

## Specify Action Policy Summary (January 9, 2012)

Threat	Policy Example #	Draft Policy #	Vulnerable Area	Implementing Body	Threat Status	Policy Idea	Implementation Schedule	Monitoring (OT.1.1)
Hauled Sewage	1.1-3	OT.M.3.5.0a	WHPA-A, B with a vulnerability score of 10; IPZ-1 with vulnerability scores of 9 and 10	Municipality	Future	Municipalities shall be encouraged, through the powers granted under the Municipal Act, to ban the land application of hauled sewage within areas where it can be a significant threat		Municipalities will notify the CA if they proceed with a bylaw to prohibit the spreading of hauled sewage where it would be a significant threat.
Hauled Sewage	1.1-5	OT.M.3.6.0a	WHPA-A, B with a vulnerability score of 10; IPZ-1 with vulnerability scores of 9 and 10	Municipality	Existing Expanding Future	It is recommended that municipalities work towards ensuring adequate sewage treatment capacity for the treatment/stabilization of septage before applying it to the land. Capacity should be in the municipality where the sewage is generated or provided through agreement by a nearby municipality. Municipalities develop programs to encourage other treatment options (such as by haulers) where sewage treatment capacity is not feasible.		The municipality shall report to the CA if adequate sewage treatment capacity is installed. If alternative treatment options are instituted, the municipality shall also provide a report to the CA
Hauled Sewage	1.1-6	OT.P.3.3.0b	WHPA-A, B with a vulnerability score of 10; IPZ-1 with vulnerability scores of 9 and 10	MOE	Existing Future	The MOE shall prioritize inspections of areas near vulnerable areas where the application of hauled sewage is considered a significant threat.	Within 1 year of the approval of the Source Protection Plan.	MOE shall report to the SPA with the number of inspections carried out as well as the number of locations where corrective action was required and the nature of the corrective action.
Mine Tailings	1B-4a	OT.M.3.9.0c	WHPA-A, B with vulnerability of 10 IPZ with vulnerability score of 9 or greater	Municipality	Existing Future	Municipalities shall encourage mining operations to share spills response plans, site sampling and monitoring activities. Municipalities shall notify the RMO of any plans for new or changes in existing mine operations in vulnerable areas. Municipalities shall encourage the use of containment structures, subsurface barriers and leak	Within 1 year of the date when the Source Protection Plan comes into effect.	The municipality shall submit a report to the CA that would include: <ul style="list-style-type: none"> <li>• The number of applications for new mining operations within vulnerable areas</li> <li>• The number of applications for changes to mine operations within vulnerable areas</li> </ul>

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						detection methods.		<ul style="list-style-type: none"> <li>The number of notifications that have been received by the RMO</li> <li>The number of mining operations that have shared their spill response plans and other activities (i.e. site sampling, monitoring) with the municipality</li> </ul> <p>The number of mining operations within vulnerable areas that are using current BMP</p>
Mine Tailings	1B-4b	OT.P.3.5.1a, b	WHPA-A, B with vulnerability of 10 IPZ with vulnerability score of 9 or greater	MOE	Existing Future	Through existing protocols of the Spills Action Centre, MOE shall be encouraged to notify the local municipality for spills related to mine activities that occur in vulnerable areas.	Within 1 year of the date when the Source Protection Plan comes into effect.	MOE shall submit a report to the CA which would detail the number of times they notified the RMO when a spill occurred that was related to mining activities in a vulnerable area.
Waste Disposal	1.3-6	OT.M.3.6.0c	WHPA-A,B with vulnerability score of 10 IPZ-1	Municipality	Existing Future	Municipalities shall consider collaborating with each other to increase accessibility to cross municipal household hazardous waste programs to ensure that the activity ceases to be a significant drinking water threat.	Within 1 year of the effective date of the Source Protection Plan.	Municipalities shall submit a report to the CA which would detail if cross municipal partnerships have occurred.
Septics	2-5	OT.M.3.5.3	WHPA-A and B with a vulnerability score of 10	Issuer of approval of septic systems under the building code (generally Municipality or Health Unit)	Existing	The Ontario Building Code requires onsite septic inspections every five years for existing systems that are identified as significant threats. The first round of inspections will be phased in over a 5 year period. Priority shall be given to inspect the oldest systems and those closest to the well head first with a priority on areas where failures are most suspected. Where the re-inspection program locates faulty and failed septic systems, the inspector shall require	As per OBC (within 5 years)	Municipalities shall provide an annual report to the CA on the results of the septic system inspection program. This report will include: The number of inspections The number of failures and remediation notices The number of system pump-outs and compliance orders issued The report shall be in a format acceptable to the SPA. The first report to be submitted within 2 years of

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						the maintenance, repair or replacement of the system to ensure that it functions as designed and meets applicable design standards thus ensure that the threat ceases to be significant.		approval of the Source Protection Plan and annually thereafter
Septics	2-6 (mod/low)	OT.M.3.7.1	WHPAs with a vulnerability score of 6-8, IPZs with a vulnerability score of 5.6 -9.0	Municipality Health Unit	Existing	Discretionary septic re-inspection programs as outlined in the Ontario Building Code are encouraged to include moderate and low threat septic systems. However, inspection of significant threats should remain the first priority. Discretionary re-inspection programs shall be encouraged to give priority to low and moderate threats within WHPA and IPZ and then HVA. Priority shall also be encouraged in those areas where septic failures are known to occur and where older septic systems are more predominant.	As soon as possible following the implementation of the mandatory re-inspection program (as determined by the local approval agency). Where mandatory re-inspection is not required the municipality encouraged to initiate the program within 5 years of the approval of the Source Protection Plan. It is anticipated that this policy would be given more weight in subsequent Source Protection Plan with legal affect increased to having regard for.	Where discretionary inspection programs are implemented, an annual report is to be submitted to the CA identifying the results of the septic system inspection program, including the number of inspections, the number of failures and remediation notices, the number of system pump-outs and compliance orders issued. The report could be combined with that which is required for mandatory inspection programs. Municipalities not initiating a discretionary inspection program shall report to the CA on their intent and considerations related to the program.
Septics	2-7	OT.M.3.5.0b	WHPA-A and B with a vulnerability score of 10	Municipality	Existing Future	Where municipal sewage services exist in areas with a vulnerability score of 10, the development of		The municipality shall report to the CA annually on the number of septic

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						municipal by-laws shall be considered to decommission existing septic systems or holding tanks and require mandatory hook-up to the municipal service.		systems which could be hooked up and the number which have been hooked up.
Septics	2-8	OT.3.6.1a	WHPA-A and B with a vulnerability score of 10	Municipality	Existing Future	When planning extension of sewer services, municipalities shall consider areas with a vulnerability score of 10 as first priority. Where the costs are beyond the capabilities of the municipality and landowner the senior levels of government should be encouraged to provide funding to offset the cost to the rate payer through an infrastructure funding programs.	Immediately upon effective date of SPP	Municipalities to report annually to the CA any new sewer lines installed or planned within the vulnerable areas.
Septics	2-9	OT.P.3.3.3	WHPA-A and B with a vulnerability score of 10	MOE – through OWRA	Existing Expanding Future	In order to ensure that large systems are adequately managed the MOE shall consider implementing a review of the Certificate of Approval within the areas where these systems may be significant drinking water threats. The development of a re-inspection program for the inspection of these systems shall also be considered. The re-inspection program should determine that the systems function as designed, they meet applicable design standards and that the systems are being properly maintained. MOE shall consider as a first priority the re-inspection of septic systems within areas with a vulnerability score of 10 and areas where known septic failures have been identified . Areas where older systems which have not recently been inspected shall also be considered as priorities within the re-inspection program. Systems found to be deficient shall be encouraged to undertake	The re-inspection program shall be established within a 2 year period from the approval of the source protection plan with a completion of the inspection of systems in these areas within 5 years of the initiation of the re-inspection program.	MOE to report to CA in a manner acceptable to the SPA. The report shall include: The number of existing septic C of As within vulnerable areas which are significant drinking water threats Amendments made to existing C of A to reduce risk presented by significant threat Number of existing C of As that have been identified through re-inspection as being properly functioning and those required to make upgrades The number inspected and those followed up on an annual basis The frequency of inspections  This report shall be submitted in 2 years from

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						improvements to be in compliance. New or expanding systems shall be considered the subject of re-inspection every 5 years from the issuance of the C of A.		the approval of the Source Protection Plan and annually from then on.
Sewers and Sewage Treatment	2b-5	OT.M.3.6.1b .c,d,e,f,g	<p>WHPA-A, B with a vulnerability score of 10</p> <ul style="list-style-type: none"> <li>-Sanitary sewers and related pipes (pathogens)</li> <li>-Sewage treatment plant effluent discharges (chemical, pathogens)</li> <li>-Storage of sewage (treatment plant tanks) (pathogens)</li> </ul> <p>WHPA-B,C with a vulnerability score of 8</p> <ul style="list-style-type: none"> <li>-Storage of sewage (treatment plant tanks) (chemicals)</li> </ul> <p>IPZ/WHPA-E with a vulnerability score of 9</p> <ul style="list-style-type: none"> <li>-Combined sewers (8 for PCBs)</li> <li>-Sewage treatment plant bypass (chemical)</li> <li>-Sewage treatment plant effluent discharges (chemical)</li> <li>-Storage of sewage (treatment plant tanks) (chemical)</li> </ul>	Municipality	Existing Future	<p>Municipalities shall consider best practice standards, which will mitigate significant threats when expansion or construction of new sewer systems and WWTPs occurs in vulnerable areas.</p> <p>Municipalities shall consider alternatives to effluent discharge or bypasses in vulnerable areas.</p> <p>Municipalities shall consider using best management practices (i.e. video inspection, sewer lining programs) for old sewers that are located within vulnerable areas.</p> <p>Municipalities shall continue to upgrade sewage treatment plants when required.</p> <p>Municipalities shall include more frequent audits where sewers or WWTP are located within vulnerable areas.</p> <p>In vulnerable areas, municipalities shall improve sewer pipe connections using appropriate design standards.</p> <p>Municipalities shall be encouraged to develop inflow/infiltration reduction programs.</p>	Within 1 year of the approval of the SPP.	<p>The municipality shall submit an annual report to the CA that would include:</p> <ul style="list-style-type: none"> <li>• The number of expansions or new construction of sewer systems and WWTPs in vulnerable areas and whether best practices standards have been used;</li> <li>• the number of audits completed of sewer systems and WWTP in vulnerable areas;</li> <li>• the number if sewer pipe connections that have been improved;</li> <li>• the number of inflow/infiltration reduction programs that have been developed.</li> </ul>
Sewers and Sewage Treatment	2b-6	OT.M.3.5.0c	<p>WHPA-A, B with a vulnerability score of 10</p> <ul style="list-style-type: none"> <li>-Sanitary sewers and related pipes (pathogens)</li> <li>-Sewage treatment plant</li> </ul>	Municipality	Existing Future	<p>Municipalities should be encouraged to enact sewer use by-laws for all users regardless of scale to improve the quality of sewage effluent.</p> <p>Municipalities shall be encouraged</p>	Within 1 year of the approval of the SPP.	<p>The municipality shall submit an annual report to the CA that would indicate whether a sewer by-law has been enacted, the number of infractions of this by-law</p>

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			<p>effluent discharges (chemical, pathogens)</p> <p>-Storage of sewage (treatment plant tanks) (pathogens)</p> <p>WHPA-B,C with a vulnerability score of 8</p> <p>-Storage of sewage (treatment plant tanks) (chemicals)</p> <p>IPZ/WHPA-E with a vulnerability score of 9</p> <p>-Combined sewers (8 for PCBs)</p> <p>-Sewage treatment plant bypass (chemical)</p> <p>-Sewage treatment plant effluent discharges (chemical)</p> <p>-Storage of sewage (treatment plant tanks) (chemical)</p>			to network with each other to provide expertise with regards to engineering standards and practice.		and when the by-law has been reviewed. This report will also include if networks have been created between different municipalities.
Stormwater Management	2.1-5a	OT.M.2.3.0	WHPA-A, B vulnerability score of 10 IPZ or WHPA-E with a vulnerability score of 9	Municipality	Existing Future	<p>In vulnerable areas, municipalities shall consider requiring design standards that mitigate the risk.</p> <p>Municipalities shall be required to use Best Management Practices during Stormwater Management Pond maintenance in vulnerable areas where the threat would be significant.</p> <p>Municipalities shall be required to ensure that existing stormwater management facilities are brought into compliance with current standards.</p>	Implementation shall occur immediately after the Source Protection Plan comes into effect.	The Municipality shall submit an annual report to the CA detailing what design standards have been used, what best management practices have been used, how many stormwater management facilities need to be retrofitted and how many retrofits have been completed.
Stormwater Management	2.1-5b	OT.M.3.5.0c	WHPA-A, B vulnerability score of 10 IPZ or WHPA-E with a vulnerability score of 9	Municipality	Existing Future	Municipalities shall enact and enforce storm sewer use by-laws for vulnerable areas where the threat is significant. These by-laws	Implementation shall occur immediately after the Source	The Municipality shall submit an annual report to the CA detailing if storm sewer by-laws have been

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						shall be reviewed periodically to reflect current engineering standards.	Protection Plan comes into effect.	developed as well as when they will be reviewed.
Stormwater Management	2.1-5c	OT.M.3.9.0d	WHPA-A, B vulnerability score of 10 IPZ or WHPA-E with a vulnerability score of 9	Municipality	Existing Future	Municipalities shall encourage emergency responders to take additional steps for risk mitigation in vulnerable areas where the threat is significant.	Implementation shall occur immediately after the Source Protection Plan comes into effect.	The Municipality shall submit an annual report to the CA detailing whether emergency responders have developed policies and procedures to take additional steps to mitigate risks in vulnerable areas where the threat is significant.
Industrial Sewage	2D-5	OT.M.3.9.0.e	IPZ and WHPA-E with a vulnerability score between 8 and 10	Municipality	Existing Future	Municipalities shall be encouraged to update their emergency response plans to include requirements for contacting water treatment plant operators if overflow/bypass occur.	For existing plans, the implementation of this policy shall be within 1 year of the approval of the SPP. For future plans, this policy shall be implemented immediately following the approval of the SPP.	Municipalities shall submit an annual report to the CA indicating when they reviewed their emergency response plans and what changes, if any, they made to these plans in order to consider them up to date.
Industrial Sewage	2D-6	OT.P.3.3.4	IPZ and WHPA-E with a vulnerability score between 8 and 10	MOE	Existing Future	MOE shall be encouraged to geo-reference the Certificates of Approval associated with industrial effluent in vulnerable areas as part of a prioritization schedule.  MOE shall be encouraged to review and update the Spills Action Centre Operations Procedures Cards to include contacting downstream water operators when a spill has occurred	Immediately after the Source Protection Plan comes into effect.	The MOE shall submit a report to the CA detailing what efforts they have undertaken regarding the geo-referencing of Certificates of Approval as well as at the Spills Action Centre to ensure that the protection of municipal drinking water, especially in vulnerable areas, has been addressed.
ASM	4-5a	OT.P.3.3.0a	WHPA-A, B with a	MOE	Existing	It is recommended that through	The	A report shall be submitted

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			vulnerability score of 10		Expanding Future	MOE's on-farm compliance program that location within a source protection vulnerable area is included as a factor in selecting inspection priorities. It is recommended that inspections are conducted every 5 years for significant threats.	implementation of a program which targets significant threats shall be initiated within 1 year of the approval of the SPP. All significant threats shall be inspected within 5 years of the approval of the SPP.	to the CA annually which indicates the number of inspections undertaken within the areas where these activities can be significant threats, the number of situation identified where the plan holder was found to be out of compliance with their plan or strategy, the number of orders issued, and the number of changes to strategies or plans as a result of the inspection.
ASM	4-5b	OT.P.2.2.0a	WHPA-A, B with a vulnerability score of 10	MOE OMAFRA	Existing Expanding Future	It is recommended that OMAFRA include voluntary Nutrient Management Plans and Strategies in its review program where the application and storage of ASMs is a significant threat.	Within 1 year of approval of the SPP	Submit an annual report to the CA with the number of voluntary NMP and NMS reviewed. MOE will submit an annual report to the CA which identifies the number of inspections and enforcements of these voluntary plans and strategies under the Nutrient Management Act.
ASM	4-9	OT.M.3.4.0	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Expanding Future	Municipalities shall consider land securement around wellheads in instances where the municipality wishes to exceed the level of protection identified in the SPP.		When land securement has been pursued the municipality shall report the progress and outcomes to the CA.
NASM	6-6	OT.P.2.2.0b	WHPA-A, B with a vulnerability score of 10	MOE	Existing Expanding Future	The MOE shall consider updating the "Guidelines for the Utilization of Biosolids" and include Source Protection principles including the restriction of application and handling and storage of NASMs in areas where it is or would be a significant drinking water threat (i.e. IPZs and WHPAs)..		MOE shall report on the progress and outcomes to the CA.
NASM	6-7	OT.P.3.3.0a	WHPA-A, B with a vulnerability score of 10	MOE	Existing Expanding Future	It is recommended that through MOE's on-farm compliance program that location within a	The implementation of a program	A report shall be submitted to the CA annually which indicates the number of

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						source protection vulnerable area is included as a factor in selecting inspection priorities. It is recommended that inspections are conducted every 5 years for significant threats.	which targets significant threats shall be initiated within 1 year of the approval date of the Source Protection Plan. All significant threats shall be inspected within 5 years of the approval of the SPP.	inspections undertaken within the areas where these activities can become significant threats, the number of situations identified where the plan holder was found to be out of compliance with their NASM Plan, the number of orders issued and the number of changes to the NASM Plans as a result of the inspection.
NASM	7-6	OT.M.3.6.2	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Expanding Future	Municipalities shall consider when utilizing (or planning for the use of) facilities for the handling and storage of NASMs, where that storage is or would be a significant threat and seek alternate storage facilities or relocation of the facility.		The municipality shall report any storages which they utilize which are or would be a significant threat and report on the progress and outcomes of the shift to utilizing alternative facilities. The report is to be submitted annually to the CA.
Fertilizers	8-5a	OT.P.3.3.0a	WHPA-A, B with a vulnerability score of 10	MOE	Existing Expanding Future	It is recommended that through MOE's on-farm compliance program that location within a source protection vulnerable area is included as a factor in selecting inspection priorities. It is recommended that inspections are conducted every 5 years for significant threats.	The implementation of a program which targets significant threats shall be initiated within 1 year of the approval of the SPP. All significant threats shall be inspected within 5 years of the approval of the SPP.	A report shall be submitted by MOE to the CA annually which indicates the number of inspections undertaken within the areas where these activities can be significant threats, the number of situations identified where the plan holder was found to be out of compliance with their plan or strategy, the number of orders issued, and the number of changes to strategies or plans as a result of the inspection.
Fertilizers	8-5b	OT.P.2.2.0a	WHPA-A, B with a vulnerability score of 10	MOE OMAFRA	Existing Expanding Future	It is recommended that OMAFRA include voluntary Nutrient Management Plans and Strategies	Within 1 year of approval of the SPP	OMAFRA will submit an annual report to the CA with the number of voluntary

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						in its review program where the application and storage of commercial fertilizers is a significant threat.		NMP and NMS reviewed. MOE will submit an annual report to the CA which identifies the number of inspections and enforcements under the Nutrient Management Act.
Fertilizers	8-9	OT.M.3.4.0	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Expanding Future	Municipalities shall consider land securement around wellheads in instances where the municipality wishes to exceed the level of protection identified in the SPP.		When land securement has been pursued the municipality shall report the progress and outcomes to the CA.
Pesticide	10-5	OT.P.3.3.0c	WHPA-A, B with a vulnerability score of 10	MOE	Existing Expanding Future	Location within a source protection vulnerable area shall be included as a factor in selecting inspection priorities for pesticide application permits. It is recommended that inspections are conducted at least every 5 years for significant threats where pesticide application under a permit occurs more than once.	The implementation of a program which targets significant threats shall be initiated within 1 year of the approval of the SPP. All significant threats shall be inspected within 5 years of the approval of the SPP.	A report shall be submitted to the CA annually which indicates the number of inspections undertaken within the areas where these activities can be significant threats, the number of situation identified where the plan holder was found to be out of compliance with their plan or strategy, the number of orders issued, and the number of changes to strategies or plans as a result of the inspection.
Pesticide	10-9	OT.M.3.4.0	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Expanding Future	Municipalities shall consider land securement around wellheads in instances where the municipality wishes to exceed the level of protection identified in the SPP.		When land securement has been pursued the municipality shall report the progress and outcomes to the CA.
Road Salt	12-4b	OT.M.2.3.0.1a	WHPA-A and B with a vulnerability score of 10 IPZ-1 with a vulnerability score of 10 IPZ and WHPA-E with vulnerability score of 9	Municipality	Existing Future	Municipalities shall continue to require the carrier of dust suppressants to apply for C of A for a dust suppressant system using waste.	For existing C of A, the implementation of this policy shall be within 1 year of the approval of the SPP. For future C of As, this policy shall be	

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							implemented immediately following the approval of the SPP.	
Road Salt	12-8	OT.O.2.2.0 OT.M.2.3.0. 1b	WHPA-A and B with a vulnerability score of 10 IPZ-1 with a vulnerability score of 10 IPZ and WHPA-E with vulnerability score of 9	Municipality	Existing Future	Municipalities shall encourage road authorities to have Winter Maintenance and Salt Management Plans which include the identification of vulnerable areas and the means of managing the threats in areas where the threat would be significant. These plans should include the use of road salt for dust suppression. Road authorities will be encouraged to involve the Risk Management Official in the development of these Plans in those areas where it involves a significant threat. Municipalities shall be encouraged to apply Best Management Practices with regards to the design and operation of the road maintenance yards.		The municipality shall report to the CA if Winter Maintenance and Salt Management Plans have been completed as well as a report identifying the Best Management Practices undertaken at the road maintenance yards.
Snow Storage	14-8	OT.M.2.3.0. 1c OT.O.2.2.0	Snow storage (below grade) is a significant threat in WHPAs with a vulnerability score of 10. Snow storage (at or above grade in an area > 1ha) is a significant threat in WHPAs with a vulnerability score of 10 or an IPZ with a vulnerability score of 9 or higher.	Municipality	Existing Future	Municipalities shall be encouraged to take into consideration vulnerable areas when locating new snow disposal sites. Municipalities shall be encouraged to apply MOE guidelines and Transportation Association of Canada Best Management Practices or other BMP when locating new snow disposal sites. Municipalities shall encourage road authorities to develop Winter Maintenance and Salt Management Plans which would include the identification of vulnerable areas and the means of managing the threats in areas where the threat		The municipality shall report to the CA on the following: <ul style="list-style-type: none"> <li>• How many Winter Maintenance and Salt Management Plans have been developed</li> <li>• What Best Management Practices have been undertaken at the roads maintenance yards</li> </ul>

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						would be significant. Road Authorities would be encouraged to involve the Risk Management Official in the development of these Management Plans in those areas where it involves a significant threat. Municipalities shall be encouraged to apply Best Management Practices with regards to the design and operation of the road maintenance yards in terms of snow storage.		
Fuels	15-8	OT.M.3.6.5 a OT.M.3.6.5 b	WHPA-A, B with a vulnerability score of 10, IPZ-1 with a vulnerability score of 10	Municipality	Existing Future	The Municipality shall be encouraged to consider following the safety protocol set out in TSSA training programs for Site Operators and Site Attendants for the handling and storage of fuel when using back-up generators at wellheads to ensure the threat is no longer significant. The municipality shall be encouraged to consider the use of natural gas/propane as an alternate fuel supply to diesel or gas for back-up generators where possible.	Within 6 months of approval of SPP	Municipality to report back to CA on implementation and details of protocol and training.
Fuels	15-9	OT.P.3.5.2 OT.P.3.3.0d OT.P.3.3.1	WHPA –A, B with a vulnerability score of 10, IPZ-1 with a vulnerability score of 10	MOE	Existing Future	MOE shall be encouraged to decrease the minimum volume spill reporting requirements in areas where fuel threats are significant. MOE shall be encouraged to be the lead on all spills occurring in vulnerable areas. MOE shall be encouraged to include private outlets, as defined in O. Reg. 217/01, as part of an inspection program. The province of Ontario shall consider funding and/or setting up a program to prioritize the monitoring and proper decommissioning of abandoned	Within 1 year of the approval of the Source Protection Plan.	MOE will submit an annual report to the CA with the number of spills reported as well as the number of locations identified for monitoring.

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						fuel sites. MOE shall consider monitoring of abandoned/decommissioned gas stations and the removal of unused storage tanks in vulnerable areas a priority.		
Fuels	15-10	OT.M.3.6.5	WHPA A, B with a vulnerability score of 10, IPZ-1 with a vulnerability score of 10	Municipality	Future	As part of the Fire Prevention Officer or RMO responsibilities, the municipality shall encourage these individuals to educate residents and business owners about spill containment. The municipality shall encourage proper staff training through TSSA (e.g. site operators and site attendants) occurs for fuel pump operation. Municipalities shall be encouraged to identify and record abandoned fuel storage site locations. Municipalities shall be encouraged to employ certified technicians to complete fuel appliance and equipment reviews in their annual infrastructure inspections.	Education of residents and business owners shall occur immediately after the approval of the Source Protection Plan. The implementation of staff training, identification of abandoned storage sites and the completion of fuel appliance and equipment review shall be initiated within 1 year of the approval of the SPP.	A report shall be submitted to the CA annually which indicates the number of staff training opportunities, the number of abandoned fuel storage sites located and the number of fuel appliance and equipment reviews completed. This report will also provide measures of tracking the uptake by the target audience with regards to spill containment.
Fuels	15-11	OT.P.3.3.2	WHPA A and B with a vulnerability score of 10, IPZ-1 with a vulnerability score of 10	MOE		TSSA shall consider monitoring the effectiveness of their program in managing significant risks to drinking water. Priority should be placed on abandoned and decommissioned fuel storage which would be significant threats. MOE shall consider the monitoring of abandoned/decommissioned gas stations, with a priority in areas where the handling and storage of fuel would be a significant threat.	Implementation shall occur within 1 year of the approval of the SPP.	TSSA shall submit a report to the CA a description of the actions/measures that they have taken to measure the effectiveness of their programs that specifically relate to the storage and handling of fuels. MOE shall submit an annual report to the CA on the number of abandoned/decommissioned

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								gas stations that have been monitored.
DNAPL	16-8	OT.M.3.6.4	WHPA-A, B and C	Municipality	Existing Future	Municipalities shall consider improving access to residential hazardous waste depots within the areas where DNAPLs are significant threats.		Municipality shall report to the CA on the location, frequency and number of residents using the depots.
DNAPL	16-9	OT.M.3.5.1	WHPA-A, B and C	Municipality	Existing Future	Municipalities shall be encouraged to enact sewer use by-laws which require that floor drains in areas where DNAPLs are being handled or stored are not directly connected to sanitary or storm sewers. Municipalities, through Building Inspectors or Risk Management Officials, shall be encouraged to conduct inspections to make sure that floor drains are properly contained and that materials collected are properly disposed.		The municipality shall report to the CA with the number of inspections carried out as well as the number of locations where corrective action was required and the nature of the corrective action.
Organic Solvents	17-8	OT.M.3.5.1	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Future	Municipalities shall consider improving access to residential hazardous waste depots within the areas where organic solvents are significant threats.		Municipality shall report to the CA on the location, frequency and number of residents using the depots.
Organic Solvent	17-9	OT.3.5.0c OT.M.3.5.1	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Future	Municipalities shall be encouraged to enact sewer use by-laws which require that floor drains in areas where organic solvents are being handled or stored are not directly connected to sanitary or storm sewers. Municipalities, through Building Inspectors or Risk Management Officials, shall be encouraged to conduct inspections to make sure that floor drains are properly contained and that materials collected are properly disposed.		The municipality shall report to the CA with the number of inspections carried out as well as the number of locations where corrective action was required and the nature of the corrective action.
Aircraft De-icing	18-4a	OT.M.3.5.0d		Municipality	Future	Municipalities shall consider monitoring where the runoff from airport sites into storm sewers and watercourses is a significant	The policy takes effect upon the approval date of	Municipalities shall submit an annual report to the CA that would include whether sewer use by-laws have

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						drinking water threat. Municipalities shall consider developing sewer use by-laws to regulate chemical discharges from aircraft de-icing.	the first source protection plan.	been created and the number of areas that have been monitored in terms of runoff. Municipalities shall indicate in these monitoring reports the considerations and reasons why this policy was not undertaken.
Aircraft De-icing	18-4b	OT.M.3.7.0		Airport Authority	Future	Airport authorities are encouraged to develop and implement glycol management plans to manage low and moderate threats with regards to the management of runoff that contains chemicals used in the de-icing of aircraft.	The policy takes effect upon the approval date of the first source protection plan.	Airport authorities shall submit an annual report to the CA that would indicate if glycol management had been prepared for airports, where the runoff from deicing chemicals was not a significant threat.
Livestock	21-5	OT.P.2.2.0a	WHPA-A, B with a vulnerability score of 10	MOE OMAFRA	Existing Expanding Future	It is recommended that OMAFRA include voluntary Nutrient Management Plans and Strategies in its review program where the use of land as livestock grazing or pasturing of land, outdoor confinement areas or a farm-animal yard is a significant threat.	Within 1 year of approval of the SPP	OMAFRA will submit an annual report to the CA with the number of voluntary NMP and NMS reviewed. MOE will submit an annual report to the CA which identifies the number of inspections and enforcements under the Nutrient Management Act.
Livestock	21-9	OT.M.3.4.0	WHPA-A, B with a vulnerability score of 10	Municipality	Existing Expanding Future	Municipalities shall consider land securement around wellheads in instances where the municipality wishes to exceed the level of protection identified in the SPP.		When land securement has been pursued the municipality shall report the progress and outcomes to the CA.
Transport Pathways	TP3-a	OT.M.3.8.0.1a,b,c,d	WHPA-A,B,C,D	Municipality	Existing Future	Municipalities are encouraged to develop by-laws restricting new transport pathways (such as wells) in vulnerable areas where activities could be significant. It is acknowledged that there are cases where exceptions to this restriction can be made at the discretion of the Risk Management Official/Inspector. (Possible exceptions would include where municipal water is not appropriate	Within 1 year of effective date of the SPP	Municipalities shall submit an annual report to the CA indicating: <ul style="list-style-type: none"> <li>• Number, location and details of new transport pathways that have been identified;</li> <li>• Number location and details of wells that have been inspected where significant threats could</li> </ul>

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						<p>for the use intended due to the chlorine content or where backup sources of water are required in the case of interruption in municipal water supply)</p> <p>Municipalities are encouraged to develop by-laws to require the decommissioning of abandoned wells and the maintenance of current wells in vulnerable areas. Municipalities are encouraged to work collaboratively with the CA and the province to develop a program to identify specified transport pathways within WHPA-A, B, C, and D. This information will be used to update the Assessment Report which will inform future policy development. Municipalities are encouraged to develop by-laws requiring that landowners, within the WHPA where services are available and suitable, that currently use wells as a water supply, hookup to municipal utilities and decommission the wells on their property.</p> <p>Municipalities are encouraged to include conditions of approval for development applications to ensure the decommissioning of wells in accordance with O. Reg. 903.</p> <p>Municipalities are encouraged to use the Risk Management Inspector to complete inspections of wells in areas where significant threats can occur. The risk management official would encourage the land owner to improve the well to meet standards including making them aware of any financial incentives which may be available to assist the</p>		<p>occur;</p> <ul style="list-style-type: none"> <li>• Number location and details of unused wells with vulnerable areas that have been decommissioned;</li> <li>• Number location and details of currently in use wells in vulnerable areas that have been maintained;</li> <li>• Number of landowners within that have been changed from private wells to the municipal drinking water supply</li> </ul>

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						<p>landowner. If the landowner fails to take appropriate action, the risk management official shall draw this deficiency to the attention of the MOE to enforce the standards under O.Reg. 903 and indicate that the deficiency is occurring in a WHPA.</p> <p>Where a transport pathway as a result of a Earth Energy system has been identified as contributing to a significant drinking water threat, municipalities shall be encouraged to negotiate a risk management plan with the property owner.</p>		
Transport Pathways	TP3-c	OT.P.3.4.1 OT.P.3.4.2	WHPA-A,B,C,D	MOE	Existing	<p>MOE shall be encouraged to enforce O. Reg. 903 through well inspection using officials with appropriate skills and training. At a minimum the MOE would be expected to act upon notification of deficient wells (from Risk management officials or others). A more proactive well inspection program focused in the areas where the risk associated with significant drinking water threats can be affected by transport pathways is encouraged.</p>	<p>MOE shall respond as soon as reasonably possible to any notification of a deficiency, should it be brought to their attention.</p> <p>A proactive inspection program is encouraged within 2 year of the effective date of the SPP.</p>	<p>MOE shall submit an annual report to the CA indicating:</p> <ul style="list-style-type: none"> <li>• Number location and details of wells identified within an area where significant threats could occur;</li> <li>• Number location and details of wells that have been inspected;</li> <li>• Number location and details of abandoned wells with vulnerable areas that have been decommissioned or require maintenance.</li> </ul> <p>It is suggested that this reporting could be accomplished through annual updates to the Water Well database.</p>
Transport Pathways	TP4	OT.M.2.3.0	WHPA-A,B,C,D	Municipality	Existing Future	Municipalities shall be encouraged to support the use of Best Management Practices which may include guidance from the	This policy shall be implemented immediately	Municipalities shall submit an annual report to the CA that would outline the Best Management Practices that

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						<p>following documents:</p> <ul style="list-style-type: none"> <li>• OMAFRA Water Wells Best Management Practices Book (provides BMP for construction, maintenance and abandonment of drilled, dug/bored and sand point wells)</li> <li>• MOE Water Supply Wells Requirements and Best Management Practices (provides guidance on when and how to abandon a well)</li> <li>• MOE Ontario Water Resources Act Reg. 903 Best Practices Manual</li> </ul> <p>When municipalities are presented with an opportunity to have wells decommission through development proposals or infrastructure planning they are encouraged to ensure the proper decommissioning of the well (as per O. Reg. 903) . Municipalities shall be encouraged to use qualified professionals to consider the effect of municipal infrastructure (i.e. sewer, SWM, re-grading) and development servicing on the vulnerability of WHPA. Municipalities shall be encouraged to require all Earth Energy systems be designed in accordance to Canadian Standards Association Design and Installation Guidelines as may be amended from time to time or other relevant standards at a minimum.</p>	after the SPP comes into effect	have been undertaken with regards to the construction, maintenance and abandonment of wells as well as the results of studies that have been undertaken considering the effect of municipal infrastructure and development servicing on the vulnerability of WHPA.
Spills Prevention Plans	SP-1	OT.M.3.9.0a ,b,c,d,e	WHPA-A,B,C,D and E IPZ-1, IPZ-2, IPZ-3 SGRA	Municipality	Existing Future	Municipalities shall update/amend their spill prevention and contingency plans to include	For existing plans, the implementation	Municipalities shall submit an annual report to the CA indicating:

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			HVA			mapping of vulnerable areas as well as special procedures related to these areas. Municipalities within the SPA shall incorporate the location of vulnerable areas and special procedures related to these areas into their Emergency Response Plans. Municipalities shall be encouraged to implement education and outreach programs to encourage businesses in vulnerable areas to prepare, review and update, when required, spill prevention plans and spill contingency plans.	of this policy shall be within 1 year of the approval of the SPP. For future plans, this policy shall be implemented immediately following the approval of the SPP.	<ul style="list-style-type: none"> <li>• When they reviewed their spill prevention plans, spill contingency plans and emergency response plans;</li> <li>• What changes, if any, they made to these plans in order to consider them up to date. These changes may involve the inclusion of mapping of vulnerable areas into their plans as well as providing special procedures related to vulnerable areas;</li> <li>• The number of educational and outreach packages offered to encourage businesses in vulnerable areas to prepare, review, and update spills prevention plans and spill contingency plans;</li> <li>• The measures of tracking the uptake of the targeted audience of the education and outreach packages.</li> </ul>
Spills Prevention Plans	SP-2	OT.P.3.5.0	WHPA-A,B,C,D and E IPZ-1, IPZ-2, IPZ-3 SGRA HVA	MOE	Existing Future	The province shall be encouraged to work collaboratively with municipalities to implement general awareness programs, such as increasing signage within vulnerable areas where significant threats could occur..	Within 2 years of the approval of the Source Protection Plan.	MOE shall submit an annual report to the CA a description of the actions/measures that they have undertaken to implement Source Protection awareness programs.
Spills Prevention Plans	SP-3	OT.P.3.5.1a, b	WHPA-A,B,C,D and E IPZ-1, IPZ-2, IPZ-3 SGRA HVA	MOE	Existing Future	The MOE shall be encouraged to update the Spills Action Centre database with mapping of vulnerable areas within the SPA	Immediately after the Source Protection Plan comes into	The MOE shall submit a report to the CA detailing what efforts they have undertaken at the Spills

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						which have been provided by the SPC to ensure immediate and proper spills response. The MOE shall be encouraged to review and update the Spills Action Centre Operations Procedures Cards with municipal contacts and vulnerable area information.	effect.	Action Centre to ensure that the protection of municipal drinking water, especially in vulnerable areas, has been addressed.
Spills Prevention Plans	SP-4	OT.M.3.9.0a ,b,c,d,e	WHPA-A,B,C,D and E IPZ-1, IPZ-2, IPZ-3 SGRA HVA	Municipality	Existing Future	Industries that are regulated under O. Reg. 224/07 within vulnerable areas shall be encouraged to continue to review and update/amend, as required, their spills prevention plans and spills contingency plans to ensure protection of municipal drinking water has been addressed, which would include the integration of vulnerable area locations. Industries that are not regulated under O. Reg. 224/07 within vulnerable areas shall be encouraged to prepare, review and update/amend, as required, spills prevention and spills contingency plans to ensure protection of municipal drinking water has been addressed, which would include the integration of vulnerable area locations.	For existing plans, the implementation of this policy shall be within 1 year of the approval of the SPP. For future plans, this policy shall be implemented immediately following the approval of the SPP.	All industries within vulnerable areas shall submit an annual report to the CA indicating: <ul style="list-style-type: none"> <li>• When they reviewed their spill prevention and spill contingency plans;</li> <li>• What changes, if any, they made to these plans in order to consider them up to date. These changes may involve the inclusion of mapping of vulnerable areas into their plans as well as providing special procedures related to vulnerable areas</li> </ul> <p>If they did not previously have a spill prevention or spill contingency plan, when these plans were developed.</p>
Local Threats	LT-2a	OT.M.3.10.0	IPZ (1,2,3)	Municipality	Existing Future	Municipalities shall consider in their decision processes rerouting, where possible, highways and arterial roads around more vulnerable areas. Municipalities shall consider placing road signs at the entrance to IPZs for emergency responders. Municipalities shall consider boosting their emergency response programs to be able to contain chemical spills (e.g. training,	This policy shall be implemented immediately once the Source Protection Plan has been approved.	The municipality shall report annually to the CA the actions taken to reduce spills in vulnerable areas. This report would include if any decisions to reroute highways or arterial roads, the development of traffic regulating bylaws (if any) and if any road signs had been placed within the

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						equipment). Municipalities shall consider upgrading/reviewing their water treatment response time and equipment. Municipalities shall update spill prevention and spill contingency plans, emergency response plans to identify all IPZs.		region.
Local Threats	LT-2b	OT.M.3.10.0	IPZ1,2,3	Municipality	Existing Future	Municipalities shall consider boosting their emergency response programs to be able to contain chemical spills (e.g. training, equipment). Municipalities shall consider upgrading/reviewing their water treatment response time and equipment.	This policy shall be implemented immediately once the Source Protection Plan has been approved.	Municipalities shall report to the CA the actions that have been taken to reduce spills in terms of emergency response and water treatment response.
Local Threats	LT-2c	OT.M.3.10.0	IPZ1,2,3	Municipality	Existing Future	MOE Spills Action Centre to review and update procedure cards with municipal contacts based on IPZ delineations. Municipalities shall be encouraged to share the IPZ-3 flow data with the MOE Spills Action Centre.	This policy shall be implemented immediately once the Source Protection Plan has been approved.	Municipalities shall submit an annual report to the CA if they have submitted IPZ-3 flow data to the MOE Spills Action Centre.
Local Threats	LT2-d	OT.P.3.6.0c	IPZ1,2,3	MTO	Existing Future	The province, through the Ministry of Transportation, shall be encouraged to conduct a regional and province-wide review of Emergency Detour Routes. This review would take into consideration the location of these routes through IPZs.	This policy shall be implemented immediately once the Source Protection Plan has been approved.	MTO shall submit a report to the CA that would detail the findings of the regional and provincial review of Emergency Detour Routes. The province shall report even if this review has not been completed.