipalities in counties [unless otherwise authorized] are assigned the responsibility for water services (i.e. collection, treatment, distribution, etc.) and are therefore the municipalities with the authority for implementing Part IV powers.

Section 47 and 48 of the CWA allow for those municipalities (in a county case the lower tier) to enter into an agreement with each other or with a board of health, planning board or source protection to transfer the responsibility and share costs.

Could counties (upper tier) be delegated the responsibility for implementing Part IV powers if the lower tier did not want to take on this responsibility?

Response:

Yes – under 47(4) the council of a lower tier municipality may come to an agreement with the council of an upper tier municipality that would result in the upper tier taking on the responsibility for the enforcement of Part IV. The upper tier doesn't need to be responsible for the water system in order to be delegated/transferred the Part IV authorities.

7.9 Ontario Drinking Water Stewardship Program

7.9.1 Question: ODWSP - Assorted well related questions

Please provide background and information on the Early Response funding program for transport pathways, particularly those relating to water wells.



Response:

BACKGROUND:

- The Early Response grant funding agreement states in S. A4.2 Eligible Projects that the Recipient shall provide funding for eligible Projects which include:
 - a) implementation of a single or multiple Risk Management Measure(s) listed in the RMMC related to a condition or activity that is a Significant Drinking Water Threat that a landowner, business or municipality volunteers to undertake.
 - b) implementation of a single or multiple Risk Management Measure(s) listed in the RMMC to address transport pathways that increase vulnerability scores and as a result make an activity or condition a Significant Drinking Water Threat, or activities identified in IRMPs, that a landowner, business or municipality volunteers to undertake.
 - c) the types of Risk Management Measures found in the RMMC that are eligible for financial assistance include:
 - i. Structural (e.g. buffer strips, constructed wetlands, oil water separators); and
 - ii. Operational.

DIRECTION:

- Transport Pathway Identified in an Assessment Report:

The Ministry supports the funding of a project to upgrade or decommission the well where a transport pathway has been considered in an assessment report. This includes where the transport pathway increases a vulnerability score (as noted in A4.2b above) or where the elimination of the transport pathway would reduce the risk to the aquifer (e.g., cases where the vulnerability score was already 10 and thus the transport pathway could not increase the score). This latter scenario may appear to be beyond the scope of A4.2b above, but is in line with the intention of this clause.

- Transport Pathway not identified in an Assessment Report:

Where a transport pathway is found adjacent to a significant drinking water threat but it has not been considered in an assessment report, the local application review committee has the discretion to fund a project to upgrade or decommission the well. The application review committee should consider the following in making its decision on the project:



- there is evidence to show that the removal of the pathway would reduce the risk to the pathway;
- the prioritization provided by the local source protection committee to fund projects; and
- the limited funding available under the program.

7.9.2 Question: ODWSP Funding - Required Actions v. Provincial Officer Order

Wirth regards to the Ontario Drinking Water Stewardship Program - If an inspector requires a landowner to take action to repair, maintain or upgrade something via an inspection report would the landowner be eligible to receive ODWSP funding? Is there a difference between a “required action” in an inspection report and a Provincial Officer’s Orders requirement to act?

Response:

A provincial officer can require a landowner, public body or industry to take action to comply with applicable legislation. There are various means in which to achieve compliance – voluntary, mandatory or a combination of both. If an inspector “requires action” in an inspection report a provincial officer can work with the landowner to determine a timeline to achieve compliance and work with the landowner – this is referred to as “voluntary compliance”. However, if compliance can not be achieved via the voluntary approach than the officer has the ability to issue a Provincial Officer’s Order and/or fine the person or bodies responsible. If an inspector is using a voluntary approach to achieve compliance than potentially ODWSP funding may be available to help that landowner; however, each situation will have be reviewed and assessed on a case-by-case basis to ensure the activity is eligible for funding. If, however, a Provincial Officer’s Order has been issued to address a non-compliance – ODWSP funding would not be available to the landowner as ODWSP funding can not used to fund work that is required by legislation.

7.10 Other

7.10.1 Question: French Language Services – requirements/ expectations

Under the French Language Services Action Plan that SPC are to follow, are there any requirements for who can provide translation services? What are the MOE’s expectations?



Response:

The Action Plan has not specified who can provide translation services for written documents. For documents that are recommended to be translated into French under the Action Plan's best practices (such as meeting minutes, the website, fact sheets, executive summaries, etc.), MOE encourages SPCs to use their in-house ability where it exists, a third party with professional experience providing translation services such as a consulting firm (check the web site <http://www.atio.on.ca/>), or a local language school. In some cases there may be an SPC member who has the capacity to translate materials, but it is not recommended for more significant documents. In all cases, it is expected that a SPC will use the Drinking Water Source Protection Lexicon for translation activities.

In terms of spoken translation, the Action Plan does specify recommended best practices – these include using bilingual friends, family members, SPC/SPA/MOE staff. SPCs are reminded, however, that the Action Plan is largely about translating written materials.

7.10.2 Question: Climate change policies - implementing body

Can SPCs write source protection plan policies about collecting climate change data that are to be implemented by persons or bodies other than a municipality or Conservation Authority?

Response:

S. 26 (5) says SPCs can write “policies specifying the actions to be taken by persons or bodies in the source protection area to ensure that data on the climate conditions in the area are gathered on an ongoing basis.” For climate change policies the SPC can name any person or body in its source protection plan as the implementing body. The person or body, for example an agency, does not have to physically reside in the area. For all climate change policies, the source protection plan policies will have the legal effect of strategic action.

7.10.3 Question: Pest Management Accreditation program & groundwater quality

Does the Pest Management Accreditation Program cover potential contamination of groundwater quality? It would be helpful to see a copy of the Pest Management Accreditation program.



Response:

We presume the question is related to the use of pesticides on golf courses and the associated Integrated Pest Management (IPM) Accreditation Program.

The IPM Accreditation Program, which is required for golf courses to continue using class 9 pesticides (as per s. 18 of O. Regulation 63/09) is not directly focused on groundwater quality. IPM is a decision-making process that uses a variety of tools, including cultural, mechanical and biological methods, as well as pesticides, to control pest populations. IPM helps to reduce the reliance on pesticides as IPM principles help to ensure that pesticides are used only when necessary, and the least-toxic pesticides are used whenever possible.

Golf courses that use Class 9 pesticides in their maintenance operations must be fully accredited by the IPM Council of Canada (IPMCC), the IPM body approved for the purpose of S. 18 of O.Reg. 63/09. Accredited golf courses are able to use Class 9 pesticides only on the actual playing surfaces and not on lawns, gardens, patios and other outdoor areas associated with the facility. Golf courses that are not accredited can only use biopesticides and lower risk pesticides (non-Class 9 pesticides) to maintain their golf course.

The IPMCC IPM Accreditation Program for golf courses includes training, maintaining detailed records of pesticide use and participating in an audit process. The IPMCC's golf course IPM Accreditation Program involves three phases:

- 1) Registration - Golf courses are registered once they have submitted the name and IPM certification number of the certified IPM Agent responsible for IPM at the golf course and have paid the annual registration fee. The owner or operator of the golf course is responsible for maintaining the golf course's annual registration in the IPM Accreditation Program.
- 2) Level 1 Accreditation - Golf courses that are registered must then successfully complete an annual Desk Review Audit to be Level 1 Accredited and have paid the annual registration fee.
- 3) Level 2 Accreditation - Golf courses that have successfully completed an on-site audit once every three years are Level 2 Accredited. The accredited golf course must continue to successfully complete the annual desk review audit, continue to employ a certified IPM Agent and have paid the annual registration fee.



Desk Review Audits and On-Site Audits are conducted by independent certified environmental auditors designated by the Canadian Environmental Certification Approvals Board.

Additional information on the Integrated Pest Management Accreditation Program is available on the MOE website

http://www.ene.gov.on.ca/environment/en/category/pesticides/STDPROD_079358.html or at <http://www.ontarioipm.com/>.

SPCs are reminded to refer to the Pesticides bulletin. The bulletin explains the regulatory framework for pesticides – including that all pesticides must be registered by Health Canada’s Pest Management Regulatory Agency – who undertake a rigorous scientific assessment of pesticides to determine that they will not pose unacceptable risks to human health or the environment when used according to the label directions. To this end, minimizing risk to the environment is incorporated into the product registration process so that a product would only be allowed for use in areas where it would not have a significant impact on the environment.

7.10.4 Question: Funding infrastructure upgrades

Who will be responsible for paying for infrastructure upgrades? Can development charges be used?

Response:

Responsibility varies. Where the facility is built by a developer and assumed by the municipality, the municipality is responsible for future maintenance and upgrades. In some cases the developer may have been required to provide a line of credit or some other “cash” assurance to the municipality via a Municipal Responsibility Agreement (including financial assurance) which may assist in future upgrades. If you are dealing with freehold ownership, generally speaking it is the municipality’s responsibility to pay for sewage infrastructure upgrades. If you are dealing with condominium ownership, then generally speaking it is the condominium corporation that pays for sewage upgrades.

Whether or not development charges may be used to fund infrastructure upgrades (where the upgrades are for expansion) would depend on what is covered by the municipality’s development charges by-law.



7.10.5 Question: Who is responsible for maintenance & funding of SWM ponds?

Who is responsible for maintenance and funding of stormwater management (SWM) ponds – the developer or municipality?

Response:

Responsibility for funding and maintenance varies. With a typical subdivision, developers usually pay for the installation of stormwater management facilities, and after a demonstration period (often 1-2 years), if they are working properly, ownership is transferred to the municipality. Maintenance from that point on rests with the municipality, as they own the stormwater works at that time. In some cases, the municipality constructs and maintains SWM facilities which service “neighbourhoods” as opposed to single properties or individual developments.

Some SWM facilities (ponds being just one sort of SWM facility) are privately owned and maintained, such as for a condominium development or a commercial or industrial mall.

7.10.6 Question: Can we see a sample CofA for large septic systems?

Can we see a sample CofA for large septic systems?

Response:

Appendix 2 of this document includes a few approvals for communal septic systems. The CofAs include monitoring requirements, objectives, requirement for an operations and maintenance manual, and preparation of annual reports. One of the approvals contains limits but isn't a traditional septic system; it has a settling chamber rather than septic tank, though it still discharges to a leaching bed. There may be a few systems that also require surface water monitoring, but examples could not be found.

Chapter 22 of the MOE's 2008 Design Guidelines for Sewage works should be consulted for design of large septic systems. Here is the link to the document for easy reference, http://www.ene.gov.on.ca/environment/en/resources/STD01_076025.html

There is also a Guide to assist in filling out the application for approval, but it isn't specific to septic systems. It can be accessed at the following link, http://www.ene.gov.on.ca/environment/en/resources/STD01_076038.html



7.10.7 Question: Fuel Tank Inspection and Enforcement

S. 13 - Maintenance of the Canadian Standards Association Ontario Installation Code for Oil-Burning Equipment (based on CSA B139, with Ontario Amendments 1st Edition 2006), s. 13.2, sub 13.2.1 requires the “owner of the oil-burning equipment shall ensure that it is maintained in accordance with Clauses 13.2 to 13.5 at least once per year”.

Clauses 13.2 to 13.5 require inspection of the fuel oil tank for leaks, slope, test for water at the bottom of the tank (for metallic end outlet tanks), line and fuel filter inspection.

How is this requirement enforced by TSSA or is it? Some source protection policies for fuel tanks may relying heavily on this inspection requirement; however, if it's not enforced then it will be extremely difficult for the policy to meet the requirements of s. 22 of the Clean Water Act.

Response:

The requirement for annual inspection of residential tanks is the responsibility of the homeowner to ensure that it is completed. According to TSSA, S. 13 of the Canadian Standards Association Ontario Installation Code for Oil-Burning Equipment is enforced in the following 3 ways:

1. Through distributor inspections that are conducted when the distributor first delivers fuel to the installation and at least once every 10 years;
2. Through contractors, certificate holders, and distributors that may see non-compliance and identify the tank maintenance as an unacceptable condition; and
3. Through random TSSA audits during contractor and distributor audits.

7.10.8 Question: What guidance does MOE have on risk assessments?

What guidance does MOE have on risk assessments?

Response:

While a risk assessment (s. 60 CWA) could determine that s.57 does not apply to an activity, it does not mean that the activity is no longer prohibited. The intent of a s. 60 Risk Assessment is to show that, at a specific site, the vulnerability scoring is not the same as what is indicated in the AR that would make it a significant threat. It's possible that the scale of the AR would mean that there may be some variations at the site that wouldn't be reflected in the vulnerability mapping. Any activity that is or would be a significant threat would continue to be prohibited. The same applies to s.58 policies.



It is being assumed that site-specific variations from the AR would be few. The risk assessment would only apply to policies that use CWA Part IV tools. If these tools were used for a large portion of a SPP, then some of these policies may not apply on specific sites based on submitted (and approved) risk assessments. Risk assessments would not invalidate these policies; what the risk assessment does is assess whether an activity meets the definition of a “significant threat” in that area.

There is currently no guidance on the differences between risk assessments and risk management plans. MOE has circulated a bulletin on s. 57 Prohibition and on s. 58 Risk Management Plans, and the CWA says that the risk management official must accept the risk assessment showing that the activity, if engaged in at that location, is not a significant drinking water threat at that location.

8 Updated Questions and Answers

The following questions and answers were updated between March 26, 2011 and October 31, 2011.

8.1 Source Protection Plans

Question:

8.2 Implementing Source Protection Plans

8.2.1 Question: Risk Management Officials

Who will Risk Management Officials work for? What powers will they have, and when can source protection committees expect to see the legislation.

Response:

Updated answer (April 2011)

Under S. 47 of the Clean Water Act (CWA), it directs the council of a municipality for enforcement of risk management plans. It also directs the council of a municipality to appoint a risk management official and risk management inspectors. In the CWA the municipalities also have the option of delegating the authority of risk management plans to conservation authorities, planning boards, health boards and as such those agencies would employ risk management officials and inspectors.



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Risk management officials and inspectors appointed as per the CWA are bound by the requirements/process laid out in the CWA. In addition, risk management officials are required to take training (a Director-approved course) in order to enter property for the purpose of inspections under S. 62. See s. 54 of O.Reg. 287/07.

Risk management plans are site-specific plans that address significant threat activities by formally setting out actions that will be taken by the person(s) who is engaging (or in the case of future threats, proposing to engage) in the activity to reduce the level of risk. The details of the actual risk management plan itself are intended to be agreed on collectively by the person(s) engaging in the activity and a risk management official. The risk management plan can also be imposed as a “last resort” by the risk management official, if required, and can be imposed by issuance of an order from the risk management official. For your reference, S. 56 of the CWA relates to interim risk management plans and S. 58 outlines the process/requirements/powers with regards to risk management plans after the source protection plan has been approved by the Minister.

It must be noted that risk management plans may only be used for activities that are prescribed by regulations and for activities that are identified as significant threats in the approved assessment report. Also, the approved source protection plans must specify the activity(ies) and the area(s) which the policy designates as subject to the application of risk management plans.

ORIGINAL ANSWER (November 2009)

Under S. 47 of the Clean Water Act (CWA), it directs the council of a municipality for enforcement of risk management plans. It also directs the council of a municipality to appoint a risk management official and risk management inspectors. In the CWA the municipalities also have the option of delegating the authority of risk management plans to conservation authorities, planning boards, health boards and as such those agencies would employ risk management officials and inspectors.

Risk management officials and inspectors appointed as per the CWA are bound by the requirements/process laid out in the CWA. In addition, risk management officials are required to take training (a Director-approved course) in order to enter property for the purpose of inspections under S. 62. They will also be required to have the qualifications which will be prescribed in a future regulation. A draft regulation is anticipated to be released winter of 2010.



Risk management plans are site-specific plans that address significant threat activities by formally setting out actions that will be taken by the person(s) who is engaging (or in the case of future threats, proposing to engage) in the activity to reduce the level of risk. The details of the actual risk management plan itself are intended to be agreed on collectively by the person(s) engaging in the activity and a risk management official. The risk management plan can also be imposed as a “last resort” by the risk management official if required and can be imposed by issuance of an order from the risk management official. For your reference, S. 56 of the CWA relates to interim risk management plans and S. 58 outlines the process/requirements/powers with regards to risk management plans after the source protection plan has been approved by the Minister.

It must be noted that risk management plans may only be used for activities that are prescribed by regulations and for activities that are identified as significant threats in the approved assessment report. Also, the approved source protection plans must specify the activity(ies) and the area(s) which the policy designates as subject to the application of risk management plans.

8.3 Other

8.3.1 Use of term “restricted land use” in CWA vs. Planning Act

Could you please explain the difference between the use of the term Restricted Land Use in the Clean Water Act and the Planning Act.

Response:

UPDATED RESPONSE (JUNE 15, 2011)

Restricted Land Uses (RLU) under S. 59 of the Clean Water Act is described in the source protection plan discussion paper as a policy approach available to source protection committees as they develop their source protection plans. In accordance with the CWA, the RLU policy approach is only eligible for use when used in combination with prohibition polices (S. 57), or Risk Management Plans (S. 58) as a means to deal with future significant drinking water threats. There is no formal definition for RLU in the CWA. Therefore, for purposes of the CWA, the application of RLU policies may result in a temporary “pause” to allow the Risk Management Official (RMO) time to review the application and/or information provided by the applicant and to determine if the proposed future activity, or expansion of an existing activity, would be allowed.



The source protection plan that applies to the municipality will identify the land uses that will be subject to the RLU policies. The RLU policies will flag new building permit applications and new Planning Act applications. The building official or municipal planner will first determine if the application is subject to the RLU policies (area and use), and if so, will direct the applicant to the Risk Management Official (RMO). At this point, the RMO will determine whether the application includes a threat activity subject to S. 57 (prohibition) or S. 58 (risk management plans). If the application is not associated with activities that are subject to prohibition or risk management planning, then the applicant receives a notice from the RMO to proceed. On the other hand, if the application is associated with an activity that is prohibited or requires a risk management plan, then the RMO would inform the applicant of the prohibited activities, and would negotiate a risk management plan if required, and when the RMP is established, the applicant would then obtain a notice from the RMO allowing them to proceed with their application.

The RLU concept under the CWA is used or applied differently from the “restricted land uses” under the Planning Act. The general practice in applying a restriction or prohibition of a use within the Planning Act framework is an outright ban on a particular new use, for example, “Development and site alteration shall not be permitted within a floodway regardless of ...” On the other hand, sometimes a restriction is placed on a use but the use could be permitted/allowed providing it meets a number of tests,

Example ...

“Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas ... unless the ecological function of the adjacent lands has been evaluated, and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions”.

RLU may be seen as similar to the “holding” clause commonly used in the processing of Planning Act applications. Although this may be true, “holding” under the Planning Act is applied when a development is permitted/allowed but a number of studies are required to be undertaken prior to final approval or release of the “holding” provision. It may take years before the development could proceed. The “holding” is not a refusal, more like “do/fix something, or prepare a study, or change the existing circumstance, before the “holding” is removed.

ORIGINAL RESPONSE:

Restricted Land Uses (RLU) under S. 59 of the Clean Water Act is described in the source protection plan discussion paper as a policy approach available to source

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protection committees as they develop their source protection plans. In accordance with the CWA, the RLU policy approach is only eligible for use when used in combination with prohibition policies (S. 57), or Risk Management Plans (S. 58) as a means to deal with future significant drinking water threats. There is no formal definition for RLU in the CWA. Therefore, for purposes of the CWA, the application of RLU policies may result in a temporary “pause” to allow the Risk Management Official (RMO) time to review the application and/or information provided by the applicant and to determine if the proposed future activity, or expansion of an existing activity, would be allowed.

The source protection plan that applies to the municipality will identify the land uses that will be subject to the RLU policies. These RLU policies will apply to new building permit applications or certain new Planning Act applications. The building official or municipal planner will determine if the application is subject to the RLU policies, and will direct the applicant to the RMO. At this point, the RMO will have to determine whether the application relates to one of the restricted land uses designated in the source protection plan and if the activities associated with this application are subject to S. 57 (prohibition) or S. 58 (risk management plans). If the application is not associated with activities that are subject to prohibition or risk management planning, then the applicant receives a notice from the RMO to proceed. On the other hand, if the application is associated with an activity that is prohibited or requires a risk management plan, then the RMO would inform the applicant of the prohibited activities, and would negotiate a risk management plan with the applicant prior to issuing the notice, which would allow them to proceed with the application.

The RLU concept under the CWA is used or applied differently from the “restricted land uses” under the Planning Act. The general practice in applying a restriction or prohibition of a use within the Planning Act framework is an outright ban on a particular new use, for example, “Development and site alteration shall not be permitted within a floodway regardless of ...” On the other hand, sometimes a restriction is placed on a use but the use could be permitted/allowed providing it meets a number of tests,

Example ...

“Development and site alteration shall not be permitted on adjacent lands to the natural heritage features and areas ... unless the ecological function of the adjacent lands has been evaluated, and it has been demonstrated that there will be no negative impacts on the natural features or on their ecological functions”.

RLU may be seen as similar to the “holding” clause commonly used in the processing of Planning Act applications. Although this may be true, “holding” under the Planning Act is applied when a development is permitted/allowed but a number of studies are required



to be undertaken prior to final approval or release of the “holding” provision. It may take years before the development could proceed. The “holding” is not a refusal, more like “do/fix something”, or prepare a study, or change the existing circumstance, before the “holding” is removed.

9 Q&As Under Review

The following Q&As are under revision and will get updated and re-circulated in the future. Until new answers are provided these questions **should not be relied on** for up-to-date source protection program information.

9.1 Other

9.1.1 Question: How is precautionary principle considered in source protection?

How is the precautionary principle considered in source protection?

Original Response - Revisions Underway:

The precautionary principle is a basis for and an important part of the implementation of the Clean Water Act, 2006 (CWA). The source protection planning process established under the Clean Water Act, 2006 and regulations created under the Act and associated guidance documents are inherently precautionary and the science based process of identifying and ranking threats to drinking water sources incorporates this approach.

Terms of Reference:

The terms of reference is a document which outlines the work that needs to be undertaken to complete the assessment report and the source protection plan. The concept of the precautionary principle does not have a special place in the workplan component of the terms of reference as it is not a specific task but rather more of an approach to decision making when developing the assessment report and policies for the source protection plan. In the guidance paper for the terms of reference, it is suggested that controversial policies (for example, when there is little data to support the policies) would require more consultation time and thereby require more money and estimated costs. Also, the source protection committee (SPC) may want to include communication deliverables that explain how the precautionary principle is one of the key foundations of the Act. These deliverables would be a part of the communication tasks in the terms of reference.

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Assessment Report:

Fundamentally, the approach of using a threats identification process, which is based on assessing the potential for an activity or condition to pose a risk to drinking water, is to seek to avoid problems rather than react to them. This approach is not reliant on intake water quality available. In the threats tables under the technical rules, a list of over 40,000 combinations of activities and considerations are considered threats to drinking water. The Ministry will continue to expand this list as more information on activities and conditions becomes available. There is also a process for SPCs to identify and address other activities or conditions that pose a risk to drinking water that are not contained in the list of prescribed threats and associated conditions. The technical rules also require an evaluation of drinking water issues and, where there are issues that cannot be linked to threats within the vulnerable areas, the SPC must reconsider the delineation of vulnerable areas to ensure they appropriately capture the areas contributing to a well or intake.

SPC must identify areas where there are water quality issues and any activity that contributes to that water quality issue then becomes a significant drinking water threat.

Source Protection Plan:

The SPC will have a range of options to consider in the development of the source protection plan and a variety of types of policies that may be included in the plan to address drinking water threats. The use of informed judgement and precaution will be a necessary element in the development of source protection plans; elements of the precautionary principle will be considered by the Province in the drafting of the proposed source protection plan regulation. SPCs, however, will also have the scope to consider/apply the precautionary approach in a more overt manner during the development of the source protection plan and in the decision making process with regard to evaluating policies in the plan. An SPC could decide to have a set of principles outlining how the precautionary approach will be applied if they desired.

It is also important to note that the precautionary principle may be challenged when source protection plan policies are developed - for example the prohibition of activities based on limited data.

Guiding principles and recommendations were provided in a report to the Minister of the Environment from the Technical Experts Committee in November 2004. These formed the basis for the development of the technical guidance documents and technical studies, which in turn formed the basis of the development of the assessment report and the source protection plan.

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- Guiding Principle 16: Source protection plans should exercise the precautionary principle for pathogens, which are complex living organisms that may change over time and can be difficult to assess (both their presence and impacts).
- Guiding Principle 21: Source protection plans must be based on risk management, when risks can be estimated, and the precautionary principle when risks cannot be estimated.
- Recommendation 32: The guidance for the delineation of the Intake Protection Zone (IPZ) should incorporate the precautionary principle by requiring that the most protective zone be established depending on the local site characteristics. In particular, it should be recognized that low flow conditions produce a slower velocity and less dilution, while higher flows increase velocity and dilution.
- Recommendation 73: A semi-quantitative analysis, considering uncertainty and the precautionary principle, should be used to determine the threats that pose a “Significant Risk” to a drinking water source, and these risks should be the subject of priority risk management activities.

9.1.2 Question: Funding and source protection planning

What funding has been committed for SP planning costs to date? How is SP implementation going to be funded? Will the costs be downloaded to municipalities?

Original Response - Revisions Underway:

To date the crown has funded the planning phase of the SP program. This funding, which totals approximately \$150 million from 2004/05 until 2009/10, has included all work related to the preparation of the ToRs and ARs as well as funding to establish and maintain SPCs and technical and project staff for SPAs. Additional Funding provided during the planning phase will also include policy work related to the preparation of SPPs.

In addition to technical funding and capacity building funding, funding has been provided to landowners, farmers, municipalities, small and medium businesses, CAs and NGOs through the ODWSP (ODWSP), established by the CWA. ODWSP funds have been provided for projects and initiatives, undertaken voluntarily before SPPs are in place, related to the protection of drinking water sources. Financial assistance in the amount of \$14 million will be made available over the next two years until 2011. This year \$7 million in financial assistance is currently available for the following key areas:

- Education and Outreach
- Special Projects, and
- Early Actions

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Beginning in late 2009, SP planning in Ontario reaches a milestone. Science-based ARs being prepared by SPCs will begin to be issued in draft for public review and comments. At this point, the ODWSP will be at a critical junction as the ARs identify threats to drinking water sources and properties or activities that may contain or cause those threats.

Changes will be made to the ODWSP in 2010-11 to focus on addressing SDWTs that are identified and to reduce the risk to our drinking water supplies. It is anticipated that the future ODWSP components will be posted on the Ministry's website in Spring 2010.

As SPAs begin to submit ARs reports on behalf of SPCs over the next year for review and approval by the ministry, the SPCs, SPAs and the province will have a more realistic picture of the number of threats to source water. From this, estimations of the potential cost of implementing SPPs can be made. As there is still uncertainty on the cost of implementation of the SPP, provincial decisions on funding for SPP implementation beyond March 31, 2011 have not yet been made. Stewardship funding will also be available until that date, with no decisions yet about future funds under the ODWSP.

While the ARs are being completed, threat activities will be identified. The ARs may identify threats on private, provincial and municipal property and SPCs have various policy development approaches to address these threats. The final policy to address a significant threat may require work by an individual, for example by undertaking risk management measures on his/her property; by the province, for example by updating a CofA; or, by the municipality, for example by hiring a RMI to work with affected landowners to administer RMPs. Individuals, the province and municipalities will all be affected by the policies in the SPP. As a result, the cost of implementation is anticipated to be shared among all parties.

SPCs will be expected to weigh the cost of implementing various policy options as they develop their SPP. In the case of municipalities, the CWA allows for incurred costs related to the administration of Part IV of the CWA (RMPs, restricted lands uses, etc) to be recovered.

In addition, full cost accounting and water pricing for water protection, treatment and supply are also available as revenue sources for municipalities. It is recommended that the SPCs consider the cost of implementing various policy options in their evaluation of the advantages and disadvantages of each as they develop their SPP.



The province recognizes that there may be “hardship” cases, and is considering this as it assesses the need for financial assistance either broadly or on a case-by-case basis.

Going forward, the key to successful implementation of the program is municipalities’ vigilant participation and constructive input to meaningfully affect policy outcomes, and acknowledgment that the protection of our water supplies is a shared responsibility.

9.1.3 Question: Private drinking water systems & terms of reference

Sometimes private drinking water systems are defaulted on and a municipality is forced to take it over. a) What happens if a municipality is forced to take over a system after the terms of reference have been approved but before an approved assessment report? Would they have to go back and amend the TOR to include it? b) What about if they take it over after they already have an approved assessment report but before the source protection plan is approved? c) What about after the source protection plan is approved? Would they be able to wait until the next round of planning or would they have to go back and do the work/planning for it right away?

Original Response - Revisions Underway:

a) The terms of reference would have to be amended to include the system. b) The assessment report would be amended to include the system and the updated assessment report would appear as part of the source protection plan. c) It would likely make sense to wait until the next round of planning to amend the source protection plan for the system.

9.1.4 Question: Application of NASM as a threat

To classify a Non Agricultural Source Material (NASM) threat, such as biosolids, to the Tables it is necessary to relate the mass loading in terms of an equivalent livestock density of < 0.5 NU/ acre; between 0.5 and 1 NU /acre or >1 NU/acre. Has there been, or can you provide, any guidance about how to relate application rates to NU/acre?

Original Response - Revisions Underway:

To determine if the application of NASM is a threat, you do not need to relate NASM to the mass loading or equivalent NUs. The circumstances under the application of NASM in the Threats Table are:

- The agricultural source material non agricultural source material is applied to land located in a vulnerable area that has a managed land percentage that is [(more than 80%) or (at least 40%, but not more than 80%) or (less than 40%)]; and



- A livestock density that is sufficient to annually apply nutrients at a rate that is [(more than 1.0 nutrient units per acre) or (at least 0.5 nutrient units per acre but not more than 1.0 nutrient unit per acre) or (less than 0.5 nutrient units per acre)].

To apply these circumstances, you are required to use the maps from the watershed characterization (rule 16) to determine the managed land percentage and the livestock density for the area in question. Whether or not NASM application is a significant, moderate, or low drinking water threat will depend on these two maps and the vulnerability of the area in question. The amount of NASM applied is not considered in the circumstances.

9.1.5 Question: Snow Storage Guidelines for parking lots

Most parking lots serving commercial, residential (apartments) and industrial areas bank pile their own snow on the lots and therefore may be considered a low or moderate threat under storage of snow. Technical staff at the Conservation Authority have encountered various size circumstances for snow storage during their research. Are there any guidelines concerning the size of parking lots to determine the area of snow storage (i.e.: if a parking lot is 'X' size than it can technically support the storage of 0.5 hectares of snow)?

Original Response - Revisions Underway:

The Ministry of the Environment has not developed any guidelines concerning the size of parking lots with regards to the amount of snow storage that a specific sized parking lot could store. However, source protection committees should contact their local municipalities to determine if by-laws or other local planning tools have been developed to address these concerns.



Appendix 1 - Acronyms

Acronyms commonly used throughout the document:

AR: assessment report
ASM: agricultural source material
CA: Conservation Authority
CO: Conservation Ontario
CofA: certificate of approval
CWA: Clean Water Act, 2006
DNAPL: dense non-aqueous phase liquid
DWPB: Drinking Water Programs Branch
DWS: drinking water system
EBR: environmental bill of rights
eCoA: electronic Certificate of Approval
ER: Early Response
FN: First Nations
GUDI: groundwater under the influence of surface water
GW: groundwater
HVA: highly vulnerable areas
ICA: Issue Contributing Area
IM: Information Management
IPZ: intake protection zone
KFSPN: Kettle and Stony Point First Nation
LNAPL: light non aqueous phase liquid
MFIPPA: municipal freedom of information and protection of privacy act
MISA: municipal industrial strategy for abatement
MMAH: ministry of municipal affairs and housing
MNR: ministry of natural resources
MOE: ministry of the environment
MPAC: Municipal Property Assessment Corporation
MTO: ministry of transportation
NASM: non agricultural source material
NMP: nutrient management plan
NU: nutrient unit
ODWSP: Ontario drinking water stewardship program
OFA: Ontario Federation of Agriculture
OMB: Ontario municipal board
OP: official plan

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O.Reg.: Ontario Regulation
PCB: polychlorinated biphenyl
P.Eng: Professional Engineer
P. Geo: Professional Geoscientist
PM: project manager
PPS: provincial policy statement
PTTW: permit to take water
RMI: risk management inspector
RMO: risk management official
RMP: risk management plan
SDWA: Safe Drinking Water Act
SDWT: significant drinking water threat
SGRA: significant groundwater recharge areas
SPA: source protection authority
SPC: source protection committee
SP: source protection
SPP: source protection plan
SPPB: source protection programs branch
SPPDB: source protection policy database
SPR: source protection region
SW: surface water
TEC: technical experts committee
ToR: terms of reference
TOT: time of travel
UAR: updated assessment report
UTRCA: Upper Thames River Conservation Authority
Vfs: source vulnerability factor
WHPA: well head protection area



Appendix 2 – Sample Large Septic System Certificates of Approval



Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDED CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS
NUMBER 1128-5S6KLC

The Corporation of the Municipality of The Nation
Rural Route, No. 3
Casselman, Ontario
K0A 1M0

Site Location: Village of Fournier Communal Sewage Works
Lot 1, Concession XIII
The Nation Municipality, United Counties of Prescott and Russell

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

the existing municipal sewage works for the collection, transmission, treatment and disposal of domestic sewage, in the Village of Fournier, with a *Rated Capacity* of 97,600 litres per day and consisting of the following:

Sanitary Sewers

- sanitary sewers on County Road 10, St. Joseph Street, Union Street, Park Street, County Road 15, Easement, and Church Street;

Sewage Pumping Stations

- Sewage Pumping Station A comprising of a 2.4 m diameter by 3.0 m deep underground wet well constructed on the south side of County Road 10 approximately 65 m west of St. Joseph Street, equipped with two (2) submersible pumps (one duty and one standby), each pump having a rated capacity of 2.5 L/s at a T.D.H. of 11.0 m with a 1.2 kW electrical drive with a 100 mm diameter forcemain discharging to a manhole located at the intersection of County Road 10 and County Road 15;
- Sewage Pumping Station B comprising of a 2.4 m diameter by 6.0 m deep underground wet well constructed approximately 85 m west of County Road 15 and approximately 105 m north of Park Street, equipped with two (2) submersible pumps (one duty and one standby), each pump having a rated capacity of 5.0 L/s at a T.D.H. of 8.0 m with a 1.2 kW electrical drive with a 100 mm diameter forcemain discharging to the inlet septic tank of the Sewage Treatment System;

Sewage Treatment System

1. Septic Tanks

- eight (8) 45,400 litre capacity precast concrete septic tanks, installed in series approximately 155 m west of Sewage Pumping Station B, equipped with two (2) cartridge effluent filters at the outlet of the last septic tank with the effluent discharging to the recirculation tank of the biological sand filtration system;

2. Biological Sand Filtration System

- a biological sand filter recirculating system installed immediately west of the last septic tank, consisting of two (2) 45,400 litre capacity recirculation tank, four (4) sets of two (2) alternating dosing pumps with four (4) distributing valve assemblies, four (4) sand filter return pumps with a recirculating valve assembly, and associated recirculating timer and flow control units for dosing septic tank effluent to the recirculation sand filter and recirculating sand filter effluent back to the recirculation tank, each dosing pump having a rated capacity of 1.9 L/s at a T.D.H. of 18.9 m with a 0.37 kW electric drive with a 50 mm diameter forcemain to dose septic tank effluent onto the recirculation sand filter, each return pump having a rated capacity of 1.9 L/s at a T.D.H. of 18.9 m with a 0.37 kW electric drive with a forcemain to return sand filter effluent to the recirculation tank;
- a 28.8 m by 21.0 m recirculation biological sand filter having a hydraulic loading of 6.8 L/m²/hr, constructed approximately 3.5 m south of the recirculation tank consisting of 600 mm deep sand media of effective size of 1 to 3 mm and uniformity coefficient of less than 2.0 in four (4) cells of six (6) zones, each cell having twelve (12) 25 mm diameter distribution pressure pipes of 21 m long connected to the distributing valve assembly at the front end of the sand filter and two (2) 100 mm diameter of perforated drain pipes at the bottom of the sand filter, each distribution pipe having thirty-five (35) 3.2 mm diameter orifices facing upward spaced at 600 mm interval and covered by orifice shields, installed on the sand filter surface, a pumping chamber located in the middle of each cell and connected the two perforated filter drain pipes to return the recirculation sand filter effluent to the recirculation tank;

Subsurface Disposal System

1. Effluent Dosing Chamber

- four (4) 86,400 litre precast concrete septic tanks, installed in series approximately 155 m west of Sewage
- a 6,000 litre, precast concrete leaching bed dosing chamber installed approximately 1 m north of the recirculation tank and equipped with two (2) sets of two (2) alternating submersible pumps, each pump having a rated capacity of 2.0 L/s at a T.D.H. of 27.3 m with a 0.75 kW electric drive, including a distribution valve assembly per pump set, liquid level and pump timer controls together with 50 mm diameter forcemains to dose recirculation sand filter effluent through the distribution boxes to a subsurface disposal system;

2. Leaching Beds

- ten (10) 30 m long by 14.4 m wide raised absorption trench type leaching beds of imported sand with 9 min/cm percolation rate, constructed approximately 6 m north of leaching bed pumping chamber including imported mantle of 9 min/cm percolation rate extending 15 m north from the leaching bed and, each leaching bed consisting of ten (10) 100 mm diameter perforated pipes of 30 m long at 1.6 m interval together with header pipes from the distribution box;

Emergency Power Supply

- three (3) portable stand-by engine driven generators with a minimum continuous rating of 40 kW (electrical) per generator, provided and located in the municipal garage for the Nation Municipality to provide emergency power necessary to operate Sewage Pumping Stations A and B and septic system pumps and controls during power outage;

Miscellaneous

- all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works;

all in accordance with the following submitted supporting documents:

1. Application for Amendment to Certificate of Approval for Fournier Communal Sewage System submitted by C. Vandelst of Golder Associates dated September 3, 2003;
2. Communal septic system design report, final plans and specifications prepared by Neil A. Levac Engineering Ltd., Consulting Engineers.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

“Act ” means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"Average Daily Flow " means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

“By-pass” means any discharge from the *Works* that does not undergo any treatment or only receives partial treatment before it is discharged to the environment;

"CBOD5 " means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Certificate " means this entire certificate of approval document, issued in accordance with Section 53 of the *Act* , and includes any schedules;

"Director " means any *Ministry* employee appointed by the Minister pursuant to section 5 of the *Act* ;

"District Manager " means the District Manager of the Kingston District Office of the Ministry;

"E. Coli " refers to the thermally tolerant forms of Escherichia that can survive at 44.5 degrees Celsius;

"Ministry " means the Ontario Ministry of the Environment;

"Owner " means the Corporation of the Municipality of The Nation and includes its successors and assignees;

“Rated Capacity ” means the *Average Daily Flow* for which the *Works* are approved to handle;

"Regional Director " means the Regional Director of the Eastern Region of the Ministry;

"Works " means the sewage works described in the *Owner* 's application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* .

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

(1) The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Certificate* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.

(2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate*, the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate*.

(3) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate*, the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

(4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.

(5) The requirements of this *Certificate* are severable. If any requirement of this *Certificate*, or the application of any requirement of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.

2. CHANGE OF OWNER

(1) The *Owner* shall notify the *District Manager* and the *Director*, in writing, of any of the following changes within 30 days of the change occurring:

(a) change of *Owner* ;

(b) change of address of the *Owner* ;

(c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager* ;

(d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Informations Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager* ;

(2) In the event of any change in ownership of the *Works*, other than a change to a successor

municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Certificate* , and a copy of such notice shall be forwarded to the *District Manager* and the *Director* .

3. RECORD DRAWINGS

(1) A set of as-built drawings showing the works “as constructed” shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the *Works* for the operational life of the *Works* .

4. MONITORING AND RECORDING

The *Owner* shall, upon commencement of operation of the *Works* , carry out the following monitoring program:

(1) All samples and measurements taken for the purposes of this *Certificate* are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.

(2) Samples shall be collected of the raw sewage and the effluent being discharged to the subsurface disposal system at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 1 - Raw Sewage Monitoring	
Frequency	Quarterly
Sample Type	Grab
Parameters	<i>CBOD5</i> , Total Suspended Solids, Total Phosphorus, Total Kjeldahl Nitrogen

Table 2 - Effluent Monitoring - effluent discharged to subsurface disposal system	
Frequency	Monthly
Sample Type	Grab
Parameters	<i>CBOD5</i> , Total Suspended Solids, Total Phosphorus, Total Kjeldahl Nitrogen, Total Ammonia Nitrogen, Nitrate-Nitrogen, Nitrite-Nitrogen, Alkalinity and <i>E. Coli</i>

(3) Samples shall be collected of the groundwater in the eight existing groundwater monitoring wells MW99-1 to MW99-8 at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 3 - Groundwater Monitoring - upgradient wells MW99-6 and MW99-7	
Frequency	Quarterly
Sample Type	Grab
Parameters	Total Kjeldahl Nitrogen, Total Ammonia Nitrogen, Nitrate-Nitrogen, Nitrite-Nitrogen, Dissolved Organic Carbon, Anions (chloride, bromide, fluoride and sulphate), <i>E. Coli</i> , pH, Temperature and Conductivity

Table 4 - Groundwater Monitoring - downgradient wells MW99-1, MW99-2 and MW99-3	
Frequency	Quarterly
Sample Type	Grab
Parameters	Total Kjeldahl Nitrogen, Total Ammonia Nitrogen, Nitrate-Nitrogen, Nitrite-Nitrogen, Dissolved Organic Carbon, Anions (chloride, bromide, fluoride and sulphate), <i>E. Coli</i> , pH, Temperature and Conductivity

Table 5 - Groundwater Monitoring - downgradient well MW99-8 (reasonable use)	
Frequency	Annually (subject to subsection 6)
Sample Type	Grab
Parameters	Total Kjeldahl Nitrogen, Total Ammonia Nitrogen, Nitrate-Nitrogen, Nitrite-Nitrogen, Dissolved Organic Carbon, Anions (chloride, bromide, fluoride and sulphate), <i>E. Coli</i> , pH, Temperature and Conductivity

Table 6 - Groundwater Monitoring - downgradient wells MW99-4 and MW99-5 (surface water impact)	
Frequency	Annually (subject to subsection 6)
Sample Type	Grab
Parameters	Total Kjeldahl Nitrogen, Total Ammonia Nitrogen, Nitrate-Nitrogen, Nitrite-Nitrogen, Dissolved Organic Carbon, Anions (chloride, bromide, fluoride and sulphate), <i>E. Coli</i> , Total Phosphorus, Dissolved Phosphorus, pH, Temperature and Conductivity

(4) The Owner shall measure or estimate and record the daily volume of effluent being discharged to subsurface disposal system.

(5) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:

- (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;

(b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and

(c) the publication "Standard Methods for the Examination of Water and Wastewater" (20th edition), as amended from time to time by more recently published editions.

(6) The monitoring frequency at monitoring wells MW99-4, MW99-5 and MW99-8 shall be increased to quarterly as the septic effluent impacted groundwater plume is within five years of anticipated arrival at MW99-4 and MW99-5.

(7) The measurement frequencies specified in subsections (2) and (3) in respect to any parameter are minimum requirements which may, after 12 months of monitoring in accordance with this Condition, be modified by the *District Manager* in writing from time to time.

5. EFFLUENT OBJECTIVES

The *Owner* shall use best efforts to design, construct and operate the *Works* with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent being discharged to the subsurface disposal system.

Table 3 - Effluent Objectives	
Effluent Parameter	Concentration Objective (milligrams per litre unless otherwise indicated)
<i>CBOD5</i>	10.0
Total Suspended Solids	10.0

6. OPERATIONS AND MAINTENANCE

(1) The *Owner* shall maintain an operations manual for the *Works*, that includes, but not necessarily limited to, the following information:

(a) operating procedures for routine operation of the *Works*; and

(b) inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary.

(2) The *Owner* shall maintain the operations manual current and retain a copy at the location of the *Works* for the operational life of the *Works*. Upon request, the *Owner* shall make the manual available to *Ministry* staff.

7. REPORTING

(1) The *Owner* shall prepare, and submit upon request, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the *Works* and subsequent reports

shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:

- (a) a summary and interpretation of all raw sewage and effluent monitoring data and a comparison to the effluent objectives outlined in Condition 5, including an overview of the success and adequacy of the *Works* ;
- (b) a summary and interpretation of all groundwater monitoring data and a comparison to the established baseline background groundwater quality;
- (c) a delineation of the septic effluent impacted groundwater plume and the documentation of the movement and anticipated arrival of the plume at monitoring wells MW99-4 and MW99-5;
- (d) a tabulation of the daily volumes of effluent disposed through the subsurface disposal system during the reporting period;
- (e) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works* ; and
- (f) a description of any operating problems encountered and corrective actions taken.

8. GROUNDWATER AND SURFACE WATER IMPACTS CONTINGENCY PLAN

(1) One year prior to the anticipated arrival of the septic effluent impacted groundwater plume at monitoring wells MW99-4 and MW99-5, the *Owner* shall conduct a comprehensive analysis of all past monitoring data and assess the impacts of the *works* on the groundwater and surface water and initiate the development of a trigger mechanism for the implementation of a contingency plan for the site to ensure that the Reasonable Use requirements are met and any significant impacts to the surface water are mitigated. The *Owner* shall submit the assessment, proposed trigger mechanism and contingency plan to the *Regional Director* for review and approval.

(2) The contingency plan shall be implemented within two (2) years of the setting off of the trigger mechanism.

The reasons for the imposition of these terms and conditions are as follows:

- 1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this *Certificate* the existence of this *Certificate* .
- 2. Condition 2 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Certificate* and continue to operate the *Works* in compliance with it.

3. Condition 3 is included to ensure that the *Works* are constructed in accordance with the approval and that record drawings of the *Works* "as constructed" are maintained for future references.
4. Condition 4 is included to enable the *Owner* to evaluate and demonstrate the performance of the *Works* , on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the design objectives specified in the *Certificate* and that the *Works* does not cause any impairment to the receiving watercourse.
5. Condition 5 is imposed to establish non-enforceable effluent quality objectives which the *Owner* is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
6. Condition 6 is included to require that the *Works* be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the *Ministry* . Such a information is an integral part of the operation of the *Works* . Its compilation and use should assist the *Owner* in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for *Ministry* staff when reviewing the *Owner'* s operation of the work.
7. Condition 7 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Certificate*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.
8. Condition 8 is included to require a contingency plan be in place and a trigger mechanism be developed to ensure that the Reasonable Use requirements are met and any significant impacts to the surface water are mitigated.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 3-0436-99-006 issued on June 11, 1999.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., 12th Floor
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the**

Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 23rd day of December, 2003



Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

FL/

c: District Manager, MOE Cornwall
Carolyn VanDelst, Golder Associates Ltd.
Drinking Water and Wastewater Section, MOE Standards Development Branch



Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDED CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS
NUMBER 2145-6TEJDM
Issue Date: September 25, 2006

The Corporation of the Township of Adjala-Tosorontio
7855 Sideroad 30, RR 1
Alliston, Ontario
L9R 1V1

Site Location: New Horizon Subdivision Sewage Treatment Plant, Everett
Lot 9, Concession 5
Adjala-Tosorontio Township, County of Simcoe

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

modifications to the municipal subsurface disposal works for the collection, transmission, treatment and disposal of domestic sewage with a *Rated Capacity* of 175,000 litres per day, consisting of the following:

PROPOSED WORKS

Installation of a tertiary filtration system consisting of the following:

- three (3) multi-media filters, each having an outside diameter of 0.61 m and each equipped with automatic pneumatic valves and approximately 390 kg of anthracite, sand, garnet and gravel media;
- two (2) filter feed pumps, each capable of delivering 2.03 L/s;
- one (1) 0.45 kW compressor for air supply to pneumatic valves; and
- all other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with the Application for Approval of Municipal and Private Sewage Works dated August 03 2006 submitted by Paul Francis Lynch of 1430981 Ontario Ltd. along with a letter from Seprotech Systems Inc., which contains revised design brief and drawings, and all other supporting

documents.

EXISTING WORKS

The *Existing Works* include the following:

Raw Sewage Pumping Station Number 1

One (1) prefabricated raw sewage duplex pumping station (approximately 7.4 metres deep x 1.2 metres diameter) located on the west side of Lynch Lane approximately 150 metres north of Decker Street, equipped with two (2) submersible grinder pumps (one duty, one standby), each pump rated at approximately 5.0 litres/second at 30.0 metres TDH (total dynamic head), with a float control system, valves and piping, lockable access hatchways, benching, one (1) goosenecked vent, with bird screen and an above ground enclosed 20 Kilowatts propane generator set with control panel, ventilation, etc., discharging to a 75 millimetre diameter sanitary sewer forcemain on Lynch Lane directing sewage to the treatment plant.

Raw Sewage Pumping Station Number 2

One (1) prefabricated raw sewage duplex pumping station (approximately 9.6 metres deep x 1.2 metres diameter) located on the north side of Decker Street approximately 300 metres east of Wales Avenue, equipped with two (2) submersible grinder pumps (one duty, one standby), each pump rated at approximately 1.0 litres/second at 20 metres TDH with a float control system, valves and piping, benching, one (1) goosenecked vent with bird screen, lockable access hatch and control panel with duty and backup power supplied from the treatment plant, discharging to a 50 millimetres diameter sanitary sewer forcemain directing sewage to the treatment plant.

Sewage Treatment Plant

One (1) package treatment plant (approximate overall dimension of 22.0 metres x 10.2 metres x 3.8 metres) with a rated treatment capacity of approximately 175,000 litres/day, located approximately 90 metres east of Raw Sewage Pumping Station Number 2 and east of Decker Street, discharging treated sewage to the Effluent Pumping Station and consisting of the following:

- one (1) concrete primary settling tank with a volume of 48.5 cubic metres (after allowance for sludge), providing for 195 days of sludge storage;
- four-stage Rotating Biological Contactor (RBC) with a first

stage surface area of approximately 873.3 square metres and a total surface area of 5,973.8 square metres;

- a denitrification zone RBC with a surface area of approximately 1,717.3 square metres equipped with a carbon source dosing system at a maximum dosing rate of 7.6 litres/hour;
- one (1) alum/PASS dosing system to be used as an aid to flocculation, if necessary;
- one (1) submerged pump in the 4th stage of the RBC returning nitrified water to the primary settling tank at a flowrate of approximately 6.3 L/s along with a bucket recycling system returning nitrified water to the primary settling tank at a flowrate of approximately 0.8 L/s; and
- one (1) final settling tank inlet weir.
- one concrete final settling tank with a capacity of 47.2 cubic metres providing an area of 19.79 square metres with a minimum of 3 hour retention time; and
- one (1) 90 V-notch weir and ultrasonic level transmitter to flow pace all chemical feeds and record flows.

Final Effluent Dosing Pump Station

One (1) effluent dosing pumping station located by the package treatment plant, equipped with two (2) submersible pumps (one duty, one standby) each pump rated at approximately 10.0 litres/second at 2.0 TDH with a float control system, valves and piping.

Subsurface Final Effluent Disposal System

Located approximately 50 metres west of the Treatment Building and consisting of three (3) tile beds with a combined area of 2,430 square metres with the following provisions:

- a 100 millimetre diameter forcemain discharging to the primary distribution box that splits the flow evenly to six (6) splitter distribution boxes feeding the three (3) tile beds;
- each of the three (3) tile beds consist of two (2) tile grids; each consisting of 8 runs of 25 metres of 100 millimetre diameter distribution pipe on 1.8 metres centre

to centre;

- backfill consisting of native fill material with a "T" time of 10 minutes from 150 metres below each distribution pipe to 100 millimetres above the pipe with a layer of filter fabric covering all pipe to a width of 500 millimetre;
- sides of the bed backfilled with soil and sloped at a maximum of 1 vertical to 4 horizontal;
- seeding on the top and side slopes; and
- diversion swales beyond the side slopes directing drainage away from the bed.

Treatment Plant Auxiliary Power Supply

One (1) 50 Kilowatts radiation cooled standby diesel generator including a 990 litre fuel tank.

Other

All other controls, electrical equipment, instrumentation, piping, pumps, valves and appurtenances essential for the proper operation of the aforementioned sewage works.

all in accordance with the Application for Approval of Municipal and Private Sewage Works dated January 25 2002, from 1430981 Ontario Ltd. and design brief, plans and supporting documents from RG Robinson and Associates (Barrie) Ltd and other supporting documents.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

"Act " means the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended;

"Average Daily Flow " means the cumulative total sewage flow to the sewage works during a calendar year divided by the number of days during which sewage was flowing to the sewage works that year;

"CBOD₅ " means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;

"Certificate " means this entire certificate of approval document, issued in accordance with Section 53 of the Act , and includes any schedules;

"Director " means any *Ministry* employee appointed by the Minister pursuant to section 5 of the Act ;

"*District Manager* " means the District Manager of the Barrie District Office of the Ministry;

"*E. Coli* " refers to the thermally tolerant forms of *Escherichia* that can survive at 44.5 degrees Celsius;

"*Existing Works* " means those portions of the sewage works previously approved and constructed, and existing on-site on the date of issuance of this *Certificate* ;

"*Ministry* " means the Ontario Ministry of the Environment;

"*Owner* " means the Corporation of the Township of Adjala-Tosorontio and includes its successors and assignees;

"*Proposed Works* " means the sewage works described in the *Owner* 's application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* ;

"*Rated Capacity* " means the *Average Daily Flow* for which the *Works* are approved to handle;

"*Substantial Completion*" has the same meaning as "*substantial performance* " in the Construction Lien Act; and

"*Works* " means the sewage works described in the *Owner* 's application, this *Certificate* and in the supporting documentation referred to herein, to the extent approved by this *Certificate* and includes both *Existing Works* and *Proposed Works* .

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. GENERAL PROVISIONS

- (1) The *Owner* shall ensure that any person authorized to carry out work on or operate any aspect of the *Works* is notified of this *Certificate* and the conditions herein and shall take all reasonable measures to ensure any such person complies with the same.
- (2) Except as otherwise provided by these Conditions, the *Owner* shall design, build, install, operate and maintain the *Works* in accordance with the description given in this *Certificate* , the application for approval of the works and the submitted supporting documents and plans and specifications as listed in this *Certificate* .
- (3) Where there is a conflict between a provision of any submitted document referred to in this *Certificate* and the Conditions of this *Certificate* , the Conditions in this *Certificate* shall take precedence, and where there is a conflict between the listed submitted documents, the document bearing the most recent date shall prevail.

- (4) Where there is a conflict between the listed submitted documents, and the application, the application shall take precedence unless it is clear that the purpose of the document was to amend the application.
- (5) The requirements of this *Certificate* are severable. If any requirement of this *Certificate* , or the application of any requirement of this *Certificate* to any circumstance, is held invalid or unenforceable, the application of such requirement to other circumstances and the remainder of this certificate shall not be affected thereby.

2. EXPIRY OF APPROVAL

The approval issued by this *Certificate* will cease to apply to those parts of the *Works* which have not been constructed within five (5) years of the date of this *Certificate* .

3. CHANGE OF OWNER

- (1) The *Owner* shall notify the *District Manager* and the *Director* , in writing, of any of the following changes within 30 days of the change occurring:
 - (a) change of *Owner* ;
 - (b) change of address of the *Owner* ;
 - (c) change of partners where the *Owner* is or at any time becomes a partnership, and a copy of the most recent declaration filed under the Business Names Act, R.S.O. 1990, c.B17 shall be included in the notification to the *District Manager* ; and
 - (d) change of name of the corporation where the *Owner* is or at any time becomes a corporation, and a copy of the most current information filed under the Corporations Informations Act, R.S.O. 1990, c. C39 shall be included in the notification to the *District Manager* .
- (2) In the event of any change in ownership of the *Works* , other than a change to a successor municipality, the *Owner* shall notify in writing the succeeding owner of the existence of this *Certificate* , and a copy of such notice shall be forwarded to the *District Manager* and the *Director* .

4. CONSTRUCTION

- (1) The *Owner* shall ensure that the construction of the works is supervised by a Professional Engineer, as defined in the Professional Engineers Act.
- (2) Upon construction of the *Proposed Works* , the *Owner* shall prepare a statement, certified by a Professional Engineer, that the *Works* are constructed in accordance with this *Certificate* , and upon request, shall make the written statement available for inspection by *Ministry* staff.

5. MONITORING AND RECORDING

The *Owner* shall, upon commencement of operation of the *Works* , carry out the following monitoring program:

- (1) All samples and measurements taken for the purposes of this *Certificate* are to be taken at a time and in a location characteristic of the quality and quantity of the effluent stream over the time period being monitored.
- (2) Samples shall be collected of the effluent being discharged to the subsurface disposal system at the frequency specified, by means of the specified sample type and analyzed for each parameter listed and all results recorded:

Table 1 - Effluent Monitoring		
(Sampling point at the outlet of the treatment plant prior to subsurface discharge)		
Parameter	Sample Type	Frequency
Column 1	Column 2	Column 3
<i>CBOD₅</i>	Grab	Monthly
Total Suspended Solids	Grab	Monthly
Total Phosphorus	Grab	Monthly
Total Ammonia Nitrogen (Ammonia + Ammonium Nitrogen)	Grab	Monthly
Nitrite Nitrogen	Grab	Monthly
Nitrate Nitrogen	Grab	Monthly
<i>E. coli</i>	Grab	Monthly

- (3) The *Owner* shall monitor groundwater level in piezometer number 1 on monthly basis.
- (4) The *Owner* shall measure and record the daily volume of effluent being discharged to subsurface disposal system.
- (5) The methods and protocols for sampling, analysis and recording shall conform, in order of precedence, to the methods and protocols specified in the following:
 - (a) the Ministry's Procedure F-10-1, "Procedures for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only), as amended from time to time by more recently published editions;
 - (b) the Ministry's publication "Protocol for the Sampling and Analysis of Industrial/Municipal Wastewater" (January 1999), ISBN 0-7778-1880-9, as amended from time to time by more recently published editions; and
 - (c) the publication "Standard Methods for the Examination of Water and Wastewater" (21st edition), as amended from time to time by more recently published editions.
- (6) The *Owner* shall retain for a minimum of three (3) years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this *Certificate* .

6. EFFLUENT OBJECTIVES

- (1) The *Owner* shall use best efforts to design, construct and operate and maintain the *Works* with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent from the *Works* .

Table 1 - Effluent Objectives	
Effluent Parameter	Concentration Objective (milligrams per litre)
<i>CBOD</i> ₅	10.0
Total Suspended Solids	10.0
Total Nitrogen (Total Ammonia Nitrogen + Nitrite Nitrogen + Nitrate Nitrogen)	5.0

7. **OPERATION AND MAINTENANCE**

- (1) The *Owner* shall prepare an operations manual, or update it if already prepared, within six (6) months of the date of issuance of this *Certificate*, that includes, but not necessarily limited to, the following information:
 - (a) operating procedures for routine operation of the *Works*; and
 - (b) inspection programs, including frequency of inspection, for the *Works* and the methods or tests employed to detect when maintenance is necessary.
- (2) The *Owner* shall maintain the operations manual current and retain a copy at the location of the *Works* for the operational life of the *Works*. Upon request, the *Owner* shall make the manual available to *Ministry* staff.
- (3) Upon the *Substantial Completion* of the *Proposed Works*, the *Owner* shall prepare a statement, certified by a Professional Engineer, that the *Works* are constructed in accordance with this *Certificate*, and upon request, shall make the written statement available for inspection by *Ministry* personnel.
- (4) Within one year of the *Substantial Completion* of the *Proposed Works*, a set of as-built drawings showing the *Works* “as constructed” shall be prepared. These drawings shall be kept up to date through revisions undertaken from time to time and a copy shall be retained at the *Works* for the operational life of the *Works*.
- (5) The *Owner* shall provide for the overall operation of the *Works* with an operator who holds a licence that is applicable to that type of facility and that is of the same class as or higher than the class of the facility in accordance with Ontario Regulation 129/04.

8. **REPORTING**

- (1) One week prior to the start up of the operation of the *Proposed Works*, the *Owner* shall notify the *District Manager* (in writing) of the pending start up date.

- (2) The *Owner* shall prepare, and submit upon request, a performance report, on an annual basis, within ninety (90) days following the end of the period being reported upon. The first such report shall cover the first annual period following the commencement of operation of the *Works* and subsequent reports shall be submitted to cover successive annual periods following thereafter. The reports shall contain, but shall not be limited to, the following information:
- (a) a summary and interpretation of all monitoring data and a comparison to the effluent objectives outlined in Condition 6, including an overview of the success and adequacy of the *Works* ;
 - (b) a tabulation of the daily volumes of effluent disposed through the subsurface disposal system during the reporting period;
 - (c) a summary of all maintenance carried out on any major structure, equipment, apparatus, mechanism or thing forming part of the *Works* ; and
 - (d) a description of any operating problems encountered and corrective actions taken.

The reasons for the imposition of these terms and conditions are as follows:

1. Condition 1 is imposed to ensure that the *Works* are built and operated in the manner in which they were described for review and upon which approval was granted. This condition is also included to emphasize the precedence of Conditions in the *Certificate* and the practice that the Approval is based on the most current document, if several conflicting documents are submitted for review. The condition also advises the Owners their responsibility to notify any person they authorized to carry out work pursuant to this *Certificate* the existence of this *Certificate* .
2. Condition 2 is included to ensure that, when the *Works* are constructed, the *Works* will meet the standards that apply at the time of construction to ensure the ongoing protection of the environment.
3. Condition 3 is included to ensure that the *Ministry* records are kept accurate and current with respect to the approved works and to ensure that subsequent owners of the *Works* are made aware of the *Certificate* and continue to operate the *Works* in compliance with it.
4. Condition 4 is included to ensure that the works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Condition 5 is included to enable the *Owner* to evaluate and demonstrate the performance of the *Works* , on a continual basis, so that the *Works* are properly operated and maintained at a level which is consistent with the design objectives specified in the *Certificate* and that the *Works* does not cause any impairment to the receiving watercourse.

6. Condition 6 is imposed to establish non-enforceable effluent quality objectives which the *Owner* is obligated to use best efforts to strive towards on an ongoing basis. These objectives are to be used as a mechanism to trigger corrective action proactively and voluntarily before environmental impairment occurs.
7. Condition 7 is included to require that the *Works* be properly operated, maintained, and equipped such that the environment is protected. As well, the inclusion of an operations manual, maintenance agreement with the manufacturer for the treatment process/technology and a complete set of "as constructed" drawings governing all significant areas of operation, maintenance and repair is prepared, implemented and kept up-to-date by the owner and made available to the *Ministry*. Such a information is an integral part of the operation of the *Works*. Its compilation and use should assist the *Owner* in staff training, in proper plant operation and in identifying and planning for contingencies during possible abnormal conditions. The manual will also act as a benchmark for *Ministry* staff when reviewing the *Owner's* operation of the work.
8. Condition 8 is included to provide a performance record for future references, to ensure that the *Ministry* is made aware of problems as they arise, and to provide a compliance record for all the terms and conditions outlined in this *Certificate*, so that the *Ministry* can work with the *Owner* in resolving any problems in a timely manner.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 4846-5ALNBD issued on June 18, 2002.

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
Environmental Review Tribunal
2300 Yonge St., Suite 1700
P.O. Box 2382
Toronto, Ontario
M4P 1E4

AND

The Director
Section 53, *Ontario Water Resources Act*
Ministry of the Environment
2 St. Clair Avenue West, Floor 12A
Toronto, Ontario
M4V 1L5

*** Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the**

Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 25th day of September, 2006



Zafar Bhatti, P.Eng.

Director

Section 53, *Ontario Water Resources Act*

ZB/

c: District Manager, MOE Barrie
Lysane Bolduc, Seprotech Systems Incorporated



Ontario

Ministry of the Environment
Ministère de l'Environnement

AMENDED CERTIFICATE OF APPROVAL
MUNICIPAL AND PRIVATE SEWAGE WORKS
NUMBER 0611-6Q3JQL
Issue Date: May 25, 2006

The Corporation of the County of Oxford
415 Hunter Street, P.O. Box 397
Woodstock, Ontario
N4S 7Y3

Site Location: Mount Elgin Sewage Treatment System
Lot 12, 13, Concession 4, Dereham
South-West Oxford Township, Restructured County of Oxford

You have applied in accordance with Section 53 of the Ontario Water Resources Act for approval of:

A sewage treatment and subsurface disposal system rated at 381,000 L/d to be constructed in 4 phases to serve existing/proposed residential development in the Village of Mount Elgin as follows:

Septic Tanks & Small Diameter Sanitary Sewers

- installation of a 4,500 L capacity (minimum) septic tank complete with an effluent filter on the outlet pipe, at each residential unit to provide pre-treatment of sewage, discharging to gravity sewers;
- construction of small diameter sanitary sewers (ranging from 75 mm dia. to 125 mm dia. high density PVC pipe) on Easement and Mount Elgin Road.

Effluent Pumping Stations

- two (2) 2.4 m diameter precast concrete wetwells, located approx. 20 m N. of the easement, equipped with two (2) submersible pumps, each pump rated at 2.2 L/s at 8 m TDH, connected to a 50 mm diameter sanitary forcemain discharging to the recirculation chamber.

Sewage Treatment Facilities

A sewage treatment system with a rated capacity of 381,000 L/d, to be constructed in four (4) phases (sewage works constructed each phase capable of handling 95,250 L/d), each phase comprising of the following sewage works:

Recirculation Tank

- a 95,250 L capacity concrete tank complete with three (3) splitter valves, level controls and six (6) submersible pumps rated 2.4 L/s at 13.8 m TDH, connected to a 50 mm forcemain discharging to the recirculating sand filter, complete with a recirculating flow splitter valve to discharge upto 20 % of incoming flow from the sand filters to the pump chamber for subsurface disposal and upto 80 % of

the incoming flow for recirculation back to the sand filters.

Recirculating Sand Filter

- a 503 sq.m. sand filter (approx. 30.5m x 16.5 m) constructed in sixteen (16) zones, with a total of 48 PVC pipes 19 mm dia. having 3 mm dia. orifices and orifice shields spaced at 600 mm c/c located in the top 150 mm stone layer, underlain by a 625 mm layer of imported filter sand laid over pea gravel/stone base and an impervious PVC liner and underdrain collection system discharging to the recirculation tank.

Pump Tank

- a 50,000 L capacity concrete pump tank equipped with four (4) effluent submersible pumps rated at 1.9 L/s at 8.3 m TDH located in a biotube vault assembly complete with an effluent filter on the outlet, discharging via a 50 mm dia. sanitary forcemain to the subsurface disposal system.

Subsurface Disposal System

- a 4,275 sq.m. leaching bed comprising of a pressure tight distribution box and a shallow buried trench system made of four (4) cells with each cell having six (6) zones, with each zone having five (5) 21 m long runs of 25 mm diameter perforated distribution pipe (total length of 2520 m) placed 1.6 m apart and located within 0.45 m wide and 0.6 m deep trenches,

all in accordance with the application for approval and design brief (dated January 2002) prepared by R. J. Burnside & Associates Limited, Environmental Consulting Engineers.

For the purpose of this Certificate of Approval and the terms and conditions specified below, the following definitions apply:

- (1) "certificate" means this entire certificate of approval document, issued in accordance with Section 53 of the *Ontario Water Resources Act* , and includes any schedules;
- (2) "Director" means any Ministry employee appointed by the Minister pursuant to section 5 of the *Ontario Water Resources Act* ;
- (3) "Ministry" means the Ontario Ministry of Environment;
- (4) "Regional Director" means the Regional Director of the Southwestern Region of the Ministry;
- (5) "District Manager" means the District Manager of the London District Office;
- (6) "Owner" means The Corporation of the County of Oxford and includes its assignees;
- (7) "licensed installer" means a person who holds a licence under Article 2.12.3.1 of the Ontario Building Code.

- (8) "Professional Engineer" means a person entitled to practise as a Professional Engineer in the Province of Ontario under a licence issued under the Professional Engineers Act;
- (9) "works" means the sewage works described in the Owner's application, this certificate and in the supporting documentation referred to herein, to the extent approved by this certificate;
- (10) "sewage system" means the entire sewage treatment and subsurface disposal system;
- (11) "grab sample" means an individual sample of at least 1000 millilitres collected in an appropriate container at a randomly selected time over a period of time not exceeding 15 minutes;
- (12) "average daily flow" means the cumulative total sewage flow to the sewage works during a particular calendar month divided by the number of days during which sewage was flowing to the sewage works that month;
- (13) "CBOD5" means five day carbonaceous (nitrification inhibited) biochemical oxygen demand measured in an unfiltered sample;
- (14) "E. Coli" refers to the thermally tolerant forms of Escherichia that can survive at 44.5 degrees Celsius.

You are hereby notified that this approval is issued to you subject to the terms and conditions outlined below:

TERMS AND CONDITIONS

1. CONSTRUCTION

- 1.1 The Owner shall ensure that the construction of the works is supervised by a licensed installer or a Professional Engineer.
- 1.2 Upon construction of the works, the Owner shall prepare a statement, certified by a licensed installer or a Professional Engineer, that the works are constructed in accordance with this Certificate of Approval, and upon request, shall make the written statement available for inspection by Ministry personnel.

2. PERFORMANCE

- 2.1 The Owner shall ensure that the average daily flow of sewage into the sewage system does not exceed 381,000 L/d.

3. MONITORING, RECORDING AND REPORTING

- 3.1 The Owner shall ensure that the following monitoring program is carried out upon commencement of operation of the works:
 - (a) Daily quantities of effluent being disposed of through the subsurface disposal system shall be measured or estimated, and recorded.

(b) Grab samples of raw sewage, effluent ahead of the subsurface disposal system, and groundwater in monitoring wells (minimum of three (3) wells) around the subsurface disposal system shall be collected at locations satisfactory to the District Manager and analysed at least quarterly for the following parameters:

<u>Raw Sewage Parameter</u>	<u>Frequency</u>
CBOD5	quarterly
Suspended Solids	quarterly
Total Phosphorus	quarterly
Total Kjeldahl Nitrogen	quarterly

<u>Effluent to Subsurface Disposal System Parameter</u>	<u>Frequency</u>
CBOD5	quarterly
Suspended Solids	quarterly
Total Phosphorus	quarterly
Total Kjeldahl Nitrogen	quarterly
(Ammonia + Ammonium) Nitrogen	quarterly
Nitrates	quarterly
Nitrites	quarterly
E. Coli	quarterly

<u>Groundwater Parameter</u>	<u>Frequency</u>
Nitrates	quarterly
Nitrites	quarterly
pH	quarterly

NOTE: Prior to the start-up of operation of the works, groundwater samples shall be collected and analysed to determine background concentrations of the above parameters at the locations established for regular monitoring.

(c) The sampling and analyses required by clause (b) above shall be performed in accordance with the Ministry's Procedure F-10-1 (formerly Policy No. 08-06); "Procedure for Sampling and Analysis Requirements for Municipal and Private Sewage Treatment Works (Liquid Waste Streams Only)", Ministry of Environment and Energy, December 31, 1994; or as described in the American Public Health Association's publication "Standard Methods for Examination of Water and Wastewater", 20th Edition, 1998, or a more recently published edition.

- 3.2 The Owner shall retain for a minimum of three years from the date of their creation, all records and information related to or resulting from the monitoring activities required by this certificate.
- 3.3 Following review of any of the analytical results required by Condition 3.1 or any of the reports required by Condition 5.2 of this certificate, the District Manager may alter the frequencies and locations of sampling and parameters for analysis required by Condition 3.1 if he/she considers it necessary for proper assessment of the operation of the sewage system and its impact on the environment or if he/she is requested to do so by the Owner and considers it acceptable by the evidence of information submitted in

support of the request.

4. OPERATION AND MAINTENANCE

4.1 The Owner shall use best effort to operate the sewage treatment facilities with the objective that the concentrations of the materials named below as effluent parameters are not exceeded in the effluent ahead of the subsurface disposal system:

<u>Effluent to Subsurface Disposal System Parameters</u>	<u>Average Annual Concentration</u>
CBOD5	10 mg/L
Suspended Solids	10 mg/L

- 4.2 Based on the operational objectives stipulated above in Condition 4.1, the Owner shall prepare an operation and maintenance manual within six (6) months of introducing sewage to the sewage works and keep it up to date. Upon request, the Owner shall make the manual available for inspection by the Ministry personnel and furnish a copy to the Ministry.
- 4.3 The Owner shall prepare and make available for inspection by Ministry personnel upon request, a complete set of drawings within one (1) year of substantial completion of the sewage works. The drawings shall show the sewage works as constructed at that time.
- 4.4 A complete set of the record drawings, incorporating any amendments made from time to time, shall be kept by the Owner at the site of the sewage works for as long as the sewage works are kept in operation.

5. REPORTING

- 5.1 One week prior to the start up of the operation of the works, the Owner shall notify the District Manager (in writing) of the pending start up date.
- 5.2 The Owner shall prepare, and upon request, submit to the District Manager annual performance reports for the sewage system. The first such report shall cover the period from the commencement of operation of the sewage works to the end of the calendar year and shall be prepared within the following ninety (90) calendar days. Each subsequent annual report shall be prepared within ninety (90) calendar days following the completion of the calendar year being reported upon. The reports shall contain the following information in a format acceptable to the District Manager:
- (a) a tabulation of all monitoring and analytical results obtained during the reporting period, including sampling/monitoring locations and dates;
 - (b) a tabulation of daily volumes of effluent disposed of through the subsurface disposal system during the reporting period;
 - (c) a record of system maintenance undertaken during the reporting period; and
 - (d) an account of any environmental and operating problems encountered at the site and the mitigative measures taken during the reporting period.

The reasons for the imposition of these terms and conditions are as follows:

1. Conditions 1.1 and 1.2 are included to ensure that the works are constructed, and may be operated and maintained such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
2. Condition 2.1 is included to ensure that the flow of sewage to the sewage system is within the approved treatment capacity of the works.
3. Conditions 3.1 through 3.3 relating to monitoring and recording the quality and quantity of raw sewage and treated effluent discharged to the subsurface disposal system, and the quality of the groundwater and surface water of the receivers are required to enable the Owner to evaluate the performance of the works and to ensure that it is operated and maintained at a level which is consistent with the design objectives and other requirements of this certificate.
4. Conditions 4.1 through 4.4 are included to ensure that the works will be operated and maintained in a manner enabling compliance with the terms and conditions of this certificate, such that the environment is protected and deterioration, loss, injury or damage to any person or property is prevented.
5. Conditions 5.1 and 5.2 are included to ensure that all pertinent information is available for the evaluation of the performance of the sewage works.

This Certificate of Approval revokes and replaces Certificate(s) of Approval No. 4672-5EAGKD issued on December 16, 2002

In accordance with Section 100 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, as amended, you may by written notice served upon me and the Environmental Review Tribunal within 15 days after receipt of this Notice, require a hearing by the Tribunal. Section 101 of the Ontario Water Resources Act, R.S.O. 1990, Chapter 0.40, provides that the Notice requiring the hearing shall state:

1. The portions of the approval or each term or condition in the approval in respect of which the hearing is required, and;
2. The grounds on which you intend to rely at the hearing in relation to each portion appealed.

The Notice should also include:

3. The name of the appellant;
4. The address of the appellant;
5. The Certificate of Approval number;
6. The date of the Certificate of Approval;
7. The name of the Director;
8. The municipality within which the works are located;

And the Notice should be signed and dated by the appellant.

This Notice must be served upon:

The Secretary*
 Environmental Review Tribunal
 2300 Yonge St., Suite 1700
 P.O. Box 2382

AND

The Director
 Section 53, Ontario Water Resources Act
 Ministry of the Environment
 2 St. Clair Avenue West, Floor 12A

Toronto, Ontario
M4P 1E4

Toronto, Ontario
M4V 1L5

* **Further information on the Environmental Review Tribunal's requirements for an appeal can be obtained directly from the**

Tribunal at: Tel: (416) 314-4600, Fax: (416) 314-4506 or www.ert.gov.on.ca

The above noted sewage works are approved under Section 53 of the Ontario Water Resources Act.

DATED AT TORONTO this 25th day of May, 2006



Mohamed Dhalla, P.Eng.
Director
Section 53, *Ontario Water Resources Act*

HV/

c: District Manager, MOE London - District
Todd Gregg, The Corporation of the County of Oxford



Appendix 3 – Director’s Instruction Memo, dated August 23, 2011

**Ministry of
the Environment**

Source Protection Programs
Branch

14th Floor
40 St. Clair Ave. West
Toronto ON M4V 1M2

**Ministère de
l'Environnement**

Direction des programmes de protection
des sources

14^e étage
40, avenue St. Clair Ouest
Toronto (Ontario) M4V 1M2



August 23, 2011

To: Source Protection Committee Chairs and Project Managers

Re: Directions for Source Protection Plans – compliance with subsections 34(1) to (4) of Regulation 287/07

As promised in source protection planning guidance material¹ and in the fall 2010 training, I am pleased to provide you with the Director's instructions for complying with section 34 of the regulation – the need to identify the applicable legal provisions of the policies in the source protection plan. Under subsection 34 (5) of Ontario Regulation 287/07 under the Clean Water Act, 2006 the Director can give directions to a source protection committee (SPC) with instructions on how to comply with subsections 34 (1) to (4) of the regulation. This is what Section 34 says:

34. (1) Clause 39 (1) (a), subsections 39 (2) and (4) and sections 40 to 42 of the Act do not apply to a policy set out in a source protection plan unless the plan states that those provisions apply. O. Reg. 246/10, s. 12.

(2) Clause 39 (7) (a), section 43 and subsection 44 (1) of the Act do not apply to a policy set out in a source protection plan unless the plan states that those provisions apply. O. Reg. 246/10, s. 12.

(3) None of the following provisions applies to a policy set out in a source protection plan unless the plan states that the provision applies:

1. Section 38 of the Act.
2. Clause 39 (1) (b) of the Act.
3. Subsection 39 (6) of the Act.
4. Clause 39 (7) (b) of the Act.
5. Section 45 of the Act. O. Reg. 246/10, s. 12.

(4) If a source protection plan states that the provisions identified in subsection (2) or paragraph 4 of subsection (3) apply to a policy set out in the plan, the plan shall identify the types of prescribed instruments to which the policy applies. O. Reg. 246/10, s. 12.

(5) If the Director gives a source protection committee written directions specifying how to comply with subsections (1) to (4), the committee shall comply with the directions. O. Reg. 246/10, s. 12.

(6) Clause 39 (7) (a) and section 43 of the Act do not apply to a person or body that issues, otherwise creates or amends a prescribed instrument if the activity to which a significant threat policy relates is regulated by a risk management plan under section 58 of the Act. O. Reg. 246/10, s. 12.

What these parts of the regulation (Subsection 34 (1) to (4)) mean is that unless the plan says that a specific provision of Part III applies to that policy, Part III of the Clean Water Act doesn't apply. Part III of the Clean Water Act gives source protection plans their legal effect; for

¹ Source Protection Planning Bulletin – Overview of Source Protection Plan Requirements, September 15, 2010

instance, some provisions of Part III require that certain statutory decisions conform to the significant threat policies of a source protection plan.. In other words, a policy in a source protection plan does not have a legal effect under a provision in Part III of the CWA unless the plan expressly says so.

These directions provide instructions to ensure that, where a source protection committee intends for a policy to be given legal effect under one or more of the provisions of Part III of the CWA, the SPC does so in a manner that complies with section 34 of the Regulation. By following these instructions, a source protection plan will properly identify the provisions of Part III of the CWA that apply to a policy.

To ensure SPCs use a consistent method for identifying a policy's legal effect under one or more of the provisions of Part III of the CWA, each SPC is directed to create an appendix at the end of the plan that contains the lists of policies identified below for each legal effect provision of Part III. The purpose of each list is to ensure that the appropriate provisions of Part III of the CWA are applied to a policy, as set out in subsections 34 (1) to (3) of the regulation. The source protection committee is directed to include each of the following lists in the appendix:

- List A Significant threat policies that affect decisions under the Planning Act and Condominium Act, 1998
- List B Moderate and low threat policies that affect decisions under the Planning Act and Condominium Act, 1998
- List C Significant threat policies that affect prescribed instrument decisions
- List D Moderate and low threat policies that affect prescribed instrument decisions
- List E Significant threat policies that impose obligations on municipalities, source protection authorities and local boards
- List F Monitoring policies referred to in subsection 22 (2) of the CWA

The required titles, opening statements and content that must appear in the appendix for each of these lists are specified below.

Additional notes of guidance are provided in this document related to significant threat policies in the plan that rely on the Part IV of the CWA and strategic action policies. These policies may be referenced within the appendix as lists G, H, I and J.

If there are no policies in the source protection plan that falls under one of the lists, then the list should include a note "No Applicable Policies". For instance, if there are no policies related to moderate or low drinking water threats that is given legal effect under clause 39 (1) (b) of the CWA, requiring decisions under the Planning Act and Condominium Act, 1998 to have regard to the moderate or low drinking water threat policy, then for "List B", the source protection committee should include the note "No Applicable Policies".

In addition to the required lists, the plan must include a table in the appendix that identifies the type of prescribed instrument that the policy affects in relation to lists C and D. This may be done in the format of Table 1 set out below. The plan may also include a policy summary matrix to illustrate a concise summary of the policies in the plan, such as the one illustrated in Table 2 below.

I trust these directions will assist committees in meeting the requirements of section 34 of the regulation. For further information, please speak with your committee's liaison officer who will work with the branch's land use planners and other branch staff to assist you.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ian Smith', written in a cursive style. The signature is positioned to the left of the typed name and title.

Ian Smith, Director
Source Protection Programs Branch
Ministry of the Environment

c: Debbie Scanlon, SPPB, MOE
Liaison Officers, SPPB, MOE
Land Use Planners, SPPB, MOE

Directions for preparing each list of policies

List A

- **Title:** Significant threat policies that affect decisions under the Planning Act and Condominium Act, 1998
- **Opening statement:** “Clause 39 (1)(a), subsections 39 (2), (4) and (6), and sections 40 and 42 of the Clean Water Act, 2006 apply to the following policies:”
- **Content:** policies to which these sections apply (e.g. Policy 2.6-1, 2.6-2, 2.6-3, etc.)

Instructions: List A should include policies to which the provisions of Part III of the CWA mentioned in subsection 34 (1) of the Regulation. These provisions give a significant threat policy legal effect through decisions under the Planning Act and Condominium Act, 1998. By including a significant threat policy in this list, decisions under the Planning Act and Condominium Act, 1998 will be required to conform with the listed policy (Clause 39 (1) (a) of the CWA). Official plans and zoning by-laws will be required to be amended and brought into conformity with the listed significant threat policy by the dates specified in the source protection plan (Sections 40 and 42 of the CWA).

A policy in the source protection plan must specify a date both for official plan conformity under section 40 and zoning by-law conformity under section 42. It is recommended that the SPC set the official plan and zoning by-law conformity date to be the same as the dates mandated by section 26 of the Planning Act. Section 26 of the Planning Act requires that official plans be reviewed every five years to ensure conformity with provincial plans and consistency with the Provincial Policy Statement. Section 26 further requires that zoning by-laws be amended within three years of the official plan revision (resulting from the OP review) to ensure they conform with the official plan. Under extenuating circumstances SPCs may decide to depart from these OP and zoning by-law conformity dates and specify an earlier conformity date. However, the SPC should only specify an earlier OP or zoning by-law conformity date if the responsible planning authority consents to the earlier date.

In cases of conflict between a listed significant threat policy and an official plan or zoning by-law, the significant threat policy prevails (subsection 39 (2) of the CWA). Further, by including a significant threat policy in List A, if there is a conflict between this significant threat policy and a policy in another provincial plan (e.g. the Greenbelt Plan), the policy that provides the greatest protection to the drinking water source prevails (subsection 39 (4) of the CWA). Finally, as with the policies in Lists C and E, a municipality or municipal planning authority must not undertake any public work, improvement of a structural nature or other undertaking or pass a by law for any purpose that conflicts with a significant threat policy in List A (subsection 39 (6) of the CWA).

List B

- **Title:** Moderate and low threat policies that affect decisions under the Planning Act and Condominium Act, 1998
- **Opening Statement:** “Subsection 39 (1) (b) of the Clean Water Act, 2006 applies to the following policies:”
- **Content:** policies to which these sections apply (e.g. Policy 2.6-4, 2.6-5, 2.6-6, etc.)

Instructions: List B should include policies to which the provision of Part III of the CWA set out in paragraph 2 of subsection 34 (3) of the regulation applies. This gives a moderate or low drinking water threat policy legal effect through decisions under the Planning Act and Condominium Act, 1998. By including a moderate or low threat policy in this list, decisions under the Planning Act and Condominium Act, 1998 will be required to have regard to the policy (clause 39 (1) (b) of the CWA).

List C

- **Title**: Significant threat policies that affect prescribed instrument decisions
- **Opening Statement**: “Subsection 39 (6), clause 39 (7) (a), section 43 and subsection 44 (1) of the Clean Water Act, 2006 apply to the following policies:”
- **Content**: policies to which these sections apply (e.g. Policy 2.6-7, 2.6-8, 2.6-9, etc.)²

Instructions: List C should include policies to which the provisions of Part III of the CWA set out in subsection 34 (2) of the regulation apply. These give a significant threat policy legal effect through “prescribed instrument” decisions. The list of prescribed instruments is set out in section 1.01 of the regulation. By including a significant threat policy in this list, a decision to issue, otherwise create or amend a prescribed instrument must conform to the listed policy (clause 39 (7) (a) of the CWA). A person or body that has issued or otherwise created a prescribed instrument before the source protection plan took effect will be required to amend the instrument to conform with the listed significant threat policies before the date specified in the source protection plan (section 43 of the CWA). The date included for conformity should be done by agreement with the responsible ministry that administers the prescribed instrument decisions. If the plan does not set a date by which this must take place, section 43 does not apply, and the plan would be considered incomplete. The Minister’s powers under section 44(1) of the CWA in relation to non-conformity (that is, to request the person or body that has the authority to amend the instruction to take such steps as authorized by law to amend the instrument) can not be used unless the policy is listed here. Finally, as with the policies in List A and E, a municipality or municipal planning authority must not undertake any public work, improvement of a structural nature or other undertaking or pass a by law for any purpose that conflicts with a significant threat policy in List C (subsection 39 (6) of the CWA).

List D

- **Title**: Moderate and low threat policies that affect prescribed instrument decisions
- **Opening Statement**: “Clause 39 (7) (b) of the Clean Water Act, 2006 applies to the following policies:”
- **Content**: policies to which these sections apply (e.g. Policy 3.6-7, 3.6-8, 3.6-9, etc.)²

Instructions: List D should include policies that are to be subject to the provision of Part III of the CWA set out in paragraph 4 of subsection 34 (3) of the regulation – a provision that gives a moderate or low threat policy legal effect through “prescribed instrument” decisions. The list of prescribed instruments is set out in section 1.01 of the regulation. By including a moderate or low threat policy in List D, a decision to issue, otherwise create or amend a prescribed instrument must have regard to the listed policy (clause 39 (7) (b) of the CWA).

² For every policy listed in Lists C and D, the source protection committee must ensure that a table is included in the appendix that identifies the type of prescribed instrument that the policy affects. This may be done in the format of Table 1 set out below.

List E

- **Title:** Significant threat policies that impose obligations on municipalities, source protection authorities and local boards³
- **Opening Statement:** “Section 38 and subsection 39 (6) of the Clean Water Act, 2006 applies to the following policies:”
- **Content:** policies to which these sections apply (e.g. Policy 4.6-7, 4.6-8, 4.6-9, etc.)

Instructions: List E should include policies to which the provision of Part III of the CWA set out in paragraph 1 of subsection 34 (3) of the regulation applies. This provision requires a municipality, a source protection authority or a local board to comply with any obligation that is imposed on it by significant threat policy (section 38 of the CWA). If the policy relates to education, outreach and incentive programs, stewardship programs, the promotion of best management practices, pilot programs, research, and other specified actions to be taken to implement the source protection plan or achieve the plan’s objectives, section 30 of the regulation requires that the policy designate (identify) the person or body responsible for implementing the policy. In many cases, the designated body may be a municipality, a source protection authority or a local board. For instance, a significant threat policy may designate a source protection authority or a local board as being responsible for implementing an education and outreach program. Alternatively, another significant threat policy may direct a municipality to pass a by-law under the Municipal Act, 2001 by a specified date to regulate an activity in an area where the activity has been identified as a significant drinking water threat in the assessment report. By including a significant threat policy in List E, the person or body identified for implementing the policy will be required to comply with the obligations specified in the policy. Finally, as with the policies in Lists A and C, a municipality or municipal planning authority must not undertake any public work, improvement of a structural nature or other undertaking or pass a by law for any purpose that conflicts with a significant threat policy in List E (subsection 39 (6) of the CWA).

List F

- **Title:** Monitoring policies referred to in subsection 22 (2) of the Clean Water Act, 2006
- **Opening Statement:** “Section 45 of the Clean Water Act, 2006 applies to the following policies:”
- **Content:** policies to which these sections apply (e.g. Policy 5.6-7, 5.6-8, 5.6-9, etc.)

Instructions: List F should include policies to which the provision of Part III of the CWA set out in paragraph 5 of subsection 34 (3) of the regulation applies. This provision requires a public body that is responsible for the implementation of a policy governing monitoring, to conduct a monitoring program in accordance with the policy (section 45 of the CWA). Subsection 22 (2) of the CWA requires a source protection plan to contain policies governing monitoring for every significant drinking water threat, and for every other type of drinking water threat or drinking water issue, if advisable. Subsection 22 (5) requires that such monitoring policies designate a “public body⁴” as being responsible for implementing the policy. Every monitoring policy that is

³ Under the CWA, “Local board” has the same meaning as in the Municipal Affairs Act. Local board means a school board, municipal service board, transportation commission, public library board, board of health, police services board, planning board, or any other board, commission, committee, body or local authority established or exercising any power or authority under any general or special Act with respect to any of the affairs or purposes, including school purposes, of a municipality or of two or more municipalities or parts thereof.

⁴ Under the CWA, “public body” means, (a) a municipality, local board or conservation authority, (b) a ministry, board, commission, agency or official of the Government of Ontario, or (c) a body prescribed by the regulations or an official of a body prescribed by the regulations.

included in the source protection plan in accordance with paragraphs 4, 5 and 7 of subsection 22 (2) of the CWA must be included in List F. By including monitoring policies in List F, the public body that is designated in the monitoring policy will be required to implement a monitoring program in accordance with the policy.

A Note About Part IV Policies – Lists G, H, I

Part IV of the Clean Water Act introduces new authorities to regulate an activity in areas of a wellhead protection area or an intake protection zone where the activity is a significant drinking water threat, as identified in the assessment report. There are two main powers that Part IV introduces to regulate such activities (1) section 57 authorizes a source protection plan to prohibit an activity, including phasing out an existing activity by a date specified in the plan, and (2) section 58 authorizes a source protection plan to require that an activity be engaged in accordance with a risk management plan. Finally, section 59 authorizes a source protection plan to prohibit development approvals from being issued where sections 57 or 58 are in effect for an activity, unless a notice is obtained under that section. The section 59 notice is intended to serve as a sort of “red flag” - its purpose is to ensure that the development proposal is in compliance with section 57 or 58, before an approval for the proposal is issued.

Part IV of the CWA is administered by the municipality that has the authority to pass by-laws respecting water production, treatment and storage. Part IV authorizes a municipality to delegate its enforcement authority to other specified public bodies by agreement. The body that is responsible for the enforcement of Part IV must then appoint one or more risk management officials and risk management inspectors to administer this Part. There are certain restrictions on what activities a SPC may designate for the purpose of section 57 or 58. To trigger the application of sections 57, 58 or 59, subsection 22 (3) of the CWA sets out certain requirements that a source protection plan must satisfy. For a more detailed description of how these Part IV tools may be used in a source protection plan, please see subsection 22(3) of the CWA and the following MOE documents which are available on Conservation Ontario's members only website:

- Source Protection Planning Bulletin: Section 57 Prohibition
- Source Protection Planning Bulletin: Section 58 Risk Management Plans
- Administering & Enforcement of Part IV under the Clean Water Act

In order to readily communicate and summarize for readers, including implementing bodies, which policies in the plan rely on each of the Part IV tools, the Ministry is recommending that the committees create the following lists of policies.

List G

- **Title: Policies related to section 57 of the Clean Water Act, 2006**
- **Opening Statement: “The following policies relate to section 57 (prohibition) of the Clean Water Act .”**
- **Content: policies to which this section apply (e.g. Policy 5.6-7, 5.6-8, 5.6-9, etc.)**

Instructions: List G should list the policy reference numbers of the policies in the plan that relate to prohibiting drinking water threat activities under section 57 of the CWA. The reader would refer to the actual policy text for information pertaining to the designated prohibited activity(ies), their respective designated areas, and other details related to the section 57 prohibition – for instance the date by which existing activities must be phased out in accordance with subsection 57 (2) of the CWA.

List H

- **Title:** Policies related to section 58 of the Clean Water Act, 2006
- **Opening Statement:** “The following policies relate to section 58 (risk management plans) of the Clean Water Act.”
- **Content:** policies to which this section apply (e.g. Policy 6.6-4, 6.6-5, 6.6-6, etc.)

Instructions: List H should list the policy reference numbers of the policies in the plan that that relate to the regulation of drinking water threat activities under section 58 of the CWA. The reader would refer to the actual policy text for information pertaining to the designated regulated activity(ies), their respective designated areas, and any other details related to the regulation of the activity under section 58 – for instance – the policies governing the content of risk management plans.

List I

- **Title:** Policies related to section 59 of the Clean Water Act, 2006
- **Opening Statement:** “The following policies relate to section 59 (restricted land use) of the Clean Water Act.”
- **Content:** policies to which this section apply (e.g. Policy 6.6-7, 6.6-8, 6.6-9, etc.)

Instructions: List I should list the policy reference numbers of the policies in the plan that rely on section 59 of the CWA, the purpose of which it to ensure that a development proposal complies with section 57 or 58 before it is given approvals. The reader would refer to the actual policy text for details related to each policy, including the designated land uses and their respective designated areas,.

A Note About Strategic Action Policies – List J:

The regulation requires that certain policies can only be identified as “strategic action” policies. Section 33 of the regulation says:

33. Any policy set out in a source protection plan that is not one of the following policies shall be identified in the plan as a strategic action policy:

1. A significant threat policy.
2. A designated Great Lakes policy.
3. A policy to which section 45 of the Act applies.
4. A policy to which clause 39 (1) (b) of the Act applies.
5. A policy to which clause 39 (7) (b) of the Act applies. O. Reg. 246/10, s. 12.

Strategic action policies do not have a legal effect, rather they represent good faith commitments by persons or bodies to carry out certain actions. For example, a policy may designate a public body to carry out an education and outreach program for a moderate or low drinking water threat.

Section 33 of the act helps to distinguish between the policies that have a legal effect under the Clean Water Act, and those that do not. So what policies are to be identified as “strategic action” policies? Section 33 lists the policies that are not “strategic action” policies, which means that the remaining policies in the plan must be identified as “strategic action” policies.

If a policy does not fit in one of the 5 categories listed in section 33 of the regulation, then the source protection plan must identify the policy as a “strategic action” policy. There are a number of ways in which a policy can be identified as a “strategic action policy” in a source protection plan. The plan could add a list of strategic action policies to the Appendix described above. An example of the title, opening statement and content may look like this:

List J

- **Title: Strategic Action policies**
- **Opening Statement: For the purposes of section 33 of Ontario Regulation 287/07, the following policies are identified as strategic action policies:**
- **Content:** policies to which this section apply (e.g. Policy 6.6-1, 6.6-2, 6.6-3, etc.)

If the plan has named policies using numbers or codes, it could include the letters “SA” in the policy name (eg. “4.13SA”) and include a statement at the beginning of the plan to explain that every policy with the letters “SA” in the policy name is a “strategic action” policy. In addition the plan may identify them in a policy matrix that is illustrated below.

Table 1: Prescribed instruments which apply to source protection plan policies in Lists C and D above (ss 34(4) of O.Reg. 287/07)

Policy #	Legal Effect (conform with, have regard to)	Aggregate Resources Act - licenses, wayside permits, aggregate permits, and site plans	Environmental Protection Act – waste sites and systems	Environmental Protection Act – renewable energy approvals	Nutrient Management Act – nutrient management strategies	Nutrient Management Act – nutrient management plans	Nutrient Management Act – NASM plans	Ontario Water Resources Act – permits to take water	Ontario Water Resources Act – sewage works	Pesticides Act - permits	Safe Drinking Water Act – permits, licences
1.2	Conform with		X								
2.2	Have regard to	X							X		X
etc											

Table 2: Policy Summary Matrix

This is an example of a policy summary matrix that may accompany the lists included in the appendix of a plan.

Policy ID #	Legal Effect (conform with, have regard to, non binding)	Policy affects decisions under the Planning Act and Condominium Act, 1998 (Lists A and B)	Policy affects Prescribed Instrument decisions (Lists C and D)	Significant threat policies that impose obligations on municipalities, source protection authorities and local boards (List E)	Monitoring policies referred to in ss 22(2) of the CWA (List F)	Part IV Policies - Significant threat policies that are designated in the plan as requiring a risk management plan, are prohibited under s. 57, or to which s. 59 of the CWA applies (Lists G, H, and I)	Strategic Action Policies (List J)	Significant threat policies which designate a body <u>other than</u> a municipality, source protection authority or local board as responsibly for implementing the policy (<i>not listed in Appendix lists</i>)
1.1	Conform with	X						
1.2	Conform with		X					
1.3	Conform with			X				
1.4	Conform with					X		
2.1	Have regard to	X						
2.2	Have regard to		X					
3.1	Conform with							
3.2	Conform with					X		
4.1	Conform with				X			
4.2	Conform with				X			
4.3	Non binding							X
4.4	Non binding						X	