

Explanatory Document for the Approved Mississippi-Rideau Source Protection Plan

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Revised XXXX

Mississippi-Rideau Source Protection Committee



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1.0 INTRODUCTION

This Explanatory Document was prepared by the Mississippi-Rideau Source Protection Committee in accordance with the requirements of the *Clean Water Act*, General Regulation 287/07. The Explanatory Document provides the rationale for the policies included in the Source Protection Plan for the Mississippi-Rideau region. It explains in detail the factors that influenced policy decisions and is an important part of the participatory, open and transparent decision making process to which the Source Protection Committee is committed. This information is provided for people and bodies directly affected by the policies, the general public, other interested parties, the Source Protection Authority and the Minister of the Environment.

The Explanatory Document is meant to be a living document that will be periodically updated as policies are reviewed and revised. Together, the Assessment Report, the Source Protection Plan and the Explanatory Document provide the roadmap for protecting municipal drinking water sources in the Mississippi-Rideau region.

This Explanatory Document adheres to the requirements of Ontario Regulation 287/07 that sets out six items that must be included in the Explanatory Document. This mandatory content is listed below together with a reference to where each item can be found in this document.

Mandatory Content of the Explanatory Document	Can be found in
Reasons for prohibiting an existing activity	Section 3.1
How climate change considerations impacted policies	Section 3.4
3. Reasons for each policy	Section 4 (under a subheading within each policy topic)
Statement that a non-regulatory measure is sufficient to address a significant threat	Sections 4.1, 4.3, 4.6, 4.7, 4.8 and 4.9
How financial implications affected policy decisions	Section 4 (under a subheading within each policy topic)
6. Summary of comments received	Appendices A, B and C

1.1 HOW TO USE THIS DOCUMENT

This Explanatory Document is a companion to, and should be read in conjunction with, the Mississippi-Rideau Source Protection Plan.

This Explanatory Document contains:

- A brief explanation of the development of the Source Protection Plan (Section 2)
- A summary of the general rationale for the policies (Section 3)
- A complete explanation of the policies by topic (Section 4) that consists of:
 - A "Policy Brief" which is a table that gives a snapshot of the policies intended to collectively address each topic
 - An explanation of policy decisions for each policy
 - o <u>Financial considerations</u> for the topic
 - <u>Comments received regarding the topic</u> (a complete listing can be found in Appendices A, B and C)
 - A statement about the Committee's <u>confidence in non-regulatory measures</u> where only non-mandatory policies have been used to address a significant threat

The Source Protection Plan contains additional information that will assist with understanding this Explanatory Document:

- An explanation of the source water protection program (Sections 1 and 2)
- Information about policy tools and their legal effect (Section 2.4)
- Background information on each policy topic (Sections 3, 4 and 5)
- The policy wording and details for all the policies cited in this Explanatory Document (Sections 3, 4 and 5)
- An explanation of key concepts such as "significant threat" and definitions such as "existing" and "future" (Section 3)
- A glossary of terms
- Schedules (maps) illustrating the areas where policies apply

List of Acronyms

ASM Agricultural Source Material

DNAPL Dense Non-aqueous Phase Liquid

HVA Highly Vulnerable Aquifer

MMAH Ministry of Municipal Affairs and Housing

MNR Ministry of Natural Resources MOE Ministry of the Environment

MCS Ministry of Consumer Services (oversees the Technical Standards and Safety Authority)

MTO Ministry of Transportation

MNDM Ministry of Northern Development and Mines

MVC Mississippi Valley Conservation NASM Non-agricultural Source Material

OMAFRA Ontario Ministry of Agriculture, Food and Rural Affairs

PCB Polychlorinated Biphenyls

TSSA Technical Standards and Safety Authority

RMO Risk Management Official IPZ Intake Protection Zone WHPA Wellhead Protection Area

2.0 DEVELOPMENT OF THE SOURCE PROTECTION PLAN

2.1 THE SOURCE PROTECTION COMMITTEE

The development of the Source Protection Plan for the Mississippi-Rideau region is the responsibility of the Mississippi-Rideau Source Protection Committee (herein referred to as the Committee). The Committee is made up of members that represent municipalities, agriculture, industry, small business, First Nations, environmental interests and the general public.

2.2 GUIDING PRINCIPLES

The Committee developed and adhered to the following guiding principles during the development of the Source Protection Plan:

- Effectiveness
- Practicality
- Cost Effectiveness
- Acceptance

To put these guiding principles into practice, a list of questions was developed to serve as a qualitative evaluation framework to be used as needed during policy development, evaluation and deliberations around the Committee table.

QUALITATIVE EVALUATION FRAMEWORK

Purpose:

The Mississippi-Rideau Source Protection Committee's Evaluation Framework is intended to foster a discussion that bears in mind the many different implications of any policy option. It is unlikely that any policy will generate "yes" answers to all of the questions, just as no policy is likely to be "all things to all people". The goal is to balance the various implications and find the most favourable option.

Guiding Principles:

Effectiveness

- 1. Will this policy address the existing threat so that it ceases to be significant?
- 2. Will it adequately address or eliminate future threats?
- 3. Will it effectively protect source water?
- 4. Is it a proven, science based approach?
- 5. Will there be evident or measurable results?
- 6. Does it take into consideration the potential impacts of climate change?

Practicality

- 7. Is the scale of this policy suitable for the scale of the threat?
- 8. Does it make use of existing knowledge (e.g., best practices)?
- 9. Does it make use of existing resources (e.g., agencies that already regulate the activity)?

- 10. Does it avoid regulatory duplication and overlap?
- 11. Can it be implemented easily?
- 12. Will it be relatively easy to enforce and monitor?

Cost Effectiveness

- 13. Is this policy economically feasible?
- 14. Can it be implemented with existing resources?
- 15. Will no ongoing investment be required?
- 16. Can it be implemented without financial assistance?
- 17. Does it share costs equitably (i.e., share economic responsibility)?

<u>Acceptance</u>

- 18. Will this policy have community buy-in?
- 19. Will it be accepted by affected persons or bodies?
- 20. Was this decision reached through an open, participatory and transparent process?
- 21. Does it adequately consider social costs?
- 22. Does it have social benefits such as an education component?
- 23. Will it be easily understood?

2.3 POLICY DEVELOPMENT PROCESS AND PARTICIPANTS

The development of initial policy ideas for the consideration of the Committee took place in late 2010 to mid 2011 and involved:

- A municipal staff working group that participated in five all day sessions to discuss policy options and develop preferred approaches
- Sector experts, including an agricultural working group, who reviewed and refined the preferred approaches
- Adjacent Source Protection Committees with whom policies were shared in order to work towards consistent policy approaches where possible
- Guidance from the Ministry of the Environment (MOE) Source Protection Programs Branch

Feedback on draft policies was sought during the latter part of 2011 through:

- A pre-consultation mail-out to all bodies named as implementers of draft policies
- Two all day meetings held for municipal staff and members of council
- Other communications with municipalities (presentations to municipal councils, meetings with staff)
- A mail-out to industry associations who represent sectors that could be affected by policies
- Letters to potentially affected property owners
- Four public open houses

A summary of the comments received is provided in Appendix A. These comments were used by the Committee to revise the draft policies. The draft policies were compiled into a draft Source Protection Plan.

2.4 CONSULTATION ON THE SOURCE PROTECTION PLAN

The draft Source Protection Plan was posted in March 2012 for a 35 day public comment period. Newspaper ads appeared publicizing the comment period, letters were mailed to all policy implementers and potentially affected property owners and three public open houses were held. A summary of the comments received on the draft Source Protection Plan is provided in Appendix B. All comments received were considered by the Committee and revisions were made to create the proposed Source Protection Plan.

The proposed Source Protection Plan was posted in June 2012 for a final 30 day public comment period. At the end of this period, the proposed Source Protection Plan and the comments received (see Appendix C) were submitted to the MOE. MOE review comments and how they were addressed are provided in Appendix D.

3.1 GENERAL RATIONALE

The Committee, in adhering to its guiding principles and through much policy discussion among the different interests represented around the table, found that certain general rationale began to emerge. This general rationale resulted in consistency in addressing similar types of threat activities and involved:

- Policy direction (prohibit, manage, encourage)
- The selection of policy tools
- The amount of detail included in the policies
- How climate change was considered
- How water quantity was considered

3.1 POLICY DIRECTION

Policies that Prohibit

No existing activities are prohibited by Source Protection policies as there are no instances where the Committee is of the opinion that prohibition is required to ensure that the existing activity ceases to be a significant threat. Policies do, however, prohibit the establishment of some future activities.

As the Committee worked their way through the drinking water threat topics, it became apparent that there was a comfort level with including policies that would have the effect of prohibiting the establishment of certain hazardous activities in the future. Firstly, prohibiting activities is 100 percent effective at protecting drinking water sources as it guarantees the threat never exists. Secondly, for many types of activities there are virtually no adverse financial or practical impacts of having to establish them outside of vulnerable drinking water areas where they would be considered a significant threat. In fact, these areas are often not attractive or feasible locations for such activities because of lack of usable space, incompatible existing land uses, prohibitive zoning, and the inherent risk and liability associated with being located close to a source of municipal drinking water. For these reasons, the Committee felt that this general policy direction would be widely accepted and would be appropriate for <u>future</u>:

- Waste disposal sites
- Large sewage works
- Snow dumps
- Road salt storages
- DNAPL and organic solvent storage and handling
- Fuel-based businesses such as gas stations
- Commercial fertilizer handling and storage for retailing
- Pesticide handling and storage for manufacturing, processing, wholesaling or retailing

Policies that Manage Risks

The general policy direction for existing activities is to manage these by ensuring that suitable risk management measures are implemented. This choice was made because there are many best management practices or technical advancements that can be used to reduce the risks to drinking water resulting from these activities. In addition, financial assistance available to undertake risk management measures helps to lessen the burden on affected people and businesses. The alternative of prohibiting these activities could have profound adverse social or financial impacts such as resulting in the closure of businesses. The other alternative of simply

encouraging the implementation of risk management measures does not provide the necessary assurance that action will be taken. For these reasons, the Committee felt policies that manage risks would be widely accepted and appropriate for existing:

- Waste disposal sites
- Large sewage works
- Snow dumps
- Road salt storages
- DNAPL and organic solvent storage and handling
- Fuel-based businesses such as gas stations
- Commercial fertilizer handling and storage for retailing
- Pesticide handling and storage for manufacturing, processing, wholesaling or retailing

It should be noted that there is relative certainty that none of these activities except for DNAPL and organic solvent use currently occur in the vulnerable areas where they are a significant threat. However, policies have been included in the Plan in the event that any of these activities were overlooked during the Assessment Report phase or have been established since that work was completed.

Managing risks of both future and existing occurrences was the policy direction of choice for certain other activities. These are smaller, less hazardous activities (such as the storage of fuel to heat a home) activities that have a long history of effective best management practices (such as agriculture related activities) and activities that are an ancillary but imperative part of an operation (such as storing fuel at a fire hall). The Committee felt that prohibiting these types of activities (existing or future) would be unnecessarily restrictive. There are many good options for reducing the risks (e.g., upgrading fuel tanks) and financial assistance such as the Ontario Drinking Water Stewardship Program to implement many of these measures. In addition, there are mechanisms such as Road Salt Management Plans and Risk Management Plans available to decide on, document and track risk management measures. For these reasons, the Committee felt that this general policy direction would be widely accepted and would be appropriate for existing and future:

- Snow piles (snow stored in piles at the edge of the property it came from)
- Road salt application
- Fuel stored for home heating, back-up generators or as an ancillary part of a business
- Commercial fertilizer handling and storage by end users
- Commercial fertilizer application
- Outdoor livestock areas
- Agricultural source material (ASM) (e.g., manure) storage and application
- Non-agricultural source material (NASM) (e.g., biosolids) handling, storage and application

Policies that Encourage

The Source Protection Plan contains two types of policies that encourage:

- Policies that encourage regulatory agencies to fill regulatory gaps or strengthen efforts to ensure compliance with existing regulations
- Policies that encourage people to take voluntary action to better protect drinking water

There are instances where appropriate regulatory requirements are in place but a gap exists where an activity is not regulated but still constitutes a significant drinking water threat. An example of this is the Grower Pesticide Safety Course which is not required for the use of some types of pesticide that are listed as significant threats. There are also instances where

regulatory requirements would adequately address the activity but more effort may be required to ensure that there is compliance with these regulatory requirements. An example of this type of policy is encouraging the MOE to consider source water protection information when determining inspection priorities related to pesticide use.

The Committee regarded encouraging people to take voluntary action to better protect drinking water as an important component of policies to address almost all of the drinking water threats. It became apparent during policy development that the most efficient way to accomplish this would be to create three comprehensive programs:

- "Living and Working in the Drinking Water Zone" for residents and businesses in the most vulnerable areas closest to the wells and intakes
- "Travelling Through the Drinking Water Zone" for businesses that transport hazardous materials through the most vulnerable areas closest to the wells and intakes (and the posting of signs to mark these areas)
- "Protecting Regional Groundwater" for all residents of the region to promote awareness and action to protect drinking water throughout the Highly Vulnerable Aguifers (HVA).

3.2 POLICY TOOLS

There are several prevailing approaches regarding the choice of policy tools to achieve desired outcomes. These are described below.

Prescribed Instruments

Managing activities through existing regulatory means (Prescribed Instruments) are used wherever possible. This prevents regulatory duplication and allows the experts and processes that already regulate the activity to continue to do so. People and bodies affected by policies expressed a preference for dealing with familiar regulatory processes. Similarly, prohibiting by using Prescribed Instruments (meaning agencies would not issue new instruments) is used wherever possible.

Part IV Policy Tools

Prohibiting an activity under Section 57 of the *Clean Water Act* is used wherever there is no Prescribed Instrument. This is preferred over prohibiting through planning tools (e.g., zoning bylaws) due to the fact that many threat activities are not "land uses" and therefore, cannot be easily regulated through planning.

Risk Management Plans under Section 58 of the *Clean Water Act* are used only where necessary to fill regulatory gaps where there are no local, site-specific checks and balances in place to provide the necessary assurance that risks are being managed.

Restricted Land Use under Section 59 is not a stand alone policy tool. Rather, it is intended to be a companion tool to assist with administration of Section 57 Prohibition and Section 58 Risk Management Plan policies. Section 59 policies have been included to require municipalities to set up an administrative procedure (screening process) to avoid inadvertently approving planning applications or building permits for activities that could be subject to Section 57 or 58 policies in the Source Protection Plan. See Section 4.15 for a complete rationale related to the selection of this policy tool.

Land Use Planning

Land use planning tools are used to prohibit the future establishment of waste disposal sites and certain types of sewage works. The policy wording indicates that "decisions under the *Planning Act* must conform" with the prohibition. This means that municipalities must amend zoning by-laws so that these land uses are no longer permitted uses in the areas where they would be significant threats to drinking water. As municipal planning approvals are often the first step in establishing these land uses, having in place prohibitive zoning will help inform project proponents and landowners at the beginning of the development process that waste disposal sites and certain types of sewage works are prohibited by source protection plan policies. This approach was not used for other threat activities because all other activities that are prohibited in the future will be caught through the screening process that will be set up at the municipalities to administer the Section 57 Prohibition policies (see Part IV Policy Tools, above).

Land use planning tools such as site plan control, interim control by-laws and holding zones were investigated as the means through which certain policy intent could be achieved. These tools were not chosen because of concerns such as costs to affected people as well as administrative burden and practical problems for municipalities.

Education

Education and outreach policies are used mainly as complementary policies to address "household" level threat activities, moderate threats and to promote good stewardship practices in general. Existing funding programs will also be promoted through the education programs. See Section 4.16 for a complete explanation of the education and outreach policies.

Other Action to Protect Source Water

The Clean Water Act allows for policies that specify action be taken to implement the Source Protection Plan or to achieve the Plan's objectives. This is a flexible policy tool that was widely used by the Committee. It enables policies to be written to either direct action (legally binding) or make recommendations (not legally binding) where they saw a need to:

- Fill a regulatory gap
- Increase efforts to ensure compliance with existing requirements
- Ensure drinking water protection is considered during review of applications for regulatory approvals

These policies are referred to as "other action" in the Policy Brief tables. They can only be legally binding where the policy addresses a significant drinking water threat and the implementer is a municipality, local board or the Source Protection Authority.

3.3 POLICY DETAILS

The amount of detail included in the policies reflects factors that came to light during research and consultation conducted during policy development. These factors are summarized below.

Policies with Few Details

Where policies use Prescribed Instruments to manage an activity, the policy wording generally does not include details. In most cases, the policy simply directs the regulating agency to take measures to ensure the activity ceases to be or does not become a significant drinking water threat. This is to allow the staff at these agencies to use their expertise and judgment about whether or not additional risk management measures are needed and if so, what those

measures should entail. This will be determined at the local level and if necessary on a site-specific basis by provincial ministry staff.

Some Risk Management Plan policies contain no details. This is because of the nature of the activities. An example is the storage and handling of DNAPLs and organic solvents. These activities can be undertaken by many different types of businesses in many different ways so it is difficult and impractical to attempt to prescribe the content of the Risk Management Plans in the policy wording. The details will be determined by the Risk Management Official and the business owner together. Due to the specialized nature of these types of businesses, the business owners will likely be the most knowledgeable and play a large role in determining appropriate content of their Risk Management Plan. There will be opportunities for the Risk Management Official to obtain assistance and input from a third party expert if necessary.

Policies with Details

Some Risk Management Plan policies have been written with specific prescribed details. When Risk Management Plan policies contain details about specific required content of the plans, it is because the activity is fairly standardized and a specific area of concern is being targeted. An example is heating oil installations. These are very similar from property to property. The specific area of concern is outdated tanks and poorly maintained systems. Therefore, the policy stipulates that the measures in the Risk Management Plan must include upgrading tanks of a certain type and age as well as conducting annual inspections and maintenance of the system by a qualified person.

The education and outreach program policies are written with specific details to help the implementers of the programs (municipalities and Source Protection Authorities) clearly understand the Committee's expectations. The description includes the date when the program must be in place, the objectives, the mandatory content and some suggestions of forms the program may take (e.g., mail-out, participation in community events).

The Committee felt it was appropriate to include details such as reference to certain industry standards, guidelines or codes of practice in some policy wording (e.g., the commercial fertilizer policy that refers to the Canadian Fertilizer Institute codes and standards). In addition, a recommendation for Prescribed Instrument content was included in some cases (e.g., the sanitary sewer policy that recommends watermain quality pipe and pressure testing for future sewers and related pipes).

3.4 CLIMATE CHANGE CONSIDERATIONS

As stated in the Assessment Report, climate change projections show that the region will likely experience the following:

- A rise in temperatures in both warm and cold seasons
- Minimum temperatures increasing at a faster rate than maximum temperatures
- Changes in monthly precipitation patterns and amounts
- Increase in evapotranspiration rates
- Increase in weather variability with higher frequency of weather extremes and events

These changes may result in:

 Changes in the delineation of the Intake Protection Zones and Wellhead Protection Areas

- Increased importance of transport pathways
- Water quantity and water quality stresses on some subwatersheds

The Committee considered three approaches to address climate change in the Source Protection Plan:

- Not addressed state in Explanatory Document that climate change was not considered.
- 2. Precautionary approach err on the side of caution when making decisions about policies given the potential impacts of climate change.
- 3. Proactive approach describe how the policies try to address the added stress climate change could create and state that the policy, as written, helps to proactively address projected climate change impacts on drinking water sources.

At their January 2010 meeting, the Committee elected to consider climate change during policy development using approach #2: the precautionary approach. Draft policy ideas deliberated by the Committee were developed with climate change considerations in mind (e.g., changing weather trends were discussed with road salt experts). In addition, part of the impetus to include some optional content in the Source Protection Plan, such as certain moderate and low threat policies and transport pathways policies, was to protect water in a changing world.

The Committee chose not to exercise the option of including policies governing climate change data collection. No climate change data collection policies were included in the Source Protection Plan because the Conservation Authorities and a number of other agencies already collect regional climate related data on an ongoing basis (e.g., stream flow, snow depth and water content, rainfall, air and water temperature).

3.5 WATER QUANTITY CONSIDERATIONS

Water budget studies were undertaken as part of the Assessment Report phase. A water budget examines the components of the water cycle such as precipitation, evaporation and surface water and groundwater flows and compares it to water needs and takings. A water budget study was done for each subwatershed in the region looking at water availability and use on a monthly basis. The water quantity in subwatersheds supplying municipal drinking water systems was not found to be "moderately" or "highly" stressed. This means policies to address water quantity are not a required part of the Source Protection Plan and mandatory policies cannot be written. Water conservation will, however, form part of the education programs as the Committee felt strongly that they would be remiss if they did not establish initiatives that promote water conservation as the region can be vulnerable to seasonal shortages.

As noted in Section 2.1 of the Source Protection Plan under 'Threats Affecting Water Quantity', the water budget study did identify some localized water quantity concerns. Specifically, the water budget study identified three subwatersheds located in the Mississippi Valley watershed as 'moderately' stressed for surface water. These subwatersheds do not have any municipal drinking water systems. They are the Carp River near Kinburn, the Fall River at Bennett Lake and Ottawa MVC (an area that drains directly to the Ottawa River). The water budget study also identified one subwatershed located in the Rideau Valley watershed as 'moderately' stressed for groundwater. This is the Rideau River at Ottawa which also does not have any municipal drinking water systems. In each case, the stresses were seasonal and associated with existing permits to take water. This information will be used by agencies when reviewing applications for activities that could impact water quantity.

4.1 POLICY SPECIFIC RATIONALE

In this section, the rationale specific to each policy is explained. Each policy topic includes an explanation of:

- Policy decisions
- How financial implications were considered
- How comments received affected the policies
- Confidence in non-regulatory policies, where applicable

The policy topics address the drinking water threats prescribed in Ontario Regulation 287/07 as well as other Source Protection Plan content permissible under the *Clean Water Act*. These are:

Drinking Water Threats and other Permissible Policy Topics	Can be found in
1. The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act.</i>	Section 4.1
2. The establishment, operation or maintenance of a system that	Section 4.2
collects, stores, transmits, treats or disposes of sewage.	
3. The application of agricultural source material to land.	Section 4.9
4. The storage of agricultural source material.	Section 4.9
5. The management of agricultural source material (aquaculture)	Section 4.11
6. The application of non-agricultural source material to land.	Section 4.10
7. The handling and storage of non-agricultural material.	Section 4.10
8. The application of commercial fertilizer to land.	Section 4.7
9. The handling and storage of commercial fertilizer.	Section 4.7
10. The application of pesticide to land.	Section 4.8
11. The handling and storage of pesticide.	Section 4.8
12. The application of road salt.	Section 4.3
13. The handling and storage or road salt.	Section 4.3
14. The storage of snow.	Section 4.3
15. The handling and storage of fuel.	Sections 4.5 and 4.6
16. The handling and storage of a dense non-aqueous phase liquid.	Section 4.4
17. The handling and storage of an organic solvent.	Section 4.4
18. The management of runoff that contains chemicals used in the deicing of aircraft.	Section 4.12
19. An activity that takes water from an aquifer or a surface water body	The Source Protection Plan has
without returning the water taken.	no policies specific to water
20. An activity that reduces the recharge of an aquifer.	quantity (Section 3.5). The
	Education and Outreach policies
	address water quantity in general
	(Section 4.16).
21. The use of land as livestock grazing or pasturing land, an outdoor	Section 4.9
confinement area or a farm-animal yard.	
Transportation Corridors (spill prevention, contingency or response plans along highways, railways or shipping lanes)	Section 4.13
Transport Pathways	Section 4.14
Climate Change Data Collection	The Source Protection Plan has
	no policies specific to collecting
	climate change data. How climate
	change was considered during
	policy development is explained
	in Section 3.4.

Administrative Policies	Section 4.15
Education and Outreach	Section 4.16
Monitoring	Section 4.17

4.1 WASTE DISPOSAL SITES

Waste disposal sites are generally regulated by the MOE through the Environmental Compliance Approval (formerly Certificate of Approval) process under the *Environmental Protection Act*. These approvals are considered "Prescribed Instruments" under the *Clean Water Act* through which the Source Protection Plan policy objectives can be achieved. This means that the MOE's decisions about approvals must conform to significant threat policies in the Source Protection Plan (if an activity is prohibited, an approval cannot be issued or if the risks of an activity must be managed, the approval must contain appropriate risk management terms and conditions).

Two of the waste disposal site categories are not regulated by the MOE under the *Environmental Protection Act.* These are the storage, treatment and disposal of mine tailings that are partly regulated by the MOE under the *Ontario Water Resources Act* and PCB waste storage sites that have no Prescribed Instrument. Policies for PCB waste storage sites and any other waste disposal site not governed by a Prescribed Instrument can therefore use other policy tools under the *Clean Water Act* such as Section 57 Prohibition and Section 58 Risk Management Plans to address significant threats or non-legally binding "other action" policies to address moderate and low threats.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
WASTE-1-LB-PI-MC	Existing waste disposal site governed by a Prescribed Instrument	Significant	Manage	Prescribed Instrument (MOE)
WASTE-2-LB-S58	Existing waste disposal site not governed by a Prescribed Instrument	Significant	Manage	Risk Management Plan (Risk Management Official)
WASTE-3-LB-PI/PA- MC	Future waste disposal site governed by a Prescribed Instrument	Significant	Prohibit	Prescribed Instrument (MOE); Planning Act decisions (municipality)
WASTE-4-LB-S57	Future waste disposal site not governed by a Prescribed Instrument	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)
WASTE-5-LB-PI-HR	Future waste disposal site in the HVA governed by a Prescribed Instrument	Moderate / low in the HVA	Manage	Prescribed Instrument (MOE)
WASTE-6-NLB	Future waste disposal site in the HVA not governed by a Prescribed Instrument	Moderate / low in the HVA	Encourage agencies to consider impacts to drinking water	Other action (MOE, Environment Canada)

Explanation of Policy Decisions

Policy: WASTE-1-LB-PI-MC

Existing Waste Disposal Site - Prescribed Instrument

The Assessment Reports for the Mississippi-Rideau region did not identify any existing waste disposal sites that are a significant drinking water threat. In the unlikely event that an existing site is discovered, this policy has been included to manage the threat by assessing current risk management measures and determining if additional measures are required to protect drinking water. This policy is unlikely to ever be implemented but if it is needed, there is confidence in the MOE's longstanding and thorough Certificate of Approval process under the *Environmental Protection Act* (now called Environmental Compliance Approvals) and the available technical means to monitor for and remediate any evident contamination from the site that may threaten drinking water sources.

Policy: WASTE-2-LB-S58

Existing Waste Disposal Site - Risk Management Plan

This is a "stop-gap" policy. In the unlikely event that an existing waste disposal site is discovered within an area where it is a significant threat and the waste disposal site is not governed by a Prescribed Instrument or through other means such as Director's Instructions, the threat to drinking water will be addressed through a Risk Management Plan established under Section 58 of the *Clean Water Act*.

Policy: WASTE-3-LB-PI/PA-MC

<u>Future Waste Disposal Site – Prescribed Instrument/Planning Act Decisions</u>

Guideline B-7 (*Incorporation of the Reasonable Use Concept into Ministry of Environment and Energy Groundwater Management Activities*) states that a disposal facility may not be supported in a location where the consequences of failure are unacceptable. For example, waste disposal may not be supported where a contaminant discharge might affect the sole source of a community water supply to an unacceptable degree. Prohibiting new waste disposal sites where they would be a significant drinking water threat is in line with these regulatory guidelines and seems reasonable to ensure leachate cannot contaminate a municipal drinking water source. The municipal working group and all Committee members unanimously supported this prohibition policy. The prohibition would be achieved through the Prescribed Instrument (denial of Environmental Compliance Approval). Decisions under the *Planning Act* must also conform meaning that municipalities will amend zoning by-laws so that waste disposal sites are no longer a permitted use in the areas where they would be a significant threat to drinking water.

Policy: WASTE-4-LB-S57

Future Waste Disposal Site - Section 57 Prohibition

This is a "stop-gap" policy. If a future waste disposal site that is not governed by a Prescribed Instrument (e.g., PCB waste storage) or by other means such as Director's Instructions, is proposed in an area where it would be a significant threat to drinking water, it will be prohibited under Section 57 of the *Clean Water Act*.

Policy: WASTE-5-LB-PI-HR

Future Waste Disposal Site in the Highly Vulnerable Aquifers - Prescribed Instrument

The Committee was concerned about future waste disposal sites in Highly Vulnerable Aquifers (HVA) because these areas have weak natural attenuation due to the presence of fractured bedrock. The MOE Procedure B-7-1 (*Determination of Contaminant Limits and Attenuation Zones*) acknowledges that there are environments which the Ministry does not believe are appropriate for waste disposal where the Ministry will either oppose the use of such

environments or will insist that stringent safeguards be incorporated in any design for the disposal site and that there be appropriate monitoring and contingency plans. The MOE is encouraged to adhere to these guidelines and consider the potential impact on drinking water when reviewing applications for new waste disposal sites in the HVA that require prescribed instruments under the *Environmental Protection Act*. Waste disposal sites should be located outside of HVA areas where possible and, where not possible, appropriate risk management measures should be required to minimize the potential of leachate or runoff entering local drinking water sources.

Policy: WASTE-6-NLB

Future Waste Disposal Site in the Highly Vulnerable Aquifers - Other Approvals

This is a "stop-gap" policy. The intent and rationale are the same as for policy WASTE-5-LB-PI-HR, however this policy is directed at the MOE and Environment Canada who may issue other types of approvals for the establishment of waste disposal sites that are not governed by Prescribed Instruments.

Financial Considerations

The Committee considered both the cost to possible project proponents including the municipality, costs to the MOE and Environment Canada of administering the policies and the cost of lost opportunity to landowners due to the future prohibition of waste disposal sites. The following factors helped the Committee decide that the policies are financially feasible and fair.

Areas where waste disposal sites are considered a significant threat and would therefore be prohibited are not well suited for this type of activity anyway. Currently there is relative certainty that there are no waste disposal sites in these areas and it is unlikely any would be proposed to be established in future. Most of these areas lack space (many are residential or close to settlement areas), many are adjacent to sensitive environmental features (like rivers), and many have zoning that would not allow a waste disposal site. This means property owners should not be impacted by the prohibition.

The cost implications of the waste disposal site policies are primarily administrative in nature. The MOE and Environment Canada will need to integrate source water protection information into their review procedures and municipalities must amend their Official Plans and zoning bylaws. Implementation costs should be minimal as there are likely no existing approvals that would need to be reviewed and amended and there will be very few if any new proposals due to the unsuitable nature of these areas. In general, the cost of prohibiting the establishment of waste disposal sites would likely be much less (to both agencies and project proponents) than managing the risks if they were permitted to be established in the areas where they would be considered a significant threat to drinking water.

Using the Prescribed Instruments (Certificates of Approval / Environmental Compliance Approvals) to achieve the policy intent makes use of existing tools and processes which prevents regulatory duplication and saves money. Risk Management Plans and Section 57 Prohibition policies that are implemented by the municipal Risk Management Official are only used as "stop-gap" policies for the very few types of waste disposal sites that are not governed by Prescribed Instruments or through other means such as Director's Instructions.

Comments Received During Pre-Consultation

A comment on the draft waste policies was received from the Ministry of Municipal Affairs and Housing regarding compliance dates. The Ministry of Northern Development and Mines provided clarification of their regulatory role. The MOE commented about timelines, resources

and policy wording for legally binding policies. The municipalities all supported or did not oppose the waste disposal site policies. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE recommended that any policies specifying required content for Prescribed Instruments be revised so that the content is presented as "where the Director considers it appropriate". The Committee was in favour of making this change to policy WASTE-1-LB-PI-MC to recognize the site specific nature of Prescribed Instruments and allow alternate or equivalent risk management measures to be determined by the MOE on a site by site basis. The MOE also requested that the three year compliance date for Prescribed Instrument policies include "or such other date as the Director determines based on a prioritized review of Prescribed Instruments". The Committee was not in favour of making this change because all other compliance dates in the Plan are firm and this would be inconsistent with the three year compliance date for municipalities to establish Risk Management Plans for existing activities. The Committee believes three years is adequate for the MOE to review the very small number of existing instruments in the Mississippi-Rideau region (threats enumeration work indicate one existing *Ontario Water Resources Act* instrument and three *Safe Drinking Water Act* instruments).

Environment Canada provided information about their role in regulating PCB waste storage which confirmed that it is appropriate to name them as an implementer of policy WASTE-6-NLB. The Committee added a compliance date of one year for policy WASTE-6-NLB to allow the MOE and Environment Canada time to initiate action after the date the Source Protection Plan takes effect. The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to waste disposal site policies is from the MOE reiterating their request that the three year timeline for implementation of all prescribed instrument policies use the language "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".

Confidence in Non-Regulatory Measures

In accordance with Section 40 of Ontario Regulation 287/07, the Committee must provide in the Explanatory Document a statement that non-regulatory measures are sufficient to address a significant threat. This section is intended to meet this requirement.

The following significant threat activities are only subject to non-regulatory source protection policies:

Waste that is registered with the MOE waste generation reporting system or waste that
is approved to be transported off-site using the MOE manifest process or waste that is
subject to Director's Instructions.

Instead, the implementation of best management practices for these types of waste will be promoted and encouraged through the "Living and Working in the Drinking Water Zone" education and outreach program (policy EDU-1-LB).

The Committee is of the opinion that:

- i) this policy, if implemented, will promote the achievement of the objectives of ensuring that these activities cease to be or do not become significant threats; and
- ii) a policy to regulate or prohibit the activity is not necessary to achieve those objectives.

4.2 SEWAGE WORKS

The development of the policies to address all of the different types of sewage works involved extensive consultation with municipal stakeholders both through the municipal working group and in meetings held with public works staff at each municipality. The Committee used the information gathered to decide on policies that effectively address the threats without interfering with vital services or creating a financial burden on the municipalities that provide those services. The sewage works topic includes these subcategories:

- On-site sewage systems regulated under the Building Code Act
- On-site sewage systems regulated under the Ontario Water Resources Act
- Sanitary sewers and related pipes
- Stormwater management facilities
- Other sewage works (sewage treatment plant effluent discharges, storage of sewage, combined sewer discharges, sewage treatment plant bypass discharges, industrial effluent discharges)

4.2.1 On-Site Sewage Systems Regulated under the Building Code Act

The *Building Code Act* and Ontario Regulation 350/06 (the Ontario Building Code) regulate onsite sewage systems that are contained on one lot and have a daily design sewage flow of not more than 10,000 litres per day. These are typical systems that serve a single residence. The Building Code contains technical and administrative requirements for the construction, alteration and repair of on-site sewage systems and general requirements for the operation and maintenance of existing systems. The enforcement of this part of the Building Code is assigned to "Principal Authorities" which can be municipalities, Conservation Authorities or health units.

Policy Brief

Policy Code	Policy Code Activity Threat Policy Intent		Policy Tool and Implementer	
SEW-1-LB	Existing and future on- site sewage systems regulated under the Building Code Act	Significant	Manage (through existing requirements – Mandatory On-site Sewage System Maintenance Inspection Program)	Other action (Principal Authority)
SEW-2-LB	Existing on-site sewage systems regulated under the Building Code Act	Significant	Manage (require careful scrutiny of redevelopment / renovation proposals)	Other action (Principal Authority)
SEW-3-LB	Future on-site sewage systems regulated under the Building Code Act	Significant	Manage (require lot grading and drainage plans)	Other action (municipality)
SEW-4-LB	Existing on-site sewage systems regulated under the <i>Building Code Act</i> Significant the <i>Building Code Act</i> Manage (require connection to municipal sewer services when systems fail)		connection to municipal sewer services when	Other action (municipality)

Explanation of Policy Decisions

The on-site sewage system policies make use of existing resources and processes, avoid regulatory duplication and are based on best management practices. The policies will be implemented by the agencies that already regulate on-site sewage systems. In addition to the policies described below, property owners will be provided with information about proper care and maintenance of on-site sewage systems as part of the "Living and Working in the Drinking Water Zone" education and outreach program (see Section 4.16).

Policy: SEW-1-LB

Mandatory On-site Sewage System Maintenance Inspection Program

If an on-site sewage system is functioning properly, contaminants from the system are greatly reduced or eliminated. Therefore, ensuring systems are functioning properly is an effective approach to ensure they cease to be a significant drinking water threat. The new On-site Sewage System Maintenance Inspection Program is intended to determine whether or not systems are functioning properly. This policy simply supports this program because it has already been made mandatory through recent amendments to the Ontario Building Code. The program will be implemented by the local Principal Authorities and will apply where on-site sewage systems are a significant drinking water threat (Wellhead Protection Areas and Intake Protection Zones with vulnerability scores of 10). Compliance dates are also set out in the amendment to the Ontario Building Code. Inspections must be completed within five years of the Assessment Report being approved (August 2016 in the Mississippi watershed and December 2016 in the Rideau watershed) and then must be inspected once every five years thereafter.

Policy: SEW-2-LB

Redevelopment / Renovation Proposals

Experts consulted during policy development emphasized the need for careful review of redevelopment and renovation proposals that would result in additional load on existing on-site sewage systems. In order to ensure that a consistent and thorough approach is used, this policy has been included to require the Principal Authorities responsible for on-site sewage system approvals to establish a procedure for their review of redevelopment and renovation proposals under the Building Code. This procedure would be used where the existing on-site sewage system is intended to service the new development and the system is located in an area where it is a significant threat to drinking water. This policy should be effective because the Principal Authorities must base their procedure on technical information such as depth to water table, soil type, lot size and size and age of the existing system.

Policy: SEW-3-LB

Lot Grade and Drainage Plans

A policy to require pre-development lot grading and drainage plans has been included. Experts consulted during policy development explained that these are an effective way to help ensure proper on-site sewage system siting and design that is especially important where sewage systems could be a significant threat to drinking water.

Policy: SEW-4-LB

Mandatory Connection to Municipal Sewer Services

Municipal sewer infrastructure is identified as a significant drinking water threat (due to the potential for leakage), however municipal sewers transport sewage away for off-site treatment and disposal. For this reason they are a preferred alternative to on-site sewage systems in vulnerable drinking water areas. Therefore, it is proposed that where municipal sewer services are available at the property line and where capacity permits, failing sewage systems or those deemed inadequate to service a proposed redevelopment or renovation would have to be

decommissioned and the development connected to municipal services. In addition, new developments must connect to municipal services where services are available and capacity permits. This policy approach would eventually phase out on-site sewage systems over time where the alternative of municipal services exists.

Financial Considerations

The policy development process considered costs to the agencies that would implement the policies, costs to property owners and examined if there would be any cost of lost opportunity to developers. The following factors helped the Committee decide that the policies are financially feasible and fair.

The cost of administering the On-site Sewage System Maintenance Inspection Program will be borne by the Principal Authority which is the municipality, Conservation Authority or health unit, depending on location. Under the Ontario Building Code, Principal Authorities may charge fees to recover the costs of the program and may accept third part certificates of inspection rather than conducting their own inspections. Locally, Principal Authorities have not yet determined how this program will be administered or what fees, if any, property owners would be charged for the inspections. Implementation costs should be reasonable in the Mississippi-Rideau region because the On-site Sewage System Maintenance Inspection Program will be required for only approximately three properties. There is also little potential for new on-site sewage systems to be established in the future because the Intake Protection Zones and Wellhead Protection Areas with a vulnerability score of 10 are primarily developed and serviced.

The municipalities will incur some administrative costs to implement the new requirement for lot grade and drainage plans. Requiring mandatory connection to municipal services may also involve administrative costs, however many municipalities already have these requirements in place.

Property owners in areas where municipal sewer services are available can continue using their on-site sewage system until it needs replacing or major upgrades (assuming they are not required to connect to municipal services through some other means). At this point, property owners would be required to connect to municipal sewer services rather than install a new system, both of which are substantial costs. It is hoped that municipalities could provide low interest, long-term loans to help people with the cost of connecting to municipal sewers.

The policies would not prevent new development and would not make new development significantly more expensive.

Comments Received During Pre-Consultation

Comments on the draft on-site sewage system policies were received from the Ministry of Municipal Affairs and Housing. The comments provided clarification and expert input about the threat, regulatory roles and policy wording. Municipalities raised concerns about the cost of the On-site Sewage System Maintenance Inspection Program (already a mandatory program) both to property owners and the municipality but did not oppose the policies in the Source Protection Plan that involve new requirements. Municipalities also suggested changes to policy wording. Principal Authorities contributed to policy development during meetings held prior to the preconsultation window rather than formally responding to the pre-consultation letters. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The City of Ottawa advised that the term "geodetic" benchmark should be changed to "permanent" benchmark because it may not always be feasible to obtain a geodetic benchmark for lot grade and drainage plans. The City of Ottawa also highlighted an inconsistency in terminology used for "Phase II Maintenance Inspection". These policy wording changes were approved by the Committee.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. A member of the public expressed concern about current planning rules for rural development that allow one on-site sewage system per property. They suggested that for rural subdivisions, communal waste water systems would better protect aquifers from the impacts of development. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the policies for on-site sewage system regulated under the *Building Code Act*.

4.2.2 On-Site Sewage Systems Regulated under the Ontario Water Resources Act

On-site sewage systems regulated under the *Ontario Water Resources Act* are large systems with a design flow greater than 10,000 litres per day intended to service public buildings or systems located on more than one property parcel.

Minimizing impacts to water quality is a priority under the legislation which is why application requirements must provide information about the background levels of contaminants in the groundwater, the expected rate of contaminants in the discharge from the system and measures to minimize and monitor for contaminants. On-site sewage systems regulated under the *Ontario Water Resources Act* are not subject to the new On-site Sewage System Maintenance Inspection Program.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
SEW-5-LB-PI-MC	Existing and future on-site sewage systems regulated under the <i>Ontario Water Resources Act</i>	Significant	Manage	Prescribed Instrument (MOE)

Explanation of Policy Decisions

Policy: SEW-5-LB-PI-MC

On-site Sewage Systems - Prescribed Instrument

The Assessment Reports for the Mississippi-Rideau region did not identify any existing on-site sewage systems regulated under the *Ontario Water Resources Act*. However, the policy addresses "existing" in the event that this type of system is discovered during implementation of the Source Protection Plan.

Managing this activity through the Prescribed Instrument would be effective as on-site sewage systems approved under the *Ontario Water Resources Act* are already subject to rigorous

requirements regarding preventing as well as monitoring for contaminants. It also seems appropriate to require connection to existing municipal services under certain circumstances. Therefore policy SEW-4-LB also applies to these types of systems.

It should be noted that in some instances new on-site sewage systems in areas where they would be a significant threat may be denied approval regardless of the Source Protection Plan policy. Guideline B-7 (*Incorporation of the Reasonable Use Concept into Ministry of Environment and Energy Groundwater Management Activities*) sets out circumstances where a new on-site sewage system would be unsuitable. One of these circumstances is where "the consequences of failure are unacceptable (e.g., impact the only water supply for a community)". So even though the policy permits future on-site sewage systems, the MOE may choose to prohibit some future systems under certain circumstances due to their own existing guidelines.

Using the Prescribed Instrument to manage the risks posed by on-site sewage systems regulated under the *Ontario Water Resources Act* has several practical advantages: it avoids regulatory duplication, uses an instrument developers are familiar with, and allows the agency that already regulates this type of activity to determine appropriate measures to effectively manage the risk to drinking water.

Financial Considerations

The policy development process considered costs to the MOE of implementing the policies, costs to property owners and examined if there would be any cost of lost opportunity to developers. The following factors helped the Committee decide that the policies are financially feasible and fair.

There will be a cost to the MOE to address any existing approvals that need to be reviewed and amended but these are unlikely as the Assessment Report did not identify any existing systems. There will also be an administrative cost of putting in place new procedures, if required, to address future applications. Using the Prescribed Instruments (Certificates of Approval / Environmental Compliance Approvals) to achieve the policy intent makes use of existing tools and processes which prevents regulatory duplication and saves money.

If the MOE changes the requirements or denies approvals for new on-site sewage systems there would be a cost to landowners or developers. However, the majority of properties where on-site sewage systems would be a significant threat either have municipal sanitary sewer services available so an on-site sewage system would not be required or are far enough from the drinking water source (e.g., outside the urban boundary of Almonte) that the MOE may be less likely to deny approvals but rather choose to manage the risk by requiring stringent safeguards in accordance with Procedure B-7-1 (*Determination of Contaminant Limits and Attenuation Zones*).

Comments Received During Pre-Consultation

The MOE commented in general about timelines, resources and policy wording for all policies using Prescribed Instruments. A comment was received from one municipality indicating that they would prefer that on-site sewage systems regulated under the *Ontario Water Resources Act* be prohibited within the Intake Protection Zones with a vulnerability score of 10. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE requested that the three year compliance date for Prescribed Instrument policies also include "or such other date as the Director determines based on a prioritized review of Prescribed Instruments". The Committee was not in favour of making this change because all other compliance dates in the Plan are firm and this would be inconsistent with the three year compliance date for municipalities to establish Risk Management Plans for existing activities. The Committee believes three years is adequate for the MOE to review the very small number of existing instruments in the Mississippi-Rideau region (threats enumeration work indicate one existing *Ontario Water Resources Act* instrument and three *Safe Drinking Water Act* instruments). The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to the policies for on-site sewage systems regulated under the *Ontario Water Resources Act* is from the MOE reiterating their request that the three year timeline for implementation of all prescribed instrument policies use the language "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".

4.2.3 SANITARY SEWERS AND RELATED PIPES

The sewer system poses a significant threat to drinking water if it is part of a wastewater facility that collects or transmits sewage containing human waste. Due to the pathogen threat, a sanitary sewer system of any size located in the Intake Protection Zones and Wellhead Protection Areas with a vulnerability score of 10 is considered a significant threat.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
SEW-6-LB	Existing and future sanitary sewers and related pipes	Significant	Manage (establish a Sanitary Sewer Maintenance Program)	Other action (municipality)
SEW-7-LB-PI-MC	Future sanitary sewers and related pipes	Significant	Manage (recommend advanced sewer designs)	Prescribed Instrument (MOE)

Explanation of Policy Decisions

Policy: SEW-6-LB

Sanitary Sewer Maintenance Program

The Assessment Reports for the Mississippi-Rideau region identified that there are existing sanitary sewers that meet the circumstances for a significant threat. The threat is caused by the potential for outflow of raw sewage or infiltration of groundwater through degraded pipes or pipe joints. While sewers and related pipes often have a Certificate of Approval (older systems may not), there is typically no requirement for ongoing maintenance. A maintenance program conducted by the municipality will ensure that sections of the sewer network in vulnerable drinking water areas are subject to regular monitoring and maintenance. Expert staff from the municipalities helped to develop the detailed wording of this policy.

Policy: SEW-7-LB-PI-MC

Future Sanitary Sewers and Related Pipes - Prescribed Instrument

The other important component of managing the threat posed by sanitary sewers is to recommend that new sewers and related pipes be of higher quality and pressure tested prior to commissioning. The municipal stakeholders played a large role in developing this policy and its specific wording and there was broad support from the municipalities for this approach. The policy is directed at the MOE to implement because new sewers would require Environmental Compliance Approvals. The policy wording leaves it up to the Director to make the final decision regarding detailed, site-specific terms and conditions associated with these new approvals but specifically mentions watermain quality pipe and pressure testing as these measures are preferred by the Committee and supported by the municipalities.

Financial Considerations

The Committee considered the costs that will be incurred by municipalities (both as an implementer and as a possible project proponent) the cost to developers and administrative costs for the MOE. The following factors helped the Committee decide that the policies are financially feasible and fair.

- There would be a cost to municipalities to conduct the Sewer Maintenance Program, although periodic monitoring, maintenance or upgrades of sanitary sewers and related pipes does already occur in most municipalities. The cost of remedial work resulting from the maintenance program will depend on a number of factors including the age of the sewer system.
- If advanced sewer design or other non-standard measures are required by the MOE for replacement sewer lines, this would also involve a cost to municipalities but may be offset by lower maintenance costs in the future. Municipal stakeholders were in support of this type of measure to safeguard drinking water.
- Developers would incur additional costs if advanced sewer design or other non-standard measures are required by the MOE for sewer lines associated with new developments.
 The Committee viewed this as a reasonable cost of doing business in vulnerable drinking water areas.
- The cost implications for the MOE are administrative in nature, (integrating source water protection information into their procedures for reviewing applications for Prescribed Instruments).
- Using the Prescribed Instruments (Certificates of Approval / Environmental Compliance Approvals) to achieve the policy intent makes use of existing tools and processes which prevents regulatory duplication and saves money.

Comments Received During Pre-Consultation

The MOE commented in general about timelines, resources and policy wording for all policies using Prescribed Instruments. Several comments were received from municipalities regarding the Sanitary Sewer Maintenance Program. These comments contributed to refining the wording of the policy. The municipalities all supported or did not oppose the Sanitary Sewer Maintenance Program policy. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE recommended that any policies specifying required content for Prescribed Instruments be revised so that the content is presented as "where the Director considers it appropriate". The Committee was in favour of making this change to policy SEW-7-LB-PI-MC to recognize the site specific nature of Prescribed Instruments and allow alternate or equivalent

risk management measures to be determined by the MOE on a site by site basis. The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the sanitary sewer policies.

4.2.4 STORMWATER MANAGEMENT FACILITIES

A stormwater management facility is defined as a facility for the treatment, retention, infiltration or control of stormwater. Significant threats depend on the size of the drainage area and the predominant land use within that drainage area (e.g., low or high density residential, industrial / commercial).

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
SEW-8-LB-PI-MC	Existing stormwater management facility	Significant	Manage	Prescribed Instrument (MOE)
SEW-9-LB-PI/PA-MC	Future stormwater management facility (Wellhead Protection Area "A", Intake Protection Zone scored 10)	Significant	Prohibit	Prescribed Instrument (MOE) and <i>Planning</i> <i>Act</i> decisions (municipality)
SEW-10-LB-PI-MC	Future stormwater management facility (Wellhead Protection Area "B" scored 10 and Intake Protection Zone scored 8 to 9)	Significant	Manage	Prescribed Instrument (MOE)
SEW-11-LB-S58	Existing and future stormwater management facility not governed by a Prescribed Instrument	Significant	Manage	Risk Management Plan (Risk Management Official)
SEW-12-LB-S57	Future stormwater management facility not governed by a Prescribed Instrument	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)

Explanation of Policy Decisions

Policy: SEW-8-LB-PI-MC

Existing Stormwater Management Facility - Prescribed Instrument

The Assessment Reports for the Mississippi-Rideau region did not identify any existing stormwater management facilities that are a significant drinking water threat. In the unlikely event that an existing stormwater management facility is discovered, this policy has been included to manage the threat by assessing current risk management measures and

determining if additional measures are required to protect drinking water. This may include an assessment of current operation and performance specifics as well as requirements for regular maintenance of the stormwater management facility. This policy is unlikely to ever be implemented but if it is needed, there is confidence in the MOE's longstanding and thorough approval process under the *Ontario Water Resources Act* and the available technical means to address the threat so that it ceases to be significant.

Policy: SEW-9-LB-PI/PA-MC

<u>Future Stormwater Management Facility In Wellhead Protection Area "A" or Intake Protection</u> <u>Zone Scored 10 – Prescribed Instrument/Planning Act Decisions</u>

Stormwater management facilities such as stormwater ponds perform a beneficial role by capturing, slowing or diverting runoff to provide water quantity and quality control. However, these facilities can be a source of numerous contaminants such as pathogens, heavy metals, hydrocarbons and pesticide which makes them an undesirable activity in the most vulnerable areas closest to drinking water sources. For this reason, the Committee favoured a prohibition policy affecting small geographical areas around municipal wells (100 metre radius, called the Wellhead Protection Area "A") and intakes (area scored 10). The prohibition would be achieved through the MOE's compliance with this policy by not issuing new Environmental Compliance Approvals required under the *Ontario Water Resources Act*. Decisions under the *Planning Act* must also conform meaning that municipalities will amend zoning by-laws so that stormwater management facilities are no longer a permitted use in the locations where this policy applies.

The Committee decided to provide an exemption to this prohibition policy under special circumstances within the Wellhead Protection Area "A". As described in the policy, the exemption applies when the Wellhead Protection Area "A" is under municipal ownership, kept in a natural state and the source water is well-protected (no discernable hydrogeological connection between the surface and the aquifer). This exemption was approved by the Committee because of the unlikelihood that the source water would be adversely impacted by the stormwater management facility in this situation and the fact that other threat activities such as sewer lines would not be established in the future if the area is under municipal ownership and remains in a natural state. Future stormwater management facilities that meet the criteria for this exemption will be subject to policy SEW-10-LB-PI-MC or SEW-11-LB-S58.

Policy: SEW-10-LB-PI-MC

<u>Future Stormwater Management Facility in Wellhead Protection Area "B" Scored 10 or Intake</u> <u>Protection Zone Scored 8 to 9 – Prescribed Instrument</u>

The Committee was of the opinion that while stormwater management facilities should be prohibited in the areas closest to drinking water sources, they need not be prohibited in the entire area. Such a policy would result in large areas where development and the associated management of stormwater could not occur. Instead, the Committee opted to allow stormwater management facilities to be established in the Wellhead Protection Area "B" with a vulnerability score of 10 and Intake Protection Zones with a vulnerability score of 8 to 9. In these areas, the risks posed by stormwater management facilities would be managed through the Environmental Compliance Approval process under the *Ontario Water Resources Act*. Municipal public works staff consulted as part of policy development favoured including a recommendation that future stormwater management facilities be built to Enhanced Level Protection Standards as described in the Stormwater Management Planning and Design Manual, MOE 2003.

Policy: SEW-11-LB-S58

Stormwater Management Facility – Risk Management Plan

This is a "stop-gap" policy. A Risk Management Plan is intended to manage the risk when a stormwater management facility is not governed by a Prescribed Instrument in the following situations:

- In the unlikely event that an existing stormwater management facility is discovered within an area where it is a significant threat
- For a future stormwater management facility in a Wellhead Protection Area "A" that is permitted under the exemption described in policy SEW-9-LB-PI/PA-MC
- For a future stormwater management facility in a Wellhead Protection Area "B" with a vulnerability score of 10 or an Intake Protection Zone with a vulnerability score of 8 to 9

It is recommended that the Risk Management Plan require that future stormwater management facilities be built to Enhanced Level Protection Standards as described in the Stormwater Management Planning and Design Manual, MOE 2003 to be consistent with policy SEW-10-LB-PI-MC.

Policy: SEW-12-LB-S57

Stormwater Management Facility - Section 57 Prohibition

This is a "stop-gap" policy. If a future stormwater management facility that would be a significant threat is not governed by a Prescribed Instrument (and it is not subject to the exemption described in the policy) it will be prohibited under Section 57 of the *Clean Water Act*.

Financial Considerations

The Committee considered both the cost to project proponents including the municipality, costs to the MOE of administering the policies and the cost of lost opportunity to landowners and developers due to the future prohibition of stormwater management facilities in some areas. The following factors helped the Committee decide that the policies are financially feasible and fair.

- If the MOE changes the design, operation and/or maintenance requirements for existing or future stormwater facilities where they would be a significant threat, there could be additional costs to developers and/or the municipality. There could also be costs to municipalities because they typically take over the operation of stormwater works and operate them over the long term. The Committee was of the opinion that if the MOE deemed extra measures to be necessary in order to protect drinking water from the potential impact of stormwater facilities, these costs are a necessary part of development in vulnerable drinking water areas.
- The cost implications for the MOE are primarily administrative in nature (integrating source water protection information into their procedures for reviewing applications for Prescribed Instruments). Implementation costs should be minimal as there are likely no existing instruments that would need to be reviewed and amended and there will be very few new proposals because many of the circumstances that constitute a significant threat would not be met (e.g., within an Intake Protection Zone with a vulnerability score of 8, the drainage area of the stormwater management facility must be greater than 100 hectares of industrial/commercial land).
- There is also an administrative cost to municipalities because they must amend their Official Plans and zoning by-laws.
- Using the Prescribed Instruments (Certificates of Approval / Environmental Compliance Approvals) to achieve the policy intent makes use of existing tools and processes which prevents regulatory duplication and saves money.
- Risk Management Plans and Section 57 Prohibition policies that are implemented by the municipal Risk Management Official are only used as "stop-gap" policies to address the unlikely situation where stormwater management facilities are not governed by Prescribed Instruments.

Comments Received During Pre-Consultation

The MOE commented in general about timelines, resources and policy wording for all policies using Prescribed Instruments. Two municipalities provided comments specifically about the stormwater policies. One municipality was not in support of prohibiting the future establishment of stormwater ponds within 100 metres of municipal wells. This comment brought to the attention of the Committee some scenarios that they previously had not considered and resulted in revising the policy to include an exemption as explained under policy SEW-9-LB-PI/PA-MC above. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE recommended that any policies specifying required content for Prescribed Instruments be revised so that the content is presented as "where the Director considers it appropriate". The Committee was in favour of making this change to policy SEW-10-LB-PI-MC to recognize the site specific nature of Prescribed Instruments and allow alternate or equivalent risk management measures to be determined by the MOE on a site by site basis. A similar change was made to policy SEW-11-LB-S58 to allow the Risk Management Official discretion regarding the standards for future stormwater management facilities that are not governed by a Prescribed Instrument. The MOE also requested that the three year compliance date for Prescribed Instrument policies include "or such other date as the Director determines based on a prioritized review of Prescribed Instruments". The Committee was not in favour of making this change because all other compliance dates in the Plan are firm and this would be inconsistent with the three year compliance date for municipalities to establish Risk Management Plans for existing activities. The Committee believes three years is adequate for the MOE to review the very small number of existing instruments in the Mississippi-Rideau region (threats enumeration work indicate one existing Ontario Water Resources Act instrument and three Safe Drinking Water Act instruments).

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to the policies for stormwater management facilities is from the MOE reiterating their request that the three year timeline for implementation of all prescribed instrument policies use the language "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".

4.2.5 OTHER SEWAGE WORKS

This section addresses "other" sewage works which are:

- Sewage treatment plant effluent discharges
- Industrial effluent discharges
- Storage of sewage
- Combined sewer discharges
- Sewage treatment plant bypass discharges to surface water

All of these activities typically require approvals from the MOE under the *Ontario Water Resources Act*. Formerly these approvals were called Sewage Certificates of Approval so an existing sewage works would have in place this instrument. They are now termed Environmental Compliance Approvals so a new sewage works would require an approval of that name.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool / Implementer
SEW-13-LB-PI-MC	 Existing: Sewage treatment plant effluent discharges Industrial effluent discharges Storage of sewage Combined sewer discharges Sewage treatment plant bypass discharges to surface water 	Significant	Manage	Prescribed Instrument (MOE)
SEW-14-LB-S58 Existing sewage works listed in policy SEW-13-LB-PI-MC not governed by a Prescribed Instrument		Significant	Manage	Risk Management Plan (Risk Management Official)
SEW-15-LB-PI/PA- MC Future sewage works listed in policy SEW-13-LB-PI-MC		Significant	Prohibit	Prescribed Instrument (MOE) and Planning Act decisions (municipality)
SEW-16-LB-S57 Future sewage works listed in policy SEW-13-LB-PI-MC not governed by a Prescribed Instrument		Significant	Prohibit	Section 57 Prohibition (Risk Management Official)

Explanation of Policy Decisions

Policy: SEW-13-LB-PI-MC

Existing "Other" Sewage Works - Prescribed Instrument

The Munster sewage lagoon is the only existing "other" sewage works that is a significant threat identified in the Mississippi-Rideau region's Assessment Reports. The lagoon is an important part of the Munster sewage system as it provides overflow storage during periods of prolonged power failures, unscheduled maintenance and significant wet weather events. Therefore, it is important to the community that the lagoon remains in operation. The lagoon is governed by a Certificate of Approval that requires the sewage works, including the lagoon, to be maintained but it does not contain any specific procedures that must be followed. The lagoon is lined to prevent infiltration into the groundwater. It has been used twice in the last four to five years and when it is activated staff do a visual inspection to ensure proper operation. When the situation is resolved, the contents are drained back into the sewer system. The policy directs the MOE to review the existing Certificate of Approval terms and conditions and amend them if necessary to ensure the lagoon ceases to be a significant drinking water threat.

In the unlikely event that there are additional "other" sewage works that are a significant drinking water threat, the MOE must ensure that there are suitable measures required through the Certificate of Approval (or Environmental Compliance Approval) issued under the *Ontario Water Resources Act* to manage the threat so that is ceases to be significant.

Using Prescribed Instruments to address the existing "other" sewage works avoids regulatory duplication, uses a tool operators are familiar with and allows the agency who currently regulates the works to determine if additional terms and conditions are required to manage the risk to drinking water sources.

Policy: SEW-14-LB-S58

Existing "Other" Sewage Works – Risk Management Plan

This is a "stop-gap" policy. In the unlikely event that an existing sewage works of the types listed in policy SEW-13-LB-PI-MC is discovered within an area where it is a significant threat and the sewage works is not governed by a Prescribed Instrument, the risk will be managed through a Risk Management Plan established under Section 58 of the *Clean Water Act*.

Policy: SEW-15-LB-PI/PA-MC

Future "Other" Sewage Works - Prescribed Instrument/Planning Act Decisions

The MOE's guidance acknowledges prohibition is an effective and efficient source protection tool that may be appropriate to ensure certain hazardous activities are located in less vulnerable areas. The municipal working group and all Committee members were in agreement that sewage works of the types listed in policy SEW-13-LB-PI-MC should be prohibited from being established in the future where they would be a significant drinking water threat. The prohibition would be achieved through the Prescribed Instruments (denial of Environmental Compliance Approvals) which is an effective regulatory process with clear criteria for implementation. Decisions under the *Planning Act* must also conform, meaning that municipalities will amend zoning by-laws so that the types of sewage works listed in the policy are no longer permitted uses in the areas where they would be a significant threat to drinking water.

Policy: SEW-16-LB-S57

Future "Other" Sewage Works - Section 57 Prohibition

This is a "stop-gap" policy. If a future sewage works of the types listed in policy SEW-13-LB-PI-MC that is not governed by a Prescribed Instrument is proposed in an area where it would be a significant threat, it will be prohibited under Section 57 of the *Clean Water Act*.

Financial Considerations

The Committee considered both the cost to possible project proponents including the municipality, costs to the MOE of administering the policies and the cost of lost opportunity to landowners and developers due to the future prohibition of sewage works of the types listed in policy SEW-13-LB-PI-MC. The following factors helped the Committee decide that the policies are financially feasible and fair:

- The Munster sewage lagoon is visually checked prior to use but is not subject to a regular monitoring or maintenance program. There could be a cost to the City of Ottawa if the MOE decides to require additional measures through an amended Certificate of Approval. The Committee and the municipal working group felt that if the MOE deemed extra measures to be necessary in order to allow the Munster sewage lagoon to remain operational, these costs are a necessary part of protecting drinking water.
- The costs to the MOE are mainly administrative in nature, (integrating source water protection information into their procedures for reviewing applications for Prescribed Instruments). Implementation costs for the MOE should be minimal as there is likely only one existing approval that will need to be reviewed and amended and there will be very few if any new proposals due to the unsuitable nature of these areas.
- Areas where new sewage works such as industrial sewage works and outfalls are considered a significant threat and would therefore be prohibited are not well suited for this type of activity anyway. Currently there is relative certainty that other than the

Munster sewage lagoon, there are no other sewage works of the types listed in policy SEW-13-LB-PI-MC in these areas and it is unlikely any would be proposed to be established in future. Most of these areas lack space (many are residential or close to settlement areas), many are adjacent to sensitive environmental features, and many have zoning that would not permit this type of land use. This means that in most situations there would be no cost of lost opportunity to property owners and no impacts to project proponents.

- Using the Prescribed Instruments (Certificates of Approval / Environmental Compliance Approvals) to achieve the policy intent makes use of existing tools and processes which prevents regulatory duplication and saves money.
- Risk Management Plans and Section 57 Prohibition policies that are implemented by the municipal Risk Management Official are only used as "stop-gap" policies to address the unlikely situation where sewage works are not governed by Prescribed Instruments.

Comments Received During Pre-Consultation

The MOE commented in general about timelines, resources and policy wording for all policies using Prescribed Instruments. The municipalities all supported or did not oppose the policies to address "other" sewage works. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE requested that the three year compliance date for Prescribed Instrument policies also include "or such other date as the Director determines based on a prioritized review of Prescribed Instruments". The Committee was not in favour of making this change because all other compliance dates in the Plan are firm and this would be inconsistent with the three year compliance date for municipalities to establish Risk Management Plans for existing activities. The Committee believes three years is adequate for the MOE to review the very small number of existing instruments in the Mississippi-Rideau region (threats enumeration work indicate one existing *Ontario Water Resources Act* instrument and three *Safe Drinking Water Act* instruments).

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. There were concerns raised by the public regarding pollution of the Ottawa River resulting from sewage. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to the policies for "other sewage works" is from the MOE reiterating their request that the three year timeline for implementation of all prescribed instrument policies use the language "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".

4.3 SNOW AND ROAD SALT

There is no federal or provincial legislation that directly regulates the use of road salt or the storage of snow. Rather these activities are guided by best management practices developed by government and industry, primarily the Transportation Association of Canada's *Synthesis of Best Practices: Road Salt Management* and Environment Canada's *Code of Practice for the*

Environmental Management of Road Salts. Road Salt Management Plans are a widely recognized tool used by the public sector to establish and implement best practices locally. Salt education programs are also used to promote the implementation of best management practices. One of the most widely recognized is the *Smart About Salt* program that originated in southwestern Ontario but is now available province wide.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
SALT-1-LB- S58	Existing snow dumps and road salt storage	mps and Significant Manage		Risk Management Plan (Risk Management Official)
SALT-2-LB- S57	Future snow dumps and road salt storage	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)
SALT-3-LB	Existing/future snow piles and road salt application	Significant	Manage (establish Road Salt Management Plans)	Other action (municipality)
SALT-4-LB	Existing/future snow piles and road salt application	Significant	Manage (implement smart salt practices)	Other action (municipality)
SALT-5-NLB	Existing/future snow piles and road salt application	Low in the HVA	Encourage Road Salt Management Plans region-wide	Other action (municipality)
SALT-6-NLB	Existing/future snow piles and road salt application	Low in the HVA	Encourage smart salt practices region-wide	Other action (municipality)

Explanation of Policy Decisions

Experts on road salt and winter road maintenance were consulted as part of the development of the policies described below. In addition to these policies, best management practices for road salt use will be promoted and encouraged through the "Living and Working in the Drinking Water Zone" education and outreach program (see Section 4.16).

Policy: SALT-1-LB-S58

Existing Storage of Road Salt and Snow (Snow Dumps) - Risk Management Plan

The Assessment Reports for the Mississippi-Rideau region did not identify any existing snow dumps or road salt storages that would constitute a significant threat. In the unlikely event that existing activities were overlooked, this policy requires a Risk Management Plan be established to recognize or establish necessary risk management measures. If there is an existing snow dump, it may be feasible to relocate it outside of the area where it is a significant drinking water threat, especially if the existing site does not have melt water management infrastructure or other cost and effort has not been invested in developing the site. This would eliminate the threat and the need for a Risk Management Plan.

Policy: SALT-2-LB-S57

Future Storage of Road Salt and Snow (Snow Dumps) - Section 57 Prohibition

The Committee was of the opinion that new snow dumps and road salt storages of the size and type that are considered a significant threat to drinking water should definitely not be established where they would be a significant threat. These are undesirable, more hazardous uses that need not be located close to municipal source water. In many areas, these activities

would not be feasible anyway due to lack of space, incompatible existing land uses or prohibitive zoning.

Policy: SALT-3-LB

Road Salt Management Plans – Significant Threats

The Assessment Reports for the Mississippi-Rideau region identified that road salt application can be considered a significant threat in small parts of the towns of Carleton Place, Kemptville, Perth and Smiths Falls. Upper and lower tier municipalities that have roads, parking lots and sidewalks in the areas where road salt application is or would be a significant threat must have in place a Road Salt Management Plan to govern salt use in these areas. The best management practices typically included in a Road Salt Management Plan are proven and science based. They are also comprehensive, addressing all aspects of winter road maintenance (road salt delivery, handling and storage, weather forecasting, pavement temperature monitoring, equipment upgrading, calibration and washing, training, record keeping, communications, etc.). The Environment Canada Code of Practice for the Environmental Management of Road Salts applies to organizations that have "vulnerable areas" in their territory. Therefore, it seems appropriate that municipalities that maintain roads in vulnerable drinking water areas where road salt would be a significant threat have Road Salt Management Plans in place to address road salt use in these locations. It should be noted that other locations within these municipalities would be subject to policy SALT-5-NLB which encourages but does not require Road Salt Management Plans.

The policies make a distinction between <u>snow dumps</u> which are a central location where a large amount of snow hauled from elsewhere is stored and <u>snow piles</u> which are smaller snow storages where snow is pushed up into piles and stored on the property where it originated. Dealing with the snow piles threat posed a problem for the Committee. They considered options such as requiring that snow be removed and hauled elsewhere in heavy snow years. However, the practical and financial impacts would be profound on municipalities especially because the thresholds are so low (piles as small as 10 metres by 10 metres can be considered a significant threat). The Road Salt Management Plan was the chosen solution because they reduce the road salt that is the major contaminant in snow piles. Significant threat areas for road salt application are the same as significant threat areas for snow piles so Road Salt Management Plans will be in place to address the snow piles threat wherever it is or would be significant.

Policy: SALT-4-LB

Smart Salt Practices - Significant Threats

The concept of "smart salt practices" originated in the Region of Waterloo and stemmed from a need to address widespread chloride contamination of groundwater. The practices have proven effective in achieving improved environmental protection without compromising safety. They involve such principles as using the right material at the right time in the right amount for maximum effectiveness and are accomplished through training, record keeping and a system of accreditation for sites and practitioners. The Smart About Salt Council has the ability to deliver the training to groups throughout Ontario upon request. The policy takes advantage of these effective methods and readily available resources. It directs the municipalities to undertake initiatives to promote smart salt practices among municipal staff (for municipal properties such as sidewalks) and to private contractors and facility managers (for private properties such as parking lots) in the locations where road salt application is or would be a significant threat. It should be noted that other locations within these municipalities would be subject to policy SALT-6-NLB which encourages but does not require the promotion of smart salt practices.

Policy: SALT-5-NLB

Road Salt Management Plans - Highly Vulnerable Aquifers

The Committee is concerned about the protection of regional groundwater due to the extensive Highly Vulnerable Aquifer (HVA) that encompasses much of the Mississippi-Rideau region. Road salt use has been demonstrated to be increasing in eastern Canada due to climate change, development with associated expansion of paved areas as well as societal expectations for bare roads. This is happening fully 10 years after an Environment Canada report concluded that road salts are entering the environment in a quantity or concentration that has or may have an immediate or long-term harmful effect on the environment and may constitute a danger to the environment on which life depends. In their *Code of Practice for the Environmental Management of Road Salts*, Environment Canada recommends that all organizations consider implementing best management practices that are relevant to their local conditions in order to protect the environment from the negative impacts of road salt. The Committee is of the opinion that the HVA areas are one of those local conditions that warrant the implementation of best management practices for salt use. Therefore this policy encourages the municipalities in the HVA areas to develop Road Salt Management Plans. Due to the extent of these areas, the policy applies to all municipalities in the region.

Policy: SALT-6-NLB

Smart Salt Practices - Highly Vulnerable Aguifers

The Committee thought it important to encourage the implementation of smart salt practices region wide to address the HVA areas. There is no other potential contaminant that is widely applied, at ever increasing amounts virtually without regulation. The concerns typically raised about reducing road salt use are safety and liability. Smart salt practices work by ensuring the methods used do not compromise safety and include components such as thorough record keeping that has been demonstrated to help successfully defend against slip and fall liability claims. The policy encourages all municipalities in the region to undertake initiatives to adopt smart salt practices on municipal properties as well as promote smart salt practices to private contractors and facility managers.

Financial Considerations

The Committee considered the cost to municipalities of administering the policies and the cost to affected people. The following factors helped the Committee decide that the policies are financially feasible and fair.

The Environment Canada Code of Practice for the Environmental Management of Road Salts, that includes the preparation and implementation of a Road Salt Management Plan, currently applies to organizations that use more than 500 tonnes of road salt per year. As a result, some municipalities such as the City of Ottawa, Lanark County and the County of Leeds and Grenville already have Road Salt Management Plans in place for the roads they maintain. So new Road Salt Management Plans need only be developed by some of the municipalities in the region.

Municipalities will incur an initial cost to develop Road Salt Management Plans and may also wish to invest in new technologies (e.g., pre-wetting equipment). There are case studies that demonstrate a cost saving from reduced road salt use that offsets initial investments resulting in a net financial benefit for the municipality. Costs for creating Road Salt Management Plans and education programs could be minimized by taking advantage of available materials, templates and training modules created by groups such as the Smart About Salt Council and the Ontario Good Roads Association.

Private sector participants in Smart About Salt certification programs will be required to pay a fee of approximately \$250 that covers the Smart About Salt Council's costs to provide the course. The benefit to the participants is a promotional and marketing opportunity created by becoming a Smart About Salt certified site or contractor. There would be minimal cost to the municipality (such as venue rental) to provide the training opportunity. Costs could be further defrayed by several municipalities collaborating to host the program in one central location.

The policies do not create any regulatory overlap or duplication because road salt use and snow storage is not directly regulated by any existing legislation.

Comments Received During Pre-Consultation

The Smart About Salt Council and the Ontario Good Roads Association provided helpful comments that contributed to refining policy language. Municipalities raised issues regarding effectiveness, responsibilities and implementation. These concerns prompted the Committee to make some policy wording changes including stipulating that the Source Protection Authority will assist with implementation of the smart salt practices policies. Draft policies were also shared with other bodies, potentially affected property owners and the public. Open house participants expressed concerns about road salt impacts to private wells. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The draft Source Protection Plan was shared with implementers, other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B. No comments about this topic were received, however, the Committee approved slight changes to policy wording to make it more clear that some municipalities will have geographic areas that are subject to legally binding policies (SALT-2-LB and SALT-3-LB) as well as areas subject to non-legally binding policies (SALT-5-NLB and SALT-6-NLB). In other words, they are required to implement Road Salt Management Plans and Smart Salt Practices in the areas where road salt application is a significant threat, and encouraged to do so at locations outside of these significant threat areas.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the snow and road salt policies.

Confidence in Non-Regulatory Measures

In accordance with Section 40 of Ontario Regulation 287/07, the Committee must provide in the Explanatory Document a statement that non-regulatory measures are sufficient to address a significant threat. This section is intended to meet this requirement.

The following significant threat activities are only subject to non-regulatory source protection policies:

- Application of road salt at private facilities such as privately owned parking lots
- Application of road salt on private residential property such as driveways

The municipality will promote the Smart About Salt program to facility managers and private contractors as required by policy SALT-4-LB. Smart salt practices will also be promoted to residential property owners as part of the "Living and Working in the Drinking Water Zone" education and outreach program (policy EDU-1-LB).

The Committee is of the opinion that:

- iii) these policies, if implemented, will promote the achievement of the objectives of ensuring that these activities cease to be or do not become significant threats; and
- iv) a policy to regulate or prohibit the activity is not necessary to achieve those objectives.

4.4 DNAPLS AND ORGANIC SOLVENTS

DNAPLs (dense non-aqueous phase liquids) and organic solvents have a wide variety of commercial and industrial uses. They are found in such products as paints, adhesives, degreasing and cleaning agents and in the production of dyes, plastics, textiles, printing inks and pharmaceuticals. The types of commercial users in the Mississippi-Rideau region are dry cleaners, electrical power stations, wood product manufacturing and automotive shops.

DNAPLs and organic solvents are regulated federally by Environment Canada under the *Environmental Protection Act* and provincially under the *Ontario Toxics Reduction Act* and *the Ontario Environmental Protection Act* through mechanisms such as Toxic Substance Reduction Plans, sector regulations such as the Dry Cleaners regulations as well as disposal and spill regulations.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
DNAPL-1-LB-S58	Existing handling and storage of DNAPLs and organic solvents	Significant	Manage	Risk Management Plan (Risk Management Official)
DNAPL-2-LB-S57	Future handling and storage of DNAPLs and organic solvents where the vulnerability score is 10	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)
DNAPL-3-LB-S57	Future handling and storage of DNAPLs and organic solvents where the vulnerability score is 4 to 8 in WHPA "B" and "C" in quantities greater than 25 liters	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)
DNAPL-4-LB-S58	Future handling and storage of DNAPLs and organic solvents where the vulnerability score is 4 to 8 in WHPA "B" and "C" in quantities less than 25 liters	Significant	Manage	Risk Management Plan (Risk Management Official)

Explanation of Policy Decisions

In addition to the policies described below, the "Living and Working in the Drinking Water Zone" education and outreach program (see Section 4.16) will raise awareness about household products that contain DNAPLs or organic solvents, provide information about alternative

products and proper disposal of unwanted products.

Historically, the Source Protection Committee and Municipal Working Group agreed that the storage and handling of DNAPLs and organic solvents should be prohibited from being established in the future where they would be considered a significant drinking water threat.

When the Province released a DNAPL guidance document in 2016, Risk Management Staff at the Mississippi-Rideau Source Protection Region underwent a two-phase project to determine what products contain these chemicals and create an inventory of where they were being used.

It was determined that DNAPL chemicals can be found in small quantities, specifically products commonly used in the automotive service industry (i.e. chlorinated brake cleaner in aerosol cans). Current policies would require Risk Management Staff prohibit future automotive repairs shops and similar land uses from establishing within IPZ-1, WHPA-A, B and C. Source Protection staff encountered difficulties with the implementation of this prohibition policy.

The Source Protection Committee and Municipal Working Group were presented with these findings between 2017-2019 and agreed to amend DNAPL policies.

Policy: DNAPL-1-LB-S58

Existing DNAPLs and Organic Solvents - Risk Management Plan

DNAPLs are arguably the most dangerous of the drinking water threats due to the potential for long-term or irreparable damage to aquifers. As such, the vulnerable area where the handling and storage of a DNAPL is a significant threat is large (five year time of travel). The Risk Management Plan policy would apply to this large area, for all types of users and for any quantity of DNAPL. This approach should effectively manage the activity so that it ceases to be a significant threat.

Organic solvents are not as dangerous, so the vulnerable area is smaller (Intake Protection Zones and Wellhead Protection Areas with a vulnerability score of 10) and the threat circumstance stipulates minimum volumes that need to be stored to be considered a significant drinking water threat. The policy approach is to require a Risk Management Plan for those existing businesses that meet the significant threat circumstances. Combined with other Federal and Provincial controls on organic solvents, this approach should effectively manage the activity so that it ceases to be a significant threat.

The Committee was of the opinion that a Risk Management Plan is necessary for all existing activities because of numerous regulatory gaps such as:

- Substances deemed to be "not toxic" by Environment Canada and Health Canada and therefore not subject to mandatory risk management measures under the Canadian Environmental Protection Act
- Users that are part of a sector not subject to mandatory risk management measures under the Canadian Environmental Protection Act
- Users that are part of a sector subject to mandatory risk management measures under the *Canadian Environmental Protection Act* but fall beneath regulatory thresholds (e.g., the solvent degreasing regulations that apply to users of more than 1,000 kg per year)
- Activities involving DNAPL/organic solvent use that are not subject to regular inspections, audits or any "on the ground" checking by regulatory agencies

This policy was amended to exempt **Retail Sales Establishments** from complying with this policy.

Policy: DNAPL-2-LB-S57 (revised)

Future DNAPLs and Organic Solvents — Section 57 Prohibition Where the Vulnerability Score is 10

While risks associated with existing activities can be managed, This policy prohibits the establishment of future land uses that involve the use of DNAPLs and certain quantities of organic solvents in areas where these activities would be a significant drinking water threat where the vulnerability score is 10.

The municipal working group and all Committee members were in agreement that the storage and handling of DNAPLs and organic solvents should be prohibited from being established in the future where they would be considered a significant drinking water threat. This prohibition policy had broad public support and is consistent with the policy approach for other activities that pose a high risk of contamination, potentially serious or irreversible consequences in the event of contamination and/or are not essential activities in that area.

DNAPL-3-LB-S57 (new policy)

Future handling and storage of DNAPLs where the vulnerability score is 4 to 8 in WHPA "B" and "C" in quantities greater than 25 liters

This policy prohibits the establishment of future land uses that involve the use of DNAPLs in areas where these activities would be a significant drinking water threat where the vulnerability score is 4 to 8 in WHPA "B" and "C" in quantities greater than 25 liters¹. Retail Sales Establishments are exempt from complying this policy.

DNAPL-4-LB-S58 (new policy)

Future handling and storage of DNAPLs where the vulnerability score is 4 to 8 in WHPA "B" and "C" in quantities less than 25 liters

This policy manages the future storage and handling of DNAPLs in WHPA "B" and "C" in quantities less than 25 liters. The Source Protection Committee and Municipal Working Group agree that the storage and handling of DNAPLs in small quantities can be managed by Risk Management Plan. Retail Sales Establishments are exempt from complying with this policy.

Policy: DNAPL-3-LB (deleted policy)

Sewer Use

This policy is intended to ensure that the concentration of the listed DNAPL and organic solvent substances in sewage discharged into the municipal sewage / stormwater system is limited (e.g., through establishing a sewer use by-law or adding the listed substances to an existing sewer use by-law). A sewer use by-law is a tool that is already used by municipalities to prevent certain types of contaminants from entering the storm water sewers and sewage treatment plants. The policy takes practical advantage of this existing tool to provide an extra regulatory measure to protect drinking water. MOE review indicated this policy is not permissible. It was removed and instead included in Section 6.1 as part of "Additional Recommendations to Municipalities".

Policy: DNAPL-4-NLB (deleted policy)

Environment Canada Risk Management Tools

Environment Canada has established risk management requirements for the substances on the Toxic Substances List under the authority of the *Canadian Environmental Protection Act*. Unfortunately, with the exception of dry-cleaners, it appears that these requirements do not apply

¹ 25 Liters is a threshold that was established by three (3) other Source Protection Areas/Regions in the Province

to the small to medium sized businesses that use DNAPLs and organic solvents in the Mississippi-Rideau region. The policy recommended Environment Canada consider ways to fill this regulatory gap. If this could be accomplished, the risks associated with these activities could be managed through these regulatory means (e.g., Pollution Prevention Plans) rather than through the Risk Management Plans administered by the municipality.

During consultation on the draft Source Protection Plan, Environment Canada provided a comment letter which reconfirmed that their focus is on developing sector wide risk management requirements. Based on this information, the Committee reconsidered the appropriateness of this policy and decided to remove it. Customized, site-specific Risk Management Plans will be a much more effective and fair way for appropriate measures to be agreed upon and implemented for the small to medium size businesses that will be impacted by the DNAPL / organic solvent policies.

Financial Considerations

The Committee considered the cost to municipalities of administering the policies, the cost to affected people of implementing risk management measures and the cost of lost opportunity resulting from the prohibition of future businesses that involve the use of these chemicals. The following factors helped the Committee decide that the policies are financially feasible and fair.

The cost of administering Risk Management Plans is the responsibility of municipalities. Under the *Clean Water Act* municipalities are permitted to charge fees to recover these costs. In this case, the cost of Risk Management Plans would be borne by the property owners who need them (like a permit fee). Alternatively, under the *Safe Drinking Water Act*, municipalities are permitted to recover costs for source protection through their water rates. In this case the cost of Risk Management Plans would be borne by those people on municipal water (through an increase to their water bill). The number of significant threat locations is relatively low (approximately 11). This means the cost of administering Risk Management Plans for this activity should be modest.

There will be costs to the municipality associated with limiting the concentration of DNAPL and organic solvents in sewage. There will be a one-time administrative cost of implementing the requirement (e.g., establishing or amending a sewer use by-law) and ongoing costs to conduct monitoring and testing required as part of compliance assurance. The Committee felt that these costs would be acceptable to the municipalities since these types of preventative measures are prudent and much cheaper than the costs of additional water treatment or remediation of contaminated sites and water sources.

Property or business owners may incur costs if upgrades or special measures are required through the Risk Management Plan. However, these costs would be low compared to the cost of a spill. Funding to help offset costs of upgrades is available through the Ontario Drinking Water Stewardship Program. There could be a cost of lost opportunity to landowners or developers because certain types of businesses could not be established as a result of the prohibition of the future handling and storage of some DNAPLs and organic solvents.

Comments Received During Pre-Consultation

Concerns were raised by some municipalities regarding implementation challenges such as determining which businesses are using which chemicals and keeping track of changes over time. However, the municipalities all supported or did not oppose the policies to address DNAPLs and organic solvents. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

comments where received when completing pre-consultation for the revised DNAPL policies.

Comments Received on the Draft Source Protection Plan

A comment letter was received from Environment Canada clarifying their regulatory role. This resulted in the removal of policy DNAPL-4-NLB as described above. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the DNAPL and organic solvent policies.

4.5 FUEL (HEATING) OIL

This section addresses fuel used in appliances such as furnaces and generators. Fuel used to power motor vehicles is addressed in Section 4.6

The Technical Standards and Safety Authority (TSSA) under the Ministry of Consumer Services (MCS) administers and enforces public safety measures pursuant to Ontario's *Technical Standards and Safety Act*. The regulation pertaining to fuel oil is Ontario Regulation 213/01 which addresses the transportation, storage, distribution and utilization of fuel. The requirements for the installation, maintenance, replacement and inspection of appliances that use fuel oil are found in the *Ontario Installation Code for Oil-Burning Equipment*.

Fuel suppliers must perform an inspection of fuel oil appliances prior to initially supplying fuel and a minimum of every ten years thereafter to ensure compliance with codes and regulations. The TSSA's role is to audit fuel distributors to ensure they comply with the requirements of the regulation. Under the regulation, homeowners are also obligated to have their fuel oil installation inspected annually but many people are unaware of this requirement.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
FUEL-1-LB-S58	Existing and future fuel stored for heating or generators*	Significant	Manage	Risk Management Plan (Risk Management Official)
FUEL-2-LB-PI-MC	Existing and future fuel storage regulated under the Safe Drinking Water Act	Significant	Manage	Prescribed Instrument (MOE)
FUEL-3-NLB	Existing and future fuel stored for heating or generators	Significant	Encourage (recommendations to the TSSA/MCS)	Other action (TSSA/MCS)

^{*}Handling and storage of fuel at a facility as defined in Section 1 of Ontario Regulation 213/01 except for that regulated under the Safe Drinking Water Act.

Explanation of Policy Decisions

Policy: FUEL-1-LB-S58

Fuel (Heating) Oil – Risk Management Plan

According to local sector experts, the most common failures relating to fuel oil handling and storage are corrosion of tanks, problems with oil lines and overfills. As there are many risk management measures that can effectively address these failures, prohibition was deemed

unnecessary. However, the consequences of a failure can be severe, with clean up costs potentially exceeding a million dollars. Therefore, where fuel oil handling and storage is or would be a significant threat, it was decided that a Risk Management Plan would be necessary to ensure:

- Appropriate tanks are in use
- Effective risk management measures are undertaken to address tank corrosion, line failure and overfilling
- An annual inspection is completed
- Property owners are encouraged to have pollution liability insurance
- Property owners have information readily available to effectively respond to a spill

The policy also promotes replacement of side feed tanks that are at least 10 years old. Side feed tanks are problematic because the bottom of the tank does not completely drain. This leads to water accumulating in the bottom of the tank due to condensation (or water present in the fuel that is delivered) which causes corrosion from the inside out. The risk is that the exterior of the tank can appear to be in good condition even at the point when a spill is imminent. Spills often occur when the tank has just been filled and weight and pressure are at their highest. Bottom feed tanks, correctly installed at an angle toward the outlet, do not allow water to accumulate in the tank.

Policy: FUEL-2-LB-PI-MC

Fuel (Heating) Oil – Prescribed Instrument

To make sure risk management measures are in place for fuel stored or handled at municipal water treatment plants, the policy directs the MOE to ensure the *Safe Drinking Water Act* licenses and permits require appropriate risk management measures. The Committee felt that the same risk management measures that are recommended for the Risk Management Plans should also be recommended to be included in the amended *Safe Drinking Water Act* approvals. The MOE Safe Drinking Water Branch has indicated their support for this policy.

Policy: FUEL-3-NLB

Fuel (Heating) Oil – Recommendations to the TSSA and Ministry of Consumer Services
This policy makes recommendations to the TSSA and MCS with regard to addressing factors
that contribute to risks associated with the storage of fuel (old style tanks, lack of regular
inspections and maintenance). As the regulating body, the TSSA can play an important role that
need not be expensive or onerous such as encouraging fuel suppliers to print a reminder about
the importance of annual inspections on their invoices given to customers. The policy wording
was later revised to address concerns raised by MCS about specific recommendations
contained within the policy wording. To address these concerns, the policy wording was revised
to encourage the incorporation of source water information into the code review process in
general terms and also to incorporate a role for the MOE Source Protection Programs Branch.
The policy to monitor the implementation of this policy recommends that the Source Protection
Authority maintain regular (annual) contact with the TSSA and MCS to obtain an update
regarding any progress related to these recommendations but also to stay informed about
stakeholder engagement opportunities associated with code revisions.

Education and Outreach – Risk Management Measures for Fuel Handling and Storage
Local sector experts indicated that outdoor single-walled fuel storage tanks pose the greatest risk of failure. This is because outdoor tanks are exposed to weather and freeze/thaw cycles and are prone to damage from falling ice and snow and from being struck by vehicles.

Unfortunately, the typical size of a residential heating oil tank is 900 litres which according to the

Provincial Tables of Circumstances can only be considered a moderate drinking water threat when located above grade. As mandatory Risk Management Plans cannot be used for moderate threats, this threat will instead be addressed by encouraging residents living in vulnerable drinking water areas to implement risk management measures for fuel storage. This will be accomplished through policy EDU-1-LB which is the "Living and Working in the Drinking Water Zone" education and outreach program (see Section 4.16).

Financial Considerations

The Committee considered both the cost to municipalities and to the MOE of administering the policies and the cost to affected people of implementing risk management measures. The following factors helped the Committee decide that the policies are financially feasible and fair.

The cost of administering Risk Management Plans is the responsibility of municipalities. Under the *Clean Water Act* municipalities are permitted to charge fees to recover these costs. In this case, the cost of Risk Management Plans would be borne by the property owners who need them (like a permit fee). Alternatively, under the *Safe Drinking Water Act*, municipalities are permitted to recover costs for source protection through their water rates. In this case the cost of Risk Management Plans would be borne by those people on municipal water (through an increase to their water bill).

The estimated number of Risk Management Plans required for fuel oil is 300. This represents the largest number of Risk Management Plans that the municipalities will be responsible for and the largest number of affected people. The Committee viewed this as a necessary and prudent expenditure for the municipalities to ensure municipal drinking water is protected and the municipalities supported the Risk Management Plan policy.

Property owners may incur costs to implement the measures in the Risk Management Plan. These costs are a modest increase over the most basic fuel oil setup currently allowed under the Codes. The risk management measures will also help protect the property owner's most expensive asset – their home. A spill can bankrupt property owners or cause them to lose their home and/or property even if they have insurance. Many insurance companies are also now offering discounts on home insurance when risk management measures are implemented. There is also a program that offers funding to undertake such measures (Ontario Drinking Water Stewardship Program) through 2012.

A Prescribed Instrument was used to avoid regulatory duplication for municipal drinking water system facilities. There will be an administrative and staffing cost to the MOE to review and amend the existing instruments. However, it appears that fuel storage at only three locations (Carp, Kemptville and Smiths Falls) would meet the significant threat circumstances. There could also be a cost to drinking water system owners/operators if upgrades are required, however, the fuel storage at the water plants is likely already up-to-date and well-maintained.

The policies do not prevent existing or new development nor do they force property owners to switch their heating methods. In many cases, the policies are enforcing measures that are already mandatory or standards that are commonly required by local fuel suppliers or insurance companies. This means many property owners may have already undertaken some or all of these measures to maintain their fuel delivery or their insurance coverage.

Comments Received During Pre-Consultation

The MOE Safe Drinking Water Branch provided feedback that helped refine policy language. Municipalities supported or did not oppose the policies to address fuel oil. The TSSA responded that they are supportive of source water protection efforts but indicated that their role would be

limited due to resource constraints as a self-funded, not-for-profit organization. They provided information about the process that is required in order to make any changes to current practices and codes. Draft policies were also shared with other bodies, potentially affected property owners and the public. Some property owners shared ideas regarding implementation and commented that they need time and grants to implement measures in the Risk Management Plan. Others viewed the current regulations as adequate. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE Safe Drinking Water Branch indicated that they support and intend to comply with the mandatory content of policy FUEL-2-LB-PI-MC. This allows this policy to be consistent with policy FUEL-1-LB-S58 where the Committee has stipulated certain risk management measures that must be in the Risk Management Plan. The City of Ottawa recommended, and the Committee agreed, that property owners should be advised rather than required to hold pollution liability insurance as some property owners may be unable to obtain this coverage. In addition, new information came to light indicating that side feed tanks are still available and therefore may be newer than 10 years old. As a result the wording of the risk management measure was revised so that only side-feed tanks at least 10 years old require immediate replacement.

The TSSA and MCS stated in their joint comment letter and in a teleconference that source water protection falls beyond their expertise and mandate. In addition, they have no plans to consider recommendations for changes to the regulatory framework for fuel but presented some ways that they are willing to support source water protection initiatives. The Committee considered these comments and decided not to revise or delete the policies directed at the TSSA because:

- The TSSA and MCS are the public bodies responsible for the safe storage and handling of fuel in Ontario
- Safe drinking water is a public health and safety issue which is a universal priority and one that transcends any one ministry or mandate
- The policies are non-legally binding and simply make recommendations to the TSSA and MCS regarding the role they could play in helping achieve source water protection goals

MCS was added as an implementer to the original TSSA policies since the TSSA is under that ministry and since they have been communicating jointly with source protection committees. In addition, the Committee added a compliance date of one year for policy FUEL-3-NLB to allow the TSSA and MCS time to initiate action after the date the Source Protection Plan takes effect.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The MOE reiterated the TSSA/MCS position as described above under "Comments Received on the Draft Source Protection Plan". The TSSA/MCS commented that policy FUEL-3-NLB should be reassigned or deleted entirely.

4.6 LIQUID FUEL

This section addresses fuel used to power motor vehicles and fuel stored at manufacturing or refining facilities. Fuel used in appliances such as furnaces and generators is addressed in Section 4.5.

The Technical Standards and Safety Authority (TSSA) under the Ministry of Consumer Services (MCS) administers and enforces public safety measures pursuant to Ontario's *Technical Standards and Safety Act* which includes the transportation, storage, distribution and utilization of fuel. The regulation pertaining to liquid fuel is Ontario Regulation 217/01. The requirements for the installation, maintenance, replacement and inspection of equipment that dispense, handle or store gasoline or an associated product are found in the *Liquid Fuels Handling Code*, 2007.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
FUEL-4-NLB	Fuel storage at existing licensed facilities*	Significant	Manage (through existing regulatory requirements)	Other action (TSSA)
FUEL-5-LB-S57	Fuel storage at future licensed facilities*	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)
FUEL-6-LB-S58	Existing and future fuel storage at a private outlet**	Significant	Manage	Risk Management Plan (Risk Management Official)

^{*}Handling and storage of fuel at a bulk plant, cardlock/keylock or retail outlet, including a marina as defined in Section 1 of Ontario Regulation 217/01 or at a facility that manufactures or refines fuel.

Explanation of Policy Decisions

The policies make a distinction between:

- Licensed facilities (bulk plant, retail outlet, marina, cardlock/keylock) and refineries that are "fuel focused businesses"; and
- Private outlets (such as a farm, heavy equipment yard, municipal garage, fire hall) where fuel is stored as an ancillary part of the business.

The policies are based on current best management practices and common industry standards and they are enforcing current regulatory requirements.

Policy: FUEL-4-NLB

Liquid Fuel at Existing Licensed Facilities – The TSSA's Existing Procedures

There are no refineries in the Mississippi-Rideau Region. Initial threat enumeration work conducted during the Assessment Report phase located two licensed facilities that were considered a significant threat in the region. These two facilities have since been removed from the list of existing threats because of well improvements that substantially reduced the size of the Wellhead Protection Area with a vulnerability score of 10 in the community in which they are located.

^{**}Handling and storage at a private outlet as defined in Section 1 of Ontario Regulation 217/01 (non fuel-based business such as a construction yard, farm, fire hall)

In the unlikely event that an existing licensed facility is present, the policy is to continue to manage the handling and storage of fuel at the facility through the TSSA's comprehensive system of monitoring, licensing and inspections that ensure compliance with the requirements of Ontario Regulation 217/01 and the *Liquid Fuels Handling Code, 2007*. This decision was based on early engagement activities that involved consulting with gas station owners and a TSSA inspector who provided information to the Committee regarding the rigorous nature of the existing compliance program for licensed facilities. The Committee was of the opinion that a Risk Management Plan policy would duplicate the monitoring, record keeping and inspections licensed facilities are already subject to.

Policy: FUEL-5-LB-S57

Liquid Fuel at Future Licensed Facilities and Refineries – Section 57 Prohibition

This policy prohibits the future handling and storage of fuel at future licensed facilities or refineries where the handling and storage of fuel would be a significant threat. The Committee felt that it is unnecessary that new licensed facilities be established where they would be considered a significant threat because these facilities are "fuel based businesses" that can be established in any suitable location, there is no operational need for them to be located in these small areas. Even though risks associated with the handling and storage of fuel could be managed, licensed facilities are most often associated with large volumes of fuel that still poses a substantial level of risk (e.g., spills, leaks, contaminated runoff). In addition, it is unlikely that new licensed facilities would be proposed in Intake Protection Zones and Wellhead Protection Areas with a vulnerability score of 10. These areas tend to be unsuitable for this type of land use because they are small, largely residential, often adjacent to sensitive environmental features and/or have prohibitive zoning.

Policy: FUEL-6-LB-S58

<u>Liquid Fuel at Private Outlets - Risk Management Plan</u>

The policy approach is to manage the handling and storage of fuel at both existing and future private outlets through a Risk Management Plan. Experts consulted during policy development indicated that compliance with the TSSA regulations and codes at private outlets is less well assured because they are not subject to regular TSSA inspections and lack the record keeping and reporting requirements of a licensed facility. A Risk Management Plan would fill this gap. The contents of the Risk Management Plan would primarily involve demonstrating compliance with the requirements of the existing regulation and codes.

Private outlets are not "fuel based businesses", they provide fuel to support other land uses (e.g., farming, small businesses with heavy equipment). Therefore, the Committee felt it is necessary to allow future fuels handling and storage at future private outlets in these areas or else it could inadvertently prohibit the establishment or interfere with the operations of an array of businesses, institutions and public buildings where fuel may need to be handled and stored (e.g., fire stations). Unlike licensed facilities, there could be an operational need for a private outlet to be located in these areas.

Private outlets are commonly associated with smaller volumes of fuel compared to licensed facilities which means if a spill occurs, the impact would not be as extensive. There are exceptions where private outlets involve large volumes of fuel (e.g., a quarry site). However, these types of private outlets associated with large industrial land uses would not be able to be established in the small areas scored 10 where fuel storage is or would be a significant threat.

Policy: FUEL-7-NLB (deleted policy)

Liquid Fuel – Recommendations to the TSSA and Ministry of Consumer Services

Research conducted as part of policy development indicated that TSSA inspectors use their expertise and discretion to select private outlets to inspect. The policy recommends that the TSSA/MCS provide information to TSSA inspectors about the location of vulnerable drinking water areas where fuel storage and handling is a significant threat. This would allow inspectors to factor this information in to their decisions about inspection priorities for private outlets. Following submission of the Proposed Source Protection Plan to the MOE, information was provided by the TSSA indicating that the recommendations cannot be adopted due to the limitations of the existing regulatory regime. Alternative wording proposed by the TSSA would not achieve the policy intent, therefore the Committee decided to remove the policy.

Financial Considerations

The Committee considered the cost to municipalities of administering the Risk Management Plan policies, the cost to affected people of implementing risk management measures and the cost of lost opportunity resulting from the prohibition of future fuel-based businesses. The following factors helped the Committee decide that the policies are financially feasible and fair.

Existing licensed facilities are not likely present in the areas where they are a significant threat. However, if a licensed facility is present, it will continue to operate and be managed through the current regulatory system. As it is unlikely and unnecessary that a new licensed facility will be proposed in these small areas, prohibiting this activity should have no financial impacts on landowners or developers.

For private outlets, the cost of administering Risk Management Plans is the responsibility of municipalities. Under the *Clean Water Act*, municipalities are permitted to charge fees to recover these costs. In this case, the cost of Risk Management Plans would be borne by the property owners who need them (like a permit fee). Alternatively, under the *Safe Drinking Water Act*, municipalities are permitted to recover costs for source protection through their water rates. In this case the cost of Risk Management Plans would be borne by those people on municipal water (through an increase to their water bill).

It is estimated that approximately 10 private outlets in the region would require a Risk Management Plan. In many cases, the Risk Management Plan would include measures that are already mandatory or standards that are commonly required by local fuel suppliers or insurance companies. This means many property or business owners may have already undertaken some or all of these measures to maintain their fuel delivery or their insurance policy. Where upgrades are required to bring installations up to code, costs would be modest compared to the costs associated with a spill. To offset costs of risk management measures, there is funding available for some improvements such as tank upgrades through the Ontario Drinking Water Stewardship Program until the end of 2012.

Comments Received During Pre-Consultation

Municipalities supported or did not oppose the policies to address liquid fuel. The TSSA responded that they are supportive of source water protection efforts but indicated that their role would be limited due to resource constraints as a self-funded, not-for-profit organization. They provided information about the process that is required in order to make any changes to current practices and codes. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The City of Ottawa recommended and the Committee agreed that property owners should be advised, rather than required, to hold pollution liability insurance as some property or business owners may be unable to obtain this coverage.

The TSSA and MCS said in their joint comment letter and in a teleconference that source water protection falls beyond their expertise and mandate. In addition, they have no plans to consider recommendations for changes to the regulatory framework for fuel but presented some ways that they are willing to support source water protection initiatives. The Committee considered these comments and decided not to revise or delete the policies directed at the TSSA because:

- The TSSA and MCS are the public bodies responsible for the safe storage and handling of fuel in Ontario
- Safe drinking water is a public health and safety issue which is a universal priority and one that transcends any one ministry or mandate
- The policies are non-legally binding and simply make recommendations to the TSSA and MCS regarding the role they could play in helping achieve source water protection goals

MCS was added as an implementer to the original TSSA policies since the TSSA is under that ministry and since they have been communicating jointly with source protection committees. In addition, the Committee added a compliance date of one year for policy FUEL-7-NLB to allow the TSSA and MCS time to initiate action after the date the Source Protection Plan takes effect.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The MOE reiterated the TSSA/MCS position as described above under "Comments Received on the Draft Source Protection Plan". The TSSA/MCS commented that policies FUEL-4-NLB and FUEL-7-NLB should be reassigned or deleted entirely.

Confidence in Non-Regulatory Measures

In accordance with Section 40 of Ontario Regulation 287/07 the Committee must provide in the Explanatory Document a statement that non-regulatory measures are sufficient to address a significant threat. This section is intended to meet this requirement.

The following significant threat activity is only subject to non-regulatory source protection policies:

• Storage and handling of fuel at existing licensed facilities and refineries

The Committee has confidence in the rigorous leak prevention and detection technology, record keeping and inspections that are required at licensed facilities. A policy recognizing that the existing requirements under Ontario Regulation 217/01 and the *Liquid Fuels Handling Code*, 2007 administered by the TSSA already safely manage this activity has been included (policy FUEL-4-NLB). Even though this policy can only be non-legally binding under the *Clean Water Act*, it will be implemented because it is simply recognizing and supporting TSSA's ongoing regulatory role.

The Committee is of the opinion that:

- i) this policy, if implemented, will promote the achievement of the objectives of ensuring that these activities cease to be or do not become significant threats; and
- ii) a policy to regulate or prohibit the activity is not necessary to achieve those objectives.

4.7 COMMERCIAL FERTILIZER

Commercial fertilizer contains nitrogen, phosphorus, potassium (or other plant food intended for use as a plant nutrient) and is applied to land to improve the growth of crops.

The application of commercial fertilizer is partly regulated by the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) under the *Nutrient Management Act*. A Nutrient Management Plan sets out how much and where the nutrients will be applied to the land and is based on the principle that managing nutrients for crop requirements minimizes environmental impact. This would address the application of commercial fertilizer. However, the *Nutrient Management Act* instruments are not required for all farms and they do not address the handling and storage of commercial fertilizer. The Canadian Fertilizer Institute plays an important role in promoting the safe handling and storage of commercial fertilizer through its guidelines and codes of practice.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
FERT-1-LB-PI-MC	Existing and future application of commercial fertilizer	Significant	Manage (Nutrient Management Act requirements)	Other action (OMAFRA and MOE)
FERT-2-LB-S58	Existing and future storage and application of commercial fertilizer except future storage for retail sale	Significant	Manage (activities not governed by Nutrient Management Act requirements)	Risk Management Plan (Risk Management Official)
FERT-3-LB-S57	Future storage of commercial fertilizer for retail sale	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)

Explanation of Policy Decisions

Policy: FERT-1-LB-PI-MC

Commercial Fertilizer - Prescribed Instrument

This policy was included because all significant threat activities must have a corresponding policy in the Source Protection Plan. The Committee is satisfied that the application of commercial fertilizer that requires a Nutrient Management Plan is adequately managed through OMAFRA's and MOE's existing processes under the *Nutrient Management Act* General Regulation 267/03. Therefore, this activity is exempt from the Risk Management Plan requirement when it is subject to a Nutrient Management Plan.

Unlike other Prescribed Instrument policies, this policy does not require OMAFRA to review and amend existing instruments or examine if there is a need to attach additional terms and conditions to new instruments. This is because the *Nutrient Management Act* and the regulation considered the Walkerton Inquiry recommendations and as a result, nutrient management became part of Ontario's comprehensive, science-based approach to protecting drinking water. The Committee felt that this legislation already achieves source protection objectives.

Policy: FERT-2-LB-S58 (formerly FERT-1-LB-S58)

Commercial Fertilizer - Risk Management Plan

The Assessment Reports for the Mississippi-Rideau region did not identify any existing retail storage of commercial fertilizer. In the event that this activity is occurring, the risks will be managed using a Risk Management Plan to ensure compliance with the Canadian Fertilizer Institute guidelines and codes of practice. These guidelines are comprehensive and cover topics such as the location of new facilities, Emergency Response Plans, design specifications for containment and runoff management and employee training.

The non-residential application and storage of commercial fertilizer by operators (e.g., golf courses, farms) can also be adequately addressed using a Risk Management Plan that will ensure effective risk management measures are in place.

Ontario's *Nutrient Management Act* sets out standards for the safe application of commercial fertilizer. These standards are implemented on large or expanding farms through a Nutrient Management Plan. After listening to presentations by staff from the OMAFRA and the MOE regarding the *Nutrient Management Act* requirements, compliance and enforcement as well as advice from the agricultural working group, the Committee concluded that this existing process adequately manages risks to drinking water of fertilizer application on these farms. Therefore, where an operation has in place a Nutrient Management Plan to address commercial fertilizer application, a Risk Management Plan is not required. The storage of commercial fertilizer is not governed by *Nutrient Management Act* instruments, so if greater than 2,500 tonnes is stored in relation to its application or for retail sale at existing outlets, a Risk Management Plan would be required.

The Committee explored the feasibility of setting a threshold below which a Risk Management Plan would not be required (e.g. low number of farm animals). However, this type of threshold is problematic because it may inadvertently exempt a large cash crop operation from the Risk Management Plan if that operation has few or no livestock. The Committee concluded that the policy exemption is not imperative anyway because the storage of commercial fertilizer already has a threshold to be a significant drinking water threat (2,500 kg) and the application of fertilizer can only be a significant threat in a small area (one field) outside the urban boundary of Munster where non-residential application could occur so the policy will not be broadly applied.

Policy: FERT-3-LB-S57 (formerly FERT-2-LB-S57)

Future Retail Storage of Commercial Fertilizer – Section 57 Prohibition

Even though risks associated with future commercial fertilizer storage for retail purposes could be managed, retail storage is often associated with larger volumes of fertilizer stored for longer periods of time which poses a higher level of risk. It is also unnecessary that new retail storage facilities be established in the small areas where commercial fertilizer handling and storage would be considered a significant threat because these facilities can be established in any suitable location; there is no operational need for them to be located in an area with a vulnerability score of 10. These are often areas that are unsuitable for the future establishment of these types of activities anyway due to incompatible existing land uses, prohibitive zoning or lack of space. For these reasons, future retail storages will be prohibited which will effectively address the drinking water threat.

Financial Considerations

The Committee considered both the cost to municipalities of administering the Risk Management Plan policies and the cost to property owners of implementing risk management measures. The following factors helped the Committee decide that the policies are financially feasible and fair.

The cost of administering Risk Management Plans is the responsibility of municipalities. Under the *Clean Water Act* municipalities are permitted to charge fees to recover these costs. In this case, the cost of Risk Management Plans would be borne by the property owners who need them (like a permit fee). Alternatively, under the *Safe Drinking Water Act*, municipalities are permitted to recover costs for source protection through their water rates. In this case the cost of Risk Management Plans would be borne by those people on municipal water (through an increase to their water bill). It is estimated that there are four properties region wide that would require a Risk Management Plan for commercial fertilizer use. This means the cost to the municipalities of administering the Risk Management Plan policy for this threat is low.

Measures that may be required through the Risk Management Plan are likely common best management practices that many operations will have already implemented either on their own or with help from the Environmental Farm Plan. If they have not, there may be additional costs incurred. However, the costs associated with new required measures under a Risk Management Plan would be modest compared to the potential costs and liability associated with contaminating a drinking water source and a record of such practices could be used to demonstrate due diligence in the event that a farm is blamed for contamination that is not a result of farm practices. In addition, the Ontario Drinking Water Stewardship Program, the Canada-Ontario Environmental Farm Plan and/or local Clean Water Programs (e.g., Ottawa and Rideau Valley) may provide funding for certain activities related to commercial fertilizer.

Exempting operations that already have in place Nutrient Management Plans avoids regulatory duplication and saves property owners and municipalities time and money.

Comments Received During Pre-Consultation

OMAFRA staff provided helpful comments that contributed to refining policy language. The Canadian Fertilizer Institute provided helpful information about their guidelines, codes of practice and education programs and indicated support for the draft commercial fertilizer policies. The municipalities supported or did not oppose the policies to address commercial fertilizer. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The City of Ottawa commented on an inconsistency with one of Raisin-South Nation region's commercial fertilizer policies. The Committee did not wish to change the policy as they feel strongly that it is unnecessary to allow new retail storages of commercial fertilizer to be established in Intake Protection Zones or Wellhead Protection Areas with a vulnerability score of 10. The MOE commented that, because all significant threat activities must have a corresponding policy in the Source Protection Plan, a policy is required to address the activities that are exempt from the Risk Management Plan policy. These are activities that are governed by a *Nutrient Management Act* instrument. For this reason, a new policy directed at the OMAFRA and the MOE has been added (policy FERT-1-LB-PI-MC) which supports the existing regulatory regime and simply says that the application of commercial fertilizer will continue to be managed through these existing requirements.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to commercial fertilizer policies is from the OMAFRA indicating their support for the Risk Management Plan policies for operations not subject to *Nutrient Management Act* requirements and suggesting a minor wording change.

Confidence in Non-Regulatory Measures

In accordance with Section 40 of Ontario Regulation 287/07, the Committee must provide in the Explanatory Document a statement that non-regulatory measures are sufficient to address a significant threat. This section is intended to meet this requirement.

The following significant threat activities are exempt from the Risk Management Plan requirement:

- Storage and application of commercial fertilizer on small, non-intensive farms
- Residential use of commercial fertilizer such as on lawns

Instead, the implementation of best management practices will be promoted and encouraged through the "Living and Working in the Drinking Water Zone" education and outreach program (policy EDU-1-LB). This uses a non-regulatory means to address a significant threat.

The Committee is of the opinion that:

- i) this policy, if implemented, will promote the achievement of the objectives of ensuring that these activities cease to be or do not become significant threats; and
- ii) a policy to regulate or prohibit the activity is not necessary to achieve those objectives.

4.8 PESTICIDE

The term pesticide as defined under the *Pesticides Act* includes herbicides used to control weeds, nematicides used to control nematodes (roundworms), insecticides and fungicides. The MOE's Tables of Circumstances lists 11 chemicals of concern to drinking water under the pesticide threat. These are active ingredients in herbicides except for one that is used to control nematodes and one that is used to control fungi.

Pesticide is regulated federally under the *Pest Control Products Act* that approves and registers pesticide products for use and governs labeling of these products. The Agrichemical Warehousing Standards Association consists of industry and government representatives that establish standards to ensure pesticide is stored in certified warehouses. In addition, pesticide is closely regulated by the MOE under the Ontario *Pesticides Act* and Ontario Regulation 63/09 the requirements of which are described in the explanation of policy decisions below.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
PEST-1-NLB	Existing and future pesticide application, handling and storage	Significant	Encourage the MOE to consider source water when determining inspection priorities	Other action (MOE)
PEST-2-NLB	Existing and future pesticide application,	Significant	Encourage the MOE to review	Other action (MOE)

	handling and storage		pesticide education	
			programs	
PEST-3-LB-PI-MC	Existing and future pesticide use requiring <i>Pesticides Act</i> approvals	Significant	Manage	Prescribed Instrument (MOE)
PEST-4-LB-S58	Existing pesticide handling and storage, commercial	Significant	Manage	Risk Management Plan (Risk Management Official)
PEST-5-LB-S57	Future pesticide handling and storage, commercial	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)

Explanation of Policy Decisions

The policy supports the continuation of the current regulatory regime for the application, handling and storage of pesticide in Ontario. The regulations include:

- Ontario's Cosmetic Pesticides Ban that prohibits the use of pesticide for cosmetic use with exceptions for protecting the health and safety of people
- Users exempt from the ban (e.g., golf courses) must become accredited for Integrated Pest Management and report annually to the public about how they have minimized their pesticide use
- Commercial exterminators, operators and technicians must be licensed under Ontario Pesticide Training and Certification
- Farmers must be certified through the Grower Pesticide Safety Course that addresses all aspects of the threat
- Vendors must have Pesticide Vendor Certification
- A permit issued by the MOE under the Pesticides Act is required for specific pesticide treatments (aerial, aquatic, fumigations)
- Storage, display, transportation and disposal requirements

The Committee was of the opinion that several policies building on the existing regulatory framework would collectively ensure that pesticide handling, storage and application ceases to be or does not become a significant threat to drinking water. In addition to the policies discussed below, best management practices for pesticide use will be promoted and encouraged through the "Living and Working in the Drinking Water Zone" education and outreach program (see Section 4.16).

Policy: PEST-1-NLB Pesticide Inspections

The Committee learned through consultation with experts and the agricultural sector that inspections related to pesticide are conducted at the discretion of the MOE regional staff. While the Committee has a high level of confidence with the training, certification and licensing system, they felt it would provide greater assurance that appropriate measures are being implemented to protect source water if the MOE were to consider source water information in their decisions about the location and frequency of inspections.

Policy: PEST-2-NLB

Pesticide Education Programs

During research conducted to support policy development, it was discovered that there is a regulatory gap with respect to the Grower Pesticide Safety Course. It appears that some types of pesticide that are considered to be a significant drinking water threat can be applied or stored

without requiring that the person engaged in the activity has completed the Grower Pesticide Safety Course (*Grower Pesticide Safety Course Manual*, page 9 indicates "Farmers Not Certified" can purchase and use Class 4 pesticide some of which are listed in the Tables of Circumstances for significant threats). It seems appropriate to bring this regulatory gap to the attention of the MOE to address so that all pesticide use that is deemed a significant threat is conducted by certified people.

Policy: PEST-3-LB-PI-MC

Pesticide Use – Prescribed Instrument

Similar to other policies using Prescribed Instruments, a policy has been included to direct the MOE to ensure that measures to protect drinking water are included in the approvals that they issue. There is confidence that these existing processes are the best mechanism to achieve the objectives of managing threats so that they are not significant. As mentioned above, pesticide permits issued by the MOE under the *Pesticides Act* are only required for specific pesticide treatments such as aerial or aquatic spraying.

Policy: PEST-4-LB-S58

Existing Commercial Storage of Pesticide – Risk Management Plan

The Assessment Reports for the Mississippi-Rideau region did not identify any existing pesticide handling and storage for manufacturing, processing, wholesaling, retailing or custom application purposes. In the unlikely event that this activity is discovered to be already occurring where it is a significant drinking water threat, the policy is to require a Risk Management Plan as a means to recognize or set out and enforce necessary risk management measures. This would prevent putting anyone out of business while providing the regulatory assurance that the risks are managed so that the threat ceases to be significant.

Policy: PEST-5-LB-S57

Future Commercial Storage of Pesticide – Section 57 Prohibition

The Committee put the future handling and storage of pesticide for manufacturing, processing and wholesaling as well as storage by retail outlets and custom applicators in the category of undesirable, more hazardous activities that should be established outside of areas where these activities would be a significant threat. These storages could be associated with larger volumes of pesticide stored for longer periods of time which could pose a higher level of risk. It is also unnecessary for these types of new storages to be established in the small areas where they would be considered a significant threat.

Financial Considerations

The Committee considered the cost to municipalities and the MOE of administering the policies and the cost to affected people. The following factors helped the Committee decide that the policies are financially feasible and fair.

Nearly all application, handling and storage (except some types of future storage) will continue to be managed under existing requirements and regulations; therefore most people and businesses would not be impacted. As it is unlikely that new pesticide storage for manufacturing, processing, wholesale, retail or custom applicators will be proposed in significant threat areas (because these areas are largely unsuitable for this use), prohibiting this activity should have no financial or development impacts. It is also unlikely that there are any existing commercial locations that would be impacted by policies. If a location is discovered, the requirements under the Agrichemical Warehousing Association standards may already meet or exceed the requirements that would be established under a Risk Management Plan. So the cost of implementing new risk management measures would likely be minimal. The Ontario Drinking

Water Stewardship Program, the Canada-Ontario Environmental Farm Plan and/or local Clean Water Programs (e.g., Ottawa and Rideau Valley) will provide funding for certain risk management measures related to pesticide use.

The cost to the municipalities of implementing the Section 57 Prohibition and Risk Management Plan policies would be administrative in nature. It may turn out that there are no costs at all because this activity is not likely occurring presently and may not be proposed in the future as the areas where pesticide handling and storage would be significant threats are largely unsuitable for establishing commercial pesticide facilities anyway.

There would be administrative and staffing costs to the MOE to implement the policies recommending program reviews but possibly no costs associated with the Prescribed Instrument policies as it is unlikely that pesticide use requiring permits will occur in the small vulnerable areas. Relying on Ontario's many existing requirements to manage pesticide avoids regulatory duplication and saves money.

Comments Received During Pre-Consultation

The MOE commented in general about timelines, resources and policy wording for all policies using Prescribed Instruments but did not comment on non-legally binding policies. OMAFRA staff provided suggestions about policy wording. A concern was raised by one municipality regarding pesticide application near drinking water sources. All other municipalities supported or did not oppose the policies to address pesticide. Draft policies were also shared with other bodies, potentially affected property owners and the public. A public house participant expressed concerns about pesticide use at golf courses. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE commented that the wording of policies that recommend changes to MOE business practices (e.g., pesticide inspections and pesticide safety courses) be revised to make them more consistent, flexible and implementable. The Committee approved these revisions to policy wording for policies PEST-1-NLB and PEST-2-NLB. The Committee also added a compliance date of one year for these non-legally binding policies to allow the MOE time to initiate action after the date the Source Protection Plan takes effect. The MOE also requested that the three year compliance date for Prescribed Instrument policies include "or such other date as the Director determines based on a prioritized review of Prescribed Instruments". The Committee was not in favour of making this change because all other compliance dates in the Plan are firm and this would be inconsistent with the three year compliance date for municipalities to establish Risk Management Plans for existing activities. The Committee believes three years is adequate for the MOE to review the very small number of existing instruments in the Mississippi-Rideau region (threats enumeration work indicate one existing *Ontario Water Resources Act* instrument and three *Safe Drinking Water Act* instruments).

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to the pesticide policies is from the MOE reiterating their request that the three year timeline for implementation of all prescribed instrument policies use the language "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".

Confidence in Non-Regulatory Measures

In accordance with Section 40 of Ontario Regulation 287/07, the Committee must provide in the Explanatory Document a statement that non-regulatory measures are sufficient to address a significant threat. This section is intended to meet this requirement.

The following significant threat activities are only subject to non-regulatory source protection policies:

- Handling and storage of pesticide by end-users (except custom applicators)
- Application of pesticide

Instead, the Committee has chosen to rely primarily on the existing regulatory regime for pesticide in Ontario which is rigorous as well as the "Living and Working and the Drinking Water Zone" education and outreach program (EDU-1-LB). In addition, two policies recommending action by the MOE to address a regulatory gap and strengthen efforts to ensure compliance (policies PEST-1-NLB and PEST-2-NLB) have been included.

The Committee is of the opinion that:

- i) these policies, if implemented, will promote the achievement of the objectives of ensuring that these activities cease to be or do not become significant threats; and
- ii) a policy to regulate or prohibit the activity is not necessary to achieve those objectives.

4.9 OUTDOOR LIVESTOCK AREAS AND AGRICULTURAL SOURCE MATERIAL

Outdoor livestock areas refers to the use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. Agricultural source material (ASM) is material produced on a farm such as manure or compost that is applied to land to improve the growth of crops and for soil conditioning.

Outdoor livestock areas and the application and storage of ASM are partly regulated by the OMAFRA under the *Nutrient Management Act*. The main philosophy of the *Nutrient Management Act* is that properly managing nutrients for crop requirements will benefit crops while minimizing environmental impacts including impacts to water quality.

A Nutrient Management Strategy prepared by a certified individual pursuant to the *Nutrient Management Act* sets out how all the nutrients that are generated on the farm (ASM) will be managed. The strategy would address the storage of ASM and the generation of ASM from a farm-animal yard or an outdoor confinement area. A Nutrient Management Plan sets out how much and where the nutrients will be applied to the land. This would address the application of ASM. These instruments are not required for all farms and they do not address the use of land for grazing or pasturing.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
LIVE-1-LB-PI-MC	Existing and future outdoor livestock areas	Significant	Manage (through Nutrient Management Act instruments)	Other action (OMAFRA and MOE)
ASM-1-LB-PI-MC	Existing and future storage and	Significant	Manage (through Nutrient Management	Other action (OMAFRA and MOE)

	application of ASM		Act instruments)	
LIVE-2-LB-S58	Existing and future outdoor livestock areas	Significant	Manage (activities not governed by Nutrient Management Act instruments)	Risk Management Plan (Risk Management Official)
ASM-2-LB-S58	Existing and future storage and application of ASM	Significant	Manage (activities not governed by Nutrient Management Act instruments)	Risk Management Plan (Risk Management Official)

Explanation of Policy Decisions

Policies: LIVE-1-LB-PI-MC and ASM-1-LB-PI-MC

Outdoor Livestock Areas and Agricultural Source Material – Prescribed Instruments

These policies were included because all significant threat activities must have a corresponding policy in the Source Protection Plan. The Committee is satisfied that outdoor livestock areas and the application and storage of ASM that require a Nutrient Management Strategy or Plan are adequately managed through OMAFRA's and MOE's existing processes under the *Nutrient Management Act* General Regulation 267/03. Therefore, these activities are exempt from the Risk Management Plan requirement when they are subject to a Nutrient Management Strategy or Plan.

Unlike other Prescribed Instrument policies, this policy does not require OMAFRA to review and amend existing instruments or examine if there is a need to attach additional terms and conditions to new instruments. This is because the *Nutrient Management Act* and the regulation considered the Walkerton Inquiry recommendations and as a result, nutrient management became part of Ontario's comprehensive, science-based approach to protecting drinking water. The Committee felt that this legislation already achieves source protection objectives.

Policies: LIVE-2-LB-S58 and ASM-2-LB-S58 (formerly LIVE-1-LB-S58 and ASM-1-LB-S58) <u>Outdoor Livestock Areas and Agricultural Source Material – Risk Management Plan</u>

Experts consulted on this topic, emphasized that one of the most effective approaches to address ASM and outdoor livestock areas is through a Nutrient Management Strategy or Plan. The agricultural and municipal working groups and the Committee agreed that where a farm is not subject to these instruments but the activities are considered to be a significant threat to drinking water, a Risk Management Plan should be required in most cases. The Risk Management Plan would ideally be based on the same principles as the Nutrient Management Strategy or Plan.

Ontario's source water protection Technical Experts Committee (2004 report) identified DNAPLs and pathogens as the two contaminants that are extremely problematic from a human health protection standpoint once they enter source water. This is the reason for the large area (Intake Protection Zones with a vulnerability score of 8 to 10) where ASM and outdoor livestock areas are considered a significant threat and the low thresholds (any amount of ASM, one or more farm animals). Given the threat circumstances, the mandatory policies will apply in these larger areas and to most farms thereby affording a high level of protection for drinking water sources.

Due to the fact that any amount of ASM stored or land applied and one or more farm animals is considered a significant threat, the Committee was concerned about the practical and financial implications of requiring a Risk Management Plan in all cases. Through research and consultation a solution was found. Both the OMAFRA and the Environmental Farm Plan program recognize that while all livestock operations produce manure, the risk of soil and water

contamination increases when large volumes of manure are stored on the farmstead and/or applied to a small land base. For this reason, the policies combine thresholds from the *Nutrient Management Act* (operations where the number of farm animals is not sufficient to generate five or more nutrient units of manure annually – these are very small operations) and the Environmental Farm Plan (operations where the concentration is less than one nutrient unit per acre of cropland – these are non-intensive, low risk operations) to set the minimum requirement below which a Risk Management Plan would not be required. Instead, the implementation of best management practices will be encouraged through the Living and Working in the Drinking Water Zone education and outreach program (see Section 4.16).

Financial Considerations

The Committee considered both the cost to municipalities of administering the Risk Management Plan policies and the cost to property owners of implementing risk management measures. The following factors helped the Committee decide that the policies are financially feasible and fair.

The cost of administering Risk Management Plans is the responsibility of municipalities. Under the *Clean Water Act* municipalities are permitted to charge fees to recover these costs. In this case, the cost of Risk Management Plans would be borne by the property owners who need them (like a permit fee). Alternatively, under the *Safe Drinking Water Act*, municipalities are permitted to recover costs for source protection through their water rates. In this case the cost of Risk Management Plans would be borne by those people on municipal water (through an increase to their water bill).

It is estimated that approximately 75 properties have existing activities related to ASM or outdoor livestock areas that would require a Risk Management Plan. If one farm is made up of multiple parcels, only one Risk Management Plan would be required for the entire operation. Also, one Risk Management Plan can address multiple activities. These factors may further reduce the number of impacted operations and the cost of administering a Risk Management Plan program for these activities.

Measures that may be required through the Risk Management Plan are likely common best management practices that many operations will have already implemented either on their own or with help from the Environmental Farm Plan. If they have not, there will be additional costs associated with these new required measures. However, the costs associated with new required measures under a Risk Management Plan would be modest compared to the potential costs and liability associated with contaminating a drinking water source and a record of such practices could be used to demonstrate due diligence in the event that a farm is blamed for contamination that is not a result of farm practices. In addition, the Ontario Drinking Water Stewardship Program, the Canada-Ontario Environmental Farm Plan and/or local Clean Water Programs (e.g., Ottawa and Rideau Valley) may provide funding for certain activities related to ASM and outdoor livestock areas.

Exempting operations that already have in place Nutrient Management Plans or Strategies avoids regulatory duplication and saves money.

Comments Received During Pre-Consultation

OMAFRA staff provided helpful comments that contributed to refining policy language. Some concerns were raised by municipalities regarding implementation issues. However, the municipalities all supported or did not oppose the policies to address ASM and outdoor livestock areas. Draft policies were also shared with other bodies, potentially affected property owners

and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE noted that because all significant threat activities must have a corresponding policy in the Source Protection Plan, a policy is required to address the activities that are exempt from the Risk Management Plan policy. These are activities that are governed by a *Nutrient Management Act* instrument. For this reason, new policies directed at the OMAFRA and the MOE have been added (policies LIVE-1-LB-PI-MC and ASM-1-LB-PI-MC) which support the existing regulatory framework and simply say that significant threat activities related to outdoor livestock areas and agricultural source material will continue to be managed through these existing requirements.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. Members of the public expressed concern about drinking water contamination caused by geese which they feel is a greater likelihood than contamination from farm animals. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to ASM and outdoor livestock areas policies is from the OMAFRA indicating their support for the Risk Management Plan policies for operations not subject to *Nutrient Management Act* requirements and suggesting a minor wording change.

Confidence in Non-Regulatory Measures

In accordance with Section 40 of Ontario Regulation 287/07, the Committee must provide in the Explanatory Document a statement that non-regulatory measures are sufficient to address a significant threat. This section is intended to meet this requirement.

The following significant threat activities are exempt from the Risk Management Plan requirement:

- Storage and application of ASM on small, non-intensive farms
- Outdoor livestock areas on small, non-intensive farms
- Residential use of ASM such as bagged manure applied to gardens

Instead the implementation of best management practices will be promoted and encouraged through the "Living and Working in the Drinking Water Zone" education and outreach program (policy EDU-1-LB). This uses a non-regulatory means to address a significant threat.

The Committee is of the opinion that:

- i) this policy, if implemented, will promote the achievement of the objectives of ensuring that these activities cease to be or do not become significant threats; and
- ii) a policy to regulate or prohibit the activities is not necessary to achieve those objectives.

4.10 NON-AGRICULTURAL SOURCE MATERIAL

Non-agricultural source material (NASM) is material that is not produced on a farm that is applied to land to improve the growth of crops and for soil conditioning. Examples of NASM are

sewage biosolids, pulp and paper biosolids and waste material from food processing. There are three categories of NASM (Category 1, Category 2 and Category 3) depending on the characteristics of the material (pathogens, other contaminants, odour).

The application, handling and storage of NASM are partly regulated by the OMAFRA under the *Nutrient Management Act*. A NASM Plan is the instrument that is prepared under the *Nutrient Management Act* and is a site-specific approval for the application, handling and storage of NASM. A NASM Plan is not required for Category 1 NASM or if the activity is governed by a Certificate of Approval issued by the MOE under the *Environmental Protection Act*.

The application of NASM used to be entirely regulated by the MOE through Organic Soil Conditioning Site Certificates of Approval issued under the *Environmental Protection Act*. The storage and application of many types of NASM is now regulated by OMAFRA as described above. However, the MOE may still have a role in regulating some types of NASM as described below under policy NASM-2-LB-PI-MC. Note that untreated septage is considered a waste and is addressed in Section 4.1 – Waste Disposal Sites.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
NASM-1-LB-PI-MC	Existing and future handling, storage and application of NASM	Significant	Manage (through Nutrient Management Act requirements)	Other action (OMAFRA and MOE)
NASM-2-LB-PI-MC	Existing and future application of NASM	Significant	Manage (through Environmental Protection Act requirements)	Prescribed Instrument (MOE)
NASM-3-LB-S58	Existing and future handling, storage and application of NASM	Significant	Manage (activities not governed by Nutrient Management Act or Environmental Protection Act requirements)	Risk Management Plan (Risk Management Official)

Explanation of Policy Decisions

Policy: NASM-1-LB-PI-MC

Non-agricultural Source Material – Prescribed Instrument (Under the Nutrient Management Act) This policy was included because all significant threat activities must have a corresponding policy in the Source Protection Plan. The Committee is satisfied that the application, storage and handling of NASM that requires a NASM Plan is adequately managed through OMAFRA's and MOE's existing processes under the Nutrient Management Act General Regulation 267/03. Therefore, these activities are exempt from the Risk Management Plan requirement when they are governed by a NASM Plan.

Unlike other Prescribed Instrument policies, this policy does not ask OMAFRA to review and amend existing instruments or examine if there is a need to attach additional terms and conditions to new instruments. This is because the *Nutrient Management Act* and the regulation considered the Walkerton Inquiry recommendations and as a result, nutrient management became part of Ontario's comprehensive, science-based approach to protecting drinking water. The Committee felt that this legislation already achieves source protection objectives.

Policy: NASM-2-LB-PI-MC (formerly NASM-1-LB-PI-MC)

Non-agricultural Source Material – Prescribed Instrument (Under the Environmental Protection Act

Where an existing Organic Soil Conditioning Site Certificate of Approval is in place, a NASM Plan is not required until the Certificate of Approval expires or is revoked but no later than January 1, 2016. This policy was included to direct the MOE to review existing instruments if there are any (the Assessment Report did not identify any) to ensure they contain terms and conditions that adequately address the threat so that it is not significant.

Environmental Compliance Approvals may continue to be required instead of NASM Plans if the NASM materials exceed thresholds for *E. coli*, odour or regulated metals stipulated in the *Nutrient Management Act*. Therefore this policy also requires the MOE to ensure that newly issued Environmental Compliance Approvals contain terms and conditions that adequately address the threat so that it is not significant. Note that if the material is untreated septage the future application is prohibited through policy WASTE-3-LB-PI/PA-MC.

Policy: NASM-3-LB-S58 (formerly NASM-2-LB-S58)

Non-agricultural Source Material – Risk Management Plan

NASM plans prepared under the *Nutrient Management Act* are required for all application and storage of Category 2 or 3 NASM (unless the activity is governed by a Certificate of Approval or Environmental Compliance Approval as described in policy NASM-2-LB-PI-MC). The NASM standards that the NASM Plans embody were jointly developed by the MOE and OMAFRA to ensure food safety and environmental protection. They include material analyses, minimum separation distances from wells and surface water, maximum application rates, safe storage and contingency plans. Category 1 NASM is exempt from the NASM plan requirement but is considered to be a significant threat to drinking water under some circumstances. The Risk Management Plan policy is intended to fill this regulatory gap. The Risk Management Plan would ideally be based on the same principles as the NASM Plans. The end result will be that all NASM storage and application that is or would be a significant threat has in place either a NASM Plan (or in some cases a Certificate of Approval or Environmental Compliance Approval, see above) or a Risk Management Plan to set out all the measures that will be implemented to ensure drinking water is protected.

Financial Considerations

The Committee considered the cost to the MOE, the cost to municipalities of administering the Risk Management Plan policies and the cost to property owners of implementing risk management measures. The following factors helped the Committee decide that the policy is financially feasible and fair.

The Assessment Reports did not identify any existing NASM activities so the MOE will not likely incur any costs related to reviewing existing Organic Soil Conditioning Site Certificates of Approval issued under the *Environmental Protection Act*. If there are any discovered during policy implementation, these approvals are set to expire in 2016, at which point the regulatory authority transitions to the OMAFRA (NASM Plans under the *Nutrient Management Act* will replace the Certificates of Approval in most cases.)

The cost of administering Risk Management Plans is the responsibility of municipalities. Under the *Clean Water Act* municipalities are permitted to charge fees to recover these costs. In this case, the cost of Risk Management Plans would be borne by the property owners who need them (like a permit fee). Alternatively, under the *Safe Drinking Water Act*, municipalities are permitted to recover costs for source protection through their water rates. In this case the cost of

Risk Management Plans would be borne by those people on municipal water (through an increase to their water bill).

Significant threat estimates indicate that there are no properties in the region where NASM is stored or applied where it is or would be a significant drinking water threat. If these activities occur in the future, NASM generators will likely pay if there was a fee required for a Risk Management Plan so that there is no cost to the receiving property owner. They usually take care of preparing NASM Plans (time and costs) because they need properties to receive their NASM material.

Measures that may be required through the Risk Management Plan are likely common best management practices that many operations will have already implemented either on their own or with help from the Environmental Farm Plan. If they have not, there may be additional costs associated with these new required measures. The costs associated with new required measures under a Risk Management Plan would be modest compared to the potential costs and liability associated with contaminating a drinking water source and a record of such practices could be used to demonstrate due diligence in the event that a farm is blamed for contamination that is not a result of farm practices. In addition, the Ontario Drinking Water Stewardship Program, the Canada-Ontario Environmental Farm Plan and/or local Clean Water Programs (e.g., Ottawa and Rideau Valley) may provide funding for risk management measures related to NASM.

Using the Prescribed Instruments to achieve the policy intent makes use of existing tools and processes which prevents regulatory duplication and saves money. Exempting operations that already have in place NASM Plans or other instruments also avoids regulatory duplication and saves property owners and municipalities time and money.

Comments Received During Pre-Consultation

OMAFRA staff provided helpful comments that contributed to refining policy language. The municipalities all supported or did not oppose the policies to address NASM. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE commented that because all significant threat activities must have a corresponding policy in the Source Protection Plan, a policy is required to address the activities that are exempt from the Risk Management Plan policy. These are activities that are governed by a *Nutrient Management Act* instrument. For this reason, a new policy directed at the OMAFRA and the MOE has been added (policy NASM-1-LB-PI-MC) which supports the existing regulatory regime and simply says that the storage, handling and application of non-agricultural source material that is governed by a NASM Plan will continue to be managed through these existing regulatory requirements.

The MOE also requested that the three year compliance date for Prescribed Instrument policies include "or such other date as the Director determines based on a prioritized review of Prescribed Instruments". The Committee was not in favour of making this change because all other compliance dates in the Plan are firm and this would be inconsistent with the three year compliance date for municipalities to establish Risk Management Plans for existing activities. The Committee believes three years is adequate for the MOE to review the very small number of existing instruments in the Mississippi-Rideau region (threats enumeration work indicate one

existing Ontario Water Resources Act instrument and three Safe Drinking Water Act instruments).

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The OMAFRA recommended the removal of the policy requiring a Risk Management Plan for Category 1 NASM as they view it as being sufficiently regulated under the *Nutrient Management Act*. The MOE reiterated their request that the three year timeline for implementation of all prescribed instrument policies use the language "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".

4.11 AQUACULTURE

Aquaculture involves farm-raising cultured fish in facilities located either in water or on land. To establish a new commercial aquaculture facility, approval would be required from the Ministry of Natural Resources (MNR). An aquaculture license must be obtained in accordance with the *Fish and Wildlife Conservation Act* and Ontario Regulation 664/98. The aquaculture license may have conditions pertaining to pathogens and diseases and require reporting of some disease organisms. Facilities would also typically require a Certificate of Approval (now called an Environmental Compliance Approval) under the *Ontario Water Resources Act* for discharge of water from the facility and a Permit to Take Water in some situations. Pre-consultation with the OMAFRA confirmed that aquaculture is not currently regulated under the *Nutrient Management Act*.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
AQUA-1-LB-PI-HR	Existing and future use of land or water for aquaculture	Moderate	Manage	Prescribed Instrument (MOE)
AQUA-2-NLB	Future use of land or water for aquaculture	Moderate	Encourage the MNR to consider impacts to drinking water	Other action (MNR)

Explanation of Policy Decisions

According to the Provincial Tables of Circumstances, aquaculture operations cannot be considered a significant drinking water threat. Therefore, a policy for aquaculture is not a mandatory part of the Source Protection Plan. Nevertheless, the Committee felt it prudent to include a policy to address this activity where it would be considered a moderate threat to drinking water sources. The policy approach is directed at the provincial agencies that currently regulate aquaculture, thereby making use of existing tools and processes and preventing regulatory duplication.

Policy: AQUA-1-LB-PI-HR

<u>Use of Land or Water for Aquaculture – Prescribed Instrument</u>

The Assessment Reports for the Mississippi-Rideau region did not enumerate the use of land or water for aquaculture since it is only considered to be a moderate threat. However, local knowledge indicates that there are not likely any existing threats. In the event that this activity is occurring in an area where it is considered a moderate threat, this policy calls on the MOE to include appropriate terms and conditions that address the threat and protect drinking water when making amendments to existing approvals (Sewage Certificate of Approval or Environmental Compliance Approval and Permit to Take Water).

The aquaculture industry is growing and it is conceivable that an aquaculture facility could be proposed to be located within an Intake Protection Zone where it would be a moderate threat to drinking water in the future. For future approvals, the MOE should consider the proximity and protection of the municipal surface water intakes when they are reviewing applications for new Environmental Compliance Approvals or Permits to Take Water under the *Ontario Water Resources Act*. This should be effective in addressing the threat because the MOE has staff knowledgeable in the potential environmental effects and mitigation associated with water withdrawal and sewage discharge.

Policy: AQUA-2-NLB

Use of Land or Water for Aquaculture – Fish and Wildlife Conservation Act Approvals ldeally, approvals would not be granted for new aquaculture facilities in close proximity to drinking water sources. However, as this activity is only considered to be a moderate threat, it cannot be prohibited through Source Protection Plan policies. Instead, a policy has been included to encourage the MNR to consider the potential impact on drinking water sources during their review of applications for approvals under the Fish and Wildlife Conservation Act and the Aquaculture Regulations. The MNR is encouraged to give preference to locations outside of the Intake Protection Zones with a vulnerability score of 9 or 10 to prevent this activity from being established in the areas where it would be a moderate drinking water threat.

Financial Considerations

The policy development process considered costs to the agencies that would implement the policies, costs to property owners and examined if there would be any cost of lost opportunity to developers. The following factors helped the Committee decide that the policies are financially feasible and fair.

It does not appear that any aquaculture facilities exist in the Intake Protection Zones scored 9 or 10 where this activity is a moderate threat. Therefore, no existing businesses would be affected and no existing approvals would need to be reviewed by the MOE. In addition, the MNR has indicated that it is highly unlikely that someone would apply for a commercial scale aquaculture site in the Mississippi or Rideau rivers as they are not well suited for aquaculture. Therefore, future businesses should not be impacted and the MOE and MNR are unlikely to incur any costs associated with administering the policies other than some initial cost to integrate source water protection information into review procedures.

Comments Received During Pre-Consultation

The MOE's pre-consultation response indicated that they are focusing on the significant threat policies and did not include comments on the other permissible policies. OMAFRA staff confirmed that aquaculture activities are not currently regulated under the *Nutrient Management Act* so they were removed as a policy implementer. Draft policies were also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MNR commented that policy AQUA-2-NLB is unnecessary because they are drafting a cage (in water) aquaculture policy which recommends the consideration of drinking water intakes and also because the Mississippi-Rideau region is not well suited for cage aquaculture. The MNR also commented that they do not consider drinking water sources when licensing landbased aquaculture facilities because the MOE must consider it in the issuance of their approvals. The Committee favoured keeping this non-legally binding policy in the Source Protection Plan because it will complement the MNR's future cage aquaculture policy by encouraging cage aquaculture to take place outside of Intake Protection Zones scored 9 and 10. The Committee added a compliance date of one year for policy AQUA-2-NLB to allow the MNR time to initiate action after the date the Source Protection Plan takes effect.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the aquaculture policies.

4.12 AIRCRAFT DE-ICING

Aircraft de-icing in Canada is regulated under the *Canadian Environmental Protection Act* Glycol Guidelines that require the development of Glycol Operational Management Plans and the monitoring of glycol concentrations entering surface water. Depending on where the runoff is discharged, provincial legislation such as the *Ontario Water Resources Act* may also apply.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
DEICE-1-LB-S57	Future management of runoff that contains chemicals used in the deicing of aircraft	Significant	Prohibit	Section 57 Prohibition (Risk Management Official)

Explanation of Policy Decisions

In the Mississippi-Rideau region, there are no existing airports where de-icing could be a significant threat so no policy has been included to address existing situations.

Policy: DEICE-1-LB-S57

Aircraft De-icing – Section 57 Prohibition

It is very unlikely that the threat activity of "management of runoff that contains chemicals used in the de-icing of aircraft" would occur in the future. This is because the land area needed to establish an airport where this activity would occur is approximately 160 hectares (400 acres) for a regional airport and even more for a national airport. The *Provincial Policy Statement, 2005* states that airports and adjacent land uses must be buffered and/or separated from each other to prevent adverse effects from odour, noise and other contaminants. For these reasons, it is unlikely, if not impossible, for a new national airport to be established in a Wellhead Protection Area scored 10 or in an Intake Protection Zone scored 9 or 10 due to the lack of space and

incompatible existing land uses. It is also unlikely that a regional airport could be established in an Intake Protection Zone scored 10. The Committee and the municipal working group all agreed that prohibiting future aircraft de-icing would be a reasonable policy choice given the unsuitable nature of the vulnerable drinking water areas and the fact that services, businesses and individuals are very unlikely to be impacted.

Financial Considerations

There are no airports now and it is very unlikely that any airports could be proposed in the future in the areas where aircraft de-icing would be a significant threat. Therefore, a prohibition policy will not have a financial impact on any landowners or businesses. There should also be no costs to the municipality to implement the Section 57 Prohibition policy.

Comments Received During Pre-Consultation

The municipalities all supported or did not oppose the policy to address aircraft de-icing. The draft policy was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

Transport Canada provided a helpful comment letter that clarified their regulatory role and responsibilities. The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the aircraft de-icing policy.

4.13 TRANSPORTATION CORRIDORS

Transportation corridors refer to roads, railways and shipping lanes.

Policy Brief

Policy Code	Topic	Threat	Policy Intent	Policy Tool and Implementer
CORR-1-NLB	Transportation corridors	n/a	Encourage municipalities to update Emergency Response Plans	Other action (municipality)
CORR-2-NLB	Transportation corridors	n/a	Encourage the MOE to update spill response procedures	Other action (MOE)

Explanation of Policy Decisions

Transportation corridors were not included in the list of prescribed drinking water threats. However, Source Protection Committees may:

- Seek approval from the MOE to add transportation of specific substances along certain routes as a local drinking water threat; or
- Address transportation corridors in general through a policy under Section 26, Part 6 of Ontario Regulation 287/07 (specifying actions to be taken by persons or bodies to update spill prevention and spill contingency plans or Emergency Response Plans).

The Mississippi-Rideau region did not add specific transportation corridor threats. However, the Assessment Reports noted a commitment to consider including a policy in the Source Protection Plan to address transportation corridors in general.

Policy: CORR-1-NLB

Municipal Emergency Response Plan Updates

The *Clean Water Act*, General Regulation 287/07 allows policies that direct actions to be taken by persons or bodies to update spill prevention and spill contingency plans or Emergency Response Plans for the purpose of protecting drinking water sources. These policies would apply to spills that occur within a Wellhead Protection Area or Intake Protection Zone along highways as defined in subsection 1(1) of the *Highway Traffic Act*, railway lines or shipping lanes.

All municipalities have an Emergency Response Plan as required by the *Emergency Management and Civil Protection Act*. Information about vulnerable drinking water areas is not required to be part of these plans. However, the Committee was of the opinion that plans should be updated to include information such as maps of the vulnerable areas and procedures for first responders. As the location and vulnerability of these areas are now known and mapped in detail, this is an ideal use of this information. Clearly, the protection of the municipal source of drinking water should be a high priority during emergencies. This policy is not legally binding for the municipality.

Policy: CORR-2-NLB

Ministry of the Environment Spill Response Procedure Updates

The MOE is the other important agency that should have awareness of the vulnerable drinking water areas because of their vital role in responding to spills across the province. The Spills Action Centre receives reports of spills and other environmental matters and initiates or coordinates a response as required. The Spills Action Centre is staffed on a 24-hour basis and can be reached with a province-wide, toll-free telephone number. The Source Protection Plan includes a policy to encourage the MOE to integrate information about the vulnerable drinking water areas into their spill response procedures as they see fit. This policy is not legally binding.

Financial Considerations

The Committee considered the cost to municipalities of updating the Emergency Response Plans and the cost to the MOE of amending their spill response procedures. These costs would be one-time and mainly administrative in nature. During consultation, the MOE and municipalities did not indicate any financial concerns associated with these policies.

Comments Received During Pre-Consultation

The municipalities all supported or did not oppose the policies. The MOE's pre-consultation response indicated that they are focusing on the significant threat policies and did not include comments on the other permissible policies. For a summary of all comments received on the draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The draft Source Protection Plan was shared with implementers, other bodies, potentially affected property owners and the public. No comments specifically about the transportation corridors policies were received. For a summary of all other comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. There were no comments received related to the transportation corridor policies.

4.14 TRANSPORT PATHWAYS

Transport pathways are caused by human activities involving excavations or drilling that disturbs or creates a channel through the natural protective overburden layer making aquifers more vulnerable to contamination.

Policy Brief

Policy Code	Activity	Threat	Policy Intent	Policy Tool and Implementer
PATH-1-NLB	Earth (geothermal) energy systems	n/a	Encourage municipalities to provide greater oversight of earth energy systems	Other action (municipality)
PATH-2-NLB	Wells	n/a	Encourage the MOE to review the compliance program associated with Ontario Regulation 903	Other action (MOE)
PATH-3-NLB	Pits and quarries	n/a	Encourage the MNR to implement measures to address the potential impacts of new pits and quarries	Other action (MOE)

Explanation of Policy Decisions

In addition to considering transport pathways in the Assessment Report, Section 27 (1) of Ontario Regulation 287/07 allows transport pathways policies to be included in the Source Protection Plan. These policies are intended to ensure:

- That any drinking water threat in the vicinity of a transport pathway ceases to be or will not become a significant drinking water threat; or
- That the transport pathway ceases to endanger the raw water supply of a drinking water system.

Under Section 27 (2), the policies for transport pathways may:

- Establish stewardship or pilot programs
- Specify and promote best management practices
- Govern research
- Specify actions to be taken by an individual or body

These policies cannot be legally binding on the implementers. The Committee considered the various types of activities that can create transport pathways and examined how these are currently regulated. They concluded that there are some regulatory gaps and policies should be included to address:

- Earth (geothermal) energy systems
- Improperly constructed or abandoned wells
- Pits and quarries

The specific reasons for these policies are described below. In addition, awareness about the potential impacts of transport pathways on drinking water and the ways to alleviate those

impacts will form part of the "Living and Working in the Drinking Water Zone" education and outreach program (see Section 4.16).

Policy: PATH-1-NLB

Oversight of Earth (Geothermal) Energy Systems

Certain types of earth energy systems involve the drilling of numerous deep boreholes that could act as transport pathways. Ontario Regulation 350/06 under the *Building Code Act* requires that the design and installation of an earth energy system conform to the Canadian Standards Association's minimum design and installation standards to help reduce pathways for contaminants, spills of heat transfer fluids and other environmental risks. A building permit and site inspection by a municipal building official are required for the installation of a new system or any change to an existing system. Boreholes that meet the definition of a well under the *Ontario Water Resources Act* must be constructed by a licensed well driller and be in compliance with Ontario Regulation 903. In addition, a Permit to Take Water is required for withdrawals of greater than 50,000 litres per day and a Sewage Certificate of Approval (now called an Environmental Compliance Approval) is required for open loop systems involving certain volumes of water.

Despite the existing regulations, expert input revealed the following problems that may arise from the installation of earth energy systems in Wellhead Protection Areas:

- The operation of an open loop earth energy system could alter the groundwater flow regime, alter wellhead capture zones and impact the vulnerability of municipal sources of water
- Boreholes may not meet the definition of a well under the *Ontario Water Resources Act* and would therefore not be subject to Ontario Regulation 903
- Unlicensed drillers may not be able to deal with unforeseen subsurface conditions such as flowing wells, highly transmissive aguifers or natural gas
- A system withdrawing more than 50,000 litres per day is exempt from a Permit to Take Water requirement if the water is considered to be for domestic use

To address these concerns, the Committee decided to include this policy to recommend that municipalities:

- Prohibit the installation of certain types of earth energy systems in portions of a Wellhead Protection Area. This would prevent adverse hydrogeological impacts in these critical areas
- Require that qualified hydrogeologists oversee new earth energy projects. This oversight will help address regulatory gaps and provide specialized expertise.
- Keep records of the location, size and other pertinent details about earth energy systems.

Policy: PATH-2-NLB Well Regulations

There are concerns about the existing regulatory framework for drinking water wells, specifically the lack of routine inspections for new well construction and decommissioning under Ontario Regulation 903. To address this concern, the Committee decided to include in the transport pathways policies a recommendation to the MOE to conduct an analysis of the compliance program associated with Ontario Regulation 903 with regard to wells in Wellhead Protection Areas.

It should be noted that there are existing programs that provide information and funding for property owners to care for or upgrade their existing wells or properly abandon unused wells so that transport pathways are eliminated. These are:

- The Ontario Drinking Water Stewardship Program that provides financial assistance in areas where Source Protection Plan policies apply
- Rural Clean Water programs that provide financial assistance in rural Ottawa and the Rideau Valley watershed
- Well Aware that provides general educational information, site visits and site-specific advice

Policy: PATH-3-NLB

Approvals for Pits and Quarries

Existing pits and quarries were considered in the vulnerability scoring of Wellhead Protection Areas in the Assessment Reports. These areas were delineated and given a higher vulnerability score. To address the potential adverse effect of new pits and quarries in Wellhead Protection Areas, the policies for transport pathways include a recommendation to the MNR to build into their approval process measures to safeguard the raw water supply of municipal drinking water systems. This may involve setting out new requirements for proponents to assess potential impacts and propose mitigation measures and/or circulating proposals to other agencies for review and input regarding appropriate action to protect drinking water.

Financial Considerations

The Committee considered the cost to the MOE, the MNR and the municipalities of administering the policies and the cost to affected people and businesses. The following factors helped the Committee decide that the policies are financially feasible and fair.

There would be an initial administrative cost to the MNR to establish new procedures and for the MOE to conduct a program analysis. Additional costs to the MOE would depend on the results of the program analysis and the action they decide to take (e.g., conduct well inspections in Wellhead Protection Areas). In their pre-consultation response letter, the MOE referred to the need to assess workload and resources required to implement source protection policies province wide prior to making decisions about non-legally binding policies. Understandably the financial priority will be the implementation of significant threat policies but it is hoped that the transport pathways policies will be given due consideration and implemented by the MOE and the MNR as resources permit.

The municipalities would incur costs associated with stepping up regulations of earth energy systems. This is a non-legally binding policy so it is anticipated that municipalities will consider it in the context of cost versus benefits and implement this policy as resources permit.

Comments Received During Pre-Consultation

No comments specific to the transport pathways policies were received during pre-consultation. The municipalities all supported or did not oppose the policies. The MOE's pre-consultation response indicated that they are focusing on the significant threat policies and did not include comments on the other permissible policies.

Comments Received on the Draft Source Protection Plan

The MOE commented that the wording of policies that recommend changes to MOE business practices, such as the compliance program associated with Ontario Regulation 903 – Wells, be revised to make them more consistent, flexible and implementable. The MNR staff provided informal input regarding possibly accomplishing the policy intent of the pits and quarries policy

by circulating new proposals to other agencies for review and advice regarding protecting drinking water sources. The Committee revised the wording of policies PATH-2-NLB and PATH-3-NLB to address these comments. The Committee also added a compliance date of one year for all transport pathways policies to allow implementers time to initiate action after the date the Source Protection Plan takes effect.

The draft Source Protection Plan was also shared with other bodies, potentially affected property owners and the public. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment received related to the transport pathways policies was from the MNR who commented that their existing processes for the review of new aggregate operations address the intent of policy PATH-3-NLB.

4.15 ADMINISTRATIVE POLICIES

Administrative policies have been included in the Source Protection Plan to meet certain requirements under the *Clean Water Act* and to assist the agencies, especially municipalities, with implementation of policies.

Policy Brief

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Policy Code	Activity/Topic	Threat	Policy Intent	Policy Tool and Implementer		
ADMIN-1-LB	Restricted Land Use – all land uses	n/a	Establish a screening process for planning applications and building permit applications to ensure Source Protection Plan policy requirements are met	Other action (municipality)		
ADMIN-2-LB	Restricted Land Use – non- residential land uses	n/a		Other action (municipality)		
ADMIN-3-LB	Official Plan and zoning by-law conformity	n/a	Update documents to conform with Source Protection Plan policies	Other action (municipality)		
ADMIN-4-LB	Transition	n/a	Stipulate situations where an activity that commences,	n/a		
ADMIN-5-LB	Interruptions / Expansions	n/a	resumes or expands after the date the Plan takes effect would be considered "existing"	n/a		

Explanation of Policy Decisions

Policies: ADMIN-1-LB and ADMIN-2-LB

Restricted Land Use Policies

Section 59 "Restricted Land Use" is a provision in the *Clean Water Act* that enables a process to be established to link threat activities affected by Section 57 Prohibition and Section 58 Risk Management Plan policies with building permits and planning applications. The purpose is to "catch" proposals at the planning approval application or building permit application stage before

a threat is established because the Section 59 notice from the Risk Management Official is required up front.

Restricted Land Use policies are not required to be part of a Source Protection Plan but are advantageous because:

- If Restricted Land Use policies are not included, the municipality may have to pass a
 procedural by-law to require development applications to be reviewed by the Risk
 Management Official which could be subject to lengthy and costly appeals.
- If Restricted Land Use policies are not included, then the Chief Building Official is obligated to issue a permit without the benefit of the Risk Management Official's review.
- Section 59 of the *Clean Water Act* (Restricted Land Use) is the applicable law flag under the *Building Code Act*.
- The Section 59 notice is a process / tool that will be part of the Risk Management Official's training and is integral to fulfilling his or her role.

For these reasons the municipalities favoured inclusion of the Restricted Land Use policies and the Committee agreed with this recommendation. While working with municipalities to prepare for implementation, source water staff recognized the need to provide an exemption to the Restricted Land Use policy wording so that applications that clearly do not involve a significant threat activity are not subject to the policy. This will greatly reduce the number of applications being sent to the Risk Management Official for a notice under Section 59.

Policy: ADMIN-3-LB

Official Plan and Zoning By-Law Conformity

This policy is a requirement under the *Clean Water Act* when there are policies in a Source Protection Plan that affect decisions under the *Planning Act*. In the policies that prohibit the future establishment of waste disposal sites and sewage works, the Committee decided to specify that *Planning Act* decisions must conform. As a result, the Official Plan and zoning bylaw must be amended to reflect these prohibitions.

Official Plans must be amended to include the Restricted Land Use policies. This will assist the municipalities by providing clarity regarding activities proposed within certain land uses that may be subject to Section 57 Prohibition or Section 58 Risk Management Plan requirements under the *Clean Water Act.* Planning documents should also be amended to include the Transition and Interruptions / Expansions policies, where appropriate.

Policy: ADMIN-4-LB <u>Transition Policy</u>

Under source protection policies, many drinking water threat activities will be managed (through measures such as Risk Management Plans) if they are **existing** but will be prohibited to be established in the **future**. The Transition policy allows activities that have not been established but have already been approved to be considered "existing" and then they may proceed (subject to source protection policies that manage the threat to drinking water such as Risk Management Plans). Similarly, the Committee felt that applications that are in process should be allowed to proceed as it is unfair to change the rules mid-process when a complete application has already been submitted. The Transition policy allows activities associated with complete applications in process to be considered "existing" so that they may also proceed (subject to source protection policies that manage the threat to drinking water such as Risk Management Plans).

Policy: ADMIN-5-LB

Expansions/Interruptions Policy

Many policies in the Source Protection Plan prohibit future activities if they commence after the date the Source Protection Plan takes effect. The Interruptions / Expansions policy is intended to ensure that certain expansions to existing businesses or activities that resume after a temporary shut down are not considered "future" and inadvertently prohibited by source protection plan policies.

Financial Considerations

There will be an administrative cost to the municipalities to amend their Official Plans and zoning by-laws and to set up the screening process to comply with the Restricted Land Use policies. These are necessary costs that are part of Source Protection Plan implementation and are not anticipated to be greater than the informal changes that municipalities would have had to make to integrate Source Protection Plan policies into their operations in the absence of these formal requirements. Also, these updates can be made at the time of the next scheduled review which should minimize costs.

Comments Received During Pre-Consultation

During pre-consultation, municipalities were requested to comment specifically on whether or not they were in favour of including Restricted Land Use policies in the Source Protection Plan. Municipalities responded in favour of including these policies.

Comments Received on the Draft Source Protection Plan

The MOE, Source Protection Programs Branch provided guidance to show how some aspects of the definitions of "existing" and "future" could be entrenched in policies. The Committee elected to do this so the "existing" and "future" definitions were simplified and the Transition policy and the Interruptions / Expansions policy were added to the Source Protection Plan.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The only comment related to the administrative policies is from the MOE recommending that "regulatory approvals" referred to in policy ADMIN-5-LB be defined.

4.16 EDUCATION AND OUTREACH

Education and outreach is a policy tool that can be used alone or in combination with other policy approaches to address drinking water threats. Education and outreach aims to encourage the voluntary implementation of good stewardship practices by providing information and resources to target groups. Education and outreach programs can take many forms from simple and economical such as mailing out brochures to comprehensive such as classroom programming.

Policy Brief

Policy Code	Education and Outreach Initiative	Policy Intent	Policy Tool and Implementer
EDU-1-LB	"Living and Working in the Drinking Water Zone"	Education and outreach program to encourage good stewardship practices in the most vulnerable parts of the Wellhead Protection Areas and Intake Protection Zones	Education and Outreach (municipality)
EDU-2-NLB	Signs along provincial highways	Encourage the Ontario Ministry of Transportation (MTO) to lead the design and production of signs to	Other action (MTO)

		mark the Wellhead Protection Areas and Intake Protection Zones and install them along provincial highways	
EDU-3-NLB	Signs along primary municipal roads	Encourage municipalities to install and maintain signs along primary municipal roads in Wellhead Protection Areas and Intake Protection Zones	Other action (municipality)
EDU-4-NLB	Signs along recreational waterways	Encourage municipalities to install signs along recreational waterways in the vicinity of Intake Protection Zones	Other action (municipality)
EDU-5-NLB	"Transporting Contaminants through the Drinking Water Zone"	Education and outreach program to encourage companies transporting materials potentially hazardous to drinking water to adhere to good practices	Other action (municipality)
EDU-6-NLB	"Protecting Regional Groundwater"	Education program to encourage actions to protect regional groundwater	Other action (Source Protection Authority)

Explanation of Policy Decisions

Early in the policy development process, it became apparent that education and outreach is an effective approach for most of the policy topics and it can serve many purposes. Education and outreach can:

- Address significant threats where thresholds are extremely low such as keeping livestock on a small, non-intensive (low-risk) farm where the benefits gained from mandatory policies would be minimal
- Address significant threats at the "household" level where implementing mandatory
 policies would be impractical, expensive and very unpopular such as regulating manure
 on residential vegetable gardens
- Address moderate threats where mandatory policies are not permitted but risks are high such as outdoor, above ground heating oil tanks
- Address cumulative effects such as too much road salt on many driveways in a community
- Complement mandatory policies such as providing information about septic system care to keep systems well-maintained in between mandatory inspections
- Promote general awareness about vulnerable drinking water areas, good stewardship practices and funding programs available to property owners in areas affected by policies

In the interest of creating policies that are effective, practical, cost conscious and widely accepted, the Committee elected to create three education and outreach initiatives to encompass the many different policy topics and to accomplish the variety of purposes as described above. The three programs are:

- "Living and Working in the Drinking Water Zone" to be implemented by the municipalities
- "Travelling through the Drinking Water Zone" (including the installation of signs) to be implemented by the municipalities and the Ministry of Transportation (MTO)
- "Protecting Regional Groundwater" to be implemented by the Source Protection Authority

Policy: EDU-1-LB

Living and Working in the Drinking Water Zone

The "Living and Working in the Drinking Water Zone" program will provide information directly to residents and businesses, including farms, in the most vulnerable parts of a Wellhead Protection Area or Intake Protection Zone. This program will ensure people become aware of the vulnerable area in which they live or work, understand the importance of following good stewardship practices and receive information about funding programs that may help them implement measures on their property to better protect municipal source water. Municipalities were identified as the implementer of this education program because its purpose is to protect those sources of water supplying municipal drinking water systems.

Policy: EDU-2-NLB

Signs Along Provincial Highways

The installation of signs to mark the location of the Wellhead Protection Areas and Intake Protection Zones along major roads and recreational waterways was a logical addition to the education and outreach efforts. The sign initiative was originally led by a delegation representing all Source Protection Regions/Areas who approached the MTO for their guidance and support. The response from the MTO was positive, a working group was formed and all Committees were provided with standardized policy wording.

Policies: EDU-3-NLB and EDU-4-NLB

Signs Along Primary Municipal Roads and Recreational Waterways

At the local level, the Committee decided to include a policy to call on the municipalities to install and maintain the standardized source protection signs on primary municipal roads. Public input and concern led to the inclusion of a policy encouraging the municipalities to also install signs along recreational waterways to raise awareness of the location of the Intake Protection Zones. The Source Protection Authority will assist with the implementation of the sign policies by determining suitable locations and securing approvals from the MNR and Parks Canada.

The policy wording deviates slightly from the standardized wording requested by the MTO because municipalities indicated to the Committee that they need to have the ability to make final decisions about municipal road sign locations in their jurisdiction for several reasons, including:

- Small Wellhead Protection Areas scored 10 with limited suitable locations for signs
- Situations where the boundaries of the Wellhead Protection Areas scored 10 do not intersect any municipal roads
- The need to comply with the municipalities own policies for road sign placement (e.g. for safety reasons)

Policy: EDU-5-NLB

Transporting Contaminants Through the Drinking Water Zone

This policy originated as a way to address the handling of fuel in the areas where this activity is or would be a significant drinking water threat. It then became clear that this education and outreach initiative should be expanded to include other types of businesses that transport materials that could be hazardous to drinking water in the event of a spill. The program is intended to build on orientation and training programs that companies already offer their employees. It is not intended to include details about spill prevention practices that may be industry specific. Rather it is intended to raise general awareness about the location of the vulnerable areas (marked by the road and waterway signs) as well as the particular importance of adhering to spill prevention and response measures in these areas. The Source Protection Authority will assist with the implementation of this policy by identifying target businesses and developing communication /educational materials.

Policy: EDU-6-NLB

Protecting Regional Groundwater

The "Protecting Regional Groundwater" program will make information available to all residents and businesses in the Mississippi-Rideau region. The objective of the program is to promote awareness of the highly vulnerable nature of the region's groundwater and the importance of good stewardship practices to help protect this shared resource. The program is intended to address multiple topics related to protecting both the quantity and quality of regional groundwater. Source Protection Authorities are identified as the implementers of the "Protecting Regional Groundwater" education program because this program is watershed wide.

Financial Considerations

The Committee considered the cost to the municipalities and the MTO of administering the policies. The following factors helped the Committee decide that the policies are financially feasible and fair.

The "Living and Working in the Drinking Water Zone" program is not intended to be a large scale or expensive education program. Rather it was envisioned that municipalities could integrate it into existing ways that they communicate with residents. For example, they could mail information out to residents with their tax bill or other municipal correspondence. Also, municipalities could partner with other agencies or build on other programs to maximize existing opportunities. Municipalities could also collaborate to deliver the program or they could approach another agency or group to deliver it on their behalf. The Source Protection Authority will assist with the development of educational materials. The policy does not prescribe methods so that municipalities can design a program and deliver it in a manner that is efficient and cost-effective.

The "Transporting Contaminants" part of the "Travelling through the Drinking Water Zone" education and outreach program can be implemented by the municipalities as resources permit and the Source Protection Authority will assist with identifying target businesses and developing educational materials. There will be a cost to MTO and the municipalities to produce, install and maintain the signs to mark the location of vulnerable drinking water areas. The Committee was of the opinion that signs are an important and effective way to communicate a fundamental part of source water protection – the location of the vulnerable areas. However, the sign policies are non-legally binding so this is not a mandatory cost.

The "Protecting Regional Groundwater" program is also not intended to be a large scale or expensive education program. Rather it was envisioned that Source Protection Authorities would use existing resources available at the Conservation Authorities to develop education materials and information that would be made publicly available. This information could then be accessed by watershed residents via a website, disseminated by any group or agency and promoted at community events that the Conservation Authorities already participate in.

Comments Received During Pre-Consultation

There was general support from the municipalities regarding the need for and appropriateness of the education and outreach programs. Several municipalities commented that they would prefer another implementing body for education and outreach policies such as the MOE or Conservation Authorities instead of the municipalities. In response to these comments, the Committee decided to add a role for the Source Protection Authority in assisting the municipalities with education policies. The municipality remains the implementer but the policy

wording was revised to specify that the Source Protection Authority will provide assistance such as developing standardized education materials.

Draft policies were also shared with other bodies, potentially affected property owners and the public. Public house participants suggested that the boaters near the intakes should be made aware of these vulnerable drinking water zones. This prompted the Committee to add the waterways signs policy. For a summary of all comments received on draft policies and how they were addressed by the Committee, see Appendix A.

Comments Received on the Draft Source Protection Plan

The MOE, the City of Ottawa and the MNR commented on the sign policies. For a summary of all comments received on the draft Source Protection Plan and how they were addressed by the Committee, see Appendix B.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The OMAFRA indicated their support for the "Living and Working in the Drinking Water Zone" education program. The MOE and MTO commented regarding the deviation from MTO's standardized policy text for the road sign policy (policy EDU-3-NLB).

4.17 MONITORING POLICIES

The Clean Water Act requires that Source Protection Plans include monitoring policies to correspond to policies that address a significant drinking water threat. Monitoring policies may also be included for moderate/low threat policies or other permissible policies (such as those that address transport pathways or transportation corridors). Monitoring policies require or request agencies that implement policies to provide feedback to the Source Protection Authority. The Source Protection Authority will use this information to track the implementation and effectiveness of policies or monitor changing circumstances to assist in preventing an activity from becoming a significant drinking water threat. The Source Protection Authority will compile all of the feedback gathered as a result of the monitoring policies into an annual progress report to be submitted to the MOE.

Explanation of Policy Decisions

Each monitoring policy was scrutinized to ensure that it will provide appropriate and useful feedback to the Source Protection Authority without being onerous for implementing bodies. The monitoring policies involve requiring or requesting implementing bodies to provide information to the Source Protection Authority either on a one-time basis or at regular intervals. For example the monitoring policy corresponding to the sewer use policy simply requires the municipality to provide the Source Protection Authority with a one-time notification when the new requirements have been put into effect. Whereas the monitoring policy that corresponds to the Risk Management Plan and Section 57 Prohibition policies direct the Risk Management Official to submit an annual report that meets the requirements of Section 65 of Ontario Regulation 287/07. The purpose is to provide ongoing administrative, compliance and enforcement results that the Source Protection Authority can use to monitor the implementation of the Risk Management Plan and Section 57 Prohibition policies. The nature of the information and the specifics of the reporting requirements are described in the monitoring policy wording. The timeline for compliance for each monitoring policy is either stated in the policy or is dictated by the compliance date of the corresponding significant threat policy.

The Committee elected to attach a monitoring policy to every policy in the Source Protection Plan (with the exception of some administrative policies as they do not require action) in order to seek feedback on the implementation of all policies. Some of these monitoring policies are not legally binding so implementing bodies are simply encouraged to communicate results with the Source Protection Authority in the spirit of cooperation and in the interest of successful implementation and ongoing improvement of the Source Protection Plan.

Financial Considerations

The monitoring policies use existing reporting mechanisms where appropriate so as not to duplicate existing legislated reporting requirements. Where these do not exist, the Source Protection Authority will work with the implementing bodies to develop a standardized reporting framework (e.g., templates) to facilitate and streamline the process and alleviate the administrative work and associated costs of complying with the monitoring policies. The MOE indicated in their pre-consultation response that they are considering how to implement standardized reporting that would meet the requirements of the monitoring policies they are responsible for province wide in order to streamline implementation and presumably to minimize costs.

Comments Received During Pre-Consultation

The MOE's pre-consultation response indicated that they will work toward developing a reporting framework that will meet the requirements for the monitoring policies for all Source Protection Plans in Ontario. No other comments specific to the monitoring policies were received during pre-consultation.

Comments Received on the Draft Source Protection Plan

The MOE provided preferred wording for the monitoring policies directed at the MOE and recommended that the multiple monitoring policies be consolidated. The Township of Rideau Lakes expressed concern about monitoring policies being too onerous and the City of Ottawa commented about the importance of streamlining and standardizing reporting. To address these concerns, the Committee approved consolidating and simplifying the monitoring policies for the MOE and for municipalities.

Comments Received on the Proposed Source Protection Plan

Comments received on the proposed Source Protection Plan are provided in Appendix C. The MOE provided advice regarding the correct placement of the monitoring policies on the legal effects lists. The Leeds, Grenville and Lanark District Health Unit commented that, after the plan is finalized, it would be helpful to discuss the details of the monitoring policies to ensure they have a complete understanding of and are adequately prepared to meet these requirements.

5.1 CONCLUSION

The Source Protection Plan for the Mississippi-Rideau region is a locally developed plan intended to protect municipal sources of drinking water through fair, reasonable, affordable and practical policies. These policies were developed using a transparent, public process with participation from municipalities, provincial ministries, sector experts, affected property owners and the public with oversight provided by a multi-stakeholder Source Protection Committee. Throughout the process, the Committee adhered to its guiding principles (effectiveness, practicality, reasonable costs and wide acceptance) and was committed to making policies complement existing legislation and programs – not duplicate or conflict with them. Financial considerations played a large role in shaping policies as did input from stakeholders. The Committee is confident the implementation of this plan will afford a high level of protection for municipal drinking water sources while balancing the interests of stakeholders and without causing financial hardship.

The Committee believes the Source Protection Plan for the Mississippi-Rideau region meets the *Clean Water Act* objectives of:

- 1. Protecting existing and future drinking water sources in the Mississippi-Rideau region.
- 2. Ensuring that, for every area identified in the Assessment Report as an area where an activity is or would be a significant drinking water threat:
 - a. the activity never becomes a significant drinking water threat; and
 - b. if the activity is occurring when the Source Protection Plan takes effect, the activity ceases to be a significant drinking water threat.

- Clean Water Act, 2006 – Ontario Regulation 287/07 General, Section 22(1)

Appendix A:

Summary of Comments Received on Draft Policies and How They Were Addressed

(October 2011 to March 2012)

OVERVIEW OF COMMENTS

As of March 27, 2012 the following stakeholders had commented on draft policies:

- Carleton Place
- Drummond/North Elmsley
- Merrickville-Wolford
- Mississippi Mills
- North Frontenac
- North Grenville
- Ottawa
- Smiths Falls
- South Frontenac
- Tay Valley
- Westport
- Frontenac County
- Lanark County
- Kingston, Frontenac, Lennox and Addington Health Unit

- MMAH
- MNDM
- MOE
- MTO
- OMAFRA
- MCS
- TSSA
- Environment Canada
- Parks Canada
- Canadian Fertilizer Institute
- Smart About Salt Council
- Salt Institute
- Ontario Good Roads Association
- Affected property owners (approx. 10)
- Open house participants (approx. 40)

Scope of Review

- Municipalities focused on reviewing policies that would apply in their municipality (those they would have to implement and those that would affect their residents).
- Government agencies focused on reviewing policies that they would have to implement.
- Industry associations reviewed policies that pertained to their sector.
- Property owners reviewed policies that might affect activities on their property.
- The general public reviewed most policies.

Response

In general there was wide-spread support for the draft policies and a sense that the policies were reasonable and implementable. The tables in the following sections outline specific comments that were made about a draft policy or set of draft policies. Aside from these comments, stakeholders expressed support for, or did not object to, the draft policies they reviewed.

Reference to Policy Codes

In the following tables each comment references two policy codes in bold. The first one is the original code of the draft policy that was circulated in October 2011 for early consultation. The code in brackets identifies the policy in the Draft Source Protection Plan that the comment pertains to.

WASTE DISPOSAL SITES

#	Comment	Commenter	Addressed	SPC Response
1	Waste-1 & 4 (WASTE-3-LB-PI/PA-MC) We encourage the addition of complementary land use planning policies where activities are prohibited using prescribed instruments. This informs the proponent at the beginning of the development process.	MOE	Yes	Complementary land use planning policies were added.
2	Waste-1 (WASTE-3-LB-PI/PA-MC) Consider using policy language that more directly prohibits the activity instead of prohibiting the Ministry from issuing approvals.	MOE	Yes	Policy wording was adjusted to indicate that the activity is prohibited.
3	Waste-2 (WASTE-4-LB-S57 and WASTE-2-LB-S58) Where waste disposal activities do not require a prescribed instrument, Part IV tools may be used. A "backstop" policy can state that activities that do not require an instrument are subject to a section of Part IV.	MOE	Yes	The land use planning policy was replaced with a backstop policy designating Section 57 where an instrument is not required.
4	Waste-2 & 3 (WASTE-3-LB-PI/PA-MC) Using "no later than the five year review" as a compliance date for policies that amend official plans and zoning bylaws could be difficult to enforce because not all municipalities comply with the five year requirement.	MMAH	No	None of the municipalities affected by these policies raised concerns about the compliance date so it was not changed.
5	Waste-5 (MON-21-NLB) Could "closing a mine" be included in the monitoring policy	SPC Improvement	Yes	Policy wording was revised to include regulating the eventual closure and abandonment of waste disposal sites.
6	Waste-5 (WASTE-6-NLB) MNDM clarified that mine water systems, including tailings facilities, can only be regulated by the MOE through an Environmental Compliance Approval for industrial sewage systems under the Ontario Water Resources Act.	MNDM	Yes	MNDM was removed as a policy implementer. All policies regarding the storage, treatment and discharge of mine tailings are directed at the MOE.

SEPTIC SYSTEMS

#	Comment	Commenter	Addressed	SPC Response
1	Septic-1 (MON-17-LB) Principal Authorities should report on decisions rendered (or copy the Source Protection Authority on notices issued).	SPC improvement	Yes	The monitoring policy was revised to include this requirement. Revised wording was circulated to Principal Authorities for comment.
2	Septic-2 (SEW-1-LB) Principal Authorities may wish to refer to MMAH information on maintenance inspections for approaches to evaluate existing systems.	ММАН	Yes	This suggestion will be communicated to Principal Authorities.
3	Septic-2 (SEW-1-LB) We are unaware that this is currently a mandatory program, clarification is required.	Municipality of North Grenville	Yes	Inspections must be completed in mandatory areas (WHPAs and IPZs scored 10) within five years of the Assessment Report being approved. These dates were included in the Source Protection Plan for clarity.
4	Septic-2 (SEW-1-LB) Province should address concerns about the cost to implementing the septic maintenance inspection program	Town of Mississippi Mills	Yes	Concerns about the cost of this program will be communicated to the principal authorities, the MMAH and the MOE.
5	Septic-2 (SEW-1-LB) Inspection guideline developed by MMAH does not form part of Ontario Regulation 315/10.	MMAH	Yes	Policy wording was revised to remove reference to the regulation.
6	Septic-2 (SEW-1-LB) Strongly recommend public open houses advise people of the upcoming 5-year inspection program under the OBC	City of Ottawa	Yes	Letters and open houses in November, 2011 informed property owners about this new inspection program. Information will continue to be provided.
7	Septic-3 (SEW-4-LB) Concerned that policy wording could require connection to sewer services outside of designated serviced areas in some situations.	Town of Mississippi Mills	Yes	Policy wording was revised to clearly state that connection is not required outside of designated service areas.
8	Septic-3 (SEW-4-LB) The policy only requires new development on existing lots to connect to sanitary sewers, not new development on new lots.	ММАН	Yes	Policy wording was revised to capture new development on any lot (existing or newly created).
9	Septic-3 (SEW-4-LB) Should verify that authority for this policy exists under the <i>Planning Act</i> or <i>Clean Water Act</i> because it cannot be required under the <i>Building Code Act</i> . Additionally, SPCs may wish to propose to MMAH that new policies be referenced in the Building Code list of applicable law.	ММАН	Yes	Municipalities have authority under the <i>Municipal Act</i> to require mandatory connection to municipal sewer services. Adding new policies to the Building Code list of applicable law will be discussed with municipalities.

#	Comment	Commenter	Addressed	SPC Response
10	Septic-3 (SEW-4-LB) A new by-law will be needed to require mandatory connection to sewer services, recommend that the policy implementation date be "initiated within one year"	City of Ottawa	Yes	This was discussed with City of Ottawa staff and it was decided that the word "initiated" would not be added.
11	Septic-4 (SEW-3-LB) Need to provide a more detailed description of the lot grading and drainage plan that is required.	SPC improvement	Yes	Policy wording was revised to require a lot grade and drainage plan that shows existing grade and proposed final grade elevations referenced to a geodetic benchmark.
12	Septic-4 (SEW-3-LB) Not clear on the objectives of the lot grade and drainage plan. Not all designs for on-site systems require additional lot grading.	Town of Mississippi Mills MMAH	Yes	Lot grading is used to ensure runoff is directed away from septic systems to prevent beds from becoming oversaturated and rainwater from becoming contaminated. It also ensures grading is away from wells.
13	Septic-4 (SEW-3-LB) An Official Plan amendment may be necessary for a municipality to require certain studies as per section 21(5) of the <i>Planning Act</i>	ММАН	Yes	During the development of draft policies, municipalities indicated that they had the means to require additional information / studies.

SEWAGE WORKS

#	Comment	Commenter	Addressed	SPC Response
1	Sewage Works-1 (SEW-6-LB) Would like to see the installation of continuous liners recognized as a response to reduce the potential threat posed by older existing sewers located in WHPA scored 10.	Town of Mississippi Mills	No	The draft policy requires municipalities to inspect their sanitary sewers every five years and take any necessary corrective action. It does not specify the type of remediation work needed, this is at the discretion of the municipality. Policy wording was not revised.
2	Sewage Works-1 (SEW-6-LB) The monitoring and maintenance dates shall align with the Pollution Prevention and Control Plan process which is once every 5 years.	Town of Smiths Falls	Yes	The policy allows for municipalities to align the sewer system maintenance program schedule with the Pollution Prevention and Control Plan process. The compliance date of one year is to initiate policy implementation (e.g., establish a process) not complete the sewer maintenance.

#	Comment	Commenter	Addressed	SPC Response
3	Sewage Works-1 (SEW-6-LB) Consider the same 20-year interval maintenance program as Raisin-South Nation for future sewers built to watermain standards	City of Ottawa	No	Septic systems now have to be inspected every five years regardless of age or type so the current 5 year interval is consistent with this approach. The policy only applies in a small area where sanitary sewers are significant threats. The policy wording was not revised.
4	Sewage Works-2 (SEW-7-LB-PI-MC) Clarification is needed to ensure that sewage works are designed, constructed and tested in accordance with force main standards, but are not required to operate as force mains and can operate on gravity feed.	Town of Smiths Falls	Yes	Policy wording was revised to clearly state that sewers do not have to operate as force mains.
5	Sewage Works-2 (SEW-7-LB-PI-MC) Change "forcemain standards" wording to "OPSS Polyvinyl Chloride PVC Pressure Pipe (Class 150) or Ductile Iron (Class 52)."	Municipality of North Grenville	Yes	Policy wording was revised to more clearly articulate the desired standard for new sewers.
6	Sewage Works-2 (SEW-7-LB-PI-MC) Identifying this design requirement at the CofA stage may be late in the development process. It should be included in municipal design guidelines (compliance date would need to be increased from 6 months to 1 year).	City of Ottawa	Yes	The implementer of this policy is now the MOE as they issue approvals for new sanitary sewers. The policy takes effect immediately. Municipalities are also encouraged to identify this new design standard in their own guidelines and other related documents (there is no compliance date).
7	Sewage Works-3 (SEW-13-LB-PI-MC) The Munster wells were remediated to remove a potential GUDI situation (groundwater under direct influence of surface water). This due diligence should address the threat posed by the Munster Lagoon.	City of Ottawa	Yes	A policy is required for storage of sewage threats. The policy uses the CofA for the lagoons so the remediation report can be provided to the MOE who will determine if remediation work on the wells adequately manages the threat.
8	Sewage Works-4 SEW-10-LB-PI-MC) Concerned about what additional conditions could be required by the MOE	Town of Carleton Place City of Ottawa	Yes	The policy was revised to state new stormwater facilities in these areas must be built to "Enhanced Level Protection Standards as described in the Stormwater Management Planning and Design Manual, MOE 2003".
9	Sewage-4, 7 and 8 (SEW-8-LB-PI-MC to SEW-12-LB-S57) Change "stormwater retention pond" to "stormwater pond"	City of Ottawa	Yes	The policies were revised to state "stormwater management facility"

#	Comment	Commenter	Addressed	SPC Response
10	Sewage Works-5 (SEW-5-LB-PI-MC) Large septic systems should be prohibited in all IPZs scored 10	Town of Smiths Falls	No	This prohibition could have implications for development in some small areas and it is felt that septic systems can be adequately managed. Individual municipalities however, could prohibit through their planning process.
11	Sewage Works-6 (SEW-4-LB) Concerned that policy wording could require connection to sewer services outside of designated serviced areas in some situations.	Town of Mississippi Mills	Yes	Policy wording was revised to clearly state that connection is not required outside designated service areas.
12	Sewage Works-7 (SEW-9-LB-PI/PA-MC) We feel that stormwater and stormwater retention ponds do not represent a significant enough threat to be prohibited within WHPAs.	Municipality of North Grenville	Yes	The policy was revised to allow stormwater ponds in WHPA-A if the WHPA-A is municipally owned and kept in a natural state that protects source water (in addition to other conditions). This is an incentive for municipalities to retain ownership of WHPA-A and not develop it.
13	Add a Backstop Policy (SEW-14-LB-S58) Where sewage works do not require a prescribed instrument, Part IV tools may be used. A "backstop" policy can state that activities that do not require an instrument are subject to a section of Part IV.	MOE	Yes	A backstop policy was added that designated Section 57 in these situations.

SNOW AND ROAD SALT

#	Comment	Commenter	Addressed	SPC Response
1	Private Wells Concerned about road salt in private well water	Open house participants	Yes	The intent of encouraging all municipalities to develop Road Salt Management Plans is to decrease the amount of road salt used to treat each weather event to help protect regional groundwater.

#	Comment	Commenter	Addressed	SPC Response
2	Chloride Testing Sodium is naturally high in groundwater in some areas so testing could create a false correlation with road salt. It does not seem necessary to test more frequently than the current requirement of once per 60 months. More frequent testing would lead to more unnecessary Adverse Water Quality notifications. Testing for chloride annually seems excessive (there has never been a documented problem). This policy	Town of Mississippi Mills Municipality of North	No	This cannot be a legally binding policy, rather it is a recommendation that municipalities test more frequently than the current five year requirement. The policy was therefore not revised.
	should reflect the current 60 month testing regime.	Grenville		
3	Environment Canada The draft policy approach aligns with Environment Canada's Code of Practice with the implementation of BMPs being undertaken by municipal road organizations. This should minimize duplication efforts by implicated stakeholders.	Environment Canada	Yes	No response required
4	Salt/Snow-1 (SALT-3-LB) Municipality does not currently prepare a Salt Management Plan because of low salt usage. Policy should be directed to county level governments	Municipality of North Grenville	No	Where the application of road salt is considered a significant drinking water threat, the policy must address all application (upper and lower tier municipal roads). Most upper tier municipalities already have Road Salt Management Plans because of their higher salt usage.
5	Salt/Snow-1 (MON-5-LB) Can we manage "contaminant content"? How will the assessment of the effectiveness of measures implemented be achieved?	SPC improvements	Yes	Policy wording was revised to remove specific reference to the contaminant content of snow and providing an assessment of the effectiveness of measures to address snow. These would be difficult to achieve. Receiving a copy of the Salt Management Plan, annual review report and general feedback from the municipality should provide information about the effectiveness of the policy overall.

#	Comment	Commenter	Addressed	SPC Response
			710010000	•
6	Salt/Snow-2 (SALT-4-LB) If the Smart about Salt program is offered there is no guarantee that private contractors or landowners would attend. Could this be an obligation for licence renewal where applicable? Would like to see the policy require facility managers and contractors to	Town of Smiths Falls Ontario Good Roads Association	No	Since Smart About Salt accreditation and certification is relatively new in eastern Ontario, requiring it at this stage could create implementation problems. The current policy approach is to promote and make available the Smart About Salt program. In future source protection plans it may become
	be Smart About Salt accredited and all sites be certified.	, , , , , , , , , , , , , , , , , , ,		appropriate to require certification.
7	Salt/Snow-2, 3 and 4 (MON-6-LB) Revise the monitoring policies to require municipalities to report how many facility managers of privately owned buildings and private sector contractors have become certified, accredited or enrolled in the Smart About Salt program	Ontario Good Roads Association	Yes	Policies were revised to request information about how many contractors and sites became accredited, certified or enrolled in the program.
8	Salt/Snow- 2 and 4 (SALT-4-LB and SALT-6-NLB) Concerned about municipalities having to offer Smart about Salt to private contractors, unless they are providing contracted services to the municipality. The province should regulate private sector salt users. MOE should be the implementer as the program has a regional scope. Concerned about the possibility of undertaking Smart about Salt training, offering this training and submitting annual reports. Policy should be directed to county level government Municipalities should not be the implementer of this policy, suggest the source protection authority. Could be accomplished through education and outreach.	Town of Mississippi Mills Township of Drummond/North Elmsley Municipality of North Grenville City of Ottawa	Yes	Municipalities can approach other agencies (e.g. other municipalities, conservation authorities) to deliver education and outreach policies on their behalf. The policies were revised to indicate that the Source Protection Authorities could assist municipalities with the promotion of Smart About Salt certification and that the expectation was to simply arrange for a training program, such as the Smart About Salt program, to be delivered locally. The comments will also be forwarded to the MOE for their consideration in playing a role in implementing smart salt practices.
9	Salt/Snow-4 (SALT-4-LB and SALT-6-NLB) Municipality should encourage facility managers to become accredited and use certified contractors	Ontario Good Roads Association	Yes	Policy was revised to encourage municipalities to promote certification.
10	Salt/Snow- 1 to 4 (SALT-3-LB to SALT-6-NLB) Suggested wording changes to help accomplish policy intent	Smart About Salt Council	Yes	Policy wording was revised to incorporate suggestions from the Smart About Salt Council.

DNAPLs AND ORGANIC SOLVENTS

#	Comment	Commenter	Addressed	SPC Response
1	DNAPL/OS-1 (DNAPL-1-LB-S58) Concerned about how Risk Management Officials will be able to locate threat activities, especially in a non-commercial use.	Town of Mississippi Mills	No	Administering Risk Management Plans for DNAPLs and organic solvents will be challenging. Some municipalities have suggested there are information sources (e.g., high risk lists for fire departments) that could help identify operations that involve DNAPLs or organic solvents. Source Protection Authorities will work with municipalities during implementation to try and resolve difficulties.
2	DNAPL/OS-2 (MON-30-NLB) The MOE suggested a more effective monitoring policy might be requiring the Source Protection Authority to follow up with Environment Canada annually.	MOE	Yes	The monitoring policy has been revised to require the Source Protection Authority to contact Environment Canada annually to obtain an update on regulation and program changes.
3	DNAPL/OS-2 (DNAPL-4-NLB) What would be the difference between this proposed, non-legally binding policy and DNAPL/OS-1	City of Ottawa	Yes	The intention of this policy is to strengthen the existing program so it can be relied on to address drinking water threats, this would reduce the need for risk management plans.
4	DNAPL/OS-3 (DNAPL-3-LB) Policy wording should reference sewer use by-laws	Town of Smiths Falls	Yes	Policy wording has been revised to include sewer use by-law as an example.
5	DNAPL/OS-4 (DNAPL-2-LB-S57) Concerned about the difficulty of enforcement because of ongoing changing commercial activities	Town of Smiths Falls	No	Prohibiting the future storage and handling of DNAPLs and organic solvents will be very challenging. Source Protection Authorities will work with municipalities during implementation to try and resolve difficulties.

FUEL OIL

#	ŧ	Comment	Commenter	Addressed	SPC Response
1	t t	FuelOil-1 (FUEL-1-LB-S58) Supports the policies but suggests the quality or grade of oil tank should be considered (not just the type).	Affected property owner	No	There are two standard gauges of tank. While the thicker one may be less prone to corrosion, tank type seems to play a bigger factor in whether corrosion occurs or not.

#	Comment	Commenter	Addressed	SPC Response
2	FuelOil-1 (FUEL-1-LB-S58) Supports the policies but feels they should be monitored by oil suppliers and service technicians rather than Risk Management Officials.	Affected property owner	No	We have no legal authority to require oil suppliers and service technicians to ensure compliance with local source protection policies. However, a policy has been directed at the TSSA to strengthen existing requirements for oil tanks and increase the frequency of required inspections in hopes that a Risk Management Plan would not be required in future.
3	FuelOil-1 (FUEL-1-LB-S58) Supports policies but homeowners need time and grants to implement them.	Affected property owner	Yes	Property owners are being strongly encouraged to take advantage of the stewardship program that is funded until December 2012 – including 80% grants to implement fuel risk management measures. The compliance date for the policy will likely be three years.
4	FuelOil-1 (FUEL-1-LB-S58) Does not support the policies: Current regulations are adequate Concerned about cost of keeping up with regulations for a non-profit organization Suggests using additives to remove water from tanks Additional insurance requirements are too much burden and should be the responsibility of the municipality	Affected property owner	No	Our research showed that current regulations lag behind industry standards established by fuel suppliers and insurance companies. The draft policies would make common industry standards a regulatory requirement. The existing stewardship program provides an 80% grant rate to implement a number of fuel oil risk management measures. Water in tanks is just one cause of fuel spills and leaks, the draft policies are meant to address all primary causes. We cannot require municipalities to cover pollution liability insurance for individuals who store fuel oil. Insurance companies are beginning to reduce premiums when risk mitigation measures have been

#	Comment	Commenter	Addressed	SPC Response
5	FuelOil-1 (FUEL-1-LB-S58) Request one replacement timeline for single walled tanks with bottom feed (Mississippi-Rideau is 15 years, Raisin-South Nation is 5 years)	City of Ottawa	No	Single-walled, bottom-feed tanks are still permitted in Ontario and do not experience chronic corrosion if installed correctly. Proper installation will be ensured through the Risk Management Plan. The 15 year lifespan was determined in consultation with the insurance and fuel industries.
6	FuelOil-1 (FUEL-1-LB-S58) Can the Clean Water Act dictate that property owners need to hold property liability insurance	City of Ottawa	Yes	Policies can dictate Risk Management Plan requirements, including needing to hold an insurance policy in case of an oil spill.
7	FuelOil-1 (FUEL-1-LB-S58) Strongly recommend public open houses advise people of the yearly inspection requirements and risk management plan requirements	City of Ottawa	Yes	Letters and open houses in November, 2011 informed property owners about potential policy requirements. Information will continue to be provided. Fuel distributors also regularly notify customers.
8	FuelOil-2 (FUEL-3-NLB and MON-29-NLB) Changes to current codes are undertaken approximately every five years. TSSA engages stakeholders to consider proposed changes. These proposals then require MCS support to amend the current regulation or Technical Standards and Safety Act, 2000. TSSA focuses its public education programs in the designated sectors they regulate. TSSA is open to providing ancillary support for source protection education programs.	TSSA	Yes	The monitoring policy has been revised to require the Source Protection Authority to contact the TSSA annually to obtain information about upcoming code changes and opportunities to comment as a stakeholder, available educational material and opportunities to partner on consistent messaging to the fuel sector.
9	FuelOil-2 (MON-29-NLB) The MOE suggested a more effective monitoring policy might be requiring the Source Protection Authority to follow up with the TSSA annually.	MOE	Yes	The monitoring policy has been revised to require the Source Protection Authority to contact the TSSA annually to obtain information about upcoming code changes and opportunities to comment as a stakeholder, available educational material and opportunities to partner on consistent messaging to the fuel sector.

#	Comment	Commenter	Addressed	SPC Response
10	FuelOil-2 (FUEL-3-NLB) Do not support increasing the 10 year inspection frequency. Yearly inspections by a certified technician are a more effective means of managing the threat.	City of Ottawa	No	Not everyone complies with the annual inspection requirement. If the TSSA required oil suppliers to inspect more frequently than every 10 years the Committee could consider eliminating the need for a risk management plan.
11	FuelOil-3 (FUEL-2-LB-PI-MC) This policy should apply to all fuel stored in association with the drinking water system. Policy should also refer to both the license and permit.	MOE	Yes	Policy wording was broadened to capture all fuel oil being stored and the provincial instruments being used.
12	FuelOil-3 (FUEL-2-LB-PI-MC) Fuel oil stored as part of the drinking water system was intended to be subject to the same risk management measures required in FuelOil-1.	SPC improvement	Yes	Policy wording was revised to clearly reference the risk management measures that are required for fuel stored as part of the drinking water system.
13	FuelOil-3 (FUEL-2-LB-PI-MC) The MOE should copy the Source Protection Authority on new or revised approvals for fuel storage associated with a drinking water system.	SPC improvement	Yes	The monitoring policy was revised to include this requirement.
14	FuelOil-3 (FUEL-2-LB-PI-MC) Recommend that fuel storage at Water Plants be subject to Risk Management Plans. Regulating it through the Works Permit could lead to conflicting requirements.	City of Ottawa	No	The policy was revised to clearly state the requirements for all fuel oil (they are the same regardless if it is being enforced through a risk management plan or Works Permit). Using the Works Permit reduces regulatory duplication.

LIQUID FUEL

#	Comment	Commenter	Addressed	SPC Response
1	LiquidFuel-2 (FUEL-5-LB-S57) Does this include liquid propane fuel as well?	Town of Smiths Falls	Yes	Gaseous fuels are not considered part of the drinking water threat so the policies do not apply to propane.
2	LiquidFuel-1 and 4 (MON-29-NLB) Changes to current codes are undertaken approximately every five years. TSSA engages stakeholders to consider proposed changes. These proposals then require MCS support to amend the current regulation or Technical Standards and Safety Act, 2000	TSSA	Yes	The monitoring policy has been revised to require the Source Protection Authority to contact the TSSA annually to obtain information about upcoming code changes and opportunities to comment as a stakeholder, available educational material and opportunities to partner on consistent messaging to the fuel sector.

#	Comment	Commenter	Addressed	SPC Response
3	LiquidFuel-1 and 4 (MON-29-NLB) The MOE suggested a more effective monitoring policy might be requiring the Source Protection Authority to follow up with the TSSA annually.	MOE	Yes	The monitoring policy has been revised to require the Source Protection Authority to contact the TSSA annually to obtain information about upcoming code changes and opportunities to comment as a stakeholder, available educational material and opportunities to partner on consistent messaging to the fuel sector.

COMMERCIAL FERTILIZER

#	Comment	Commenter	Addressed	SPC Response
1	Information and Training Information about codes of practice and the 4R Nutrient Stewardship Initiative was provided which could form part of risk management plans. The Urban Fertilizer Council's "Greener Lawns" publication was also provided and could be used in the education and outreach programs.	Canadian Fertilizer Institute	Yes	The Canadian Fertilizer Institute plans to distribute new codes of practice to Risk Management Officials as they become available and also notify them when training courses for the 4R Stewardship Initiative are being offered.
2	Fertilizer-3 (FERT-1-LB-S58) This policy should also apply to the application of fertilizer by municipal parks and recreation departments.	Town of Smiths Falls	Yes	The policy will apply to all non- residential application of commercial fertilizer.
3	Fertilizer-3 (FERT-1-LB-S58) Change policy wording to: "Nutrient Management Plans and Non-Agricultural Source Material (NASM) Plans developed under the Nutrient Management Act can be used to fulfill this requirement."	OMAFRA	Yes	Policy wording was revised to incorporate this suggestion.
4	Fertilizer-3 (FERT-1-LB-S58) The existing prescribed instrument would adequately manage the threat. Need clarification why municipalities are identified as implementer for threats subject to the NMA.	City of Ottawa	Yes	Policy wording was revised to clearly state that any activity subject to an instrument under the <i>Nutrient Management Act</i> is exempt from requiring a Risk Management Plan. All other activities not subject to the <i>Nutrient Management Act</i> will be addressed by the municipality through this policy.

PESTICIDE

#	Comment	Commenter	Addressed	SPC Response
1	Inclusion of Herbicides Is there background information relating to the decision to omit herbicides as a drinking water threat?	Town of Mississippi Mills	Yes	The Pesticide Act defines "pesticide" as a substance used to control pests including weeds, fungi and nematodes. This means herbicides are included in the threat. The substances listed in the Tables of Drinking Water Threats are active ingredients in herbicides, nematicides (used to control nematodes) and fungicides.
2	Golf Course (EDU-1-LB) If pesticide application rates at the golf course surrounding the Perth intake do not reach the "significant drinking water threat" circumstance set by the province, best management practices would still improve water quality at the intake.	Open house participant	Yes	The education and outreach program will disseminate information in IPZs and WHPAs scored 8 or higher to promote and encourage best practices for all threats (including pesticide application and storage).
2	Pesticides – 3 & 4 (PEST-1-NLB and PEST-2-NLB) Is spraying herbicides under order of a designated Weed Inspector (Weed Act) not a concern in a WHPA scored 10 or an IPZ scored 9 or 10?	Town of Mississippi Mills	Yes	The application of pesticide ordered by a Weed Inspector must comply with the rules for exemptions under Ontario's Cosmetic Pesticide Ban and the application would be subject to requirements of the <i>Pesticide Act</i> and Ontario Regulation 63/09. The policies support the existing regulatory regime for pesticides and rely on them to manage the threat. However, the policies call on the MOE to increase inspections in vulnerable areas and ensure that a Pesticide Safety Course is required for all pesticide use that is considered a significant threat (ensure no regulatory gap).
3	Pesticides – 2, 3 & 4 (EDU-1-LB) Suggest policies that have MOE encouraging operators to be certified under the Ontario Pesticide Education Program and encouraging farm operators to use licensed custom applicators (this is currently a requirement).	OMAFRA	Yes	Growers need the Ontario Pesticide Education Program to buy and apply their own pesticides and custom applicators need an Operator's License (not covered under the education program). These programs and requirements will be promoted through the education programs.

ASM, NASM AND OUTDOOR LIVESTOCK AREAS

#	Comment	Commenter	Addressed	SPC Response
1	Financial Impact Supports the policies but they will be financially impacted so they are going to pursue available funding opportunities.	Affected property owner	Yes	Property owner was given information about funding programs they are eligible for including the Ontario Drinking Water Stewardship Program.
2	Definitions Suggest using the explanation of NASM in Ontario Regulation 267/03 under the <i>Nutrient Management Act</i> .	OMAFRA	No	MOE simplified the classification of NASM in their Tables of Threat Circumstances under the Clean Water Act to simply differentiate between NASM that has pathogens and NASM that does not. We have to use these classifications.
3	SML-1 (NASM-2-LB-S58) Remove NASM application, handling and storage from the policy because category 2 and 3 NASM already requires a NASM Plan.	OMAFRA	No	The policy was revised to state that a NASM Plan exempts the person from requiring a Risk Management Plan. The policy must apply to NASM thought to address any category 1 NASM.
4	SML-1 (LIVE-1-LB-S58) Is there clear direction about how to manage the risk posed by outdoor livestock areas? Would like to see OMAFRA take a lead role in negotiating risk management measures for outdoor livestock areas.	Town of Mississippi Mills	Yes	Common best management practices would likely suffice which may include restricting livestock access to watercourses. OMAFRA cannot negotiate risk management plans but they have been asked to assist Risk Management Officials in any way they can.
5	SML-1 (ASM-1-LB-S58 and NASM-2-LB-S58) Change policy wording to: "Nutrient Management Strategies, Nutrient Management Plans and/or Non-Agricultural Source Material (NASM) plans developed under the Nutrient Management Act (NMA) can be used to fulfill this requirement"	OMAFRA	Yes	Policy wording was revised to incorporate this suggestion.
6	SML-1 (ASM-1-LB-S58 and LIVE-1-LB-S58) Change policy wording to: "Small, non-intensive farms (where the number of farm animals is not sufficient to generate 5 or more nutrient units of manure annually) or a concentration of <1 nutrient units per acre of cropland".	OMAFRA	Yes	Policy wording was revised to incorporate this suggestion.

#	Comment	Commenter	Addressed	SPC Response
7	SML-1 (LIVE-1-LB-S58, ASM-1-LB-S58 and NASM-2-LB-S58) The existing prescribed instrument would adequately manage the threat. Need clarification why municipalities are identified as the implementer for threats subject to the Nutrient Management Act.	City of Ottawa	Yes	Policy wording was revised to clearly state that any activity subject to an instrument under the <i>Nutrient Management Act</i> is exempt from requiring a Risk Management Plan. All other activities not subject to the <i>Nutrient Management Act</i> will be addressed by the municipality through this policy.

AQUACULTURE

#	Comment	Commenter	Addressed	SPC Response
1	Aqua-1 (AQUA-1-LB-PI-HR), (EDU-1-LB) Aquaculture operations are currently not regulated under the Nutrient Management Act. We recommend an education and outreach program for future operations would be valuable.	OMAFRA	Yes	Policy wording was revised to remove any reference to the Nutrient Management Act. A broad education and outreach program is proposed to address all threat activities, including aquaculture.

AIRCRAFT DE-ICING

#	Comment	Commenter	Addressed	SPC Response
1	It is unclear why the Town of Mississippi Mills is listed as an implementer of the policy since there are no airports.	Town of Mississippi Mills	Yes	A policy is required to address future airports in areas where runoff containing de-icing materials would be a significant threat. While it is unlikely that a future airport could be established in these areas, a policy was required.

TRANSPORTATION CORRIDORS

No specific comments were received about transportation corridors draft policies.

TRANSPORT PATHWAYS

No specific comments were received about transport pathway draft policies.

EDUCATION AND OUTREACH

#	Comment	Commenter	Addressed	SPC Response
1	E&O-1 (EDU-1-LB) Suggest the MOE or conservation authority take the lead in developing and distributing education and outreach materials. Municipalities could play a supporting role.	Mississippi Mills Smiths Falls North Grenville Drummond/North Elmsley Ottawa	Yes	Policy wording was revised to state the Source Protection Authority will assist with the development of materials that municipalities can then disseminate to residents in their municipality.
2	E&O-1 (EDU-1-LB) Do not like the "clean water zone" working title.	SPC Members Many municipalities	Yes	The working title has been revised to "drinking water zone". The program's official name can be determined prior to implementation by the implementer(s).
3	E&O-1 (EDU-1-LB) Will the program be a living document? Please clarify the form of the program.	Smiths Falls	Yes	The form of the program will be decided by the implementer. It may entail printed materials that are mailed to residents and businesses or some other form.
4	E&O-1 (EDU-1-LB) The storage and application of pesticides should be addressed by the Ontario Pesticide Education Program	OMAFRA	Yes	This education program intends to direct people to existing programs where available and only fill gaps where existing education opportunities do not exist.
5	E&O-1 (EDU-1-LB) Perhaps this policy should include large farms, small intensive farms and other operations.	OMAFRA	Yes	All farms will receive or have access to information through the "Living and Working in the Drinking Water Zone" program.
6	E&O-2 (EDU-6-NLB) This program requires additional implementation and promotional material. Should include the need to properly decommission abandoned wells.	County of Lanark	Yes	The region wide education and outreach program will address all topics related to protecting regional groundwater, including well abandonment. The Source Protection Authority will disseminate information as proactively as resources permit.

#	Comment	Commenter	Addressed	SPC Response
7	Transp-3 (EDU-5-NLB) MOE should instigate the education and outreach program and municipalities could make the information available. Concerned about policies suggesting a municipal role toward E&O for safe handling of substances to prevent spills (bullet #2).	Township of Drummond/North Elmsley Town of Mississippi Mills	Yes	Policy wording was revised so the education and outreach program only entails the dissemination of information about where vulnerable areas are located and encouraging best practices in these areas to prevent and respond to spills (bullet #2 removed). The program is intended to build on existing resources including material available from the MOE. Policy wording was also revised to say Source Protection Authorities would assist municipalities with the development of materials and the identification of dissemination opportunities.
8	Signs-1 & 2 (EDU-2-NLB) Consider changing the policy to: "MTO in collaboration with other members of the MTO/MOE/SPC Working Group will design a standardized source water protection road sign, and will be responsible for the manufacture and installation of any signs to be placed on provincial highways. Municipalities will be responsible for manufacturing to the design standard and installing on their roadways"	МТО	Yes	Policies were revised to reflect the standardized policy wording provided to all Committees by the MTO.
9	Signs-1, 2 & 3 (EDU-3-NLB) Suggest the municipality be responsible for determining signage requirements to identify the boundary of WHPAs and to provide consistent contact information for the appropriate city department, information to report a spill Do not support the identification of IPZs on roadways	City of Ottawa	No	All 19 Source Protection Committees are supporting the creation of a standardized road sign to delineate WHPAs because a standard sign will create the best awareness about what the sign means. IPZ signs will be recommended along primary roadways, shorelines and at other appropriate locations (e.g. boat launch) where awareness about an IPZ is pertinent. This is a non-legally binding policy at the discretion of the municipality.

#	Comment	Commenter	Addressed	SPC Response
10	Signs-3 (EDU-4-NLB) If a sign is to be placed on, or above federal lands or waters, then an application will need to be made to the Rideau Canal office in Smiths Falls for approval of the Superintendent.	Parks Canada	Yes	The policy was revised to make the Source Protection Authorities responsible for researching potential IPZ sign locations and coordinating appropriate approvals and municipalities responsible for producing and installing the signs.

ADDITIONAL COMMENTS

#	Comment	Commenter	Addressed	SPC Response
1	Provincial Funding All program costs should be funded by the province. The Province should fund the first round of Risk Management Plans for existing activities.	South Frontenac Leeds and Grenville Carleton Place	Yes	All 19 SPCs across Ontario have been pressuring the MOE to provide provincial funding for implementation. They will continue to push for provincial funding. These concerns are documented in Section 6.6 of the Source Protection Plan.
2	Funding For Property Owners The Ontario Drinking Water Stewardship Program should be provincially funded beyond 2012 to assist with policy implementation.	Tay Valley	Yes	All 19 SPCs across Ontario have been pressuring the MOE to provincially fund this stewardship program beyond 2012 to help property owners implement policies. They will continue to push for extended funding. This concern is documented in Section 6.6 of the Source Protection Plan.
3	Rural Clean Water Program The conservation authority, in partnership with the MOE, municipalities and local stakeholder groups should establish an incentive program for replacing underground storage tanks; replacing and repairing sewage systems; and properly decommissioning unused wells and upgrading substandard wells.	South Frontenac	Yes	The Rideau Valley Conservation Authority has a funding program to address septic systems, wells and fuel storage on farms. It does not currently address underground storage tanks. This comment was provided to the project manager of the Rideau Valley Rural Clean Water Program.
4	Prohibition – s.57 Recommend both SPRs ensure they apply s.57 to the same threats. The reason for this is that a s.57 prohibition cannot be appealed or amended, unlike an OP or ZBL amendment can be under the <i>Planning Act</i> .	City of Ottawa	No	The only inconsistency is the Mississippi-Rideau region prohibits the storage of commercial fertilizer for retail sale where it would be a significant threat and the Raisin-South Nation region does not.

#	Comment	Commenter	Addressed	SPC Response
5	Restricted Land Use Tool Support the addition of Section 59 restricted land use policies (an administrative policy tool).	Carleton Place Lanark North Grenville Smiths Falls Westport	Yes	Restricted land use policies were added to act as a screening tool for applications that may be subject to Section 57 prohibition or Section 58 Risk Management Plans under the Clean Water Act.
6	Reviewers Guide Excellent document, however would like to see all policy documents formatted in a manner that could be incorporated into a standard letter (if possible).	Town of Mississippi Mills	Yes	The Source Protection Plan was formatted like a traditional policy document.
7	RMO Training Training for RMOs should be held locally or on-line to minimize costs to municipalities. Province should cover the cost of RMO training.	Tay Valley Township Township of Montague	No	MOE has indicated they will not hold regional training sessions or cover costs associated with the training (the course itself is free). This concern will be pursued if municipalities choose to send their staff for RMO training.
8	RMO Jurisdiction Which RMO is responsible for addressing the four Carleton Place threats in Almonte?	Town of Mississippi Mills	Yes	The RMO for Carleton Place.
9	RMO Selection Municipalities should appoint a RMO for their IPZ or WHPA.	Town of Smiths Falls Drummond/North Elmsley	Yes	Selecting a RMO and deciding on the area they will cover will be decided by municipalities.
10	RMO Information More information is needed regarding the RMO (a factsheet could be created).	Town of Smiths Falls	Yes	Guidance material about Risk Management Officials and Inspectors has been developed for municipalities by the MOE. We are awaiting its release.
11	OMAFRA As The RMO OMAFRA does not have the authority to administer Risk Management Plans under the Clean Water Act.	OMAFRA	Yes	Conversations are ongoing at the provincial level about what role OMAFRA could play in assisting municipalities with the establishment of Risk Management Plans for agricultural operations.
12	RMP Compliance Date The municipal working group agreed that a compliance date of 3 years to establish risk management plans for existing threats was reasonable. This will be consistent with the compliance date for reviewing existing prescribed instruments.	Municipal Working Group	Yes	A compliance date of three years was added to the policies throughout the Plan.

#	Comment	Commenter	Addressed	SPC Response
13	Threat Count Would like to see a correlation between each threat count and the respective property in each category.	Town of Mississippi Mills	Yes	This information can be provided to municipalities under Municipal Freedom of Information and Protection of Privacy Act.
14	Certificate of Approvals Certificates of Approval are moving towards using the term "Environmental Compliance Approval"	MOE	Yes	Policy wording was revised to reflect the change in terminology.
15	Compliance Date for Existing Instruments Strongly recommend existing prescribed instruments comply with policies "within 3 years from the date the plan takes effect, or such other date as the Director determines based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities".	MOE	No	The policies state a compliance date of 3 years for existing prescribed instruments. It is believed that only 12 existing instruments (1 waste and 11 fuel at municipal drinking water systems) will have to be examined in the Mississippi-Rideau so it does not seem necessary to give discretion beyond 3 years. This is also consistent with the compliance date for establishing Risk Management Plans for existing threats.
16	Moderate/Low Threat Polices At this time the MOE is focusing their policy review on significant threat policies.	MOE	n/a	We will await a response. In the meantime policies will remain unchanged.
17	Specify Action Policies At this time the Ministry is cataloguing all of the strategic action policies into specific ministry program areas. Once all the pre-consultation policies are received, we can determine the scope and variation of strategic policies proposed.	MOE	n/a	We will await a response. In the meantime policies will remain unchanged.
18	Monitoring Policies The MOE will consider how to implement reporting that would meet the requirements for the monitoring policies of all of the Plans in Ontario and streamline implementation requirements. Recommend that standardized	MOE City of Ottown	Yes	We will await a response. In the meantime policies will remain unchanged. Source Protection Authorities will work with policy implementers to create
	reporting be developed, where possible, to enable consistent monitoring and reporting throughout both watersheds.	City of Ottawa		standardized reporting templates where possible.

#	Comment	Commenter	Addressed	SPC Response
19	Municipal Policy Tools May consider providing more direction to support municipalities (especially those with limited resources) in the implementation of policies that use existing municipal tools like official plans and zoning bylaws.	MMAH	Yes	Guidance material is being developed for municipalities by the MOE. We are awaiting its release.
20	Policy Framework Want a consistent policy framework developed across the City. Encourage Mississippi- Rideau and Raisin-South Nation to further coordinate policy wording in various sections	City of Ottawa	Yes	Policies have been compared between the two regions and are generally quite consistent. Additional revisions are being considered to further align policies in the two regions.
21	Any policy requiring change to municipal planning documents for implementation can be timeconsuming.	ММАН	Yes	All compliance dates were established in consultation with municipalities.
22	Park Land Municipalities may wish to include direction in their official plan that will consider the acquisition of 5% parkland when considering development in WHPAs and IPZs as opposed to cash-in-lieu in order to increase green space in these vulnerable areas.	ММАН	Yes	This recommendation was included in Section 6.1 of the Source Protection Plan.
23	Land Acquisition Municipalities can be encouraged to develop a land acquisition strategy (authority under section 58 of the <i>Planning Act</i>). Could acquire lands in the most vulnerable areas and manage them in a way that protects source water.	ММАН	Yes	This recommendation was included in Section 6.1 of the Source Protection Plan.
24	Site Plan Control Municipalities may consider the application of site plan control to regulate on-site storage. Official plans must have implementing policies to utilize site plan control.	ММАН	Yes	No response required.
25	Legal Authority Policies should identify what legal authority authorizes municipalities to carry out the actions and responsibilities outlined in the policy (e.g., section of the Municipal Act or other applicable legislation).	ММАН	Yes	Policy wording was revised where applicable to reference the <i>Municipal Act</i> . Other legal authorities may be identified where needed.

#	Comment	Commenter	Addressed	SPC Response
26	Financial Costs Need to consider the cumulative impact of the policies on the financial capacity and available resources of affected municipalities to prevent further strain on municipal finances.	ММАН	Yes	Municipalities have been heavily involved in developing source protection policies as they will be the primary policy implementer and have limited resources.
27	Policy Summary Want to see a specific list of policies with definite details of potentially restricted land uses.	Affected property owner	Yes	A summary table will be included in the appendix of the Plan that will summarize policies by their effect (e.g., prohibit or manage a land use)
28	Pharmaceuticals Concerned about pharmaceuticals in the water.	Open house participant	Yes	This concern will be forwarded to the MOE for consideration.
29	Private Wells Concerned about water quantity and related development.	Open house participant	Yes	This concern will be forwarded to the City of Ottawa for consideration.
30	Public Participation Need to include the public in all steps of the process.	Affected property owner	Yes	The source protection process contains multiple rounds of public consultation. Policies will go through three rounds of public consultation before being submitted to the province for possible approval.
31	Boating Info Additional information is needed regarding boats at intakes.	Affected property owner	Yes	A policy was added requesting municipalities install signs along recreational waterways to make boaters aware when they are near a municipal drinking intake.
32	Transparency Transparency is necessary, which companies/businesses or industries might garner business from the introduction of new policies?	Affected property owner	Yes	The type of businesses that could garner business from the introduction of source protection policies are those that are involved in best management practices or risk mitigation measures associated with the drinking water threat activities.
33	Taxes Would the policies mean an increase to property tax?	Affected property owner	Yes	It is unknown right now if policies will affect property taxes. Municipalities and SPCs are lobbying for provincial funding to cover implementation costs (not property taxes). SPCs also tried to develop policies that were cost—effective to implement.

Appendix B:

Summary of Comments Received on the Draft Source Protection Plan and Explanatory Document and How They Were Addressed

(March 2012 to May 2012)

OVERVIEW OF COMMENTS

As of May 29, 2012 the following stakeholders had commented on the draft Source Protection Plan and Explanatory Document:

Municipalities:

- Carleton Place
- Drummond/North Elmsley
- Elizabethtown-Kitley
- County of Lanark
- North Grenville
- Ottawa (staff)
- Rideau Lakes
- Smiths Falls
- South Frontenac
- Tay Valley
- Westport
- Carleton Place Urban Forest / River Corridor Advisory Committee

Provincial / Federal Government:

- MMAH
- MOE
- MTO
- OMAFRA
- MCS and TSSA
- MNR
- Environment Canada
- Transport Canada

Property Owners / Public:

- 4 written submissions
- 62 open house participants

Scope of Review

- Most municipalities focused on reviewing policies that would apply in their municipality as well as the general sections of the Plan.
- Government agencies focused on reviewing policies that they would have to implement or that pertain to their mandate.
- Property owners reviewed policies that might affect activities on their property.
- The general public reviewed policies and the overall Plan.

Response

In general there was broad support for the draft Plan and an overall sense that the policies were reasonable and the Plan was easy to use. Many of the comments received were suggestions to improve the readability of the Plan or the effectiveness of the policies. Some comments raised concerns about the impact of certain policies and the potential cost of implementation.

Revisions

Every comment was reviewed and consideration was given as to whether the Plan could be revised to address the comment. The following tables summarize all the comments that were received on the draft Plan and Explanatory Document and how they were addressed. The comments are organized by the sections in the Plan.

In addition to the changes listed below, a number of other minor revisions were made to the Plan and Explanatory Document to correct editorial errors or improve readability.

OVERALL PLAN

#	Comment	Commenter	Addressed	SPC Response
1	General Support For The Plan Comments included: Plan is well structured and policies are clear and concise Plan is representative of the high standards employed throughout the process Plan is well-organized, methodical and easy to read Measures appear to be appropriate and well written and include exceptionally high quality mapping Plan is well written, well designed and readable One of the best and most comprehensive documents I have read in a long time A well written and organized comprehensive document which has incorporated previous concerns Many of the comments made during pre-consultation were taken into consideration	Carleton Place Drummond/North Elmsley County of Lanark North Grenville Smiths Falls South Frontenac Tay Valley Westport Carleton Place Urban Forest/River Corridor Advisory Committee MOE MTO OMAFRA MMAH	n/a	This feedback was appreciated.
2	Format Needs Improvement The Plan is overly complex and does not provide clear and concise direction on what implementing authorities need to do. The need to flip back and forth makes the Plan cumbersome. An overhaul of the format (in terms of how a user references it) should be completed before approval and submission.	Rideau Lakes	No	 Staff spoke to Rideau Lakes staff and explained that: A lot of information had to be included in the Plan and we tried to organize it in the most concise, user-friendly way. A series of one page fact sheets were prepared for the public which explain how policies could apply to each of their activities. Municipalities will be supported throughout implementation so they can fulfill their roles as efficiently as possible (e.g. templates). Since many of the policy tools are new, new procedures will need to be developed
3	References to The Act Referencing sections of the Clean Water Act does not make the document user friendly. If a Risk Management Plan is required that language should be used, or at a minimum an index provided.	Rideau Lakes	Yes	Throughout most of the Plan references to the Clean Water Act are accompanied by an explanation of what that section of the legislation is. Staff reviewed the Plan and ensured this was done wherever possible.

#	Comment	Commenter	Addressed	SPC Response
4	Imposing Risk Management Plans Risk Management Plans can also be imposed if requirements cannot be worked out with the property owner. Explanations throughout the Plan should be edited to reflect this possibility.	MOE	Yes	Wording was revised throughout the Plan to reflect this possibility.
5	Non-legally Binding Policies Including non-legally binding policies in the Plan as specific policies appears to elevate their status to policies which must be undertaken by municipalities. Non-legally binding policies should be included in a separate appendix to identify them as being separate recommended policy actions only which municipalities are encouraged to undertake as time/finances permit. Implementing non-legally binding policies will require staff time and municipal expense which would be borne by the taxpayer. The implementation of these policies must be at the sole discretion of municipalities as resources permit.	South Frontenac Rideau Lakes	Yes	In some cases policies are non-legally binding because the Clean Water Act doesn't allow them to be binding, not because they are a lower priority. Keeping them in the body of the Plan will ensure they are not overlooked. While wording and policy codes throughout the Plan clearly indicate these policies are non-legally binding, wording in the Plan was revised to indicate that implementation of non-legally binding policies is strongly encouraged as resources permit. The heading of Appendix C2 was also modified to say "compliance date / target date" so as not to imply that non-binding policies have a firm compliance date.

TITLE PAGES

#	Comment	Commenter	Addressed	SPC Response
6	The Document is Two Plans The Clean Water Act requires a Source Protection Plan for each source protection area. This requirement can be satisfied by a single document if the title page indicates the document represents the Source Protection Plans (plural) for both areas.	MOE	Yes	Title page was revised to say "This document <u>stands as</u> the Source Protection Plan <u>s</u> for the: • Mississippi Valley Source Protection Area • Rideau Valley Source Protection Area"

SECTION 1 – BACKGROUND

#	Comment	Commenter	Addressed	SPC Response
7	Viewing Terms of Reference The box in section 1.6 that indicates where Assessment Reports can be viewed should also indicate where Terms of Reference can be viewed.	SPC improvement	Yes	Wording was revised to indicate that both the Terms of Reference and the Assessment Reports can be viewed online and at the Conservation Authorities.

#	Comment	Commenter	Addressed	SPC Response
8	Over Regulation I am already protected by the existing guidelines for safe water. Implementing further policies increases government spending in a time of economic strife. We are all sorry about the Walkerton crises but from the discussions I have had with friends and neighbours we are not prepared to suffer at the expense of one accident. What about all the 'safe drinking' days without incidence? The more regulated I am, the less freedom I feel, the more taxes I have to contribute to support policies I do not believe in, the greater my desire to take my hard earned money and move to another country.	Public	No	Section 1.1 explains that source protection is important for a number of reasons: • Water treatment systems do not remove all contaminants from water, particularly chemicals such as fuels and solvents, so preventing contamination is sometimes the only approach. • It is much cheaper to keep water clean than it is to try and remove contaminants. One spill from a home heating oil tank in eastern Ontario cost \$1 million to clean up. The spill might have been avoided through a few preventative changes to the tank and supply lines. • Sometimes contamination cannot be cleaned up and a source of drinking water is lost forever. Manotick lost access to its groundwater in the 1990s when it was contaminated by chemicals from a dry cleaning business. Since then water has been piped into Manotick from urban Ottawa. • Clean and plentiful sources of drinking water are also important for property values, business development, tourism, recreation, and fish and wildlife habitat. All of which are important to local economies.

SECTION 2 – POLICY DEVELOPMENT

#	Comment	Commenter	Addressed	SPC Response
9	Significant Groundwater Recharge Areas The paragraph in Section 2.1 titled "Threats Affecting Water Quantity" should also reference Significant Groundwater Recharge Areas. For completeness, and for municipalities who may want to have local policies regarding moderate and low threats, a small section should be added about Significant Groundwater Recharge Areas.	SPC improvement City of Ottawa SPC improvement	Yes	A statement was added to section 2.1 to state that Assessment Reports also identified Significant Groundwater Recharge Areas which showed that groundwater recharge is occurring throughout much of the region which should also be considered by decision makers. A new paragraph about Significant Groundwater Recharge Areas was also added immediately following the paragraph about Highly Vulnerable Aquifers in section 2.2.

#	Comment	Commenter	Addressed	SPC Response
10	Improving Existing Programs The explanation in section 2.4 of improving existing programs to adequately protect source water in future should be reworded to soften the negative tone.	MOE	Yes	Wording was revised as follows: "Where there were opportunities to strengthen other regulatory programs so they could be used to adequately protect source water in the future, the Committee recommended such modifications. This could make additional source protection policies unnecessary in the future".
11	Binding Monitoring Policies In the "Legally Binding Policies" list in section 2.5, it should clarify that only monitoring policies pertaining to significant threat policies can be legally binding.	MOE	Yes	Some monitoring policies pertaining to moderate and low threats can be legally binding depending on which implementer they are directed at. Wording was therefore revised to say: "Most monitoring policies directed at"
12	Terminology Both "Non-Legally Binding" bullets in section 2.5 require clarification as to their intent. What is meant by the terms "strategic action" and "public bodies"?	Carleton Place Urban Forest / River Corridor Advisory Committee	Yes	"Strategic actions" was replaced with "recommended actions" and the term "public bodies" was added to the glossary

SECTION 3 – POLICIES TO ADDRESS SPECIFIC THREATS

#	Comment	Commenter	Addressed	SPC Response
13	Existing / Future Definitions MOE recommends adding transition policies to address the intent of the existing and future definitions.	MOE	Yes	Transition policies were added to reflect the intent of the "existing activity" and "future activity" definitions.
14	Where Policies Apply The "Where Policies Apply" explanation in Section 3.0 is very generic and non-specific.	Carleton Place Urban Forest / River Corridor Advisory Committee	Yes	Policy wording was revised to add a reference to Section 2.2 for more details.
15	Assessment Report Findings The "Policy Intent" for some topics references the Assessment Reports while others do not. This needs to be consistent and we suggest referencing what was concluded in the Assessment Reports under all topics would be more informative.	Carleton Place Urban Forest / River Corridor Advisory Committee	Yes	Policy wording was revised to include a reference to the Assessment Report findings in each Policy Intent section in Section 3.

#	Comment	Commenter	Addressed	SPC Response
16	Policy Requirements Unclear For some proposed policies it is unclear as to the direction/action required. The link between a policy and what is to be done or implemented is not intuitive (e.g. what actions are to be taken in ADMIN-1 and ADMIN-2).	Rideau Lakes	Yes	Staff spoke to Rideau Lakes staff and explained that in some cases (e.g. ADMIN policies) we are obligated to write a policy a certain way. The "policy intent" narrative that precedes each policy is intended to explain what the policy will achieve. How it can be achieved (e.g. what the administrative procedures could be to implement policies) will be developed in partnership with municipalities as we move into implementation. The Source Protection Authorities want to facilitate discussions among municipalities and provide support so implementation is as efficient as possible.
17	Time Needed to Appoint Risk Management Official It may take some time to appoint a Risk Management Official after the plan is approved so implementation timelines should reflect this.	Rideau Lakes	Yes	In June source protection staff is meeting with municipal staff to give them the information councils need to appoint Risk Management Officials. The three year compliance date provides time to get new roles and procedures in place.
18	Clarify Risk Management Plans for Existing and Future Where applicable, Risk Management Plan policies need to be reworded so it more clearly explains that while the compliance date of three years applies to existing activities, the policy applies to both existing and future activities (e.g. policy FUEL-1-LB-S58).	City of Ottawa	Yes	The statement "Risk Management Plans for existing activities shall be established within 3 years" was moved to the end of policies to remove any uncertainty that the policy and its minimum content apply to existing and future activities.
19	Compliance Date for all Non- Legally Binding Policies Implementing bodies may need time after the Source Protection Plan takes effect to initiate action related to non-legally binding policies (currently these policies take effect immediately upon the Plan being approved because no compliance date was specified).	SPC Improvement	Yes	Policies were revised to add the following statement: "Action to implement this policy should be initiated within one year from the date the Source Protection Plan takes effect."

#	Comment	Commenter	Addressed	SPC Response
20	Compliance Date for Existing Prescribed Instrument Policies To address existing threat activities the MOE must review existing instruments to determine whether any additional terms and conditions are warranted. In order for the MOE to establish an effective implementation framework, they recommend the compliance date be "three years or such other date as the Director determines based on a prioritized review of prescribed instruments that govern significant drinking water threat activities".	MOE	No	MOE's recommendation was not added to our compliance date of three years because it would make it inconsistent with the firm three year compliance date that municipalities have to establish Risk Management Plans for existing activities. In addition, our Assessment Reports only identified one existing prescribed instrument that MOE Operations Branch would have to review (Safe Drinking Water Branch did not express a concern with the compliance date).
21	Policies Containing Prescribed Instrument Content Specific content in prescribed instrument policies should be presented as "as the Director determines necessary". This recognizes the site specific nature of prescribed instruments and will prevent the MOE from having to develop multiple site specific business processes which is an inefficient use of limited resources. All instrument recommendations will be reviewed and incorporated where appropriate as part of the program review.	MOE	Yes	Policy wording was revised so mandatory content became recommendations to be implemented as the Director determines necessary. This will make prescribed instrument policies similar to most Risk Management Plan policies which leave site specific measures to the discretion of the Risk Management Official.
22	Address the Activity It is recommended that policies address the activity as opposed to the actions of the MOE Director (e.g., "Waste Disposal Sites shall be managed in a manner that ensures they cease to be a significant threat" rather than "MOE shall manage waste disposal sites in a manner that")	MOE	No	MOE's recommendation was not integrated into the policies. This revision would make the policies inconsistent with our other policies (we say "municipalities shall"). It would also make the policy more difficult to read as you would have to turn to the legal effects list in Appendix A to see which body is the implementer.
23	Policies Affecting MOE Business Practices It is recommended that policies that impact MOE business practices (e.g. pesticide safety course) be revised to make them more consistent, implementable, and to give the MOE flexibility in when and how policies are implemented. Policies should be written to undertake a program analysis and report on actions taken by the MOE as a result of that program analysis rather than define program outcomes/actions through the policy.	MOE	Yes	Policy wording was revised to integrate MOE's proposed wording. Policy CORR-2-NLB was also revised to better reflect permissible policy content outlined in Section 26 (6) of Clean Water Act Regulation 287/07.

#	Comment	Commenter	Addressed	SPC Response
24	Abandoned Landfills What about abandoned non- operational landfill sites? What about contaminated sites? Should there not at least be monitoring policies aimed as these sites?	Carleton Place Urban Forest / River Corridor Advisory Committee	Yes	Policies for existing waste disposal sites also apply to abandoned nonoperational landfills. This was clarified in the policy intent section. Assessment Reports were also required to identify contaminated sites that have the potential to impact municipal drinking water sources. No such sites were identified in the Mississippi-Rideau.
25	Environment Canada – PCBs Environment Canada clarified their legislative role and responsibilities	Environment Canada	n/a	This information confirmed the policies are appropriate.
26	Sewage in Ottawa River The Ottawa River is probably the most polluted waterway in Ontario yet the Plan does not deal with sewage runoff.	Public	Yes	The Plan does contain policies to address sewage discharges but the City of Ottawa's sewage treatment plant outfalls are not subject to them because the outfalls are downstream of their municipal drinking water system intakes. It is the MOE's Ontario Water Resources Act that regulates sewage works throughout Ontario and this Act prohibits the discharge of polluting materials that may impair water quality. The City of Ottawa is also developing an Ottawa River Action Plan to address this issue. This concern has been raised before by many stakeholders and it has been captured in our Accompanying Document to be forwarded to the MOE for their consideration.
27	Geodetic Benchmark It may not be feasible to always obtain a geodetic benchmark. Perhaps policies should require that grades be referenced to a geodetic or approved benchmark.	City of Ottawa	Yes	Policy wording was revised to say "a permanent benchmark" rather than a geodetic benchmark.
28	Inspection Program Terminology Policy refers to a "Phase II Inspection" while the glossary refers to a "Phase II Maintenance Inspection." The policy should match the term in the glossary.	City of Ottawa	Yes	Policy wording was revised to say "Phase II Maintenance Inspection"
29	Unnecessary Backstop Policy Cases where a sewage threat would not require an Environmental Compliance Approval should be very rare. Consideration should be given to having only one "backstop" policy for sewage.	MOE	No	It seems prudent to have a back- stop policy for all situations that may need one, regardless of how unlikely the situation.

#	Comment	Commenter	Addressed	SPC Response
30	Legislation Clarification Due to recent legislative changes, Environmental Compliance Approvals for sewage works are required under the Ontario Water Resources Act but actually issued under the Environmental Protection Act.	MOE	Yes	Minor wording changes were made throughout the Source Protection Plan and Explanatory Document to reflect this legislative change.
31	Salt Management Plans Policies should be revised to clearly state that within the same municipality there may be areas where Road Salt Management Plans are required (legally binding policy) and other areas where they can only be recommended (non-legally binding policies).	SPC Improvement	Yes	Policies were revised to provide greater clarity that both policies will apply in some municipalities. Appendix C was also corrected to show that in some municipalities both legally binding and non-legally binding policies apply, albeit in different areas.
32	Environment Canada – DNAPLs Environment Canada clarified their legislative role and responsibilities and provided links to the work they have completed in this area.	Environment Canada	Yes	The information that was provided shows Environment Canada usually develops standardized risk mitigation measures for whole sectors. Since Risk Management Plans allow risk measures to be tailored to the unique characteristics of each user, the DNAPL policy directed at Environment Canada was deleted from the Plan.
33	Fuel Tank Replacement Age – Bottom Feed Raisin-South Nation is requiring the replacement of single-walled steel tanks with bottom feed within 5 years and Mississippi-Rideau requires this at 15 years old. These policies should be consistent.	City of Ottawa	Yes	Raisin-South Nation revised their policy to require these types of tanks to be replaced within 15 years.
34	Fuel Tank Replacement Age – Side Feed It was originally thought that single-walled steel tanks with side feed had not been manufactured since 2003. The policy therefore required immediate replacement of this type of tank because they are very prone to corrosion. However some manufactures still make this style of tank which means the current policy could require the immediate replacement of a brand new tank. This is not reasonable.	SPC Improvement	Yes	Policy wording was revised to prohibit the installation of any new single-walled steel tanks with side feed and to require the replacement of existing ones at 10 years old.
35	Pollution Liability Insurance Has consideration been given to property owners that are unable (financially or otherwise) to obtain pollution liability insurance?	City of Ottawa	Yes	The policy was revised to say property owners are "advised to hold" rather than "must hold" since pollution liability insurance is not a measure that protects source water, rather it is intended to ensure cleanup costs will be covered in the event of a spill.

TSSA's Limited Role We see TSSA's role as being critical and we are concerned they			Policies aimed at the TSSA remain
do not see themselves as an important component of a multi-barrier approach.	City of Ottawa	Yes	Policies aimed at the TSSA remain in the Plan despite their comments indicating that their mandate is fuel safety not environmental protection (see comments below).
TSSA's Mandate There is currently no evidence that the provincial regulatory framework governing fuel is not effectively managing the risk to source water. On this basis the government has no plans to review the regulatory framework. Under the Clean Water Act, recommendations for provincial action to protect source water are the responsibility of the MOE. MCS and TSSA can support Committees in the following ways: • Municipalities can request data about licensed fuel storage/handling facilities • Include Risk Management Officials on their mailing list • Work with MOE to provide source water protection awareness information to be integrated into training programs. • Provide training/info sessions on fuel oil tanks to qualified individuals for a fee • Work with MOE to include source water safety info into current public education vehicles (website, brochure) • Work with MOE and fuel supply industry associations to distribute education materials to fuel suppliers.	MCS and TSSA	No	Policies were not revised. Many provincial ministries are playing an active role in helping protect source water. Since MCS and TSSA are the public bodies in Ontario responsible for fuel it is reasonable for them to take a proactive role to try and integrate source water concerns into their fuel mandate, much like OMAFRA has in the way they manage nutrients in Ontario.
Fuel at Drinking Water Systems We agree with the policy and propose to implement it in the manner indicated. We also agree that by February 1 of each year, the MOE shall provide the Source Protection Authority with a summary of implementation activities related to the previous calendar year. Raisin-South Nation is using the policy wording proposed by the	MOE City of Ottawa	Yes	Our policies apply the same requirements to all fuel oil storage that is considered a significant threat (fuel oil at a municipal drinking water system and other fuel oil such as residential). The requirements are listed in policy FUEL-1-LB-S58.
	governing fuel is not effectively managing the risk to source water. On this basis the government has no plans to review the regulatory framework. Under the Clean Water Act, recommendations for provincial action to protect source water are the responsibility of the MOE. MCS and TSSA can support Committees in the following ways: • Municipalities can request data about licensed fuel storage/handling facilities • Include Risk Management Officials on their mailing list • Work with MOE to provide source water protection awareness information to be integrated into training programs. • Provide training/info sessions on fuel oil tanks to qualified individuals for a fee • Work with MOE to include source water safety info into current public education vehicles (website, brochure) • Work with MOE and fuel supply industry associations to distribute education materials to fuel suppliers. Fuel at Drinking Water Systems We agree with the policy and propose to implement it in the manner indicated. We also agree that by February 1 of each year, the MOE shall provide the Source Protection Authority with a summary of implementation activities related to the previous calendar year. Raisin-South Nation is using the	governing fuel is not effectively managing the risk to source water. On this basis the government has no plans to review the regulatory framework. Under the Clean Water Act, recommendations for provincial action to protect source water are the responsibility of the MOE. MCS and TSSA can support Committees in the following ways: • Municipalities can request data about licensed fuel storage/handling facilities • Include Risk Management Officials on their mailing list • Work with MOE to provide source water protection awareness information to be integrated into training programs. • Provide training/info sessions on fuel oil tanks to qualified individuals for a fee • Work with MOE to include source water safety info into current public education vehicles (website, brochure) • Work with MOE and fuel supply industry associations to distribute education materials to fuel suppliers. Fuel at Drinking Water Systems We agree with the policy and propose to implement it in the manner indicated. We also agree that by February 1 of each year, the MOE shall provide the Source Protection Authority with a summary of implementation activities related to the previous calendar year. Raisin-South Nation is using the policy wording proposed by the MOE. Will the same conditions	governing fuel is not effectively managing the risk to source water. On this basis the government has no plans to review the regulatory framework. Under the Clean Water Act, recommendations for provincial action to protect source water are the responsibility of the MOE. MCS and TSSA can support Committees in the following ways: • Municipalities can request data about licensed fuel storage/handling facilities • Include Risk Management Officials on their mailing list • Work with MOE to provide source water protection awareness information to be integrated into training programs. • Provide training/info sessions on fuel oil tanks to qualified individuals for a fee • Work with MOE to include source water safety info into current public education vehicles (website, brochure) • Work with MOE and fuel supply industry associations to distribute education materials to fuel suppliers. Fuel at Drinking Water Systems We agree with the policy and propose to implement it in the manner indicated. We also agree that by February 1 of each year, the MOE shall provide the Source Protection Authority with a summary of implementation activities related to the previous calendar year. Raisin-South Nation is using the policy wording proposed by the MOE. Will the same conditions

#	Comment	Commenter	Addressed	SPC Response
39	Prohibiting Storage of Retail Fertilizer Raisin-South Nation requires a Risk Management Plan for the future handling and storage of commercial fertilizer for retail sale and Mississippi-Rideau prohibits it. These policies should be consistent.	City of Ottawa	No	The Mississippi-Rideau Source Protection Committee feels it is unnecessary to allow new retail storages exceeding 2,500 tonnes of commercial fertilizer to be established in IPZs or WHPAs scored 10. The policy was not changed.
40	Pesticide Inspections Policies requiring MOE to increase or prioritize inspections in vulnerable areas does not provide enough flexibility for MOE to consider all of its other inspection priorities. MOE will include source protection information as a criterion when setting inspection targets so if Committee's believe this type of policy is necessary, it is recommended that the policy simply state that MOE shall consider source protection information as a criterion when setting inspection targets.	MOE	Yes	The policy was revised to integrate the MOE's suggested wording.
41	Nutrient Management Act Activities Policies that exempt activities already governed by Nutrient Management Act instruments leave these significant threat activities without a policy in the Plan. This is non-compliant.	MOE	Yes	New policies were added that direct OMAFRA to continue to regulate these activities under the <i>Nutrient Management Act</i> Regulation 267/03.
42	Livestock Exemptions The Township supports the exemption of rural livestock as outlined in policies related to a small number of animals or where an existing Nutrient Management Plan is in place.	Rideau Lakes	n/a	The feedback is appreciated.
43	Geese The Plan does not address the <i>E.coli</i> threat posed by the large numbers of geese in eastern Ontario. They probably produce more manure than the farms in eastern Ontario.	Public	No	Under the Clean Water Act, only human activities can be addressed by policies in the Plan (e.g. agricultural activities not wildlife). Concerns about geese have been raised by numerous stakeholders throughout this process and this concern has been captured in our Accompanying Document to be forwarded to the MOE for their consideration.

#	Comment	Commenter	Addressed	SPC Response
44	NASM Legislation Some types of NASM will continue to be regulated under the Environmental Protection Act if the NASM has certain properties (high E.coli, high metals, high odour). Therefore, this policy needs to address future approvals as well as existing approvals.	SPC improvement	Yes	The preamble, policy wording and Explanatory Document were revised so the NASM policy using Prescribed Instruments under the Environmental Protection Act applies to existing and future activities.
45	Aquaculture MNR does not consider drinking water sources when licensing landbased aquaculture facilities because MOE must consider it in the issuance of Permits to Take Water and Certificate of Approvals (landbased hatcheries require both). MNR is currently drafting a cage aquaculture policy which does recommend consideration of drinking water intakes when siting a facility. The policy in the draft Plan is therefore unnecessary given this fact and the public consultation that would be required for a new cage aquaculture site. The Mississippi- Rideau is also not well suited to cage aquaculture so an application is unlikely.	MNR	No	The aquaculture policy, which is non-legally binding, was not deleted because it will complement MNR's future cage policy by encouraging cage aquaculture to take place outside of Intake Protection Zones scored 9 and 10. We are also uncertain about what aspects of landbased aquaculture the Certificate of Approval takes into consideration and manages.
46	Transport Canada Role – Deicing Transport Canada clarified their legislative role and responsibilities.	Transport Canada	n/a	The information was helpful and very informative.
47	Pits and Quarry Policy Wording MNR is concerned the policy would require them to seek additional information from proponents or instrument holders beyond existing regulatory requirements. MNR therefore proposed the following alternative wording: "MNR is strongly encouraged to ensure that proposals for new and modified approvals under the Aggregate Resources Act are circulated to the following agencies: MOE, Local Conservation Authority; Local municipality in which the site is located; and, Region/County in which the site is located. in order to ensure the proposed approval or change does not endanger the raw water supply of a municipal drinking water system. This policy applies in Wellhead Protection Areas "A" and "B".	MNR	Yes	MNR's official comment containing alternative policy wording was not received until after the Source Protection Committee's meeting on June 7. This means their proposed policy wording could not be considered by the Committee. However changes were made to the policy based on staff's conversations with MNR during their initial review of the policy. The changes include: "MNR is strongly encouraged to implement measures to ensure that new pits and quarries located within Wellhead Protection Areas do not endanger the raw water supply of a municipal drinking water system. Measures may include requiring proponents to conduct an assessment of potential impacts and if necessary develop plans to mitigate impacts and/or circulating proposals to the MOE or other agencies for review."

#	Comment	Commenter	Addressed	SPC Response
48	Pits and Quarries It is recommended that the MNR and municipalities be given the ability to decline new pits and quarry licenses in and around Wellhead Protection Areas. Also municipalities may consider additional protections through future planning processes.	City of Ottawa	Yes	Source protection policies cannot prohibit pits and quarries but municipalities and the MNR can do so through their existing regulatory tools (e.g. municipalities could do so in their Official Plans and zoning by-laws).
49	Admin Policy Correction Pesticides storage is not listed here even though there are section 57 and 58 policies for pesticides. Please revise accordingly.	MOE	Yes	Pesticide was inadvertently omitted, this was corrected.
50	Rural Development The current planning rules for rural development (one hectare/one house/one well/one septic) are wasteful, expensive and do not yield the desired environmental results. Each drilled well and traditional septic system represents a threat to the underlying aquifer. With the increasing number of rural subdivisions, the situation will become more critical. Although rural source water protection is out of the scope of this exercise, there should be some policy direction that would encourage more modern and innovative "shared" source and waste water systems. It would appear that there are technologies in current use (and approved for Ontario) that can mitigate the impact of development on aquifers.	Public	No	This concern has been raised before by other stakeholders and it is one of the issues documented in our Accompanying Document to be forwarded to the MOE for their consideration with other ministries.

SECTION 4 – POLICIES FOR EDUCATION AND OUTREACH

#	Comment	Commenter	Addressed	SPC Response
51	Legal Effect of Education Policies Why are policies in section 4.2 non-legally binding while policy EDU-1-LB is legal binding?	Carleton Place Urban Forest / River Corridor Advisory Committee	Yes	Policy EDU-1-LB can be legally binding because it is addressing significant drinking water threats. Road signs cannot be legally binding because they are not addressing a significant threat.
52	MTO Wording for Road Signs Please note that for Wellhead Protection Areas, MTO's suggested wording is road signs be installed where vulnerability scores are 10 or higher.	MOE	No	We adhered to MTO's criteria for road signs on provincial highways but we dropped it to a vulnerability score of 8 for primary municipal roads because that is more appropriate for our Wellhead Protection Areas. We received comments from the MTO but they did not say to change our policy.

#	Comment	Commenter	Addressed	SPC Response
53	Road Sign Content The City should have the ability to provide additional information on the sign such as a contact number in case of spills (pg. 60)	City of Ottawa	No	The MTO is developing a standardized sign in partnership with municipalities, conservation authorities and the MOE. This request will be forwarded to the working group.
54	Consistent Road Signs A standardized sign should be installed across the entire region to facilitate an efficient review and approvals process for installations along provincial waterways.	MNR	Yes	An MTO led working group is producing a standardized sign for use across the entire province.

SECTION 5 – POLICIES THAT MONITOR IMPLEMENTATION

#	Comment	Commenter	Addressed	SPC Response
55	Consolidate MOE Monitoring To allow the province to establish an effective implementation framework, the preferred wording from the ministry on monitoring policies is: "The ministry shall prepare an annual summary of the actions it has taken to achieve the outcomes of the source protection policies and make that report available to the SPC." Monitoring policies should not specify or direct MOE monitoring activities. This is to ensure that significant variation in potential monitoring policies across the Province does not prevent the Ministry from being able to implement a single new business process for complying with monitoring policy requirements.	MOE	Yes	MOE monitoring policies were consolidated into two policies: one corresponding to legally binding policies and one corresponding to non-legally binding policies.
56	Monitoring by Municipalities The monitoring policies are onerous and beyond the abilities of a small municipality to be tracking and reporting on a yearly basis. Critical aspects of monitoring (tracking/reporting) should be provided through an easy to use and standard form supplied by the Source Protection Authority.	Rideau Lakes	Yes	Annual reporting is required by the Clean Water Act but the Source Protection Authority is committed to making it as easy as possible for municipalities. Section 5 explains that the Authority will work to develop reporting templates. To facilitate the creation of templates, the 15 municipal monitoring policies were consolidated into three.
57	Consistent Monitoring It should be recognized that streamlined reporting is not just to limit costs but also to ensure that appropriate monitoring and reporting is prepared from year to year so that progress can be tracked and trends evaluated.	City of Ottawa	Yes	Monitoring policies were consolidated for municipalities and the MOE to simplify the development of reporting templates which will help standardize the information being reported.

#	Comment	Commenter	Addressed	SPC Response
58	Monitor Salt Education Program The reliance on salt programs such as Smart About Salt suggests that the Committee should be monitoring over time whether the programs are effective in educating the public and private operators.	City of Ottawa	Yes	During implementation Source Protection Authorities will explore how the effectiveness of education policies could be monitored using existing resources.
59	Low and Moderate Threats Explain the decision to develop and monitor policies aimed at "moderate" and "low" threats. Not clear why, and if needed, why not the Source Protection Authority?	Carleton Place Urban Forest/River Corridor Advisory Committee	Yes	The Committee chose to develop a few policies to address moderate and low threats in the Highly Vulnerable Aquifers. The Committee then chose to develop complimentary monitoring policies for all policies in the Plan (except some administrative policies) so that the effectiveness of each policy could be evaluated when the Plan is revised in the future. Most monitoring policies are aimed at the original policy implementer.

SECTION 6 – IMPLEMENTING THE PLAN

#	Comment	Commenter	Addressed	SPC Response
60	Committee Role Is the Source Protection Committee going to provide oversight to the Source Protection Authority? What is the intended long-term role and relationship?	Carleton Place Urban Forest/River Corridor Advisory Committee	Yes	Under the Clean Water Act, both the Source Protection Authority and Source Protection Committee have long-term roles and responsibilities. However, long-term provincial funding has not been determined yet so that will determine what resources are available to operate the Committee.
61	Templates The implementation process for municipalities would be better facilitated if template documents were created for: Generic planning process amendments. Mandated emergency plan revisions. Common cooperative education and outreach initiatives.	Westport	Yes	A couple of statements in the Plan indicate that the Source Protection Authorities will assist implementers by developing templates and other shared resources. Wording in Section 6.1 was revised to clearly list the development of templates as a responsibility of the Source Protection Authorities.
62	Implementation Costs Costs associated with the implementation of this Plan should not be borne by the municipality from existing revenues. Those municipalities with a drinking water system should pay a larger proportion.	Rideau Lakes	Yes	Section 6.6 of the Plan calls on the province to provide funding for implementation. Should provincial funding not be available, the Source Protection Authority will facilitate a conversation among local municipalities to determine how best to fund implementation.

#	Comment	Commenter	Addressed	SPC Response
"	Provincial Funding		7 (44) 30004	C. C. Koopenio
63	We urge the MOE to create a funding program to help municipalities with the implementation of the policies listed in the Source Protection Plan. Lobby the province to fund the cost of developing the initial Risk Management Plans.	Smiths Falls Carleton Place	Yes	Section 6.6 of the Plan calls on the province to provide funding for implementation. Should provincial funding not be available, the Source Protection Authority will facilitate a conversation among local municipalities to determine how best to fund implementation.
64	Risk Management Plan Process There is some concern that the cost of Risk Management Plans will become an additional cost borne by municipalities. While the Act does allow for cost recovery through permit fees there is recognition that many rural landowners already feel over-regulated. Care will need to be taken in establishing a Risk Management Planning process that is simple, responsive to legally existing land uses and sensitive to the important public interest in clean drinking water. Guidance such as a case study would be helpful.	City of Ottawa	Yes	In June source protection staff is meeting with municipal staff to give them the information councils need to appoint Risk Management Officials. This meeting will include discussion about funding and cost recovery options. Source Protection Authorities are committed to working with municipalities to help establish a process that is effective, efficient and fair.
65	Support for Stewardship Funding Property owners were very excited about the generous grants currently offered through the Ontario Drinking Water Stewardship Program. Farmers, people on septic and fuel oil, and businesses want to see this program continue beyond 2012. Economic Impact – Farms Additional rules and regulations for farmers could cause economic hardship and drive some out of business. Economic Impact – Fuel Oil Having insurance companies and oil delivery companies force residents to upgrade oil tanks or convert without access to funding assistance is a bad policy and does not treat taxpayers fairly. In some cases this will force older people on fixed or limited incomes out of their homes. If municipalities value their source water, then they should pay to protect it, not hide behind insurance/oil companies.	Public	Yes	Mandatory policies in the Plan only apply in less than 1.5 per cent of the Mississippi-Rideau region. Farms, homes and businesses that fall inside this small area are being strongly encouraged to take advantage of the stewardship program that is funded until December 2012 (grant rates of up to 80% are available to implement risk management measures). Section 6.6 of the Plan lobbies the province to extend this stewardship program beyond 2012. Municipally appointed Risk Management Officials will require people in some circumstances to upgrade their oil tank but policies do not require conversion to another fuel source. Policies also do not involve insurance companies or fuel distributors in policy implementation.

#	Comment	Commenter	Addressed	SPC Response
66	Water System Operators The Plan will have no effect on the watershed if the people managing the water system are irresponsible alcoholics.	Public	Yes	One of the first steps the provincial government took following the Walkerton Inquiry was to strengthen the rules regarding water treatment plant operators (training, qualifications, reporting, inspections). These new rules are captured in the Safe Drinking Water Act which was enacted in 2002. Source Protection Plans are an additional layer of protection meant to complement much more critical protection measures such as proper water testing, treatment and distribution and operator qualifications and accountability.
67	Future Scope of Plan Policies There are concerns that future versions of the Plan could have bigger implications (e.g., policies will apply in larger areas or recommendations will become mandatory policies).	Rideau Lakes Public	Yes	Full public consultation would be required if any policies in the Plan changed (including their legal effect) or if the MOE changed when or where an activity is subject to a policy (e.g. larger area).

GLOSSARY OF TERMS

#	Comment	Commenter	Addressed	SPC Response
68	Additional Terms Consider adding "Prescribed Instrument", "Restricted Land Use" and "Prohibition".	Carleton Place Urban Forest/River Corridor Advisory Committee	Yes	These terms were added to the glossary.
69	Highlight Glossary Terms It would be helpful in reading the document to bold, italicize or other, the defined terms within the document.	City of Ottawa	No	Staff could not come up with a suitable way to identify defined terms that would not conflict with the current formatting of the Plan (i.e. bold and italics are used for specific purposes in the Plan).

SCHEDULES

#	Comment	Commenter	Addressed	SPC Response
70	Schedule H Schedule H and Appendix D3 appear to be the same. The intended difference should be clarified.	Carleton Place Urban Forest/River Corridor Advisory Committee	Yes	There is a schedule for each vulnerable area (H shows the Carleton Place Intake Protection Zone) and there is an Appendix D map for each municipality where significant threat policies apply (D3 shows Carleton Place). While these two maps look similar they are different scales and they emphasize different features. The intention of each map is explained in the User's Guide but it will be added to the cover pages for the Schedules and Appendix D.

APPENDICES

#	Comment	Commenter	Addressed	SPC Response
71	Appendix A – List I You should only list ADMIN-1-LB and ADMIN-2-LB in addition to keeping them on List A. The individual policies on List I do not specifically note s.59 in their policy text.	MOE	Yes	The list was corrected.
72	Appendix A – List J The corresponding monitoring policy for any optional and non-legally binding policy or any moderate or low policy in areas the threat cannot become significant should be listed on List J.	MOE	Yes	All monitoring policies were added to their correct legal effect list.
73	Appendix A – Prescribed Instrument Chart Due to recent changes, all sewage approvals required under the Ontario Water Resources Act are actually issued under the Environmental Protection Act. Therefore an "X" should also be under the Environmental Protection Act for sewage policies.	MOE	Yes	The chart was corrected.
74	Appendix A – Prescribed Instrument Chart NASM prescribed instruments can be issued under the Environmental Protection Act as well (not just the Nutrient Management Act) so an "X" should be added.	MOE	Yes	The chart was corrected

DRAFT EXPLANATORY DOCUMENT

#	Comment	Commenter	Addressed	Staff Recommendation
75	Useful Document This is a very useful document that is very helpful in explaining the Plan, the rationale used in its production and how it is intended to be implemented.	City of Ottawa	n/a	The feedback was appreciated
76	Explanatory Document Does the Explanatory Document get approved by the Ministry with the Source Protection Plan? If so, does it need a formal approval for amendments to it?	City of Ottawa	Yes	The Explanatory Document is submitted to the MOE along with the proposed Plan but it is not approved by the Minister. It is intended to provide the Minister with the rationale for each policy. It can be updated to reflect amendments to the Plan.
77	Terminology (Section 3.1) Land uses are legally allowed to continue, suggest replacing the word 'punitive' with 'restrictive'.	City of Ottawa	Yes	Wording was revised.

#	Comment	Commenter	Addressed	Staff Recommendation
78	Scope of Education Program (Section 3.2) The use of the term 'household' should be reconsidered as this education program will apply to other users.	City of Ottawa	Yes	Wording was revised.
79	Climate Change (Section 3.4) The precautionary principle means that in erring on the side of caution with unknown impact to drinking water a proposal should not proceed, How does this translate into making decisions based on climate change?	City of Ottawa	Yes	MOE outlined three ways that Source Protection Plans could consider climate change when creating policies. This Plan used the precautionary approach as explained in Section 3.4. This approach should make policies in the Plan more resilient to changes in climate.
80	Water Quantity Stresses (Section 3.5) It would be appropriate to identify the stressed watersheds by name.	City of Ottawa	Yes	The names of the stressed subwatersheds were added.
81	Cost of Sewage Policies (Section 4.2.1) Unclear if on-site sewage systems and connecting to municipal services necessarily have the same expense	City of Ottawa	Yes	Policy wording was revised to say that both are a substantial expense.
82	Farm Definitions (Section 4.7) Clarification is needed on what constitutes a non-intensive farm versus an intensive farm operation.	City of Ottawa	Yes	Wording was revised to provide cross-references to the policies which define each term.

Appendix C:

Summary of Comments Received on the Proposed Source Protection Plan and Explanatory Document and How They Could be Addressed

(June 2012 to July 2012)

OVERVIEW OF COMMENTS

As of July 25, 2012 the following stakeholders had commented on the proposed Source Protection Plan and Explanatory Document:

Municipalities:

- Ottawa (staff)
- Rideau Lakes

Government Agencies:

- MOE
- MTO
- OMAFRA
- MCS and TSSA
- MNR
- Leeds, Grenville and Lanark District Health Unit

Scope of Review

- Municipalities focused on reviewing policies that would apply in their municipality or that they would have to implement.
- Government agencies focused on reviewing policies that they would have to implement or that pertain to their mandate.

Response

In general, very few comments were received on the proposed Plan. Of the comments received, some were suggestions to improve the readability of the Plan or the effectiveness of the policies while others raised concerns about the wording or impact of certain policies or the potential cost of implementation.

Revisions

As required under the *Clean Water Act*, all comments received on the proposed Plan were forwarded to the MOE for their consideration when reviewing the Plan for approval. MOE also clarified that improvements for readability or clarity that would be helpful in the long run are reasonable changes that could be made to the proposed Plan prior to submitting it to MOE. However, MOE clarified that changes that would substantively alter a policy and impact any new/additional parties are not appropriate at this time.

Below is a summary of all the comments that were forwarded to the MOE for their consideration as well as an indication of how each comment was or could be addressed. In some cases the comments were minor enough that they were addressed in the proposed Plan prior to it being submitted. In other cases there was insufficient time to address the comment prior to submission because it would require consideration by the Source Protection Committee and/or consultation with one or more stakeholders. In addition to the changes listed below, a number of other minor revisions were made to the Plan and Explanatory Document to correct editorial errors and improve readability and clarity.

Unresolved Comments

The following comments in the table below were not addressed in the proposed Plan submitted to the MOE:

• Comments 3, 4, 5, 6, 7, 9 and 10

OVERALL PLAN

#	Comment	Commenter	Addressed	Staff Response
1	Overall Support For The Plan	Ottawa LGL Health Unit	N/A	This feedback was appreciated.
2	Non-legally Binding Policies Plans should specifically acknowledge that non-legally binding policies will only be implemented where resources allow, a determination which should be at the sole discretion of the implementing authority.	Rideau Lakes	Yes	Municipalities made this request during the posting of our draft Source Protection Plan and our Source Protection Committee revised statements through the Plan to clarify that while not mandatory, non-legally binding policies are strongly encouraged as resources permit as they will contribute to the overall protection of source water.

SECTION 3 – POLICIES THAT ADDRESS SPECIFIC THREATS

#	Comment	Commenter	Addressed	Staff Response
3	Compliance Date for Existing Prescribed Instrument Policies We note that for many of the prescribed instrument policies directed at the MOE the policy text does not include the wording "or such other date as determined by the director based on a prioritized review of Environmental Compliance Approvals that govern significant drinking water threat activities". At this time the number of actual instruments that would be affected by source protection policies and would require the ministry to undertake a review of the instrument with a source protection lens is unknown. The ministry will need to review identified instruments to determine how many would be affected by source protection policies across the province. The ministry requests that timelines for implementation of all prescribed instrument policies use the language provided above in order to allow for the establishment of an effective and consistent provincial implementation framework.	MOE	No	The MOE made this request during the posting of our draft Source Protection Plan and the Source Protection Committee did not add MOE's recommended wording to our compliance date of three years. The revision was not made because it would make the policy inconsistent with the firm three year compliance date that municipalities have to establish Risk Management Plans for existing activities. In addition, our Assessment Reports only identified one existing prescribed instrument that MOE Operations Branch would have to review (Safe Drinking Water Branch did not express any concerns with the compliance date). This comment was not addressed in the proposed Source Protection Plan submitted to the MOE because the Source Protection Committee does not support the recommendation.

#	Comment	Commenter	Addressed	Staff Response
4	Nutrient Management Policies OMAFRA recommended that in the Plan and Explanatory Document the word "exempt" should be replaced with "this policy does not apply to" for those policies that exempt activities already governed by instruments under the Nutrient Management Act.	OMAFRA	No	This comment was not addressed in the proposed Source Protection Plan submitted to the MOE because it requires consideration by our Source Protection Committee. In the coming months our Source Protection Committee could consider recommending to MOE whether or not to revise the wording prior to Plan approval.
5	NASM Policy NASM-3-LB-S58 It is OMAFRA's view that Category 1 NASM material is sufficiently regulated under the <i>Nutrient</i> Management Act. The regulation sets out a maximum application rate of 20 tonnes per hectare for this material. If a higher rate is applied, it must meet the agronomic balances set out in the regulation. In addition, the Nutrient Management Act already regulates the land application standards for NASM material, therefore we recommend removing the policy requiring a Risk Management Plan for Category 1 NASM material.	OMAFRA	No	This comment was not addressed in the proposed Source Protection Plan submitted to the MOE because it requires consideration by our Source Protection Committee. In the coming months our Source Protection Committee could work with OMAFRA to gain a better understand of how Category 1 NASM is currently regulated and they could consider recommending to MOE whether or not to remove this policy prior to Plan approval.
6	Liquid Fuel Policy FUEL-4-LB We are pleased to note that this policy has been amended to recognize that existing liquid fuels regulatory and code requirements provide sufficient protections. We recommend that this policy be removed in its entirety given that the policy merely acknowledges current practices and affirms the efficacy of current regulatory requirements.	TSSA & MCS	No	This policy cannot be deleted because Source Protection Plans are required to contain a policy to address all significant drinking water threats, even a policy that simply recognizes that existing regulatory practices are adequate.

#	Comment	Commenter	Addressed	Staff Response
7	Non-legally Binding Fuel Policies FUEL-3-NLB and FUEL-7-NLB These policies continue to name TSSA and MCS as implementing bodies and have not been reassigned to be managed by the most appropriate means, Part IV tools, as recommended in our previous communications. We recommend that the Committee reassign these policies to municipalities under Part IV or delete the policies in their entirety. Specifically: The proposed policies are not accompanied by an evidence- based risk and impact analysis to determine both the need and efficacy of the proposed policies. Consideration of such policies would not proceed until such time as the committee provided data and an evidence-based rationale. Neither TSSA nor MCS have direct contact with all fuel customers and are not in a position to undertake these policies. These policies seek to have TSSA take action that is not consistent with its role and mandate. Specifically, TSSA cannot promote tank replacement after 10 years when ongoing use of the tan is lawful and TSSA does not have expertise to assess risk related to source water and inspectors do not distinguish inspections on the basis of vulnerable drinking water areas.	TSSA & MCS	No	Our Source Protection Plan has always included policies that use Part IV tools and prescribed instruments to manage or prohibit fuel activities where necessary (FUEL-1-LB-S58, FUEL-2-LB-PI, FUEL-5-LB-S57 and FUEL-6-LB-S58). These legally binding policies are what the Source Protection Committee relies on to address fuel activities where they are a significant drinking water threat. Where opportunities were available, the Committee also included nonlegally binding policies in their Plan to complement their mandatory policies. These complementary policies were often directed at ministries and agencies already responsible for managing particular drinking water threats. The two nonlegally binding policies directed at TSSA and MCS are complementary policies. They suggest ways in which TSSA and MCS could revisit their codes, processes and procedures to look for ways to contribute to the provincial mandate of protecting sources of municipal drinking water. Similar policies have been directed at OMAFRA (agricultural practices), MOE (pesticide activities), MNR (aquaculture and aggregate activities) and MTO (road signage). During our draft Source Protection Plan posting, TSSA and MCS asked that these policies be redirected or deleted. The Committee revised policy wording to mirror terminology and information provided by TSSA and MCS but they did not delete or redirect the policies. The Committee feels these non-binding policies simply flag potential opportunities for bodies already regulating fuel to contribute to source protection. These recommendations are entirely at the discretion of TSSA and MCS. Currently Conservation Ontario is consolidating all policies across the province directed at these two bodies in an effort to provide one consistent message. This comment was not addressed in the proposed Source Protection Plan submitted to the MOE.

#	Comment	Commenter	Addressed	Staff Response
8	Pits and Quarry Policy PATH-3-NLB MNR is able to confirm that our existing processes for the review of new aggregate operations address this policy. Under the Aggregate Resources Act, proposals to extract in close proximity (i.e., 1.5 m for a pit, 2.0 m for a quarry) of the water table are treated as below-water applications. License applications to extract below the water table include requirements for a technical hydrogeological report prepared by a qualified individual, assessing the potential for adverse effects to groundwater and surface water resources and their uses. Where a potential for adverse effects to groundwater and surface water resources is identified, an impact assessment is required to determine the significance of the effect and feasibility of mitigation. These reports are currently circulated to the local and county/regional municipality and the conservation authority. The MOE is also circulated on all below-water quarry applications and below-water pit applications where an impact assessment is required.	MNR	N/A	This is very valuable information that will be used during implementation to demonstrate how MNR is achieving the desired outcome of this non-legally binding policy.
9	Expansions/Interruptions Policy The policy states "an expansion of an existing activity that does not require additional regulatory or planning approvals" is considered an existing activity under the Plan. Regulatory approvals can include many things such as business licenses, Risk Management Plans and permits. It would be helpful to the reader to be more specific about what is included as "regulatory approvals" in the form of a footnote in the Plan and/or Explanatory Document.	MOE	No	Our municipal working group recommended that activities not requiring any sort of regulatory approval to expand be considered existing because it would be difficult to know about such expansions. Our understanding was that the list was not meant to be explicit. Rather the need for a regulatory approval was intended to act as a flag identifying activities that could be changing in nature. This comment was not addressed in the submitted proposed Source Protection Plan because it would require consideration by our Source Protection Committee and consultation with our municipalities.

SECTION 4 – POLICIES FOR EDUCATION AND OUTREACH

#	Comment	Commenter	Addressed	Staff Response
10	Road Sign Policy It is unfortunate that the Source Protection Committee has chosen not to adopt in its entirety the standardized wording related to the provincial road sign initiative. Also regrettable is that the subtle but significant deviation in wording was missed by MTO during the previous stage of consultation. Of specific concern is the lowering of the criterion for municipal road signs within a Wellhead Protection Area from 10 to 8. The success of any road signing program is dependent on consistent application and messaging. It is therefore important for MTO to see a unified position from the Committees on road signing for vulnerable areas. Reconsideration by the Committee to wholly adopt the standardized policy text would be appreciated. Please note that MTO's suggested wording is "vulnerability score of 10 for Wellhead Protection Areas". We understand that there was recent communication from MTO on July 3 to some project managers about this issue. Project managers requested some assurance that during implementation, departure from the established location criteria will be considered for local and unique circumstances. MTO indicated that while the policy is explicit, technical staff will need to use engineering judgment to interpret how best to apply the policy to situations not envisioned when the policy was drafted (e.g. additional signs may be required due to local circumstances).	MOE	No	Our initial road sign policy was crafted before standardized wording was available and at that time our municipal working group and Source Protection Committee agreed that an appropriate location for signs along municipal roadways in our Wellhead Protection Areas would be a vulnerability score of 8. This was to accommodate local characteristics that would result in no signs, or poor sign locations, should the installation criteria be a vulnerability score of 10. Unfortunately the comments we received from MTO during the posting of our draft Source Protection Plan did not indicate any concern with the policy wording or criteria so no changes were made at that time. Our Source Protection Committee is very supportive of the provincial road sign initiative and understands the importance of consistency. While MTO's recent comment was not addressed in the submitted proposed Source Protection Plan because it would require consideration by our Source Protection Committee and consultation with our municipalities, our Committee could undertake such consultation in the coming months and consider recommending to MOE that the policy be revised prior to Plan approval. There would just have to be assurance that municipalities would have discretion to choose appropriate sign locations based on (not limited to) the criteria set in the policy.

SECTION 5 – POLICIES THAT MONITOR IMPLEMENTATION

#	Comment	Commenter	Addressed	SPC Response
11	Monitoring Policies Once the Plan is finalized it would be helpful to review the nature of the monitoring policies to ensure we are of a common understanding as to annual expectations and adequate preparation for the annual progress reports.	LGL Health Unit	Yes	Similar comments were received from municipalities when our draft Source Protection Plan was posted for consultation. Our Source Protection Committee responded by clarifying in the Plan that the Source Protection Authorities will work closely with all implementers to ensure they have all the resources and understanding they need to effectively and efficiently fulfill their monitoring policy requirements. This will include developing templates and other shared resources which Section 6.1 identifies as a responsibility of the Source Protection Authorities.

SECTION 6 – IMPLEMENTING THE PLAN

#	Comment	Commenter	Addressed	SPC Response
12	Implementation Costs The cost of implementing the Plan should be funded by the province. No cost should be borne by municipal taxpayers, especially in municipalities which do not benefit from municipal drinking water systems. If the Plan is to be funded at a lower tier level of government it should be equitable. Specifically, funding should be through a levy on drinking water system users. Where municipalities are responsible for Plan implementation for drinking water systems in adjacent municipalities, the Plan implementation should be fully funded by the municipality with the drinking water system.	Rideau Lakes	Yes	Section 6.6 of the Plan calls on the province to provide funding for implementation. Should provincial funding not be available, the Source Protection Authority will facilitate a conversation among local municipalities to determine how best to fund implementation.
13	Impact of Plan Impact of final legislation should not result in the removal of structures and/or force the relocation of existing residents.	Rideau Lakes	Yes	Source Protection Plans cannot force the relocation of existing residents and the policies in our Source Protection Plan do not prohibit existing activities.

APPENDICES

#	Comment	Commenter	Addressed	SPC Response
14	Appendix A – Legal Effect Lists MON-15-LB should appear on List J. MON-12-LB should only appear on List F. An "X" should be placed in the Environmental Protection Act column for AQUA-1-LB-PI-HR in the table indicating Prescribed Instruments which apply to policies in Lists C and D.	MOE	Yes	The lists were corrected in the proposed Source Protection Plan submitted to the MOE.

Appendix D:

Summary of Ministry of Environment Review Comments and How They Were Addressed

(August 2012 to December 2013)

OVERVIEW OF COMMENTS

The comments listed in this Appendix consist of:

- MOE review comments
- Unresolved comments from Appendix C (where these were not addressed through MOE comments)
- SPC improvements (to fix minor errors or to improve clarity)

OVERALL PLAN

#	Comment	Commenter	Addressed	SPC Response
1	Include a reference to the 2011 Assessment Reports where appropriate throughout the document including: • Section 2.2 Drinking Water Sources and Vulnerable Areas (where numbers of systems and municipalities are indicated) • Section 3.1, 3.2, etc. "Policy Intent" (where these subsections indicate numbers of existing significant threat activities identified in the Assessment Reports) • Section 3.6 Commercial Fertilizer and 3.10 NASM (where the yellow Significant Threat Circumstances boxes refer to circumstances that are only met at Munster) • Figures (on the cover page) • Schedules (on the cover page) • Appendix C2 – Policy Codes Summarized by Implementing Body (in the title of the chart) • Appendix D – Maps (on the cover page) • Appendix E – Summary of Consultation Activities (where Assessment Reports are discussed)	SPC Improvement	Yes	References to the 2011 Assessment Reports were added because the Mississippi-Rideau Source Protection Plan contains policies that are intended to apply to both existing and future vulnerable areas in the region. Therefore, when a new drinking water system is established or an existing vulnerable area is modified, the Assessment Reports will need to be updated but the Source Protection Plan will not. The revised wording proposed by staff will indicate to the reader that the Source Protection Plan applies beyond the 12 original drinking water systems.

SECTION 2 – POLICY DEVELOPMENT

Section 2.4 Policy Tools A reference to "Part IV" of the Clear Water Act should be added as this term is frequently used to collective refer to Section 57 Prohibition, Section 58 Risk Management Plans and Section 59 Restricted Land Use (e.g. Part IV policies, Part IV power	SPC Improvement	Yes	The term "Part IV" was added and explained in the text of Section 2.4

SECTION 3 – POLICIES THAT ADDRESS SPECIFIC THREATS

#	Comment	Commenter	Addressed	SPC Response
3	Policy DNAPL-3-LB Sewer Use A sewer use by-law establishing discharge levels for certain parameters does not address the handling and storage of DNAPLs since handling of DNAPLs would not include disposal (i.e., within the sewage system). Given that the by-law would not reduce the risks associated with the handling and storage of DNAPLs, you cannot include it as a legally binding threat policy included on List E of appendix A	MOE	Yes	The policy was removed because the handling and storage of DNAPLs and organic solvents is primarily addressed by other policies in the Source Protection Plan (Risk Management Plan for existing, prohibition for future) so removing this policy will not leave a gap. The policy intent can still be achieved by municipalities through their sewer use by-law and was added to the list of "Additional Recommendations for Municipalities" in Section 6.1 of the Source Protection Plan.
4	Policy FUEL-1-LB-S58 Fuel (Heating) Oil – Risk Management Plan The current policy includes detailed risk management measures that must be included in Risk Management Plans for home heating oil storage. Source Protection Plan policies are intended to stand for many years. Over time, regulations, codes and technology will change which may render detailed policy wording inappropriate, inaccurate or unnecessary.	SPC Improvement	Yes	The policy wording was revised to allow the Risk Management Official and the affected person flexibility in establishing appropriate risk management measures for Risk Management Plans while still highlighting the main areas of concern for fuel storage. To accomplish this, "Risk Management Plans shall have the following minimum content" was replaced with "Risk Management Plans shall have the following minimum content (except where alternate measures are determined to be as protective of drinking water sources)".

#	Comment	Commenter	Addressed	SPC Response
5	Policy FUEL-2-LB-PI-MC Fuel (Heating) Oil – Prescribed Instrument This policy directs MOE to include specific terms and conditions in prescribed instruments under the Safe Drinking Water Act. As written, the policies may not achieve the environmental outcomes intended and may not be relevant over time. Specifically the policy would prevent the province from considering more advanced technology or approaches moving forward and may not allow the consideration of local conditions. Please amend the policy to focus on the intended outcome of the policy. Where the SPC wants to include specific terms and conditions, please amend the policy to indicate the province "should consider including", rather than "require", specific terms and conditions in prescribed instruments. MOE is developing outcome-based business processes for issuing or amending prescribed instruments for drinking water threat activities. In developing this process, we are considering the terms and conditions proposed by the source protection committees.	MOE	Yes	The policy wording was revised to address the MOE's concerns and to recognize that fuel storage associated with the drinking water system is under a different regulatory regime than home heating oil storage. Revised policy wording: "Terms and conditions shall include the risk management measures listed in policy FUEL-1-LB-S58" was replaced with "The MOE should consider including in the terms and conditions the risk management measures listed in policy FUEL-1-LB-S58".

#	Comment	Commenter	Addressed	SPC Response
6	Policy FUEL-3-NLB Fuel (Heating) Oil – Recommendations to the TSSA and Ministry of Consumer Services (MCS) In discussions with MOE, MCS raised a number of points with the current policy wording. The fuel codes are developed by Code Committees made up of technical experts representing a broad spectrum of stakeholders including industry, regulatory authorities and consumers. MCS acknowledged that the code review process is the appropriate vehicle for source protection committees to provide recommendations and suggested revisions to the codes. MCS noted that the specifics within the current policy wording replace the code review and development process and do not address the evolution of new information and potentially new recommendations to be incorporated over time. Revising the policy wording to recognize and encourage the incorporation of source water information in general terms allows the policy to stay relevant over time and recognizes the Code Committee's role in the code review and development process. MCS noted that they see value in MOE utilizing its own source water expertise and working with MCS to incorporate source water information into the code review process. From an implementation perspective, MOE source protection experts would solicit specific requests, concerns and recommendations from source protection committees and communicate this information to the code committee during the code review process. With regards to the second part of the policy, MCS/TSSA also noted that they are not in a position to promote the phasing out of single-walled tanks as single-walled tanks that were installed before January 1, 2013 are currently permitted under the code. MCS/TSSA are comfortable promoting the fact that they have new science that supports double-walled tanks that were installed before January 1, 2013 are currently permitted under the code. MCS/TSSA are comfortable promoting the fact that they have new science that supports double-walled tanks and can promote double walled tanks and can promote dou	MOE/MCS/ TSSA	Yes	The policy wording was revised to address the MCS/TSSA concerns and to incorporate a role for the MOE as described in the comment letter.

#	Comment	Commenter	Addressed	SPC Response
7	Policy FUEL-7-NLB Liquid Fuel – Recommendations to the TSSA and Ministry of Consumer Services Although private fuel outlets are subject to the requirements of the Fuel Code, TSSA does not regularly inspect private fuel outlets. This is because the legislation does not establish a licensing regime for private fuel outlets, therefore the locations are not known to TSSA. TSSA conducts ad hoc inspections of private fuel outlets, in particular, following incidents or when TSSA receives reports of non-compliance. The requirement to prioritize inspections using source water protection information is not compatible with the ad-hoc inspection model, limited location information on private fuel outlets, and the fee for service structure for inspections. However, TSSA welcomes local intelligence on the location of these facilities in vulnerable areas and may consider inspections on a fee for services basis.	MOE/MCS/ TSSA	Yes	The policy was removed because: • The original policy intent cannot be achieved. The policy was intended to encourage the TSSA to step up inspections and regulatory compliance efforts in vulnerable areas so that Risk Management Plans would not be necessary in the future. • Alternative policy wording proposed by the TSSA is not necessary as it simply states what is already TSSA's practice – that they may respond to complaints or reports of non-compliance.
8	Policy FERT-2-LB-S58 Commercial Fertilizer – Risk Management Plan The policy excludes "small, non- intensive farms where the number of farm animals is not sufficient to generate five or more nutrient units of manure annually and the concentration is less than one nutrient unit per acre of cropland" from the requirement for a risk management plan. Please provide clarification as to what types of farms this exemption covers. For example, does this exemption include cash crops (i.e. farms with only crops and no animals that may be using only fertilizer and not manure)? Please clarify that if cash crops are included in the exemption and not subject to this policy, then the intent is to use education and outreach (EDU-1-LB) to address these types of farms.	SPC Improvement	Yes	The exemption was removed to avoid inadvertently exempting large users who have no livestock. The exemption is not critical since the storage of commercial fertilizer circumstances already have a threshold which ensures small users would not be considered a significant threat and therefore would not be subject to the policy. Also, the application of commercial fertilizer can only be a significant threat at Munster and there is only a small area (one field) outside the urban boundary of Munster where nonresidential application could occur so the policy will not be broadly applied.
9	PEST-4-LB-S58, PEST-5-LB-S47 Pesticide Policies The term "custom applicator's storage yard" is used to describe a specific subset of persons handling and storing pesticide. This term may not be clear to the reader. For the purposes of implementation and for readers of the plan, it would be helpful to provide clarification either as a footnote in the plan or in the explanatory document.	MOE	Yes	The term "custom applicator's storage yard" was added to the glossary.

#	Comment	Commenter	Addressed	SPC Response
10	LIVE-2-LB-S58, ASM-2-LB-S58, NASM-3-LB-S58 The word "exempt" should be replaced with "this policy does not apply to" for those policies that exempt activities already governed by instruments under the Nutrient Management Act.	OMAFRA	Yes	The policy wording was revised to say "this policy does not apply to"
11	NASM-3-LB-S58 It is OMAFRA's view that Category 1 NASM material is sufficiently regulated under the <i>Nutrient Management Act</i> (maximum application rates, agronomic balances). Therefore, we recommend removing the policy requiring a Risk Management Plan for Category 1 NASM material.	OMAFRA	No	The policy was not removed because category 1 NASM is exempt from the NASM plan requirement but is considered to be a significant drinking water threat. The Risk Management Plan policy is intended to fill this regulatory gap. While there are regulations for NASM, the policy approach has been to ensure there is either a prescribed instrument or Risk Management Plan in place for the storage or land application of nutrients that is or would be a significant threat. This provides an opportunity and a vehicle to determine and implement sitespecific protection measures as well as provide greater oversight.
12	Policy AQUA-1-LB-PI-HR Use of Land or Water for Aquaculture - Prescribed Instrument The current policy wording implies that all existing instruments for moderate threats will be reviewed and amended as necessary to manage the risk, however this scope of review is not provided for in the Clean Water Act. Rather, once the plan takes effect, the Clean Water Act requires MOE to have regard to this policy whenever it makes (i) a decision on any new instrument and (ii) on amendments to the instruments associated with an application to change the site or operations. To address this, the timeline included in the policy should be removed and text or a footnote should be added to clarify the policy applies when decisions are made on amendments to the instruments associated with a change to the aquaculture site or operations.	MOE	Yes	The policy wording was revised so that it does not imply that all existing instruments must be reviewed and amended.

#	Comment	Commenter	Addressed	SPC Response
13	Policy PATH-2-NLB Well Regulations The MOE agrees that it would be prudent to analyze how prioritizing well complaints and increasing inspections on the persons who construct wells could help to protect source water near municipal supplies. The MOE is aware of the scientific research that was completed as part of the Assessment Reports for the Source Protection areas. The MOE can use this scientific information to identify and prioritize the way the ministry ensures ground water protection in these vulnerable areas. The MOE has been asked by six committees to undertake different approaches to further enhance the wells program. The MOE has reviewed the committees' recommendations and timelines, the MOE is requesting the policy be revised to allow for a provincially consistent approach that we believe will meet the intent of the original local policy. Based on previous conversations with the Project Manager, the MOE believes that this revised policy text should address the intent of the original policy proposed by the Source Protection Committee.	MOE	Yes	The policy wording was replaced with the MOE revised policy text which is stronger and more detailed than the existing policy wording.
14	Policies ADMIN-1-LB and ADMIN-2-LB Restricted Land Use The policies need to be revised to allow for site-specific exemptions that authorize the planning and building departments to screen out applications that clearly do not involve a significant threat activity, thereby reducing the number of applications being sent to the Risk Management Official for a notice under Section 59 of the Clean Water Act. The revised wording should also inform the reader about the Restricted Land Use concept and process.	SPC Improvement	Yes	The policy wording was revised to: name land uses and areas, rather than drinking water threat activities; better explain the Restricted Land Use process; and add an exemption to reduce unnecessary involvement of the Risk Management Official.

#	Comment	Commenter	Addressed	SPC Response
15	Policy ADMIN-5-LB Interruptions / Expansions Policy a) It is our understanding that "seasonal activities" was intended to be captured in this policy. For the sake of clarity for the reader, please include the wording "seasonal activities" in the description of activities in the interruptions policy. b) The term "expansion" is used in two of the bullets to describe the footprint of the physical space, as well as to describe the activity. For the sake of clarity for the reader and so that it can be easily understood and implemented in a community planning situation it would be helpful to clarify or revise this wording, i.e. "expansion of the physical space" c) We would like to understand the intended outcome of one of the exceptions in the policy. As written, the second exemption means that an expansion to an existing activity is subject to the existing threat policy unless the expansion is also subject to a regulatory or planning approval. If there is an approval required, the expansion is subject to the future threat policy. Our interpretation of this is that different policies would apply to what is essentially the same outcome: the expansion of a significant drinking water threat activity. We would like to discuss the rationale and intention of this policy in light of some possible scenarios that could come into play with this policy exception. For example, if a proponent were to expand their structure, which includes a planning approval, without expanding their activity, they would not be subject to an existing threat policy. Alternatively, someone undertaking both the expansion of the building and the activity at the same time would be subject to an future threat policy. d) We would also like to confirm that consultation with the municipalities had taken place on this policy and there are no municipal concerns with this policy.	MOE	Yes	The policy wording was revised to address all of the recommended revisions. Consultation with the municipalities was as follows: • The policy was originally developed in consultation with the municipal working group on February 16, 2012. • No municipal comments were received on this policy when the draft and proposed Source Protection Plans were posted for consultation in 2012. • MOE's recommended revisions for this policy were discussed with the municipal working group on September 19, 2013 and they support the revised policy wording.

SECTION 4 – POLICIES FOR EDUCATION AND OUTREACH

#	Comment	Commenter	Addressed	SPC Response
16	EDU-1-LB Living and Working in the Drinking Water Zone This education and outreach policy is "targeted at residents and businesses". It would be helpful to the reader to include wording in the explanatory document that indicates that farmers are included in this target group.	MOE	Yes	The Explanatory Document was revised to say "businesses, including farms"
17	Policy EDU-3-NLB Signs Along Primary Municipal Roads Please revise the wording to align with the wording provided in the February 29 th 2012 Ministry of Transportation (MTO) letter which outlines the relevant vulnerability scores and says, "Municipalities will be responsible for the purchase, installation and maintenance of appropriate signs designed by the Province in collaboration with the SPAs." These revisions are needed to include the vulnerability scores in the policy wording and because the current policy wording implies that the signs are optional. As has been communicated to Committee Chairs, the initiative should be consistent in terms of provincial/municipal effort, messaging, application and location.	MOE / MTO	Yes	The policy wording was revised to reflect further consultation with MTO, specifically: • Vulnerability scores were changed to be consistent with the MTO wording • The wording "strongly encouraged" remains in the policy • Wording to allow final sign location to be determined based on site-specific factors remains in the policy

SECTION 5 – POLICIES THAT MONITOR IMPLEMENTATION

#	Comment	Commenter	Addressed	SPC Response
18	Policy MON-2-LB Annual Report from the Municipality Some of the requirements of the policy require detailed reporting and/or the scope of the information being requested may go beyond the intent of monitoring policies. The intent of monitoring policies is to track the implementation of threat policies. This outcome could be achieved using the first paragraph of this monitoring policy (which requests a summary of implementation activities), in combination with the list of significant threat policies the monitoring policy corresponds to. Since this policy may be quite onerous for municipalities to implement, we request that the feasibility of the detailed policy be evaluated. The Chair and/or source protection authority should discuss the policy with each of the municipalities to verify the policy feasibility for each of the municipalities and explore the need for revisions. We also request that the intent of monitoring policies be considered during these discussions with municipalities.	MOE	Yes	The detailed list was removed from the policy wording and instead included as an information box in the text entitled "Suggested Content for Annual Reports". For consistency, the same change was made to policy MON-3-NLB – Annual Report from the Municipality – Non-legally Binding Policies.

SECTION 6 – IMPLEMENTING THE PLAN

#	Comment	Commenter	Addressed	SPC Response
19	The deleted policy DNAPL-3-LB should remain in the Plan as a non-legally binding recommendation.	SPC Improvement	Yes	Revising sewer use policies to include DNAPL and organic solvents that are a significant drinking water threat was added to the Additional Recommendations for Municipalities in Section 6.1