

Prescribed Instruments Draft Policies (Revised Nov. 16, 2011)

Rationale

Prescribed instruments set out terms and conditions that are designed to protect the environment or human health. Prescribed instrument policies are provided within the Thames-Sydenham and Region Source Protection Plan since they can legally manage the risks associated with an activity that has been identified as a drinking water threat in the associated Assessment Reports.

PII.0 Interpretation

PI.1.0 The policies associated with prescribed instruments are directed to the prescribed drinking water threats outlined within O. Reg. 287/07. The circumstances that make these threats significant are found within the Provincial Drinking Water Threats Tables. Prescribed instrument policies will address significant threats within specific vulnerable areas identified within the table below.

Vulnerable Area	Vulnerability Score	Applicable Drinking Water Threat		Prescribed Instrument
WHPA-A, B	10	1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Environmental Protection Act
		2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage	Ontario Water Resources Act
		6	The application of non-agricultural source material to the land	Nutrient Management Act Environmental Protection Act
		7	The handling and storage of non-agricultural source material	Nutrient Management Act Environmental Protection Act
		10	The application of pesticide to land	Pesticide Act
		12	The application of road salt	Environmental Protection Act Ontario Water Resources Act
		13	The handling and storage of road salt	Ontario Water Resources Act Aggregate Resources Act
		14	The storage of snow	Ontario Water Resources Act Aggregate Resources Act
		15	The handling and storage of fuel	Aggregate Resources Act
		17	The handling and storage of an organic solvents	Environment Protection Act
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm animal yard	Nutrient Management Act		
WHPA-A,B and C	Not Applicable	16	The handling and storage of a dense non-aqueous phase liquid	Environment Protection Act
IPZ-1	9 and 10	1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.	Environment Protection Act
		12	The application of road salt	Environmental Protection Act Ontario Water Resources Act
		13	The handling and storage of road salt	Ontario Water Resources Act Aggregate Resources Act
		15	The handling and storage of fuel	Aggregate Resources Act
IPZ and WHPA-E	9	12	The application of road salt	Environmental Protection Act Ontario Water Resources Act
		13	The handling and storage of road salt	Ontario Water Resources Act Aggregate Resources Act

Vulnerable Area	Vulnerability Score	Applicable Drinking Water Threat		Prescribed Instrument
		14	The storage of snow	Ontario Water Resources Act Aggregate Resources Act

PI.2.0 Prescribed Instruments

PI.2.1 The following policies are directed to those prescribed instruments as outlined within S.1.0.1 of O. Reg. 287/07.

PI.2.2.Environmental Protection Act

PI.2.2.1 For future Certificates of Approval, the policies under the Environmental Protection Act shall be implemented immediately following the effective date of the Source Protection Plan. Policies directed towards existing Certificates of Approval shall be implemented within 1 year of the effective date of the Source Protection Plan.

Review and Amend Existing Certificates of Approval

PI.2.2.2 The province, (the Ministry of Environment) through the Environmental Protection Act and Regulation 347-General Waste Management, shall review and amend existing Certificates of Approval (C of As) such that:

- i) Where rupture or spills during handling and storage of non-agricultural source material (NASM) could result in the release into an area where this is a significant threat, conditions shall be included in the C of A which ensure temporary storages are not permitted.
- ii) Where the application of non-agricultural source material (NASM) would be a significant threat to drinking water, the application would not be permitted.
- iii) Where the application of hauled sewage would be a significant threat to drinking water, Certificates of Approval (C of As) shall prohibit the threat.
- iv) Where the handling and storage of wastes which might include dense non-aqueous phase liquid (DNAPL) or organic solvents, would be a significant threat, the C of A includes conditions which prohibit or manage the threat, such that it ceases to be significant. The following chemicals listed as part of the Drinking Water Threats Tables include:
 - a. DNAPL include 1,4 Dioxane, Tetrachloroethylene (Perchloroethylene), trichloroethylene, vinyl chloride and polycyclic aromatic hydrocarbons (PAHs),
 - b. Organic solvents include carbon tetrachloride, chloroform, methylene chloride and pentachlorophenol.
- v) The C of A for hauling waste brine includes conditions which make carriers aware of the concerns related to the application of waste products used as road salt, for the purposes of dust suppression, within vulnerable areas where its application would be a drinking water threat.
- vi) Where the following waste disposal site categories are a significant threat, conditions shall be included in Certificates of Approval which adequately manage these threats:

- a. landfarming of petroleum refining waste,
 - b. landfilling of hazardous waste,
 - c. landfilling of municipal waste,
 - d. landfilling of solid, non-hazardous industrial or commercial waste
 - e. liquid industrial waste injection into a well,
 - f. Polychlorinated biphenyl (PCB) waste storage and
 - g. storage of hazardous waste at disposal sites
 - h. storage of wastes as described in clause (p), (q), (r), (s), (t) or (u) of O. Reg. 347.
- vii) Where the following sub-threats associated with the establishment, operation or maintenance of a system that collects, stores, transmits, dispose of sewage are significant, conditions shall be included in Certificates of Approval to adequately manage the threat:
- a. sanitary sewer network
 - b. sewage treatment plant effluent discharge
 - c. sewer treatment plant with designed bypasses
 - d. the storage of sewage

Conditions on new Certificates of Approval

PI.2.2.3 The province, (the Ministry of the Environment) through the Environmental Protection Act, shall ensure that where applicable all new Certificates of Approval include conditions described in PI.2.2.2

Waste Disposal

PI.2.2.4 The province (MOE), through the Environmental Protection Act, shall prohibit the issuance of new waste site Certificates of Approval where the following activities are significant unless terms and conditions identified within the Certificates of Approvals adequately manage the threat:

- i) Land farming of petroleum refining waste
- ii) Landfilling of hazardous waste
- iii) Landfilling of municipal waste
- iv) Landfilling of solid, non-hazardous industrial or commercial waste
- v) Liquid industrial waste injection into a well
- vi) PCB (Polychlorinated biphenyl) waste storage
- vii) Storage of hazardous waste at disposal sites
- viii) Storage of wastes as described in clause (p), (q), (r), (s), (t) or (u) of O. Reg. 347.

Sewers and Sewage Treatment Plants

PI.2.2.5 Director's orders under S. 53 (1) of the EPA, shall be used to prohibit the issuance of new Certificates of Approval in vulnerable areas where the following systems are used to collect, store or transmit sewage:

- i) sanitary sewer network
- ii) sewage treatment plant effluent discharge
- iii) sewage treatment plants with designed bypasses
- iv) storage of sewage

PI.2.3 Ontario Water Resources Act

PI.2.3.1 The policies under the Ontario Water Resources Act shall be implemented immediately following the approval of the Source Protection Plan for future Certificates of Approval and within 1 year of the effective date of the Source Protection Plan for existing Certificates of Approval.

PI.2.3.2 The province (MOE), through the Ontario Water Resources Act shall review and amend, where appropriate, existing Certificates of Approval such that:

- i) Where septic systems would be a significant threat to identify systems which should be a priority in a compliance monitoring program. The compliance monitoring program should include inspection of the system to ensure that it continues to function as designed, meets applicable design standards and are being properly maintained. Priorities should include areas where the vulnerability score is 10, areas where known septic failures have been identified and areas where older systems have not recently been inspected.
- ii) Where the establishment, operation or maintenance of a system that collects, stores, transmits, treats or dispose of sewage as it pertains to stormwater management facilities, include conditions in the Certificates of Approval to ensure the protection of municipal drinking water sources. This review shall also consider the impact of snow melt water and road salt on drinking water when the application, handling or storage of road salt is a significant threat.
- iii) Where sewage systems or sewage works systems would be a significant drinking water threat, Certificates of Approval for industrial sewage discharge shall include conditions which manage the activity such that it is no longer a significant drinking water threat.

PI.2.3.3 The province (MOE), through the Ontario Water Resources Act shall prohibit the issuance of new Certificates of Approval for the following activities where they would be a significant drinking water threat:

- i) establishment, operation or maintenance of a system that collects, stores, transmits, treats or dispose of sewage as it pertains to stormwater management facilities
- ii) Sewage Systems or Sewage Works pertaining to industrial sewage effluent discharge

Septic Systems

PI.2.3.4 New Certificates of Approval for septic systems issued by the province (the Ministry of Environment) through the Ontario Water Resources Act, shall include conditions which manage the activity such that it never becomes a significant threat. If alternatives are available, new septic systems should be prohibited where they are proposed to be located where they would be a significant threat.

Fuels

PI.2.3.5 It is noted that sewage works may include backup generators and other liquid fuel powered devices which require fuel storage. In areas where the storage and handling of fuel is a significant drinking water threat, the province (Ministry of Environment), through the Ontario Water Resources Act, shall review Sewage Works Certificates of Approval to ensure that all works include double walled tanks or secondary containment for all fuel storage which would be a significant threat. Certificates issued for these areas, shall also include conditions which require regular inspection of all fuel tanks.

PI.2.4 Nutrient Management Act and Ontario Regulation 267/03

PI.2.4.1 The policies under the Nutrient Management Act shall be implemented immediately upon the effective date of the first Source Protection Plan, except for those policies where a specific timeline has been established.

PI.2.4.2 The province (Ministry of Agriculture, Food and Rural Affairs), through the Nutrient Management Act, shall prohibit the application of non-agricultural source material (NASM) in areas where this is a significant threat to drinking water.

PI.2.4.3 The province (Ministry of Agriculture, Food and Rural Affairs), through the Nutrient Management Act, shall ensure all (new and existing) Non-agricultural Source Material (NASM) Plans adequately manage the risk related to the storage and handling of NASM where it would be a significant threat.

For existing NASM Plans, this policy shall be implemented within 1 year of the effective date of the Source Protection Plan.

PI.2.5 Pesticides Act

PI.2.5.1 When a Pesticide Permit is required as per the Pesticide Act, within a vulnerable area, the province (Ministry of the Environment) shall ensure existing and future permits adequately manage the threat to drinking water by:

- i) Prohibiting the application of pesticides **containing specific chemicals**, as identified within the Provincial Drinking Water Threats Tables, in areas where they are a significant threat.
- ii) Including conditions on the Pesticide Permit which emphasize the protection of municipal wellheads where the activity of applying pesticides is not a significant threat.

All new permits shall conform to this policy from the effective date of the Source Protection Plan. All active permits shall be amended within 6 months of the effective date of the Source Protection Plan.

PI.2.6 Aggregate Resources Act

PI.2.6.1 It is noted under the Aggregate Resources Policy Manual Policy A.R. 5.00.14 (Salt Storage and Snow Dumps on Licensed/Permitted Sites) that road salt may be permitted on a temporary basis on a site licensed or permitted under the Aggregate Resources Act, where contamination through leaching is avoided. In as much as this may be regulated through permit conditions (s.37 (1)) and site plan amendments (s.37 (7)) of the Aggregate Resources Act, the province (Ministry of Natural Resources) shall require that site plans and/or permit conditions prohibit the temporary storage of road salt where it is a significant threat.

PI.2.6.2 Where storage of snow is a significant drinking water threat, the province, (Ministry of Natural Resources) shall continue to prohibit the importing of snow removal material at aggregate operations as per the Aggregate Resources Policy Manual Policy A.R. 5.00.14 (Salt Storage and Snow Dumps on Licensed/Permitted Sites).

PI.2.6.3 The province, (Ministry of Natural Resources), through the Aggregate Resources Act, shall review site plans associated with aggregate permits with regards to the location of existing and future fuel tanks. The site plans shall contain conditions to either ensure handling procedures and the location of fuel tanks do not result in this activity being a significant threat or adequately manage the activity so that it ceases to be a significant drinking water threat.

PI.2.6.4 For existing aggregate permits, policies PI.2.6.1 and PI.2.6.3 shall be implemented within 1 year of the effective date of the Source Protection Plan. For new aggregate permits these policies shall be implemented on the effective date of the Source Protection Plan.

PI.2.7 Safe Drinking Water Act

PI.2.7.1 It is noted that water works may include backup generators and other liquid fuel powered devices which require fuel storage. In areas where the storage and handling of fuel is a significant drinking water threat, the province (Ministry of Environment), through the Safe Drinking Water Act, shall review Water Works permits and licenses to ensure that all works include double walled tanks or secondary containment for all fuel storage which would be a significant threat. Licenses or permits shall also include conditions which require regular inspection of all fuel tanks.

This policy shall be implemented within 1 year of the effective date of the Source Protection Plan.

PI.3.0 Monitoring

PI.3.0 Prescribed instruments are subject to monitoring and reporting requirements as outlined in policy X.