

Monitoring and Reporting Draft Policies (January 9, 2012)

Rationale

In order for the Source Protection Plan to be effective in reducing threats to drinking water sources it is important that its implementation be monitored. This monitoring will allow the implementers, the Source Protection Committee, Source Protection Authorities and the Ministry of the Environment to assess the effectiveness of the Source Protection Plan and ensure that it is achieving its legislated objectives. This information will also inform future updates to the Source Protection Plan.

The Clean Water Act requires a public body to conduct monitoring programs as specified in policy within the Source Protection Plan. The information required to be submitted as part of these monitoring programs will be utilized to fulfill the annual reporting requirements of the Clean Water Act. The Source Protection Authority shall annually prepare and submit to the Director and the Source Protection Committee a report that:

- (a) describes the measures that have been taken to implement the source protection plan;
- (b) describes the results of any monitoring program;
- (c) describes the extent to which the objectives set out in the source protection plan are being achieved; and
- (d) contains such other information as is prescribed by the regulations.

Prior to submitting the annual progress report to the Director, a Source Protection Authority shall submit the report to the Source Protection Committee. The Source Protection Committee shall review the report and provide written comments to the Source Protection Authority about the extent to which, the objectives set out in the source protection plan are being achieved by the measures described in the report. The Source Protection Committee's comments must then be included with the annual report to the Director.

Each report applies to a calendar year with the exception of the first report which applies to the period beginning on the day the plan takes effect and ending on December 31 of the second calendar year following the year in which the plan takes effect. Each report shall be submitted to the Director by May 1 in the year following the year to which the report applies. To allow the timely submission of the annual report, monitoring reports must be submitted before the deadline included in the policies (February 1).

The monitoring reports required by the policies in Source Protection Plan will also help inform the review of the Source Protection Plan and Assessment Reports as required by the Clean Water Act. The Act requires that in approving a Source Protection Plan the Minister shall identify when and which parts of the Source Protection Plan and Assessment Report shall be reviewed.

The policies pertaining to monitoring and reporting are intended to be general in nature and describe the need to report however specifics as to the details to be included in the reports will be described through monitoring and reporting guidance to be developed by the CA in consultation with the Source Protection Committee and the policy implementers. Guidance will include the structure and information to be included in the reports and is likely to include a tool for the organization and submission of the data.

Interpretation

As noted in the rationale for this policy, public bodies are required by the Clean Water Act to conduct monitoring programs as specified in policy within the Source Protection Plan.

Draft Policies

1. In recognition of the importance of periodically evaluating the effectiveness of Source Protection Plan and to ensure that the objectives and policies of the Source Protection Plan are reflective of changing circumstances it is required that all implementers shall establish monitoring programs which collect information for the evaluation of the effectiveness of the Source Protection Plan.
2. The information collected through these monitoring programs shall be included in a monitoring report.
3. The monitoring report shall be submitted annually to the Conservation Authority. Notwithstanding the above, Conservation Authorities are required to report annually to the Source Protection Authority on the implementation of policies for which they are the implementer.
4. Monitoring reports shall include information since the submission of the previous monitoring report to December 31 of the year previous to the deadline for report submission. For the first report the information shall include information from the effective date of the Source Protection Plan.
5. In order to assist implementers in satisfying the requirements to provide appropriate information in their reports, the CA, in consultation with the Source Protection Committee and the policy implementers, will develop monitoring and reporting guidance. Guidance which is available by February 1 the year prior to the due date for the monitoring report, shall be adhered to in the submission of the monitoring report.
6. Monitoring reports are due on February 1 of each year following the first anniversary of the effective date of the Source Protection Plan.

Monitoring Policies Detail Table

Tool	Monitoring Details	
Education and Outreach	<ul style="list-style-type: none"> • Number and types of education programs • Measures taken to implement the programs 	<ul style="list-style-type: none"> • Uptake of the programs by the target audience
Incentives	<ul style="list-style-type: none"> • Types of incentives provided • Whether the programs through which the incentives provided are new • Whether programs previously available have been cancelled • Measures taken to track the effectiveness of the programs • Efforts taken to promote the incentive program • The funding available under the programs • The number and value of grant applications, eligible applications and successful applications 	<ul style="list-style-type: none"> • The number of grants which were for activities which would be considered a significant threat. • The locations of activity for which the grant was applied. • The number and type of transport pathways managed through the incentive programs • Each incentive program is to be reported on separately
Prescribed Instruments	<ul style="list-style-type: none"> • number of compliance inspections which were carried out in the vulnerable areas • the number of locations which were found not to be in compliance • the steps taken to bring them into compliance 	<ul style="list-style-type: none"> • The instrument number, type and location of instruments issued or amended in the vulnerable areas • Type of risk management measures required by prescribed instruments • Number and type of prescribed instruments prohibited
Risk Management Plans	<ul style="list-style-type: none"> • Number of risk management plans required and approved for each type of threat • A summary of the types of risk management measures which were approved as part of the risk management plans 	<ul style="list-style-type: none"> • An outline of the plans for carrying out inspections • Number of inspections carried out and the number which identified risk management plans which were not being adequately followed • Number of orders issued by the Risk Management Officials/Inspectors • Involvement with glycol management plans
Prohibition	<ul style="list-style-type: none"> • The number and types of activities which the RMO prohibited 	
Land Use Planning	<ul style="list-style-type: none"> • Steps taken to bring OP and bylaws into conformity with the SPP 	<ul style="list-style-type: none"> • Policies incorporated into OP and bylaws relevant to source water protection
Restricted Land Use	<ul style="list-style-type: none"> • The number and type of activity which was referred to the RMO as a restricted land use and the number of notices issued by the RMO 	
Specify Action	<ul style="list-style-type: none"> • LEVEL OF DETAIL TO BE DETERMINED 	

The following details related to monitoring policies have been copied from the policy examples. These will inform a monitoring and reporting guidance to be developed by the CA in consultation with policy implementers. This is not intended to form part of the policy or rationale.

Monitoring Policies

Incentives

Waste Disposal

The implementing body shall report to the CA (or in the case of the CA, the SPA), the types of incentive packages offered, whether they were new or existing initiatives and the measures taken to track the effectiveness of these programs.

On-site septic

Completed annual reports sent to either the CA (by municipalities and MOE) or the SPA (CA) will include reporting the number of septic grant applications within vulnerable areas, the number of eligible grant applications and the number of grants distributed

Sewers and sewage treatment

Completed annual reports sent to either the CA (by municipalities and MOE) or the SPA (CA) will include reporting the number of septic grant applications within vulnerable areas, the number of eligible grant applications and the number of grants distributed

stormwater

The implementing bodies shall report to the CA annually on the implementation of this policy. The report shall include the funding available, the uptake of the incentives, the area where the incentives were used and a description of the efforts to promote the incentives. Each incentive program shall be reported on separately.

Fuels

The implementing bodies shall report to the CA annually on the implementation of this policy. The report shall include the funding available, the uptake of the incentives, the areas where the incentives were used and a description of the efforts to promote the incentives. Each incentive program shall be reported on separately

Livestock

Program operators shall report to CA annually and include the number and type of risk management measures which have been applied for and the number funded in the vulnerable areas. The report shall identify how many were considered to be significant drinking water threats.

Transport Pathways

Program operators shall report to CA annually and include the number and type of risk management measures which have been applied for and the number funded in the vulnerable areas. The report shall identify how many were considered to be significant drinking water threats.

The implementing bodies shall report to the CA annually on the implementation of this policy. The report shall include the funding available, the uptake of the incentives, the areas where the incentives were used and a description of the efforts to promote the incentives. The report shall report on each type of incentive separately.

Education

The implementing body shall report to the SPA the number of educational packages offered as well as a description of the actions/measures they have taken to implement the education/outreach in the previous year. Measures of tracking of the uptake by the target audience will also be included in this report.

Prescribed Instruments

Hauled Sewage

MOE shall report annually to the SPA with the number of C of As issued for the application of hauled sewage which specified a prohibition in the areas where the application would be a significant threat and the number of C of As which were denied as the entire application area was within the areas where the application would be a significant threat.

Waste Disposal

MOE shall report to the CA the number of C of A applications that have been reviewed and amended including the instrument number as well as the number of C of A applications that have been prohibited within vulnerable areas where the threat is considered significant.

Mine Tailings

MOE shall report to the CA the number of Certificate of Approval applications that they have reviewed and the number that have incorporated vulnerable areas considerations.

Septic

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 that were made to existing C of As to reduce risk presented by these significant threats
- The 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 the approval of the Source Protection Plan and annually from then on.

Sewers and Sewage Treatment

MOE shall report to the CA the number of Certificate of Approval applications that they have reviewed, the number located within vulnerable areas and the types of conditions applied to those C of As.

Stormwater

MOE shall report to the CA the number of C of A applications that have been reviewed and amended including the instrument number as well as the number of C of A applications that have been prohibited within vulnerable areas where the threat is considered significant.

Industrial Sewage

MOE shall report to the CA the number of Certificates of Approval applications that have been reviewed and the number that have been amended.

ASM

Submit an annual report to the CA which identifies the number of NMP, and NMS which were reviewed and the number which required updates to adequately manage the significant threats. MOE will submit an annual report to the CA which identifies the number of inspections and enforcements under the Nutrient Management Act.

NASM

- OMAFRA shall submit an annual report to the CA which identifies the number of NASM Plans that were reviewed and the number that required updates to adequately manage the updated threats.
- MOE shall submit an annual report to the CA which identifies the number of inspections and enforcements completed under the Nutrient Management Act within the vulnerable areas associated with municipal water supply sources.

Fertilizers

OMAFRA will submit an annual report to the CA which identifies the number of NMP, and NMS which were reviewed and the number which required updates to adequately manage the significant threats. MOE will submit an annual report to the CA which identifies the number of inspections and enforcements under the Nutrient Management Act.

Pesticide

A report shall be submitted by MOE to the CA annually which indicates the number of permit applications issued and if any, the number that were found to be out of compliance with the Source Protection Plan.

Road Salt

MOE shall report to the CA the number of Certificate of Approval applications that they have reviewed and the number that have included snow melt water considerations.

MOE shall report to the CA the number of Certificate of Approval applications that they have reviewed including the instrument number, the number of applications that have been approved, the number that have included using road salt as a dust suppressant.

MNR shall submit an annual report to the CA the number of temporary salt storages that have been identified and whether they have identified any storage location that would be in contravention of this policy.

Storage of Snow

MOE shall report to the CA the number of Certificate of Approval applications that they have reviewed and the number that have included snow melt water considerations.

MNR shall submit an annual report to the CA indicating if any snow storage areas have been identified that would be in contravention of this policy.

Fuels

The MNR shall submit an annual report to the CA, which identifies the number of permits reviewed under the Aggregate Resources Act with respect to the handling and storage of fuel in significant threat areas.

The MOE shall submit an annual report to the CA which identifies the number of C of A applications which were reviewed and the number which required updates to adequately manage the significant threats.

DNAPLs

The MOE shall submit an annual report to the CA which identifies the number of C of A applications which were reviewed and the number which required updates to adequately manage the significant threats.

Organic Solvents

The MOE shall submit an annual report to the CA which identifies the number of C of A applications which were reviewed and the number which required updates to adequately manage the significant threats.

Livestock

OMAFRA will submit an annual report to the CA which identifies the number of NMP, and NMS which were reviewed, the number approved and the number which required updates to adequately manage the significant threats. MOE will submit an annual report to the CA which identifies the number of inspections and enforcements under the Nutrient Management Act.

Land Use Planning

Municipalities shall report to the CA on new policies incorporated in Official Plans and any new by-laws relevant to source water protection. All municipalities must report even if it is to indicate that no changes were required. Where no changes were required, the report is to describe how the existing OP and bylaws meet the requirements of this policy.

Prohibition

The municipality shall submit a report which includes whether they have identified any storage which is in contravention of this policy and indicates any steps taken to correct the contravention. The report shall be submitted annually to the CA.

Risk Management

ASM

The Risk Management Official shall submit an annual report which includes the number of RMP required and approved to the CA

NASM

The Risk Management Official shall submit an annual report which includes the number of RMP required and approved to the CA

Fertilizer

The Risk Management Official shall submit an annual report to the CA which includes the number of RMP required and approved.

Pesticide

The Risk Management Official shall submit an annual report which includes the number of RMP required and approved to the CA

Snow Storage

The Risk Management Official shall submit an annual report to the CA which includes the number of RMP required and approved.

Fuels

The Risk Management Official shall submit an annual report to the CA which includes the number of RMP required and approved as well as the number of inspections completed and how many inspections identified RMP which were not being adequately followed

DNAPLs

The Risk Management Official shall submit an annual report to the CA which includes the number of RMP required and approved. The report shall include a summary of the types of Risk Management Measures which were approved as part of Risk Management Plans. The Risk Management Official will also report on the inspections completed.

Organic Solvents

The Risk Management Official shall submit an annual report to the CA which includes the number of RMP required and approved. The report shall include a summary of the types of Risk Management Measures which were approved as part of Risk Management Plans. . The Risk Management Official will also report on the schedule of inspections and the number of inspections carried out.

Aircraft De-icing

The Risk Management Official shall submit an annual report to the CA which would indicate the type of involvement, if any, in the preparation of glycol management plans.

Livestock

The Risk Management Official shall submit an annual report which includes the number of RMP required and approved to the CA

Restricted Land Use

Specify Action

Hauled Sewage

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.

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

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

The municipality shall submit a report to the CA that would include:

- The number of applications for new mining operations within vulnerable areas
 - The number of applications for changes to mine operations within vulnerable areas
 - The number of notifications that have been received by the RMO
 - The number of mining operations that have shared their spill response plans and other activities (i.e. site sampling, monitoring) with the municipality
 - The number of mining operations within vulnerable areas that are using current BMP

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

Municipalities shall submit a report to the CA which would detail if cross municipal partnerships have occurred.

On-Site septics

Significant

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 approval of the Source Protection Plan and annually thereafter

The municipality shall report to the CA annually on the number of septic systems which could be hooked up and the number which have been hooked up.

Municipalities to report annually to the CA any new sewer lines installed or planned within the vulnerable areas.

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 the approval of the Source Protection Plan and annually from then on.

Moderate/Low

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.

Sewers and Sewage Treatment

The municipality shall submit an annual report to the CA that would include:

- The number of expansions or new construction of sewer systems and WWTPs in vulnerable areas and whether best practices standards have been used;
- the number of audits completed of sewer systems and WWTP in vulnerable areas;
- the number if sewer pipe connections that have been improved;
- the number of inflow/infiltration reduction programs that have been developed.

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 and when the by-law has been reviewed. This report will also include if networks have been created between different municipalities.

Stormwater Management

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.

The Municipality shall submit an annual report to the CA detailing if storm sewer by-laws have been developed as well as when they will be reviewed.

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

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.

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

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 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.

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.

When land securement has been pursued the municipality shall report the progress and outcomes to the CA.

NASM

MOE shall report on the progress and outcomes to the CA.

A report shall be submitted to the CA annually which indicates the number of 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.

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

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.

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.

When land securement has been pursued the municipality shall report the progress and outcomes to the CA.

Pesticide

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 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.

When land securement has been pursued the municipality shall report the progress and outcomes to the CA.

Road Salt

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.

Storage of Snow

The municipality shall report to the CA on the following:

- How many Winter Maintenance and Salt Management Plans have been developed
- What Best Management Practices have been undertaken at the roads maintenance yards

Fuels

Municipality to report back to CA on implementation and details of protocol and training.

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.

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.

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 gas stations that have been monitored.

DNAPLs

Municipality shall report to the CA on the location, frequency and number of residents using the depots.

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

Municipality shall report to the CA on the location, frequency and number of residents using the depots.

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 Deicing

Municipalities shall submit an annual report to the CA that would include whether sewer use by-laws have 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.

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

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.

When land securement has been pursued the municipality shall report the progress and outcomes to the CA.

Transport Pathways

Municipalities shall submit an annual report to the CA indicating:

- Number, location and details of new transport pathways that have been identified;
- Number location and details of wells that have been inspected where significant threats could occur;
- Number location and details of unused wells with vulnerable areas that have been decommissioned;
- Number location and details of currently in use wells in vulnerable areas that have been maintained;
- Number of landowners within that have been changed from private wells to the municipal drinking water supply

MOE shall submit an annual report to the CA indicating:

- Number location and details of wells identified within an area where significant threats could occur;
- Number location and details of wells that have been inspected;
- Number location and details of abandoned wells with vulnerable areas that have been decommissioned or require maintenance.

It is suggested that this reporting could be accomplished through annual updates to the Water Well database.

Municipalities shall submit an annual report to the CA that would outline the Best Management Practices that 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

Municipalities shall submit an annual report to the CA indicating:

- When they reviewed their spill prevention plans, spill contingency plans and emergency response plans;
- 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;
- 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;
- The measures of tracking the uptake of the targeted audience of the education and outreach packages.

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.

The MOE shall submit a report to the CA detailing what efforts they have undertaken at the Spills Action Centre to ensure that the protection of municipal drinking water, especially in vulnerable areas, has been addressed.

All industries within vulnerable areas shall submit an annual report to the CA indicating:

- When they reviewed their spill prevention and spill contingency plans;
- 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

If they did not previously have a spill prevention or spill contingency plan, when these plans were developed.

Local Threats

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 region.

Municipalities shall report to the CA the actions that have been taken to reduce spills in terms of emergency response and water treatment response.

Municipalities shall submit an annual report to the CA if they have submitted IPZ-3 flow data to the MOE Spills Action Centre.

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.