

CITY OF HAMILTON

PUBLIC WORKS DEPARTMENT Environment & Sustainable Infrastructure Division

and

PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT Strategic Services / Special Projects Division Building Services Division

TO: Mayor and Members

General Issues Committee

WARD(S) AFFECTED: CITY WIDE

COMMITTEE DATE: November 14, 2011

SUBJECT/REPORT NO:

Halton-Hamilton Source Water Protection Plan Policies - Comments from the City of Hamilton (PW11067/PED11183) - (City Wide)

SUBMITTED BY:

Gerry Davis, CMA General Manager Public Works Department

Tim McCabe General Manager Planning and Economic Development Department

SIGNATURE:

PREPARED BY:

Chris Shrive (905)546-2424, Extension 7209

Joanne Hickey-Evans (905)546-2424, Extension 1282

Jorge Caetano (905)546-2424, Extension 3931

RECOMMENDATION:

- (a) That the City Council inform the Halton-Hamilton Sourcewater Protection Authority that it supports the draft Sourcewater Protection Plan policies, dated September 2011, attached as Appendix "A" and, recommend the following:
 - (i) No wording changes to Policies G-1 to G-2, O-2 to O-4, O-7, T-2, T-11, T-13 to T-15, T-18, T-20, T-25, T-34, T-35, T-40, T-44, T-45 and T-47;
 - (ii) Minor wording changes, to Policies O-1, T-3, T-9, T-10, T-17, T-19, T-27, T-29, T-31, T-32, T-37, T-39, T-41, T-43 and T-49, as identified in Appendix "B" to Report PW11067/PED11183, to provide clearer direction

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to the municipality, to extend the time period for compliance and to provide more flexible programming;

- (iii) Policy T-28 be deleted, since the <u>Planning Act</u> cannot require the applicant to receive or maintain an Audubon Certificate for a golf course;
- (iv) Policy T-39 be deleted since it is redundant if the directions are made clearer in Policy T-37.
- (b) That the City Clerk be requested to forward the recommendations and the report on the draft Halton-Hamilton Source Protection Plan to the Halton-Hamilton Source Protection Authority;
- (c) That staff initiates the procedure for the internal appointment(s) of a qualified Risk Management Official and Risk Management Inspector(s) as necessary to satisfy the City's obligation under the <u>Clean Water Act</u> and report back to Council as and when appropriate.

EXECUTIVE SUMMARY

The purpose of this Report is to provide formal comments to the Halton-Hamilton Sourcewater Protection Authority on the draft Sourcewater Protection Plan policies attached as Appendix "A".

Background

In 2006, the Province passed the <u>Clean Water Act</u>, in response and in part due to the Walkerton tragedy where seven people died and 2,300 people became ill from contaminated municipal drinking water. This Act requires municipalities to develop collaborative, locally driven, multiple stakeholder, and science based plans to protect existing and future drinking water supplies. Regulation 287.07 articulates how Sourcewater Protection Plans (SPP) are to be prepared, as well as their content.

The Halton-Hamilton Sourcewater Protection Authority (SWPA) and other authorities have been working on developing the Sourcewater Protection Plans (SPP) for the various watersheds. The City of Hamilton is geographically located in three (3) SWPAs: Halton-Hamilton, Lake Erie and Niagara (see Appendix "B"). This report deals only with the proposed SPP from the Halton-Hamilton SWPA. The Plans from the two remaining Authorities will be reviewed in later staff reports.

There are 3 City-operated municipal wells/wellfields within the Halton and Hamilton Regions – Greensville (1 well), Freelton (2 wells) and Carlisle (4 wells) and one Intake Protection Zone (IPZ) extending from the Woodward Water Treatment Plant (WTP) into Lake Ontario.

Sourcewater Protection Plan and Process

The first step in the process was the completion of Assessment reports which evaluated twenty one (21) water quality and quantity threats to municipal wells/well fields within vulnerable areas. The second stage is the completion of a Sourcewater Protection Plan,

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which all levels of government and landowners will implement in the third and final stage of the source water protection process.

The proposed Plan includes fifty eight (58) policies of which thirty eight (38) of these policies are to be implemented by the City. The <u>Clean Water Act</u> and its regulations make it mandatory for municipalities to comply with the policies. The proposed policies focus on significant drinking water threats around municipal wells. These policies require the City:

- To amend their planning instruments to prohibit and restrict the location of a small number of land uses;
- To establish and govern mandatory on-site sewage system maintenance inspection programs to be administered by municipalities following a recent amendment to the Ontario Building Code (OBC);
- To appoint a risk management official and inspector to monitor Risk Management Plans in vulnerable areas; and,
- To prepare or to continue education and outreach programs

In addition to the mandatory policies, there are six (6) strategic policies, which although not mandatory, will directly or indirectly protect drinking water supplies.

Overall the impact of these policies on the City is neutral since:

- The City has existing programs or procedures and staff related Outreach and Education initiatives located within various Departments (i.e. Source Protection Planning group);
- The staff complement will remain the same; changes in Official Plan policies and Zoning By-law, other procedures and varying types of work will be accommodated with the existing staff; and,
- The implementation of the Plan components ranges from one to three years after the approval of the Sourcewater Protection Plan (likely to be in 2013)

Staff have reviewed the policies and recommend:

- no wording changes are recommended for Policies G-1 to G-2, O-2 to O-4, O-7, T-2, T-11, T-13 to T-15, T-18, T-20, T-25, T-34, T-35, T-40, T-44, T-45 and T-47;
- minor wording changes, to Policies O-1, T-3, T-9, T-10, T-17, T-19, T-27, T-29, T-31, T-32, T-37, T-39, T-41, T-43 and T-49, as identified in Appendix "B" to Report PW11067/PED11183, to provide clearer direction to the municipality, to extend the time period for compliance and to provide more flexible programming;
- Policy T-28 should be deleted since the Planning Act cannot require an applicant to receive or maintain an Audubon Certificate for a golf course; and,
- Policy T-39 should be deleted as it is redundant if the directions are made clearer in Policy T-38

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Alternatives for Consideration - See Page 18

FINANCIAL / STAFFING / LEGAL IMPLICATIONS

Financial:

Building Services Division

 Since all direct and indirect costs associated with delivering services related to administration and enforcement of the <u>Building Code Act</u>, 1992 are fully cost recovered there would be no impact on the general levy.

<u>Environment & Sustainable Infrastructure Division – Infrastructure & Source Water Planning (ISWP)</u>

- As all direct and indirect costs associated with the delivery of services related to the
 administration and enforcement of the <u>Clean Water Act</u>, <u>2006</u> are presently fully
 budgeted, there would be no impact on the rates-funded budget. The current SPP
 budget (operating) also funds other Source Protection Planning-related services
 such as rural private servicing and rural private communal servicing planning,
 Municipal well planning, hydrogeological characterization and groundwater
 monitoring.
- Outreach and education programs (hazardous waste disposal, water conservation, etc.) are typical initiatives undertaken by relevant City Sections. Some draft SPP policies request municipalities to maintain and expand these programs; they are a fundamental component of the City's communications strategy, but may remain subject to periodic efficacy audit and overall fiscal budgeting processes.
- ISWP staff have been very successful in attaining provincial funding to support SPP outreach and education programs, as well as investigative research related to Provincial and City sourcewater interests; these initiatives will continue as available and appropriate.
- Any costs associated with further Risk Management Official/Inspector training can be accommodated through existing Sectional training funds.

Staffing:

Building Services Division

 Based on preliminary figures, and on the fact that certificates would be received and spread out within a 5-year period, existing plan examination staff would be able to handle the review and acceptance of third-party inspection certificates. However, should Council decide to establish a discretionary on-site maintenance inspection program to other areas of the City of Hamilton, the Building Services Division would have to review staffing levels to determine if additional staff would be required based on the anticipated number of properties that would be affected by the discretionary program.

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<u>Environment & Sustainable Infrastructure Division - Infrastructure & Source Water Planning</u>

Public Works established the Source Protection Planning group in 2006 to address the City's responsibilities with respect to the <u>Clean Water Act</u>. To date these responsibilities (including groundwater model development, water budgeting, participation and input to the development of mandatory reporting and policy directives, etc.) have been met with the current staff complement and approved budgets. With the focus of SPP now shifting from assessment to SPP policy and implementation, the roles and focus of staff will be adjusted accordingly within the next phases of the intended framework of the <u>Clean Water Act</u>.

Under the <u>Clean Water Act</u>, the municipality is responsible for enforcement of the regulation of drinking water threats and is required to appoint a Risk Management Official (RMO) and such Risk Management Inspectors (RMI) as are necessary for that purpose. An RMO/RMI must have acquired the full qualifications as prescribed by the <u>Clean Water Act</u>. One ISWP staff member currently carries these qualifications and other staff members at this time hold only partial qualifications. Staff who have partial qualifications will be encouraged to attain the full qualifications for the required RMO/RMI.

The full extent of activities deemed to be significant threats in vulnerable areas within the City has yet to be fully verified. This task, along with establishing a Risk Management office, working with PED staff to effect the required Official Plan amendments/zoning changes and ensuring the appropriate existing and proposed threat management tools are in place, will be the primary initial responsibilities of the appointed Risk Management Official. The appointed Official is also required to prepare an annual written report to the Source Protection Authority describing the progress and current conditions with respect to the implementation of the Sourcewater Protection Plan. Subject to verification, requirements for the preparation of any activity-specific Risk Management Plans or oversight of specific regulated activities are not anticipated at this time. Further, once the appropriate Official Plan amendments and bylaws are in place, the implementation of Risk Management Plans should not be required.

Depending upon the decision of Council as to the appointment of the mandatory Risk Management Official, existing staff levels will be maintained, but with a shift in current staff focus and duties as the Source Protection Planning process further evolves.

A proposed discretionary on-site septic and certified tertiary treatment system maintenance inspection program will be brought before Council in a subsequent Staff Report.

Legal:

The <u>Clean Water Act</u> directs that the Sourcewater Protection Authorities prepare Sourcewater Protection Plans. There are thirty one (31) policies in the Halton-Hamilton SPP that require the City to comply.

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HISTORICAL BACKGROUND

1.0 Clean Water Act

In 2006, the Province passed the <u>Clean Water Act</u>, in response and in part due to the Walkerton tragedy where seven people died and 2,300 people became ill from contaminated municipal drinking water. This Act requires municipalities to develop collaborative, locally driven, multiple stakeholder, and science based plans to protect existing and future drinking water supplies. Regulation 287.07 articulates how Sourcewater Protection Plans (SPP) are to be prepared, as well as their content. The Ministry of the Environment (MOE) is responsible for the administration of the Act and any accompanying regulations. Together with other potable water legislation, regulations and public awareness initiatives, the <u>Clean Water Act</u> and SPP represent the front end components of a 'multi-barrier' approach to the protection of the Province's present and future drinking water supplies.

The principles of SPP are to safeguard drinking water for the health of our communities through prevention using watersheds/subwatershed as the basic unit for source protection planning. The approach must be multi-barrier, where source protection is the first barrier in the drinking water safety net and focuses on preventing contaminants from entering the drinking water system. The responsibility for implementing source water protection includes the City, the Province, the Sourcewater Protection Authority (SPA) and landowners.

2.0 Sourcewater Protection Regions/Authorities

To develop and implement these Plans, the Province established nineteen (19) Sourcewater Protection Regions roughly corresponding to Conservation Authority Watershed boundaries, as shown in Appendix "C". The City of Hamilton is located within three (3) regions and also participates in one (1) Lake Collaborative:

- 1. Halton-Hamilton
- 2. Lake Erie
- 3. Niagara Peninsula
- 4. Lake Ontario Collaborative (covering municipal lake intakes from Hamilton to Kingston

Each Region appoints a Sourcewater Protection Authority, which acts as the overseer and approval authority for Sourcewater Protection Plans and any associated background materials. Chris Shrive from the Public Works Department and Judi Partridge, Ward 15 Councillor, sit on the Halton-Hamilton Sourcewater Protection Committee (SPC). Mr. Shrive also sits on the Niagara Peninsula SPC and Lake Ontario Collaborative. In addition, the City has observer status at the Lake Erie Source Protection Committee.

3.0 Source Protection Process

The process has been broken down into three (3) phases:

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Phase 1: Identity - 2006-2010

Assessment Report: Evaluate watershed vulnerabilities and drinking water threats

Phase 2: Plan-2010-2012

Sourcewater Protection Plan: Prepare policies to address drinking water threats

Phase 3: Implement and Monitor – 2013+

Implement: SPPs, inspect and enforce, monitor and report and review SPPs

3.1 Phase 1-Assessment Report (November 2010)

Each Region was required to prepare a detailed Assessment Report that analyzed the water resources within its boundaries. The Assessment Report(s) for the City's municipal drinking supply sources identified and evaluated surface and groundwater vulnerabilities, focused on the twenty one (21) possible existing and future threats to sourcewater quality and quantity as set by the Act (as shown in Appendix "D") as well as water budgets and water quantity risk assessments for each source. It also mapped wellhead protection¹ areas (WHPAs), surface water intake protection zones (IPZs)², highly vulnerable aquifers³ (HVAs) and significant recharge⁴ areas (SGRAs) (see Appendix "E"). Threats are measured as being significant, medium or low.

In this phase of the SPP process, only existing and future significant threat activities, within vulnerable areas, are being evaluated for the city's municipal wells and intake protection zones. Future plans may expand the assessment to consider moderate and low threats.

There are three (3) City-operated Municipal wells/wellfields within the Halton and Hamilton Regions - Greensville, Freelton (2 wells) and Carlisle (4 wells) and one IPZ extending from the Woodward Water Treatment Plant (WTP) into Lake Ontario. The

¹ "wellhead protection area" means an area that is related to a wellhead and within which it is desirable to regulate or monitor drinking water threats. O.Reg. 385/08, s. 2.

² "surface water intake protection zone" means an area that is related to a surface water intake and within which it is desirable to regulate or monitor drinking water threats

³ "highly vulnerable aquifer" means an aquifer on which external sources have or are likely to have a significant adverse effect, and includes the land above the aquifer

⁴ "significant groundwater recharge area" means an area within which it is desirable to regulate or monitor drinking water threats that may affect the recharge of an aquifer

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Woodward WTP intake is located at a moderate distance of about 750 m from shore and a relatively shallow depth of about 8 m. This otherwise good source of water is subject to periodic turbidity, taste and odour issues, resulting mostly from down welling events. The vulnerability of the intake IPZ-1 (1 kilometre radius around the intake) is assessed a relatively moderate score of 6. IPZ -2, the boundary determined by the point from which flow (both within the lake and from on-shore tributaries and stormwater systems) can reach the intake within 2 hours, extends about 3 km in from the south shore of the lake and from the base of the Niagara Escarpment. The vulnerability score assigned to IPZ-2 is a relatively moderate 4.8.

The first draft of the Halton and Hamilton Region Assessment Reports were completed in the summer of 2010. In July and September 2010, the SPA sent two (2) letters to all landowners within the WHPAs to explain the Sourcewater Protection Plan process and to identify if the landowner was engaging in an activity that was a significant threat to drinking water.

Once the results were released, these reports were available for public review on two (2) different occasions (September 9 to October 14, 2010, and November 5 to December 5, 2010). Proposed reports were then submitted to the Ministry of Environment for approval.

The preliminary conclusions for the City of Hamilton from the Halton and Hamilton Assessment Reports are:

Drinking Water Threat	Total	Number of Significant Occurrences			
		Freelton FDF01	Freelton FDF03	Carlisle FDC01 FDC02 FDC3R/05	Greensville FDG01
Sewage system	91	15P	11P	49P	16P
Agricultural source material - application	3			3P	
Agricultural source material - storage	6			3C 3P	
Pesticide - application	6		1C	5C	
Fuel - storage	9		9C		
DNAPL – handling and storage	1				1C
Land associated with livestock	5			2C 3P	
Total	121	15	21	68	17

NOTE: P = Pathogenic C = Chemical

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3.2 Phase 2 - Source Water Protection Plan, the Explanatory Document and Consultation-Current Phase

3.2a) Purpose of the Plan

The purpose of the Sourcewater Protection Plan (SPP) is to:

- 1. Protect existing and future drinking water supplies within a source protection area
- 2. Ensure that current activities never become a drinking water thereat and if the activity affects drinking water then it is to cease
- Ensure that past activities which may have resulted in a significant drinking water threat are corrected
- Incorporate policies in the SPP aimed at improving Great Lakes targets, in the event such target policies are identified in other reports and the Ministry identifies such targets

3.2b) Plan

The Source Water Protection Plan is a document, which details mandatory policies and strategic actions to protect municipal drinking water sources. It also identifies how the policies are to be implemented and by which agency. Implementation of the Plan is **mandatory**. Any policies identified which are the responsibility of the City must be implemented.

There are fifty eight (58) policies within the Plan of which thirty seven (37) are the responsibility of the City. Of these thirty seven (37) policies, thirty one (31) are mandatory.

3.2c) Explanatory Document

Accompanying the Plan is an explanatory document which provides the background documentation used in the preparation of the Plan and the development of the policies and strategic actions. It also identifies which implementation tool will be used to address the threat.

3.2d) Consultation

The Plan through the provisions of the <u>Clean Water Act</u> calls for extensive consultation with Municipalities and the public at large. During the current pre-consultation round within the City, City Departments, Divisions and Sections have been circulated the draft policies and requested to provide input relevant to their mandates. The results of this pre-consultation round are reflected in the minor wording changes in policies provided in Appendix "B" to this Report. The SPP will then be provided to the public for comment through a series of Public Information Centres to be held in the Halton-Hamilton region early in 2012. Additional information is provided in Section 4.0 in the Background Section.

3.3 Phase 3 - Implementation Tools and Monitoring

There are several different types of implementation tools available; some exist today and some tools have been created under Part IV of the Clean Water Act for the sole

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purpose of implementing the SPP. Implementation tools provide the reference for the manner in which policies may be applied.

Existing legislative tools, which are referred to as 'prescribed instruments', include nine (9) Provincial Acts:

- Nutrient Management Act
- Planning Act
- Condominium Act
- Ontario Water Resources Act
- Environmental Protection Act
- Environmental Assessment Act
- Pesticides Act
- Safe Water Drinking Act
- Aggregate Resources Act

Education, incentive and outreach programs (i.e. stewardship programs) are also used to inform landowners and solicit their active participation in protecting drinking water supply sources.

Three (3) new tools were introduced:

- Prohibiting Activities/Land Uses this tool would be used where activities cannot be addressed by the OP and Zoning By-law, and where activity-specific Risk Management Plans are unimplementable or ineffective
- Risk Management Plans plans prepared by an owner and approved by the risk management official which documents the activities related to significant threats and the management of these activities
- Restricted Land Uses this tool would be used where activities cannot be addressed by the OP and Zoning By-law, and where activity-specific Risk Management Plans are unimplementable or ineffective

The SPA is required to identify which tool shall be used to address existing or future significant threats. The approach of the Plan is to use existing prescribed instruments wherever possible to address the threats.

Post-implementation monitoring is a key component of the Plan and its policies. The Risk Management Official solicits/receives information from the Municipality (and from Provincial agencies where applicable) on the outcomes and results of implementing the Plan and must report this information annually to the SPA.

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4.0 Timing of Approvals

Since a number of the actions to implement the SPP are the responsibility of the municipalities, they are required to provide formal comments on the draft SPP by December 31, 2011. This report and the recommendations will constitute the formal response.

The SPA will review all comments and make any changes to the SPP. A final report will be prepared and the City will have a second opportunity to comment on the Plan early in 2012. Comments on the final report will be sent directly to the Ministry of the Environment and considered in the SPP's approval. The final SPP has to be submitted to the Ministry by August 2012, as prescribed in the Clean Water Act.

POLICY IMPLICATIONS

Planning Instruments

Changes to the OP and Zoning By-law will be required to prohibit or restrict certain land uses within two years of the SPP coming into effect. The City should amend their planning instruments prior to this date, which is expected to be in 2013.

Public Works - Innovate Now

Communities - Services our communities connect with and trust

This is a prime focus of Source Protection Planning, in that sourcewater protection continues and enhances our focus on a healthy environment and safe, secure timely services in the supply of Municipal drinking water.

People - Skilled teams ready for any situation

SPP provides a basis and tools for staff to better undertake and understand their responsibilities with respect to the protection of drinking water sources. Opportunities for mandatory training have been acted on, particularly by Sourcewater Planning group staff, to ensure the City has the competence, understanding and qualifications to assume the required responsibilities.

Processes - Smart processes that match our needs

The SPP is a business process improvement, streamlining and clarifying the roles and responsibilities that the Province, City and relevant staff must undertake to effect the front end of the 'multi-barrier approach' and ensuring legislated qualities and quantities for potable water are being met at the outset of this overall approach.

Finances - Sound financial management for the long haul

SPP ensures that sourcewater quality characteristics are effectively managed at the front end of the 'multi-barrier approach', resulting in a reduction for any need for implementing more costly 'reactive' solutions such as increased water treatment processes and infrastructure later in the 'source to tap' water stream.

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RELEVANT CONSULTATION

Consultation was undertaken with:

- Public Works Department Environment & Sustainable Infrastructure, Operations & Waste Management, and Transportation, Energy, & Facilities Divisions
- Planning and Economic Development Department Strategic Services and Special Projects, Planning, and Building Services Divisions
- City Manager's Office, Legal Services
- Public Health Services
- Corporate Services, Financial Services Division

All Departments and Divisions were responsive in contributing comments and input relevant to their mandates on the Plan and its policies. Most of the Departments/Divisions consulted and affected by the SPP have existing Plans, Programs, Incentives and Procedures that will form the basis for meeting the minimum requirements for most City-applicable SPP policies based upon standard practice implementation. See Sections 3.4 to 3.6 of the Analysis Section for additional information.

The results of this pre-consultation round are reflected in the minor wording changes in policies provided in Appendix "B" to this Report. The SPP will then be provided to the public for comment through a series of Public Information Centres to be held in the Halton-Hamilton region by the Source Protection Authority early in 2012. Additional information is provided in Section 4.0 of the Background Section.

ANALYSIS / RATIONALE FOR RECOMMENDATION

1.0 Overview of the Significant Threats

At the present time, there are several existing significant threats for the Greensville, Carlisle and Freelton wells.

The greatest current threat to drinking water supplies is individual septic systems-tanks/leaching beds (Class 4 under the OBC) or holding tanks (Class 5 under the OBC). They are the largest threat because of the sheer number of these systems adjacent to the wells. Up until the recent amendments to the OBC (Ontario Regulation 315/10 with changes that came into effect January 1, 2011 and other changes coming into effect on

January 1, 2016), there were no mechanisms to ensure such private systems, including tertiary treatment systems were operating effectively or meeting the required effluent quality targets.

The implementation of the policies of the SPP will manage these threats as well as protect the drinking water supplies against future significant threats.

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2.0 Sourcewater Protection Plan Policies

The SPP contains fifty eight (58) policies of which thirty seven (37) apply to municipalities (see Appendix "A"). The policies are broken down into two (2) types: mandatory (denoted by G and T) and optional (denoted by O). The mandatory policies require the municipality to undertake certain actions to ensure conformity with the SPP. The optional policies are more strategic actions and would indirectly assist in the protection of the drinking water supply, both in terms of quality and quantity.

The mandatory policies are implemented through the various tools listed in Section 3.0 below. The optional policies incorporate many of the procedures and programs the City undertakes (i.e. water conservation education, complete applications for <u>Planning Act</u> submissions, supporting climate change).

3.0 What Tools Will The City Use To Address Threats?

There are a number of tools available for the City can use to regulate and/or manage land uses and activities that may become significant drinking water threats to the municipal wells.

3.1 Planning Act

There are several tools under the <u>Planning Act</u> that can be used to manage future threats; these tools include the OP, the Zoning By-law and site plan control.

The OP and the Zoning By-law can regulate only future land uses. These tools are ineffective where a particular land use is permitted but one of the activities related to that land use is problematic (i.e. 'threat activity'). An example of this situation is Agriculture: the land use is agriculture but the activity of spreading of agricultural source material (manure) may have the potential to contaminate the water supply. Therefore, this activity cannot be addressed using <u>Planning Act</u> tools. It may, however, be adequately addressed through an existing 'prescribed instrument' (the Nutrient Management Act) and the SPA has developed policies aimed at binding Provincial agencies responsible for the instruments to ensure compliance.

Based on the SPP, the following land uses will be either prohibited or have their location restricted in both the OP and Zoning By-law within vulnerable areas:

- 1. Retail establishments that sell pesticides
- 2 Pesticides manufacturing processing or warehousing
- 3. Handling and storage of road salt greater than 5,000 tonnes
- 4. Snow storage facility
- 5. Waste Disposal Systems (i.e landfills)

At the present time, none of these uses exist within vulnerable areas. Any changes to the OP and zoning will be undertaken as a separate process to the SPP. The SPP identifies that all <u>Planning Act</u> documents have to be brought into conformity with the SPP by no later than 2 years after the Province has approved the Plan.

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3.2 Ontario Building Code

The Building Code was recently amended by Ontario Regulation 315/10 to establish and govern mandatory and discretionary on-site sewage system maintenance inspection programs to be administered by municipalities. These amendments help protect Ontario's drinking water and support implementation of the <u>Clean Water Act</u>.

The mandatory inspection program would be required in parts of "vulnerable areas" identified through the source protection planning process. These "vulnerable areas" will be determined by local source protection committees and will be identified in Assessment Reports. These reports would then be subject to approval by the Director of Source Protection Programs Branch of the Ministry of the Environment. Inspections would be required in areas where on-site sewage systems subject to the <u>Building Code Act</u> have been identified as a significant drinking water threat. These inspections would be required to be carried out within five years of January 1, 2011, or where the applicable assessment report or source protection plan is approved after January 1, 2011, inspections would be required within five (5) years of the report or plan's approval by the Ministry of the Environment, and every five years thereafter.

These mandatory maintenance inspections can either be carried out by city building inspectors or the municipality may accept a certificate (in a form approved by the Ministry of Municipal Affairs and Housing) from a qualified and registered sewage system designer/installer, an architect, or a professional engineer. Since these mandatory maintenance inspections are required to be carried out only every five (5) years, it is the Building Services Division intent to accept only third-party inspection certificates, as permitted under the Building Code. This procedure would eliminate the need to hire additional building inspectors. Building Services Division staff will still be required to review and accept these certificates and to carry out any enforcement related to non-submission of the certificates or remediation work required to correct any deficiencies identified by these inspections.

The cost of hiring a qualified third-party to inspect an existing sewage system would be the responsibility of the owner of the property. The homeowner would also be responsible for the cost of any remedial work required as a result of the maintenance inspection. Additionally, since the Building Services Division operates under the Enterprise Model; the cost of reviewing and accepting the certificate would have to be paid by the owner. At the present time the Building Services Division would be looking at a review fee of \$204 which is the current minimum permit fee. This fee would ensure that the cost to review and accept the certificate is fully cost recovered with no impact on the general levy.

Once the areas subject to the mandatory sewage system inspection are identified, and the plan is approved by the Ministry of the Environment, homeowners would be notified of these new Building Code requirements. A notification would be sent out to affected homeowners with the following information:

The applicable fee to be charged

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- Procedural information including contact information and legislative authority
- The fact that the City of Hamilton requires the homeowner to retain a qualified sewage system designer/installer to carry out a maintenance inspection of the sewage system and that the qualified designer/installer provide the Building Services Division with a third-party certificate on a form approved by the Ministry of Municipal Affairs and Housing
- The homeowner would be advised that any necessary remedial work identified by the maintenance inspection would have to be carried out before the qualified designer/installer can sign the third-party certificate
- It would also be noted that the homeowner would be responsible for any costs associated with the issuance of the certificate and the cost of carrying out any necessary remedial work in order to have a certificate issued
- Enforcement actions that can be taken if an acceptable certificate is not submitted within the prescribed time

The intention of these sewage system maintenance inspections is to determine if a sewage system is in substantial compliance with the operation and maintenance requirements as outlined in Section 8.9 of Division B of the Building Code.

These amendments also allow municipalities to establish discretionary on-site maintenance inspections programs to other areas not regulated under the mandatory inspection program noted above. The regulation provides that these programs shall apply to all on-site sewage systems in the area affected by the program.

3.3 Risk Management Plans

Based upon assessments to date, and subject to further field verification of specific activities by the appointed Risk Management Official, Risk Management Plans are not expected to be required for negotiation by the City's appointed Risk Management Official.

3.4 City Best Management Practices

Currently, the City has a number of Best Management Practices (BMPs) established that will effectively support and contribute to meeting the requirements of the proposed SPP policies. These standard practice documents include:

- Salt Management Plan
- Standard Operating Procedures for Water & Wastewater, Compliance & Regulations
- Hydrogeological Guidelines for Private Servicing

These and other BMPs will form the basis for meeting the minimum requirements for most City-applicable SPP policies based upon standard practice implementation.

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3.5 Education and Outreach Programs/Brochures/Displays

The City has several education programs that will assist in information residents and businesses about their obligations to protect drinking water supplies. These programs include:

- Be The One brochure (O&WM) that identifies the appropriate procedures for disposal of household hazardous waste
- Water Wise Use brochure (WWW Compliance & Regulations) which outlines the Sewer Use By-Law as well as use of the Spills Reporting Line
- Numerous Public Information Centres on Sourcewater Protection and Planning process and proper well and septic maintenance. These focus on the rural areas served by City Municipal Wells and are organized by the Infrastructure and Source Water Planning Section of ESI

These and other City Programs will form the basis for meeting the minimum requirements for most City-applicable SPP policies based upon Education and Outreach Program implementation.

3.6 Existing Incentive Programs

Unilaterally, and in association with the Hamilton Conservation Authority, the City currently supports the framework and financing of incentive programs that promote stewardship, good practice and procedures to protect the quality of water at its source. These incentive programs include:

- Well Decommissioning Program (ISWP)
- Ontario Drinking Water Stewardship Program

These and other City Programs will form the basis for meeting the minimum requirements for most City-applicable SPP policies based upon Incentive program implementation

4.0 Municipal Implementation Costs

Source Water Protection Authorities have been requesting the Province to fund or assist in the funding for the implementation of the SPPs. The largest cost may appear to be the hiring and training of Risk Management Official and Risk Management Inspectors. The cost will depend on Council's decision as to whether to appoint existing qualified staff to the position, or undertake one of the options supported by accompanied City funding as presented in the alternatives for consideration. Staff are recommending that the RMO position be appointed internally with existing/future qualified staff. Refer to the Staff Section above for additional information.

5.0 Provincial Role

The Provincial government has a very active role in ensuring the safety of drinking water supplies. Their role includes:

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- Responsibilities assigned to Ministries under various Acts and regulations (i.e. Nutrient Management Plans under the <u>Nutrient Management Act</u>, Permits to take Water, approval and monitoring of sewage systems greater than 10,000 L per day, fertilizers, etc.)
- Approval and Changes to various Acts and regulations to introduce greater powers for municipalities and Conservation Authorities

Pages 24 to 27 of Appendix "A" detail the roles and responsibilities of various levels of governments and agencies in the protection of drinking water supplies.

6.0 Staff Recommendations on the Draft Sourcewater Protection Plan

6.1 Impact of the Policies on the City of Hamilton

Overall, the impact of these policies on the financial and staffing resources is neutral. At the present time:

- There are no land uses that will be prohibited or require a restricted location that exist within vulnerable areas; however, changes to planning instruments will be required to prevent these uses in the future.
- Small changes to the Building permit and <u>Planning Act</u> applications procedures within vulnerable areas will be required to protect against significant drinking water threats
- The City has several existing outreach and education programs aimed at protecting drinking water supplies.
- There have been amendments to Ontario Building Code that will require maintenance and inspection of on-site sewage systems prior to the completion of the SPP. Staff is recommending the cost of this program be borne by the homeowner through third party inspections.
- The Public Works Department established a Source Protection Planning group in 2006 to address the City's responsibilities with respect to the <u>Clean Water Act</u>. To date, these responsibilities (including groundwater model development, water budgeting, participation and input to the development of mandatory reporting and policy directives, etc.) have been met with the current staff complement and approved budgets. No changes to this complement are expected at this time.
- Staff will continue to work collaboratively with other agencies, such as the Conservation Authorities and the Ministry of the Environment in the implementation of various programs and procedures.
- The implementation of the Plan will occur one (1) to two (2) years after the approval of the Plan, which will be sometime in 2013.

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6.2 Staff Comments on the Policies

Staff of the various Departments and Divisions have reviewed and provided comments on the proposed SPP policies. Overall, the policies are comprehensive and well written; however, staff are suggesting some minor wording changes and to delete two (2) policies:

- To identify specific actions that a municipality should undertake (i.e. amendments to planning instruments) (Policies T-3, T-29, T-32, T-37, T-41);
- To give the municipality more flexibility to design their financing programs for the improvement of on site septic tanks should they choose to fund such programs (T-17);
- To establish more consistent time frames for compliance amongst the policy directives to implement changes to or introduce new programs (T-27, T-31, T-43);
- To make the language of some policies clearer (T-10, T-9, T-10, T-19, T-39, T-49, O-1);
- To delete Policy T-28 since the <u>Planning Act</u> can not require the submission of an Audubon certificate for golf courses; and,
- To delete Policy T-39 (location of snow storage facilities) since changes to Policy 38 prohibits new facilities in vulnerable areas.

7.0 Next Steps

The SPA will review all comments and make any changes to the SPP. A final report will be prepared and the City will have a second opportunity to comment on the Plan early in 2012. In addition, the SPA will be carrying out a series of public information centres/meetings on the finalized Plan. Comments on the final Plan will be sent directly to the Ministry of the Environment and considered in the SPP's approval. As prescribed in the Clean Water Act, the final SPP must be submitted to the Ministry by August 2012.

ALTERNATIVES FOR CONSIDERATION

The <u>Clean Water Act</u> and accompanying regulations require mandatory compliance, certain changes to the <u>Planning Act</u>, appointment of a risk management official and mandatory sewage system inspections under the OBC.

Risk Management Official:

- 1. Cost share with another Municipality Halton has indicated an intention to not cost share
- 2. Delegate to a Conservation Authority appointed RMO, supported with associated funding support of the position
- 3. Delegate to a third party qualified person or consultant with associated funding support

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Mandatory Maintenance and Inspection of On-Site Sewage Systems

Hire new staff to monitor the timing of the septic tank inspections, and to inspect private on site sewage systems under the Building Code. This option is not preferred since it would require additional staff resources. Additionally, the City takes on the liability for the inspection.

CORPORATE STRATEGIC PLAN

Focus Areas: 1. Skilled, Innovative and Respectful Organization, 2. Financial Sustainability, 3. Intergovernmental Relationships, 4. Growing Our Economy, 5. Social Development, 6. Environmental Stewardship, 7. Healthy Community

Skilled, Innovative & Respectful Organization

More innovation, greater teamwork, better client focus

Financial Sustainability

 Delivery of municipal services and management capital assets/liabilities in a sustainable, innovative and cost effective manner

Intergovernmental Relationships

- Influence federal and provincial policy development to benefit Hamilton
- Maintain effective relationships with other public agencies

Environmental Stewardship

- Natural resources are protected and enhanced
- Aspiring to the highest environmental standards

APPENDICES / SCHEDULES

Appendix "A" - Halton-Hamilton Source Protection Region Draft Policies

Appendix "B" - City Staff Comments on Draft Policies

Appendix "C" - Map of the Sourcewater Protection Regions

Appendix "D" - Excerpt from Clean Water Act O. Reg. 287/07

List of 21 Prescribed Drinking Water Threats

Appendix "E" - Maps of Wellhead Protection Areas (WHPAs) and Intake Protection Zones (IPZs)

Objectives of the Plan

The policies in this Plan are designed to implement the objectives defined by the General Regulation as follows:

1.

To protect existing and future drinking water sources in the Source Protection Area; and,

To ensure that, for every area identified in an assessment report as an area where an activity is or would be a significant drinking water threat,

i)

the activity never becomes a significant drinking water threat, or

ii)

if the activity is occurring when the source protection plan takes effect, the activity ceases to be a significant drinking water threat.

Policy Format

The policies in this Plan are organized by type, i.e. general policies, significant threat policies, and local threat policies.

To assist the reader of the Plan, an identifier has been used for each policy. The identifier specifies the type of policy, its number, and its legal effect.

The policy type is specified first and is one of the following:

G – a general requirement of the Clean Water Act, 2006 or its regulations;

T – a significant threat policy based on the 18 prescribed water quality threats;

L – a significant threat policy based on an added local threat;

O – an optional policy included to enhance drinking water source protection in the Source Protection Area; or

I – a significant threat policy for the issue contributing area of the Georgetown wells.

Each policy is numbered sequentially within the policy type.

The effect of the policy is designated as follows.

C – requires compulsory compliance;

S – strategic action, a discretionary obligation recommended to achieve the objectives of the Plan; or

N – non-legally binding commitment policy directed at federal agencies.

Significant threat policies address existing drinking water threats, potential future threats, or both. The policy text includes the agency responsible for implementation.

Activities that are or would be significant drinking water threats must be monitored and the effectiveness of significant threat policies be evaluated, requiring additional policies. Monitoring policies follow their associated significant threat policies.

Draft Plan Policies

General Policies

The Director under the *Clean Water Act* has provided directions that specify how to comply with section 34 of Ontario Regulation 287/07 to give legal effect to the policies included in the Source Protection Plan. A series of lists of policies under appropriate headings will be included as an appendix to the Source Protection Plans.

This policy enacts timing requirements for implementation of Plan policies.

G-1 If no time period is set out below or no time period is specified within a policy, the policy comes into full force and effect on the date of the posting of the notice of approval of this Plan on the Environmental Registry established under the Environmental Bill of Rights by the Ministry of the Environment, and therefore, must be complied with from that date forward.

a.

For the purpose of section 58(3) of the *Clean Water Act, 2006*, the date the policies regarding regulated activities comes into full force and effect is two years from the date the Source Protection Plan comes into full force and effect.

b.

For the purpose of section 59(1) of the *Clean Water Act, 2006,* the date for the policies regarding restricted land uses to come into full force and effect is the same date that the Source Protection Plan comes into full force and effect.

C.

For the purpose of section 43(2) of the *Clean Water Act, 2006*, the deadline for amendments to prescribed instruments is two years from the date that the Source Protection Plan comes into full force and effect.

d.

For the purpose of section 40(2) of the *Clean Water Act, 2006*, the official plans for the Region of Halton, the City of Hamilton, and the County of Wellington must be amended to conform to the significant threat policies within two years from the date the Source Protection Plan comes into full force and effect.

For the purpose of section 40(2) of the *Clean Water Act, 2006*, the official plans for the Town of Milton, the Town of Halton Hills, the Town of Oakville, and the City of Burlington, must be amended to conform to the significant threat policies within three years from the date the Source Protection Plan comes into full force and effect.

This policy enacts restricted land uses.

G-2 In accordance with section 59(1) of the *Clean Water Act, 2006*, unless identified specifically within a policy, all land uses set out within the official plans for the municipalities where this Source Protection Plan is in full force and effect are designated as land uses to which the restricted land uses provisions of the *Clean Water Act* apply.

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Significant Drinking Water Threat Policies

T-1-C For waste disposal sites within the meaning of Part V of the Environmental Protection Act,

a.

The Ministry of the Environment shall not issue a certificate of approval for the establishment of a new waste disposal site on properties located within vulnerable areas where there would be a significant drinking water threat.

h.

The Ministry of the Environment shall document the number of applications received and denied for a certificate of approval under Section 39 of the *Environmental Protection Act*.

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year.

T-2-C To increase the awareness of landowners who have property within vulnerable areas about appropriate waste disposal to prevent significant drinking water threats from improper disposal of hazardous materials, the following policies apply:

a.

The City of Hamilton and the Region of Halton shall continue their established education and outreach programs on hazardous waste disposal and reduction of waste. In addition, they shall include messaging consistent with source water protection and the careful use and disposal of substances identified in the Ministry of the Environment's most recent Tables of Drinking Water Threats, such as organic solvents, pesticides, and dense non-aqueous phase liquids.

The City of Hamilton and the Region of Halton shall document the efforts undertaken through education and outreach programs regarding hazardous waste disposal and reduction of waste.

By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach programs and the results of the previous year.

T-3-C To prevent the establishment of waste disposal sites within the meaning of Part V of the Environmental Protection Act in vulnerable areas where there would be a significant drinking water threat,

a.

The Region of Halton, Town of Milton, and the City of Hamilton shall prohibit the establishment of a new waste disposal site.

b.

The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to prohibit the establishment of a new waste disposal site.

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T-4-C For a proposed system that would discharge untreated stormwater from a stormwater retention pond within a vulnerable area where this would be a significant drinking water threat,

a.

The Ministry of the Environment shall not issue a new certificate of approval for the system unless conditions are imposed that, when implemented, will ensure that the system does not become significant drinking water threat. Conditions of approval may include the requirement for regular maintenance, periodic removal of accumulated sediment, lining of the pond where warranted, the use of an oil/water separator, and other requirements to address site conditions.

The Ministry of the Environment shall document the number and locations of applications received for certificates of approval for these systems, the actions taken, as well as the conditions imposed.

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year and provide a copy of any approved certificates of approval.

T-5-C (Halton Only) When industrial land uses are proposed within vulnerable areas that would discharge effluent to the environment where this would be a significant drinking water threat,

a.

The Ministry of the Environment shall not approve certificates of approval for industrial effluent discharge for sites unless conditions are imposed that, when implemented, will ensure that these discharges do not become a significant drinking water threat, including strict criteria for effluent quality and monitoring. b.

The Ministry of the Environment shall document the number and locations of applications received for certificates of approval for industrial effluent discharge concerning sites located within vulnerable areas, the action taken on the applications, and the conditions imposed.

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year, and shall provide a copy of any issued certificates.

T-6-C When sanitary sewers and pipes are proposed to be installed within vulnerable areas where there would be a significant drinking water threat,

a.

The Ministry of the Environment shall, in the review and approval of new certificates of approval, ensure that the sewers and pipes do not become a significant drinking water threat. Conditions of approval shall include requirements for regular maintenance and inspections. b.

The Ministry of the Environment shall document the number and locations of applications received for certificates of approval for sanitary sewers and pipes, the actions taken on the application, and the conditions imposed to protect drinking water sources.
c.

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year, and shall provide a copy of any issued certificates.

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T-7-C For existing and potential future septic systems regulated under section 53 of the *Ontario Water Resources Act* and located within vulnerable areas where there is or would be a significant drinking water threat,

a.

The Ministry of the Environment shall ensure that certificates of approval incorporate conditions that, when implemented, ensure that these septic systems cease to be or do not become significant drinking water threats. The conditions shall include, as appropriate, mandatory monitoring of groundwater impacts, contingencies in the event that drinking water quality is adversely affected, regular and ongoing compliance monitoring, mandatory system inspections at least every five years, and upgrading of these septic systems to current standards, if necessary. In addition, the conditions shall include annual reporting to the Source Protection Authority of any monitoring and inspection programs required and their results.

b.

The Ministry of the Environment shall document the number and locations of certificates of approval that were issued or amended for these septic systems, the actions taken, the conditions imposed, and how protection of the municipal drinking water sources was addressed.

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions and the results for the previous year, and shall provide copies of all approved or revised certificates.

T-8-C When sewage treatment plants are proposed for sites within a vulnerable area where there would be a significant drinking water threat,

a.

The Ministry of the Environment shall ensure that certificates of approval required for sewage treatment plants incorporate conditions that, when implemented, will ensure that they do not become significant drinking water threats. The conditions shall include strict criteria for effluent quality, appropriate sizing to reduce by-passes, in addition to inspections and proactive maintenance of the works to prevent leaks. b.

The Ministry of the Environment shall document the number and locations of certificates of approval that were issued for sewage treatment plants, the actions taken, as well as the conditions imposed.

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year, and shall provide a copy of any approved certificates of approval.

T-9-C In consideration of applications received under the *Planning Act* or *Condominium Act* that include stormwater retention ponds in vulnerable areas where there would be a significant drinking water threat from the discharge of untreated stormwater effluent,

a.

Where possible, the municipal planning authority shall locate future stormwater retention ponds outside of the vulnerable area.

b.

The municipal planning authority shall document the number of applications reviewed for stormwater retention ponds, whether the application was approved, and whether the pond was located within or outside of the vulnerable area.

С.

By February 1 of each year, the municipal planning authority shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, including the rationale for

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the decisions made.

T-10-C In consideration of site plan approval for a property located partially within a vulnerable area and requiring a new septic system regulated under section 53 of the *Ontario Water Resources Act*,

a.

Where possible, the municipal planning authority shall locate the septic system outside of a vulnerable area to ensure it will not be a significant drinking water threat. b.

The municipal planning authority shall document the number of site plan applications reviewed that were denied, those approved with the septic system located outside of the vulnerable area, and those approved with the septic system located within the vulnerable area.

By February 1 of each year, the municipality shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, including the rationale for the decisions made.

T-11-C In consideration of possible future development of properties within vulnerable areas where there would be a significant drinking water threat from on-site private servicing,

a.

The Region of Halton, the Town of Milton, and the City of Hamilton shall require that future lot sizes be sufficient to accommodate the required, on-site, private servicing. b.

The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to ensure that future lot sizes are sufficient to accommodate the required, on-site, private servicing.

T-12-S For consistency of policy documents within a municipal jurisdiction, the following policies apply:

a.

The Niagara Escarpment Commission is requested to require that future lot sizes in the Niagara Escarpment Plan Area be sufficient to accommodate the required, on-site, private servicing for properties located within vulnerable areas where there would be a significant drinking water threat.

The Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to require that future lot sizes in the Niagara Escarpment Plan Area be sufficient to accommodate the required, on-site, private servicing for properties located within vulnerable areas where there would be a significant drinking water threat.

T-13-C To increase awareness about best practices to protect drinking water sources for users of septic tanks and holding tanks located within vulnerable areas where these are or would be significant drinking water threats,

a.

Within one year of the date the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority, are requested to continue and broaden

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education and outreach programs. The programs should inform landowners about the proper disposal of toxic chemicals, the operation and maintenance of sewage systems, and the benefits of installing effluent filters, performing tank inspections, and having tanks regularly pumped out.

For any new or continuing education and outreach programs established regarding septic systems, the City of Hamilton and the Region of Halton shall document the nature of the program, the number of persons contacted, and the location of the participants.

By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing the education and outreach programs and the results for the previous year.

T-14-C In support of the septic system inspection requirements of the Ontario Building Code specific to vulnerable areas where there are significant drinking water threats,

a.

The Town of Milton and the City of Hamilton shall implement an on-site sewage system maintenance inspection program, as required.

The Town of Milton and the City of Hamilton shall document the number of sewage system maintenance inspections completed, as well as the actions required, if any.

By February 1 of each year, the Town of Milton and the City of Hamilton shall prepare and submit to the Source Protection Authority a report summarizing their actions, including a summary of the results of the inspections completed for the previous year.

T-15-S For existing properties where septic systems are used within a municipal service area, the following policies apply:

a.

Landowners are requested to connect to a municipal sewage system when a septic system is used within a vulnerable area where the system is a significant drinking water threat and where municipal services are provided, a connection is permitted, and where municipal servicing capacity is available.

The City of Hamilton and the Region of Halton shall document the number and locations of connections to municipal sewage systems for those properties with septic systems in use within vulnerable areas where there are significant drinking water threats.

By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing the information concerning the number and locations of municipal sewage system connections.

T-16-S To assist landowners in reducing the risks to drinking water sources from existing septic system threats, the following policies apply:

a.

The Province of Ontario is requested to provide ongoing funding through the Ontario Drinking Water Stewardship Program or a similar program for septic system upgrades and replacements.

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When funding is provided, the Hamilton-Halton Watershed Stewardship Program, under the direction of the Halton Region and Hamilton Conservation Authorities, shall implement the incentive program to reduce the risk of septic system drinking water threats.

By February 1 of each year, the Hamilton-Halton Watershed Stewardship Program shall advise the Source Protection Authority of the amount of funding received from provincially funded programs for septic system upgrades and replacements, as well as the number of projects completed in the previous year through the Ontario Drinking Water Stewardship Program or a similar program.

T-17-C To assist landowners with improvements required under the on-site sewage systems maintenance inspection program, the following policies apply:

a.

The City of Hamilton, the Region of Halton, and the Town of Milton shall consider the creation of a financial assistance program to help landowners who are required to undertake septic system upgrades or replacements under the on-site sewage systems maintenance inspection program. It is recommended that this program be designed in a manner that allows the work to be completed as required, and the landowner to repay the cost over time.

The City of Hamilton, the Region of Halton, and the Town of Milton shall document their efforts and the results regarding the creation of a municipal financing program to assist landowners.

By February 1 of each year, the City of Hamilton, the Region of Halton, and the Town of Milton shall prepare and submit to the Source Protection Authority a report summarizing details of the financial assistance program and the number of participants in the program.

T-18-C In consideration of reducing the risk from septic systems requiring approval under section 53 of the *Ontario Water Resources Act*,

a.

The municipality responsible for wastewater services may consider a connection to municipal wastewater services for rural properties where the septic system has failed and where all other mitigation measures have been explored (including the replacement of the system and/or installation of an advanced private treatment facility) to the satisfaction of the municipality and found unsuitable, and where the connection is permitted by provincial and municipal planning policy.

By February 1 of each year, the municipality responsible for wastewater services shall report to the Source Protection Authority the number of any connections made to the municipal wastewater system in the previous year due to the failure of a septic system.

T-19-C To reduce the risk to drinking water sources from sewage treatment plant by-passes, the following policies apply:

a.

The municipalities responsible for stormwater systems are requested to implement programs to remove connections of stormwater sources to sanitary sewers in order to reduce surges in volumes to sewage treatment plants during wet weather.

By February 1 of each year, the municipalities having approval for stormwater systems shall report to the

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Source Protection Authority whether a program to remove connections of stormwater sources to sanitary sewers has been implemented and the number of connections removed.

By February 1 of each year, the municipalities responsible for wastewater services shall report to the Source Protection Authority the number of by-passes of the wastewater treatment plant that occurred due to plant capacity limitations.

T-20-C (*Under review to remove building permits from pre-screen*) To reduce the risk to drinking water sources from the application and storage of agricultural source material (ASM) on farms not phased-in under the *Nutrient Management Act* where there would be a significant drinking water threat,

a.

A Risk Management Official shall screen all building permit and *Planning Act* applications for properties zoned for agricultural use within vulnerable areas.

A Risk Management Official shall negotiate and oversee the implementation of a Risk Management Plan with the persons undertaking or proposing to undertake the activities of the application or storage of agricultural source material. These Risk Management Plans shall be based upon the regulatory requirements of a nutrient management plan and strategy under the *Nutrient Management Act* and scoped to address these specific threats.

C.

The Risk Management Official shall document action taken regarding Risk Management Plans for the application and storage of agricultural source material in their annual report in accordance with Section 65 of Ontario Regulation 287/07, and the Official shall submit this report to the Source Protection Authority by February 1 of each year.

T-21-C For existing and potential future nutrient management plans and strategies for agricultural operations located within a vulnerable area where significant drinking water threats exist now or could exist in the future due to the application or storage of agricultural source material,

a.

The Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment shall ensure that the nutrient management plans and strategies are inclusive of measures to protect drinking water sources that, when implemented, will ensure that the application and storage of agricultural source material never become or cease to be significant drinking water threats. All contingency plans must contain the requirement for notification of the appropriate municipal official and the Spills Action Centre if a leak is discovered from an agricultural source material storage facility or there is a spill.

The Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment shall document the number and locations of nutrient management plans and strategies that were reviewed or approved and the actions taken to attain compliance with this policy.

By February 1 of each year, the Ministry of Agriculture, Food and Rural Affairs and the Ministry of the Environment shall prepare and submit to the Source Protection Authority reports summarizing their actions and results for the previous year.

T-22-C To monitor compliance with nutrient management plans and strategies for agricultural operations located within vulnerable areas where there are now or potentially would be significant drinking water threats due to the application and storage of agricultural source materials, non-

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agricultural source materials, commercial fertilizer, and land used for outdoor confinement areas and farm-animal yards,

a.

The Ministry of the Environment shall prioritize and conduct regular compliance inspections of agricultural operations where significant drinking water threats exist, and shall guide farmers to improve compliance performance, when needed.

b.

The Ministry of the Environment shall document the number and location of compliance inspections completed and the actions taken.

С

By February 1 of each year, the Ministry of the Environment shall prepare and submit to the Source Protection Authority a report summarizing this information for the previous year, including the number of inspections completed in each vulnerable area that were compliant and non-compliant with legislated requirements.

T-23-S As an incentive to reduce the risks from the application and storage of agricultural source materials, and from land used for livestock grazing, pasturing land, outdoor confinement areas, and farm-animal yards,

a.

The Ministry of the Environment is requested to continue to provide ongoing funding for stewardship projects on properties where these activities are a significant threat.

b.

When funding is provided, the Hamilton-Halton Watershed Stewardship Program, under the direction of the Halton Region and Hamilton Conservation Authorities, shall implement the incentive program.

С.

By February 1 of each year, the Hamilton-Halton Watershed Stewardship Program shall advise the Source Protection Authority of the amount of funding received from provincially funded programs for stewardship projects.

T-24-C For properties located within a vulnerable area where future significant drinking water threats are possible due to the application, or handling and storage of non-agricultural source material,

a.

The Ministry of Agriculture, Food and Rural Affairs shall ensure that non-agricultural source material plans (NASM plans) required under the *Nutrient Management Act* include measures that, when implemented, will ensure that these activities never become significant drinking water threats.

h

The Ministry of Agriculture, Food and Rural Affairs shall document the number and locations where non-agricultural source material plans were reviewed and approved, and the measures included.

By February 1 of each year, the Ministry of Agriculture, Food and Rural Affairs shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year.

T-25-C To reduce the risks to drinking water sources from the application and storage of commercial fertilizer on farms not phased-in under the *Nutrient Management Act*, at retail establishments, and on other properties,

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a.

A Risk Management Official shall screen all building permit and *Planning Act* applications for properties within vulnerable areas where there would be a significant drinking water threat.

A Risk Management Official shall negotiate and oversee the implementation of a Risk Management Plan with the persons proposing to undertake the activities of the application or storage of commercial fertilizer. A Risk Management Plan shall be based upon the regulatory requirements of a nutrient management plan and strategy under the *Nutrient Management Act* and scoped to address these specific threats.

C.

The Risk Management Official shall document action taken regarding Risk Management Plans for the application, handling and storage of commercial fertilizer in their annual report in accordance with Section 65 of Ontario Regulation 287/07, and the Official shall submit this report to the Source Protection Authority by February 1 of each year.

T-26-C For properties located within a vulnerable area where significant drinking water threats could occur in the future due to the application, or handling and storage of commercial fertilizer,

a.

The Ministry of Agriculture, Food and Rural Affairs shall ensure that nutrient management plans and strategies required under the *Nutrient Management Act* include measures that, when implemented, will ensure that these activities never become significant drinking water threats.

The Ministry of Agriculture, Food and Rural Affairs shall document the number of and locations of properties where nutrient management plans and strategies were reviewed and approved, and the measures included.

C.

By February 1 of each year, the Ministry of Agriculture, Food and Rural Affairs shall prepare and submit to the Source Protection Authority a report summarizing their actions and results for the previous year.

T-27-C For properties located within vulnerable areas where significant drinking water threats could occur in the future from the application, or handling and storage of commercial fertilizer,

a.

Within one year of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority, are requested to develop and implement education and outreach programs to promote best management practices regarding these activities for the protection of source water. The target audience will be golf courses, fertilizer application technicians, home and business owners, and retail establishments that apply or store commercial fertilizer.

h

For any new and existing education and outreach programs established regarding the application, handling or storage of commercial fertilizer, the City of Hamilton and the Region of Halton shall document the nature of the program, the number of persons contacted, and the location of the participants.

By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach programs and the results for the previous year.

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vulnerable areas where the application, and storage and handling of commercial fertilizers would be significant drinking water threats,

а

The municipal planning authority shall encourage all applicants to obtain and retain Audubon Cooperative Sanctuary Certification.

b.

The municipal planning authority shall document the number of planning applications received for golf courses within vulnerable areas and the number with an Audubon Co-operative Sanctuary Certificate. c.

By February 1 of each year, the municipal planning authority shall prepare and submit to the Source Protection Authority a report summarizing the information on golf course applications.

T-29-C In consideration of possible future development within vulnerable areas where there would be a significant drinking water threat from the handling and storage of pesticides,

a.

The Region of Halton, the Town of Milton, and the City of Hamilton shall prohibit a retail establishment that sells pesticides or a pesticide manufacturing, processing, or warehousing operation.

The municipal planning authority shall provide the Source Protection Authority proof of compliance with the policy to prohibit a retail establishment that sells pesticides or a pesticide manufacturing, processing, or warehousing operation within a vulnerable area.

T-30-S For consistency of policy documents within a municipal jurisdiction, the following policies apply:

a.

The Niagara Escarpment Commission is requested to prohibit a retail establishment that sells pesticides, or a pesticide manufacturing, processing, or warehousing operation within vulnerable areas in the Niagara Escarpment Plan Area where the handling and storage of pesticides would be a significant drinking water threat.

b.

The Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to prohibit a retail establishment that sells pesticides or a pesticide manufacturing, processing, or warehousing operation within vulnerable areas in the Niagara Escarpment Plan Area where the handling and storage of pesticides would be a significant drinking water threat.

T-31-C For vulnerable areas where significant drinking water threats exist or could exist in the future due to the application, or handling and storage of pesticide,

a.

Within one year of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority, are requested to undertake an education and outreach program on pesticide use and storage methods and their potential impacts on drinking water sources. It is recommended that the outreach program include wellhead protection area mapping and target pesticide applicators and exterminators, golf course operators, and farmers. b.

The City of Hamilton and the Region of Halton shall document the nature of any new and existing education and outreach program established regarding the application, and the handling and storage of

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pesticides, the number of persons contacted, and the location of the participants.

By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach programs and the results for the previous year.

T-32-C In consideration of possible future land use changes within vulnerable areas where there would be a significant drinking water threat from the handling and storage of greater than 5,000 tonnes of road salt,

a.

The Region of Halton, Town of Milton, and the City of Hamilton shall prohibit salt storage and handling facilities with more than this capacity.

b.

The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to prohibit the salt storage and handling facilities with more than this capacity.

T-33-S For consistency of policy documents within a municipal jurisdiction, the following policies apply:

a.

The Niagara Escarpment Commission is requested to prohibit salt storage and handling facilities with capacity greater than 5,000 tonnes within vulnerable areas in the Niagara Escarpment Plan Area where the handling and storage of salt would be a significant drinking water threat.

The Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to prohibit salt storage and handling facilities with capacity greater than 5,000 tonnes within vulnerable areas in the Niagara Escarpment Plan Area where the handling and storage of salt would be a significant drinking water threat.

T-34-C For vulnerable areas where significant drinking water threats could exist in the future due to the application, or handling and storage of road salt,

a.

Within two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, are requested to develop and implement education and outreach programs for the private and public sector, as well as the general public, about the impacts of road salt on drinking water sources and the use of best management practices. It is recommended that the key messages be the efficient use of road salts and the use of alternatives. b.

The City of Hamilton and the Region of Halton shall document the nature of any new or existing education and outreach program established regarding the application, and handling and storage of road salt, the number of persons contacted, and the location of the participants.

By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach programs and the results for the previous year.

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T-35-C To include the results of source protection planning in existing salt management plans, the following policies apply:

a.

Within two years of the date that the Source Protection Plan comes into effect, the municipalities shall amend their salt management plans to identify the location of wellhead protection areas and intake protection zones and to enhance best management practices in these areas. b.

The municipalities shall advise the Source Protection Authority of the revision to the salt management plans when completed and provide a status update by February 1 of each year until completed.

T-36-S To promote awareness of mapped drinking water sources and seek collaboration on the use of best practices for the application of road salt within vulnerable areas, the following policies apply:

a.

The Ministry of Transportation and private de-icing contractors are requested to amend their salt management plans to identify the location of wellhead protection areas and intake protection zones, and to enhance best management practices within these areas.

The Conservation Authority shall consult with the Ministry of Transportation and de-icing contractors to determine if their salt management plans have been updated to identify the location of the vulnerable areas and report on this information to the Source Protection Authority by February 1 of each year.

T-37-C In consideration of future land use changes within vulnerable areas where the storage of snow would be a significant drinking water threat and the activity would be carried out at a purpose-designed snow storage facility at or above grade at greater than one hectare in size or, below grade, at or greater than 0.01 hectare in size,

a.

The Region of Halton, the Town of Milton, and the City of Hamilton shall prohibit purpose-designed snow storage facilities of these sizes.

The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to prohibit purpose-designed snow storage facilities of these sizes.

T-38-S For consistency of land uses permitted within a municipal jurisdiction, the following policies apply:

a.

The Niagara Escarpment Commission is requested to prohibit purpose-designed snow storage facilities at or above grade at greater than one hectare in size or, below grade, at or greater than 0.01 hectare in size, within vulnerable areas in the Niagara Escarpment Plan Area where the storage of snow would be a significant drinking water threat.

b.

The Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report on the actions taken to prohibit purpose-designed snow storage facilities at or above grade at greater than one hectare in size or, below grade, at or greater than 0.01 hectare in size, within vulnerable areas in the Niagara Escarpment Plan Area where the storage of snow would be a significant drinking water threat.

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T-39-C In consideration for the site plan approval for a proposed development located within a vulnerable area where there would be a significant drinking water threat due to the storage of snow,

a.

The municipal planning authority shall require that best management practices for site design be included to manage snow storage and the associated melt water.

b.

The municipal planning authority shall document the number of site plan applications reviewed, and the conditions imposed for the management of snow storage and melt water runoff.

C

By February 1 of each year, the municipality shall prepare and submit to the Source Protection Authority a report summarizing the documented planning approval information for the previous year.

T-40-C To reduce the risks to drinking water sources within vulnerable areas where there are existing or where there could be future significant drinking water threats in the future from the handling and storage of fuel,

a.

The Risk Management Official shall screen all building permit and *Planning Act* applications within these vulnerable areas.

b.

The Risk Management Official shall negotiate and oversee the implementation of a Risk Management Plan with the person undertaking or proposing to undertake the handling and storage of fuel under Ontario Regulation 213/01 and under Ontario Regulation 217/01, except home fuel oil tanks. The Risk Management Plan shall include the requirements for all storage tanks to comply with the requirements of the *Technical Standards and Safety Act* and its regulations, for all owners/operators to have an emergency response plan with emergency contact information of the municipality responsible for water services and the Spills Action Centre, and for the owner/operator to call both agencies in the case of a release of fuel.

С.

The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding Risk Management Plans for the handling and storage of fuel and submit this report to the Source Protection Authority by February 1 of each year.

T-41-C (*Policy under review regarding farm fuel storage*) In consideration of potential future land use changes within vulnerable areas where the handling and storage of fuel would be a significant drinking water threat,

a.

The Region of Halton, Town of Milton, and the City of Hamilton shall prohibit new gas stations and bulk fuel storage facilities.

b.

The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to prohibit new gas stations and bulk fuel storage facilities.

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T-42-S For consistency of land uses permitted within a municipal jurisdiction, the following policies apply:

a.

The Niagara Escarpment Commission is requested to prohibit new gas stations and bulk fuel storage facilities within vulnerable areas in the Niagara Escarpment Plan Area where the handling and storage of fuel would be a significant drinking water threat.

b.

The Niagara Escarpment Commission is requested to provide to the Source Protection Authority a report of the actions taken to prohibit new gas stations and bulk fuel storage facilities within vulnerable areas in the Niagara Escarpment Plan Area where the handling and storage of fuel would be a significant drinking water threat.

T-43-C For properties within vulnerable areas where there are existing or where there could be significant drinking water threats in the future due to the handling and storage of fuel,

a.

Within one year of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority, shall develop and implement an education and outreach program for homeowners with home fuel oil tanks, regarding spill response and the method and timing for contacting the Spills Action Centre and the municipality responsible for water services. As part of this program, stickers with emergency phone numbers shall be provided to be placed on or near the fuel tanks and fill pipes to ensure immediacy of response if there is a spill or leak detected. b.

The City of Hamilton and the Region of Halton shall document the nature of any new education and outreach program established regarding home fuel oil tanks, the number of persons contacted, and the location of the participants.

C.

By February 1 of each year, these municipalities shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach program and the results for the previous year.

T-44-C (Hamilton Report existing and future – Halton only future) To reduce the risks to drinking water sources within vulnerable areas where there are existing or could be future significant drinking water threats from the handling and storage of a dense non-aqueous phase liquid,

a.

The Risk Management Official shall screen all building permit and *Planning Act* applications within these vulnerable areas.

b.

The Risk Management Official shall negotiate and oversee the implementation of a Risk Management Plan with the person undertaking or proposing to undertake the handling and storage of a dense non-aqueous phase liquid.

C.

The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding Risk Management Plans for the handling and storage of a dense non-aqueous phase liquid and submit this report to the Source Protection Authority by February 1 of each year.

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T-45-C To reduce the risks to drinking water sources within vulnerable areas where there could be future significant drinking water threats from the handling and storage of an organic solvent,

The Risk Management Official shall screen all building permit and *Planning Act* applications within these vulnerable areas.

b.

The Risk Management official shall negotiate and oversee the implementation of a Risk Management Plan with the person proposing to undertake the handling and storage of an organic solvent.

The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07 action taken regarding Risk Management Plans for the handling and storage of an organic solvent and submit this report to the Source Protection Authority by February 1 of each year.

T-46-N In support of the existing planning process for new airport facilities and to protect drinking water sources from runoff containing de-icing chemicals, the following policies apply:

Transport Canada, in their consideration of any new airport facilities, are requested to include appropriate design standards and management practices to prevent the runoff from airport de-icing facilities from becoming a significant drinking water threat.

The Conservation Authority shall report to the Source Protection Authority on the number of environmental assessments initiated for new airport facilities within vulnerable areas.

T-47-C To reduce the risks to drinking water sources from farms not phased-in under the Nutrient Management Act and located within vulnerable areas where there are existing or where there could be future significant drinking water threats from the use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard,

The Risk Management Official shall screen all building permit and *Planning Act* applications for properties zoned for agricultural use within these vulnerable areas.

The Risk Management Official shall negotiate and oversee the implementation of a Risk Management Plan with the person using or proposing to use farm lands for livestock outdoors. These Risk Management Plans shall be based upon the regulatory requirements of a nutrient management strategy under the Nutrient Management Act and incorporate the best management practices as set out in Streamside Grazing (2007).

The Risk Management Official shall document in their annual report, in accordance with Section 65 of Ontario Regulation 287/07, action taken regarding Risk Management Plans for the use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard and submit this report to the Source Protection Authority by February 1 of each year.

T-48-C For existing and potential future nutrient management strategies prepared under the Nutrient Management Act for agricultural operations located within a vulnerable area where significant drinking water threats exist now or could exist in the future due to the use of land as an

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outdoor confinement area or farm-animal yard,

a.

The Ministry of Agriculture, Food and Rural Affairs shall ensure that all existing and future nutrient management strategies incorporate measures to protect drinking water sources that, when implemented, will ensure that the activities never become or cease to be significant drinking water threats.

The Ministry of Agriculture, Food and Rural Affairs shall document the number and locations of nutrient management strategies that were reviewed, amended, or approved, and the actions taken to attain compliance with this policy.

С

By February 1 of each year, the Ministry of Agriculture, Food and Rural Affairs shall prepare and submit to the Source Protection Authority reports summarizing their actions and results for the previous year.

T-49-C (Policy under review as SPC requires additional information from MOE) To prevent future significant drinking water threats within vulnerable areas due to the use of land for grazing and pasturing of farm animals,

a.

Within two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Town of Milton shall prohibit farm animals within a wellhead protection area A.

The City of Hamilton and the Town of Milton shall advise the Source Protection Authority of the actions taken to prohibit farm animals within a wellhead protection area A when completed and provide a status update by February 1 of each year until completed.

Other Policies

Transport Pathways

O-1-S To achieve the intent of the *Clean Water Act, 2006*, that drinking water threats identified in the vicinity of a transport pathway cease to be or do not become a significant threat, and that a pathway ceases to endanger the source water of a municipal water supply, the following policies apply:

a.

Municipalities are requested to require the use of best management practices to protect the quantity and quality of groundwater sources during the installation of new municipal infrastructure in proximity to municipal water supplies.

h

Municipalities are requested to incorporate conditions of approval for development applications to ensure private wells that are no longer in use are abandoned in accordance with Ontario Regulation 903. c.

The Ministry of the Environment and the municipalities responsible for water services are requested to provide ongoing funding for incentive programs focused on the decommissioning of wells, and for education and outreach programs regarding the decommissioning of wells.

If funding is provided by the Ministry of the Environment through the Ontario Drinking Water Stewardship

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Program, the Hamilton-Halton Watershed Stewardship Program, under the direction of the Halton and Hamilton Conservation Authorities, shall implement the incentive program to decommission unused wells. e.

The municipalities are requested to develop a program to facilitate, where possible and appropriate, the connection to municipal water services of current private well users within the urban boundary. The users should be required to decommission the unused wells.

The municipalities are requested to prohibit the construction of new wells and septic systems within the urban area where municipal water and wastewater services are available.
g.

(Policy under review re wording other than prohibit) The municipalities are requested to prohibit the construction of closed loop, earth energy systems within the wellhead protection areas A and B. h.

The Source Protection Authority and Source Protection Committee, upon receipt of a notice from a municipality regarding an application for development of a transport pathway within a wellhead protection area, shall refer the notice to the Halton-Hamilton source protection project team for follow up and reporting back.

Climate Data

O-2-S To ensure that data on the climate conditions in the Source Protection Area are gathered on an ongoing basis, the following policies apply:

a.

The municipalities, the conservation authority, the Province of Ontario and Environment Canada are supported and encouraged in their efforts to collect, share and interpret the hydrogeological, hydrological, and climate data for the Source Protection Area. b.

Environment Canada is encouraged to review its monitoring network to ensure appropriate locations are utilized for climate stations, and that data for all necessary parameters, including solar radiation, used to monitor climate change are being collected.

Water Conservation

O-3-S To ensure that the municipal drinking water sources are sustainable into the future, the following policies apply:

а

The municipalities are requested to continue the effective education, outreach, and incentive programs currently implemented to improve water conservation efforts across the Source Protection Area.

The Province of Ontario is requested to fund the research of, and facilitate approvals of, water efficient technologies and processes for use by the public and private sectors, and is also requested to promote ongoing education and outreach opportunities regarding water conservation.

Disposal of Imported Fill

O-4-S The municipalities and the conservation authority are requested to develop and implement an education and outreach program for rural landowners based on Ministry of the Environment guidance to best protect municipal drinking water sources during the importation of fill.

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Spill Prevention Plans, Spill Contingency Plans, and Emergency Response Plans along highways, railway lines, or shipping lanes

O-5-S To ensure spill prevention plans, contingency plans, and emergency response plans are updated for the purpose of protecting drinking water sources with respect to spills that occur within a wellhead protection area or intake protection zone along highways, railway lines, or shipping lanes, the following policies apply:

a.

The municipalities are requested to incorporate the location of wellhead protection areas and intake protection zones into their emergency response plans in order to protect drinking water sources when a spill occurs along highways, rail lines or in shipping lanes.
b.

The Ministry of the Environment is requested to provide mapping of vulnerable areas to assist the Spills Action Centre in responding to reported spills along transportation corridors.

The municipalities are requested to implement an education and outreach program to encourage all transportation businesses that ship goods through wellhead protection areas and intake protection zones to prepare spill prevention plans and spill contingency plans, to review these plans annually, and to update them, as required.

O-6-N The Hamilton Port Authority is requested to advise each company that leases space on port lands and that use the port shipping lanes of the requirement to update spill contingency plans to include the location of the municipal drinking water intakes, to enhance best practices for spill containment and clean-up to protect drinking water supplies, and also to record municipal emergency contact information for direct notification should a spill occur.

Land Use

O-7-S To facilitate effective implementation of significant threat policies and to achieve the Source Protection Plan's objectives, the following policies apply:

a.

The Province of Ontario is requested to enact the regulations under the *Planning Act* to enable the use of conditional zoning.

b.

The City of Hamilton and the Region of Halton are requested to require a full disclosure report as part of a complete application under the *Planning Act* and Ontario Building Code. The full disclosure report will include the activities occurring and/or expected to occur on the site, as well as the substances utilized or stored on the site.

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and	Instruments	Land Use Planning	Part IV Tools under <i>Clean</i>	Other Tools		
Restricted Land Uses				Water Act, 2006	Regulated Activities (Risk Management Plans)	
T-2-C (a)		T-1-C (a)	T-3-C (a) T-3-C (b)			
S						
		T-4-C (a)	T-9-C			
		T-5-C (a) (Halton only)				
		T-6-C (a)				
T-16-S (b)	T-16-S (a)	T-7-C (a)	T-10-C (a)			
		T-8-C				
T-13-C (a)	T-16-S (a) T-17-C (a)		T-11-C (a)			
	and Outreach Restricted Land Uses T-2-C (a) T-16-S (b)	and Outreach Restricted Land Uses T-2-C (a) T-16-S (b) T-16-S (a) T-13-C (a) T-16-S (a)	and Outreach Instruments Restricted Land Uses T-1-C (a) T-2-C (a) T-4-C (a) T-5-C (a) (Halton only) T-6-C (a) T-16-S (b) T-16-S (a) T-13-C (a) T-16-S (a)	and Outreach Restricted Land Uses T-1-C (a) T-3-C (a) T-3-C (b) T-2-C (a) T-4-C (a) T-9-C T-5-C (a) (Halton only) T-6-C (a) T-10-C (a) T-16-S (b) T-16-S (a) T-7-C (a) T-10-C (a)	Tools under Clean Water Act, 2006	Instruments

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							age zz	
		T 00 0 (1)	T 00 0 ()	T 04 0 ()		T.00.0 ()	<u> </u>	(a)
3 and 4	Agricultural Source Material	T-23-S (b)	T-23-S (a)	T-21-C (a)		T-20-C (a)	T- 20- C	T- 22- C
6 and	Non- Agricultural			T-1-C (a) T-24-C (a)			(b)	(a)
7	Source material							
8 and 9	Commercial Fertilizer	T-27-C (a)		T-26-C	T-28-C (a)	T-25-C (a)	T- 25- C (b)	
10 and 11	Pesticide	T-31-C (a)			T-29-C (a)			T- 30- S (a)
12 and 13	Road Salt	T-34-C (a)			T-32-C (a)			T- 33- S (a) T- 35- C
								(a) T- 36- S (a)
14	Snow Storage				T-37-C (a) T-39-C (a)			T- 38- S (a)
15	Fuel	T-43-C (a)			T-41-C (a)	T-40-C (a)	T- 40- C (b)	T- 42- S (a)
16	Dense Non- aqueous Phase Liquid					T-44-C (a)	T- 44- C (b)	
17	Organic					T-45-C (a)	T-	

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	Solvents						45- C (b)	
18	De-Icing of Aircraft							T- 46- N (a)
21	Land Used for Livestock	T-23-S (b)	T-23-S (a)	T-48-C (a)	T-49-C (a)	T-47-C (a)	T- 47- C (b)	

Table 2. Other policy numbers

Topic	Education and Outreach	Incentives	Best Management Practices	Specify Actions
Transport Pathways	O-1-S (d)	O-1-S (c)	O-1-S (a)	O-1-S (b) O-1-S (e) O-1-S (f) O-1-S (g) O-1-S (h)
Climate Data				0-2-S (a) 0-2-S (b)
Water Conservation	O-3-S (a) O-3-S (b)			
Disposal of Imported Fill	O-4-S			
Spill Prevention, Contingency, and Emergency Response Plans	O-5-S (c)			O-5-S (a) O-5-S (b) O-6-N
Land Use				0-7-S (a) 0-7-S (b)

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Proposed Changes by City of Hamilton in bold below

POLICY ID:	0-1-S		IMPLEMENTING BODY:	Region of Halton, Region of Peel, Region of Niagara, Wellington County, City of Hamilton, City of Mississauga, City of Burlington, Town of Grimsby, Town of Halton Hills, Town of Milton, Town of Oakville and Township of Puslinch
POLICY TYPE:	Optional Policy		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Strategic Action		POLICY STATUS:	Draft
SPC ENDORSEMENT:		September 13, 2	2011	
REVISION DATE(S):				

RATIONALE

Constructed pathways may facilitate the movement of contaminants vertically and laterally below the ground and result in faster or more widespread distribution. The Source Protection Committee recommends a number of policies to effectively manage increased risks to drinking water sources from threats located near transport pathways.

- **O-1-S** To achieve the intent of the *Clean Water Act, 2006*, that drinking water threats identified in the vicinity of a transport pathway cease to be or do not become a significant threat, and that a pathway ceases to endanger the source water of a municipal water supply, the following policies apply:
 - a. Municipalities are requested to require encourage the use of best management practices to protect the quantity and quality of groundwater sources during the installation of new municipal infrastructure in proximity to municipal water supplies.
 - b. Municipalities are requested to incorporate conditions of approval for development applications to ensure private wells that are no longer in use are abandoned in accordance with Ontario Regulation 903.
 - c. The Ministry of the Environment and the municipalities responsible for water services are requested to provide ongoing funding for incentive programs focused on the decommissioning of wells, and for education and outreach programs regarding the decommissioning of wells.
 - d. If funding is provided by the Ministry of the Environment through the Ontario Drinking Water Stewardship Program, the Hamilton-Halton Watershed Stewardship Program, under the direction of the Halton and Hamilton Conservation Authorities, shall implement the incentive program to decommission unused wells.
 - e. The municipalities are requested to develop a program to facilitate, where possible and appropriate, the connection to municipal water services of current private well users within the urban boundary. The users should be required to decommission the unused wells.
 - f. The municipalities are requested to prohibit the construction of new wells and septic systems within the urban area where municipal water and wastewater services are available.
 - g. (Proposed new wording from the City of Hamilton) Municipalities are encouraged to prepare bylaws/procedures/processes that ensure the construction of closed loop, earth energy systems within wellhead

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protection areas A and B will not result in the establishment of transport pathways.

h. The Source Protection Authority and Source Protection Committee, upon receipt of a notice from a municipality regarding an application for development of a transport pathway within a wellhead protection area, shall refer the notice to the Halton-Hamilton source protection project team for follow up and reporting back.

Proposed Changes by City of Hamilton in bold below

POLICY ID:	T-3-C		IMPLEMENTING BODY:	City of Hamilton, the Region of Halton, and the Town of Milton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conform with		POLICY STATUS:	Draft
SPC ENDORSEMENT: August 23, 2011				
REVISION DATE(S):				

THREAT:	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act.</i>
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on 673 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee determined that the use of prescribed instruments to prevent the establishment of a waste disposal site was the preferred primary option to address this threat, supported by education and outreach about proper hazardous waste disposal and reduction. In addition, policies are to be included within Official Plans regarding the prohibition of waste disposal sites to further support this policy direction. It is not considered likely that an application would be made to develop a waste disposal site within a vulnerable area where it would be a significant threat. The prevention of this development is considered the only acceptable protection of drinking water sources.

Documentation and reporting back with proof of compliance with the policy will provide assurance to the Committee that the policy is effective.

- **T-3-C** To prevent the establishment of waste disposal sites within the meaning of Part V of the *Environmental Protection Act* in vulnerable areas where there would be a significant drinking water threat,
 - a. The Region of Halton, Town of Milton, and the City of Hamilton shall amend the Official Plan and Zoning By-law to prohibit the establishment of a new waste disposal site in vulnerable areas where there would be significant drinking water threats.
 - b. The municipal planning authority municipality shall provide to the Source Protection Authority proof of compliance with the policy and regulations to prohibit the establishment of a new waste disposal site in vulnerable areas where there would be significant drinking water threats.

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POLICY ID:	T-9-C		IMPLEMENTING BODY:	City of Hamilton and the Town of Milton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conform with		POLICY STATUS:	Draft
SPC ENDORSEMEN	ENT: August 23, 2011			
REVISION DATE(S):				

THREAT:	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on 673 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee determined that the use of prescribed instruments to manage untreated stormwater from a stormwater retention pond was the preferred primary option to address this threat, supported by policies within Official Plans regarding the location of these facilities. As there are no existing threats, policy to locate future facilities where they would not be significant threats is important. However, location outside of vulnerable areas may not be possible for all development applications and flexibility is included in the policy and other supportive policies are included.

Documentation and reporting back of the number of applications processed and actions taken will provide assurance to the Committee that the policy is effective.

- T-9-C In consideration of *Planning Act* applications where **a new storm water retention is proposed** and where the **discharge of untreated storm water effluent from** for storm water retention ponds in vulnerable areas where there would be a significant drinking water threat from the discharge of untreated storm water effluent,
 - a. Where possible, the municipal planning authority **municipality** shall locate future storm water retention ponds outside of the vulnerable area.
 - b. The municipal planning authority—municipality shall document the number of applications reviewed for storm water retention ponds, whether the application was approved, and whether the pond was located within or outside of the vulnerable area.
 - c. By February 1 of each year, the municipal planning authority municipality shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, including the rationale for the decisions made.

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POLICY ID:	T-10-C		IMPLEMENTING BODY:	City of Hamilton and the Town of Milton
POLICY TYPE:	Significan Threat	t Prescribed	SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conform with		POLICY STATUS:	Draft
SPC ENDORSEMENT: August 23, 2011				
REVISION DATE(S):				

THREAT:	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER	1 Chemical and 1 Pathogen existing threats in Kelso.
THREATS:	Future threats possible on an additional 77 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee determined that the use of prescribed instruments is the preferred primary option to address this threat, supported by policies within Official Plans regarding the location of these facilities. To manage future threats it is desirable to not locate the facilities where they could be a significant threat. However, as this may not be possible for all development applications, flexibility is included in this policy and other supportive policies are included.

Documentation and reporting back of the number of site plan applications processed and actions taken will provide assurance to the Committee that the policy is effective.

PROPOSED POLICY/POLICIES

T-10-C In consideration of site plan approval for a property located partially within a vulnerable area and requiring a new septic system regulated under section 53 of the *Ontario Water Resources Act*,

- d. Where possible, the municipal planning authority municipality shall require the applicant to locate the septic system outside of a vulnerable area to ensure it will not be a significant drinking water threat.
- e. The municipal planning authority **municipality** shall document the number of site plan applications reviewed that were denied, those approved with the septic system located outside of the vulnerable area, and those approved with the septic system located within the vulnerable area.
- f. By February 1 of each year, the municipality shall prepare and submit to the Source Protection Authority a report summarizing their actions for the previous year, including the rationale for the decisions made.

POLICY ID:	T-17-C	IMPLEMENTING BODY:	Region of Halton, the City of Hamilton, and the Town of Milton
POLICY TYPE:	Significant Prescribed Threat	SOURCE PROTECTION AREA(S):	Halton and Hamilton

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LEGAL EFFECT:	Conform with		POLICY STATUS:	Draft
SPC ENDORSEMENT:		August 23, 2011		
REVISION DATE(S):				

THREAT:	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
NO. OF EXISTIN/FUTURE SIGNIFICANT DRINKING WATER THREATS:	15 Pathogen existing threats in Freelton FDF01, 11 Pathogen existing threats in Freelton FDF03, 36 Pathogen existing threats in Carlisle, 16 Pathogen existing threats in Greensville, 27 Pathogen existing threats in Campbellville, and 1 Chemical & 6 Pathogen existing threats in Kelso. Future threats possible on an additional 77 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee raised the issue about whether the homeowners who use septic systems should pay for the needed repairs and upgrades, as they are the users and beneficiaries. It was put forth that there be a program to assist homeowners to ensure upgrades are completed when needed without financial limitations. In addition to the policy requesting ongoing funding from the Province, the Source Protection Committee is of the opinion that the municipalities should consider an additional funding assistance program that would allow the landowner to make the repairs now and pay the funding back over time.

Documentation and reporting back of their efforts and the results will provide assurance to the Committee that the policy is effective.

- **T-17-C** To assist landowners with improvements required under the on-site sewage systems maintenance inspection program, the following policies apply:
 - a. The City of Hamilton, the Region of Halton, and the Town of Milton shall **may** consider the creation of a financial assistance program to help landowners who are required to undertake septic system upgrades or replacements under the on-site sewage systems maintenance inspection program. It is recommended that this program be designed in a manner that allows the work to be completed as required, and the landowner to repay the cost over time.
 - b. The City of Hamilton, the Region of Halton, and the Town of Milton shall document their efforts and the results regarding the creation of a municipal financing program to assist landowners.
 - c. By February 1 of each year, the City of Hamilton, the Region of Halton, and the Town of Milton shall prepare and submit to the Source Protection Authority a report summarizing details of the financial assistance program and the number of participants in the program.

POLICY ID:	T-19-C	IMPLEMENTING BODY:	City of Hamilton and the Town of Milton
POLICY TYPE:	Significant Prescribed Threat	SOURCE PROTECTION AREA(S):	Halton and Hamilton

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LEGAL EFFECT:	Conform v	vith	POLICY STATUS:	Draft
SPC ENDORSEMENT:		August 23, 2011		
REVISION DATE(S):				

THREAT:	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on 673 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

By-passes from a sewage treatment plant are often the result of infiltration/inflow during wet weather. By separating stormwater sources from sanitary sewers, the potential for by-passes to occur is reduced. The Source Protection Committee supported this policy approach to manage this threat.

Documentation and reporting back on whether there is a program in place and the number of connections removed will provide assurance to the Committee that the policy is being implemented and is effective.

PROPOSED POLICY/POLICIES

T-19-C To reduce the risk to drinking water sources from sewage treatment plant by-passes, the following policies apply:

- a. The municipalities responsible for stormwater systems are requested to implement programs to remove which address connections of stormwater sources to sanitary sewers in order to reduce surges in volumes to sewage treatment plants during wet weather.
- b. By February 1 of each year, the municipalities having approval for stormwater systems shall report to the Source Protection Authority whether a program to remove connections of stormwater sources to sanitary sewers has been implemented and the number of connections removed.
- c. By February 1 of each year, the municipalities responsible for wastewater services shall report to the Source Protection Authority the number of by-passes of the wastewater treatment plant that occurred due to plant capacity limitations.

POLICY ID:	T-27-C		IMPLEMENTING BODY:	City of Hamilton and the Region of Halton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conform with		POLICY STATUS:	Draft
SPC ENDORSEMENT:		August 23, 2011		
REVISION DATE(S):				

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THREAT:	The application of commercial fertilizer to land. The handling and storage of commercial fertilizer.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on154 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

Education and the promotion of best management practices were considered important tools by the Source Protection Committee to address threats related to commercial fertilizers. Many golf courses already use best management practices and this should be encouraged and supported. These same practices should be encouraged for all those that use or store commercial fertilizers. The link should be established between these practices and the protection of drinking water sources.

Documentation and reporting back on any new and existing education and outreach programs will provide assurance to the Committee that the policy is effective.

PROPOSED POLICY/POLICIES

- **T-27-C** For properties located within vulnerable areas where significant drinking water threats could occur in the future from the application, or handling and storage of commercial fertilizer,
 - d. Within ene **two** year**s** of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority**ies**, are requested to develop and implement education and outreach programs to promote best management practices regarding these activities for the protection of source water. The target audience will be golf courses, fertilizer application technicians, home and business owners, and retail establishments that apply or store commercial fertilizer.
 - e. For any new and existing education and outreach programs established regarding the application, handling or storage of commercial fertilizer, the City of Hamilton and the Region of Halton shall document the nature of the program, the number of persons contacted, and the location of the participants.
 - f. By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach programs and the results for the previous year.

	Troposed changes by city of Hummton in bold below			
POLICY ID:	T-29-C		IMPLEMENTING BODY:	Region of Halton, City of Hamilton and the Town of Milton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conform with		POLICY STATUS:	Draft
SPC ENDORSEMENT:		August 23, 2011		
REVISION DATE(S):				

THREAT: The handling and storage of pesticide.	
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NO. OF EXISTING/FUTURE	No existing threats.
SIGNIFICANT DRINKING WATER	
THREATS:	Future threats possible on 154 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee is of the opinion that the best management tool for this threat is a prohibition through land use planning. The prohibition must be specific to selected land uses that involve the handling and storage of pesticide. Land use planning cannot regulate the application of pesticides.

Documentation and reporting back with proof of compliance with the policy will provide assurance to the Committee that the policy is effective.

PROPOSED POLICY/POLICIES

- **T-29-C** In consideration of possible future development within vulnerable areas where there would be a significant drinking water threat from the handling and storage of pesticides,
 - g. The Region of Halton, the Town of Milton, and the City of Hamilton shall amend the Official Plan and Zoning by-law to prohibit a retail establishment that sells pesticides or a pesticide manufacturing, processing, or warehousing operation in vulnerable areas where there would be significant drinking water threats.
 - h. The municipal planning authority municipality shall provide the Source Protection Authority proof of compliance with the policy to prohibit a retail establishment that sells pesticides or a pesticide manufacturing, processing, or warehousing operation within a vulnerable area in vulnerable areas where there would be significant drinking water threats.

POLICY ID:	T-31-C		IMPLEMENTING BODY:	Region of Halton and the City of Hamilton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conforms with		POLICY STATUS:	Draft
SPC ENDORSEMENT:		August 23, 2011		
REVISION DATE(S):				

THREAT:	The application of pesticide to land. The handling and storage of pesticide.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	Application of pesticide: 1 Chemical existing threat in Freelton FDF03 and 5 Chemical existing threats in Carlisle.
	Future threats possible on an additional 226 properties.
DOLLOV ADDILICO IN.	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead
POLICY APPLIES IN:	protection areas.

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RATIONALE

The Source Protection Committee noted that pesticides are heavily regulated at the federal and provincial levels and those who store or apply pesticides are trained. The Committee is of the opinion that an education program that links source protection to the threat activities could build on their existing knowledge. Providing applicators with maps showing the locations of municipal wells would support the other policies that address these threats. An additional education opportunity is to educate the homeowner about the risks relating to illegal use of pesticides.

Documentation and reporting back of any new or existing education and outreach program, the number of persons contacted and the location of participants and actions taken will provide assurance to the Committee that the policy is being implemented.

PROPOSED POLICY/POLICIES

- **T-31-C** For vulnerable areas where significant drinking water threats exist or could exist in the future due to the application, or handling and storage of pesticide,
 - i. Within ene two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority ies, are requested to undertake an education and outreach program on pesticide use and storage methods and their potential impacts on drinking water sources. It is recommended that the outreach program include wellhead protection area mapping and target pesticide applicators and exterminators, golf course operators, and farmers.
 - j. The City of Hamilton and the Region of Halton shall document the nature of any new and existing education and outreach program established regarding the application, and the handling and storage of pesticides, the number of persons contacted, and the location of the participants.
 - k. By February 1 of each year, the City of Hamilton and the Region of Halton shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach programs and the results for the previous year.

Proposed Changes by City of Hamilton in bold below				
POLICY ID:	T-32-C		IMPLEMENTING BODY:	Region of Halton. The Town of Milton, and the City of Hamilton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conforms with		POLICY STATUS:	Draft
SPC ENDORSEMENT: Aug		August 23, 201	1	
REVISION DATE(S):				

THREAT:	The handling and storage of road salt.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on 154 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection area.

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RATIONALE

As the threat relates to large municipal and provincial salt storage facilities, the Source Protection Committee was of the opinion that the most effective method of addressing this storage threat is to use land use planning tools. Prohibition of this activity was appropriate in the vulnerable areas as it is reasonable to expect that alternative locations are readily available for this type of facility.

Documentation and reporting back with proof of compliance with this policy will provide assurance to the Committee that the policy is effective.

PROPOSED POLICY/POLICIES

- **T-32-C** In consideration of possible future land use changes within vulnerable areas where there would be a significant drinking water threat from the handling and storage of greater than 5,000 tonnes of road salt,
 - The Region of Halton, Town of Milton, and the City of Hamilton shall amend the Official Plan and Zoning by-law to prohibit salt storage and handling facilities with more than this capacity in vulnerable areas where there would be significant drinking water threats.
 - m. The municipal planning authority municipality shall provide to the Source Protection Authority proof of compliance with the policy to prohibit the salt storage and handling facilities with more than this capacity in vulnerable areas where there would be significant drinking water threats.

Proposed Changes by City of Hamilton in bold below

POLICY ID:	T-37-C		IMPLEMENTING BODY:	Region of Halton, the Town of Milton, and the City of Hamilton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conforms with		POLICY STATUS:	Draft
SPC ENDORSEMENT: August 23, 2011				
REVISION DATE(S):				

THREAT:	The storage of snow.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on 154 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee recommends the use of land use planning tools to address the threat of the storage of snow. Planning approvals are required to establish purpose-designed snow storage and melting facilities. The Committee recognized that there are best practice guidelines and that other locations will be available for establishment of these facilities. Therefore, the most effective option is to prohibit the use.

Documentation and reporting back with proof of compliance with the policy will provide assurance to the Committee that the policy has been implemented.

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PROPOSED POLICY/POLICIES

- **T-37-C** In consideration of future land use changes within vulnerable areas where the storage of snow would be a significant drinking water threat and the activity would be carried out at a purpose-designed snow storage facility at or above grade at greater than one hectare in size or, below grade, at or greater than 0.01 hectare in size,
 - a. The Region of Halton, the Town of Milton, and the City of Hamilton shall amend the Official Plan and Zoning By-law to prohibit purpose-designed new snow storage facilities of these sizes in vulnerable areas where there would be significant drinking water threats.
 - b. The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to prohibit purpose-designed **new** snow storage facilities of these sizes **in vulnerable areas** where there would be significant drinking water threats.

POLICY ID:	T-39-C		IMPLEMENTING BODY:	Town of Milton and the City of Hamilton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conforms with		POLICY STATUS:	Draft
SPC ENDORSEMENT:		August 23, 2011		
REVISION DATE(S):				

THREAT:	The storage of snow.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	No existing threats. Future threats possible on 154 properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee recommends that municipalities encourage best practices for the management of snow storage and the associated melt water as part of the approval process for site plan applications for development with parking lots, such as multiple residential or commercial developments. Historical design has been for melt water to run across parking lots to a central catch basin, which in turn requires the application of more road salt. The stockpiling of snow and the effects of melt water and salt application should be considered by the proponent.

Documentation and reporting back of the number of applications reviewed and the conditions imposed will provide assurance to the Committee that the policy is effective.

- **T-39-C** In consideration for the site plan approval for a proposed development located within a vulnerable area where there would be a significant drinking water threat due to the storage of snow,
 - c. The municipal planning authority **municipality** shall require that best management practices for site design be included to manage snow storage and the associated melt water.

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- d. The municipal planning authority **municipality** shall document the number of site plan applications reviewed, and the conditions imposed for the management of snow storage and melt water runoff.
- e. By February 1 of each year, the municipality shall prepare and submit to the Source Protection Authority a report summarizing the documented planning approval information for the previous year.

Proposed Changes by City of Hamilton in bold below

POLICY ID:	T-41-C		IMPLEMENTING BODY:	Region of Halton, the Town of Milton and the City of Hamilton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conforms with		POLICY STATUS:	Draft
SPC ENDORSEMENT: Sep		September 13, 2	2011	
REVISION DATE(S):				

THREAT:	The handling and storage of fuel.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	Fuel storage: 9 Chemical existing threats in Freelton FDF03 and 3 Chemical existing threats in Kelso. Future threats possible on 77 additional properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

The Source Protection Committee recommends a multi-tool approach to address the threat of the handling and storage of fuel. For home fuel oil tanks, the preferred tool is education and outreach to ensure the appropriate maintenance of the tank and response in case of a spill. For future retail fuel storage facilities and bulk fuel storage facilities, the preferred tool is prohibition through land use planning as it is considered best to not establish these uses in the first place. These facilities can be located outside of the vulnerable areas. For the remaining sub-threats, a risk management plan approach is recommended to ensure compliance with the requirements of the *Technical Standards and Safety Act* and to ensure that an emergency response plan is in place.

Documentation and reporting back with proof of compliance with this policy will provide assurance to the Committee that the policy has been implemented.

- **T-41-C** In consideration of potential future land use changes within vulnerable areas where the handling and storage of fuel would be a significant drinking water threat,
 - f. The Region of Halton, Town of Milton, and the City of Hamilton shall amend the Official Plan and Zoning By-law to prohibit new gas stations and bulk fuel storage facilities in vulnerable areas where there would be a significant drinking water threat.
 - g. The municipal planning authority shall provide to the Source Protection Authority proof of compliance with the policy to prohibit new gas stations and bulk fuel storage **facilities in vulnerable areas where there would be significant drinking water threats**.

Proposed Changes by City of Hamilton in bold below

POLICY ID:	T-43-C		IMPLEMENTING BODY:	Region of Halton and the City of Hamilton
POLICY TYPE:	Significant Prescribed Threat		SOURCE PROTECTION AREA(S):	Halton and Hamilton
LEGAL EFFECT:	Conforms with		POLICY STATUS:	Draft
SPC ENDORSEMENT: August		August 23, 2011		
REVISION DATE(S):				

THREAT:	The handling and storage of fuel.
NO. OF EXISTING/FUTURE SIGNIFICANT DRINKING WATER THREATS:	Fuel storage: 9 Chemical existing threats in Freelton FDF03 and 3 Chemical existing threats in Kelso.
	Future threats possible on 77 additional properties.
POLICY APPLIES IN:	Freelton, Carlisle, Greensville, Campbellville, Walkers Line, and Kelso wellhead protection areas.

RATIONALE

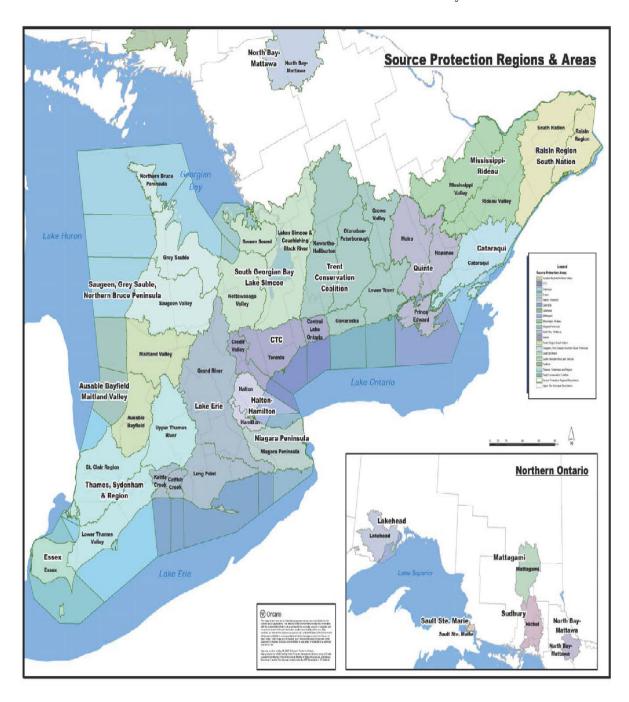
The Source Protection Committee recommends a multi-tool approach to address the threat of the handling and storage of fuel. For home fuel oil tanks, the preferred tool is education and outreach to ensure the appropriate maintenance of the tank and response in case of a spill. For future retail fuel storage facilities and bulk fuel storage facilities, the preferred tool is prohibition through land use planning as it is considered best to not establish these uses in the first place. These facilities can be located outside of the vulnerable areas. For the remaining sub-threats, a risk management plan approach is recommended to ensure compliance with the requirements of the *Technical Standards and Safety Act* and to ensure that an emergency response plan is in place.

Documentation and reporting back on any new education and outreach program, the number of persons contacted, and the location of participants will provide assurance to the Committee that the policy has been implemented.

- **T-43-C** For properties within vulnerable areas where there are existing or where there could be significant drinking water threats in the future due to the handling and storage of fuel,
 - a. Within ene two years of the date that the Source Protection Plan comes into effect, the City of Hamilton and the Region of Halton, in collaboration with the Conservation Authority ies, shall develop and implement an education and outreach program for homeowners with home fuel oil tanks, regarding spill response and the method and timing for contacting the Spills Action Centre and the municipality responsible for water services. As part of this program, stickers with emergency phone numbers shall be provided to be placed on or near the fuel tanks and fill pipes to ensure immediacy of response if there is a spill or leak detected.
 - b. The City of Hamilton and the Region of Halton shall document the nature of any new education and outreach program established regarding home fuel oil tanks, the number of persons contacted, and the location of the participants.
 - c. By February 1 of each year, these municipalities shall prepare and submit to the Source Protection Authority a report summarizing their education and outreach program and the results for the previous year.

Appendix "C" to Report PW11067/PED11183 Map of the Sourcewater Protection Regions Page 1 of 1

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APPENDIX "D" to Report PW11067/PED11183 Excerpt from Clean Water Act O. Reg. 287/07 List of 21 Prescribed Drinking Water Threats Page 1 of 1

Prescribed drinking water threats

- **1.1** (1) The following activities are prescribed as drinking water threats for the purpose of the definition of "drinking water threat" in subsection 2 (1) of the Act:
- 1. The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the *Environmental Protection Act*.
- 2. The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.
- 3. The application of agricultural source material to land.
- 4. The storage of agricultural source material.
- 5. The management of agricultural source material.
- 6. The application of non-agricultural source material to land.
- 7. The handling and storage of non-agricultural source material.
- 8. The application of commercial fertilizer to land.
- 9. The handling and storage of commercial fertilizer.
- 10. The application of pesticide to land.
- 11. The handling and storage of pesticide.
- 12. The application of road salt.
- 13. The handling and storage of road salt.
- 14. The storage of snow.
- 15. The handling and storage of fuel.
- 16. The handling and storage of a dense non-aqueous phase liquid.
- 17. The handling and storage of an organic solvent.
- 18. The management of runoff that contains chemicals used in the de-icing of aircraft.
- 19. An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.
- 20. An activity that reduces the recharge of an aquifer.
- 21. The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm-animal yard. O. Reg. 385/08, s. 3.

