

PREPARING RISK MANAGEMENT PLANS

A Guidance Document for preparing Risk Management Plans in the City of Guelph, under *The Clean Water Act, 2006*

June 2016
Version 1

Preface

Municipalities in Ontario have been working with the provincial government and stakeholder partners since 2006 to implement the *Clean Water Act, 2006*. July 1, 2016 represents a milestone where the municipalities are now responsible to implement policies developed within Source Protection Plans using existing tools and new tools provided in the *Clean Water Act, 2006*.

Each municipality has unique challenges and objectives in implementation of their new responsibilities. The approach presented in the attached document has been developed based on careful review of the typical threats to drinking water in the City of Guelph and the need to have a system where risk management plans are clear and consistent and reflect a reasonable cooperative effort between the person who is engaged in a threat activity and the City of Guelph.

Given the many complexities inherent in the regulations, the initial release of this document is intended to be a “living draft” that will be continuously updated through experience in the initial implementation of the source protection plan. The Risk Management Official encourages comments and insights on opportunities to streamline and improve this process/experience, while still respecting the needs of the municipality to be able to make consistent decisions and to be able to enforce the risk management plans.

A place to provide comments and insights has been created on the City of Guelph Web-site at www.guelph.ca/sourcewater. Comments can also be forwarded directly to the Risk Management Official.

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Preparing Risk Management Plans

1.0 Introduction

The City of Guelph is one of the largest cities in Canada to almost exclusively depend on groundwater for its potable water supply. Most of the municipal water supply wells that provide drinking water to the residents draw water from deep confined bedrock aquifers. The City of Guelph is committed to ensuring clean, safe drinking water for our citizens – today, and into the future.

Since 2001, the Province of Ontario has introduced new regulations to provide greater confidence that municipal water sources in Ontario provide safe, high quality water. The first set of regulations were made under *The Safe Drinking Water Act, 2002* and established increased responsibilities for inspections, maintenance, operator training, monitoring, and reporting of water quality in municipal drinking water systems. The second set of regulations was introduced under *The Clean Water Act, 2006 (CWA)* to provide a framework for providing long-term protection to municipal drinking water sources in Ontario. The *CWA* provides the basis for the drinking water source protection planning program that has been developed co-operatively by the Province of Ontario, municipalities, conservation authorities, and stakeholders since 2007. The local aspects of this program have been led by Source Protection Committees (SPCs) with support from the local conservation authorities to develop **Source Protection Plans (SPPs)** as directed by the *CWA* and associated regulations for watershed-based areas designated as a **Source Protection Area**. Many of the policies within the SPPs are to be implemented by municipalities in accordance with the *CWA*.

The Grand River Source Protection Plan (Grand River Source Protection Authority, 2015 - hereafter referred to as Grand River SPP) was approved by the Ontario Ministry of the Environment and Climate Change (MOECC), in November, 2015 and the policies come into effect on July 1, 2016. **Risk Management Plans (RMPs)** are one of the policy tools provided under the *CWA* that the City of Guelph is responsible to implement to comply with policies in Chapter 8 of the Grand River SPP.

1.1 How to Use This Guidance Document

This guidance document has been developed to provide individuals and businesses in the City of Guelph with information on when a RMP will be required and how a RMP will be developed, negotiated, agreed to, and enforced by the City of Guelph. This document is intended as a resource for landowners, business owners, applicants for planning approvals and building permits, City of Guelph staff, and other agencies. This guidance document and the process presented herein are intended to facilitate negotiations and promote the consistent content and format of RMPs.

This guidance document is organized into five (5) sections as follows:

- 1) Introduction
- 2) Approach to Source Protection in the City of Guelph
- 3) Risk Management Plan Development Process
- 4) Risk Management Plan Content/Format

5) Compliance/Enforcement

Additional information can be found on the City of Guelph’s website: www.guelph.ca/sourcewater, the website of the Lake Erie Source Protection Region: www.sourcewater.ca, and the website of the MOECC: www.ontario.ca/page/source-protection. A Glossary of terms used in this Guidance Document is provided in Appendix B. These terms are highlighted as ***blue bold italic text*** on first use in this document.

Examples of information letters, forms and templates (***green bold italic text***), notices (***orange bold italic text***), and orders (***red bold italic text***) referred to in this Guidance Document are available on the City of Guelph’s website: www.guelph.ca/sourcewater. This website will be used to maintain current versions of all documents referenced herein.

2.0 Approach to Source Protection in the City of Guelph

Since 2001, the City of Guelph has worked with various ministries of the Provincial Government and the Grand River Source Protection Authority to conduct technical studies and assessments as defined under the *CWA* and to develop a set of policies that “protect, improve, or restore the quality and quantity of water”. The policies, as set out in the Section 8 of the Grand River SPP are designed to protect existing and future sources of drinking water from unwanted impacts and harmful contaminants.

The policy tools used to address identified threats to drinking water sources in the Grand River SPP include:

- ***Prescribed Instruments*** (typically requiring approval and enforcement by provincial ministries or designated authorities);
- Land Use Planning;
- Prohibition using Section 57 of the *CWA*;
- Risk Management using Section 58 of the *CWA*;
- Land Use Restrictions (for future uses) using Section 59 of the *CWA*;
- Incentive Programs;
- Education and Outreach; and
- Other

Prescribed Instruments and existing policy tools typically have priority in Chapter 8 of the Grand River SPP. The City of Guelph chose to rely on use of the Part IV powers provided under Section 58 of the *CWA* to manage ***activities*** that are ***significant threats to drinking water sources*** that are not regulated by a Prescribed Instrument. Section 58(1) of the *CWA* states:

“If a source protection plan that is in effect designates an activity to which this section should apply and an area within which this section should apply to the activity, a person shall not engage in that activity at any location within that area unless a risk management plan has agreed to or established under this section or section 56 for that activity at that location”.

Implementation of the Grand River SPP will be achieved through amendments to integrate the policies into the City of Guelph Official Plan, as well as other relevant City of Guelph planning documents, by-laws, policies, and procedures, as applicable.

2.1 What is a Risk Management Plan (RMP)?

A RMP is a legally binding instrument that is to be negotiated and agreed to by the person, or business who is, or will be, engaged in the activity(ies) that is(are) a significant threat to drinking water, and the **Risk Management Official (RMO)**. The *CWA* and Ontario Regulation 287/07 describe the legal requirements of a RMP and the responsibilities of municipalities, the RMO and **Risk Management Inspectors (RMIs)**, and the Source Protection Authority in implementing and enforcing RMPs.

The RMP will describe existing and proposed **risk management measures** that are to either continue or are to be put in place to provide confidence that the identified threat activity will cease to be or not become a significant threat to drinking water. The risk management measures to be included in the RMP will include best management practices and will consider the potential financial impact on the person who is, or will be, engaged in the activity(ies), or their business.

A RMP will not be required when the activity and circumstances that trigger a RMP is not currently occurring on the property or is not proposed to take place on the property.

2.2 What is the Role of the City of Guelph?

The City of Guelph has been proactive in protecting the municipal water supply in terms of both water quantity and water quality. The approach and tools provided by the *CWA* and the policies presented in the Grand River SPP allow the City of Guelph to move forward to a new level of confidence that available water resources will remain in place to support the needs of planned growth.

Beginning on July 1, 2016, the City of Guelph will be responsible for implementing policies outlined in the Grand River SPP in accordance with the *CWA*, *The Planning Act*, *The Condominium Act*, *The Municipal Act*, *The Building Code Act*, and policies of the Grand River SPP. This includes policies that use tools in Part IV of the *CWA*, including Section 57, Section 58, and Section 59. The Grand River SPP policies and the areas to which they apply have been approved by the MOECC. The City of Guelph does not have authority to change the policies or the areas to which they apply without seeking an amendment to the Grand River SPP.

The City of Guelph will be responsible for reviewing existing and proposed activities to determine whether they constitute a significant threat to drinking water and, when they do, to enforce the applicable policies in the Grand River SPP to manage the identified threats. Additional information on Compliance and Enforcement is provided in Section 5.

2.3 What is the Role of the Risk Management Official (RMO)?

The City of Guelph has appointed a Risk Management Official (RMO) to implement and enforce policies that use tools under Part IV of the *CWA*. The RMO has total responsibility for making technical and enforcement decisions regarding the requirement for a RMP, the content of the RMP, and the effectiveness of the RMP.

In the course of making decisions regarding a RMP, the RMO may seek assistance from provincial staff, other RMO/RMI, or individuals who are recognized to possess the required technical understanding to assist the RMO in understanding the risk presented by the activity and the potential effectiveness of existing or proposed risk management measures.

The RMO will typically be making decisions relating to:

- 1) Is the existing or proposed activity a significant threat to drinking water sources, or
- 2) Are existing or proposed risk management measures sufficient to cause the activity to cease to be or to never become a significant threat to drinking water sources.

In most situations, these decisions will be straight forward and will be based on regulations and rules under the *CWA*, or policies in the Grand River SPP. Decisions relating to the effectiveness of risk management measures will typically rely on the professional judgement and experience of the RMO. The City of Guelph has prepared additional tools to assist the RMO in making consistent and defensible decisions regarding the effectiveness of existing or proposed risk management measures.

2.4 What is the Role of the Risk Management Inspector (RMI)?

The City of Guelph has appointed a Risk Management Inspector to assist the RMO in enforcement of RMPs. The primary role for the RMI will be to conduct inspections to a) identify activities that are not in compliance with the Grand River SPP policies, and b) to identify when actions are not in compliance with a RMP. Part IV of the *CWA* and regulations made under the *CWA* provide the RMI with powers to issue Notices and Orders, conduct investigations, and to issue charges against the *Provincial Offences Act*.

In the course of making decisions regarding compliance with the Grand River SPP or a RMP, the RMI may seek assistance from provincial staff, other RMO/RMI, or individuals who are recognized to possess the required technical understanding to assist the RMI in reaching a decision.

2.5 Who negotiates the RMP with the RMO?

A RMP is to be negotiated, agreed to, and complied with by the person, or business who is, or will be, engaged in the activity(ies) that is(are) identified to be a significant threat to drinking water. Typically, this will be the Landowner of the property or the Operator of a business that takes place on the property (*Landowner/Operator*). For activities proposed in applications for planning approval or a Building Permit, the RMP may be negotiated with the Applicant. In the case where the RMP is not negotiated and agreed to by the Landowner, negotiation of the RMP will include steps to ensure that the Landowner is aware that the RMP is in place. Amendment of the RMP will be required whenever the person who is engaged in the regulated activity(ies) is(are) changed.

2.6 What is a Significant Threat to Drinking Water?

Ontario Regulation (O.Reg.) 287/07 identifies the following 21 activities as Prescribed Threats to Drinking Water:

- 1) The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act.

- 2) The establishment, operation or maintenance of a system that collects, stores, transmits, treats, or disposes of sewage.
- 3) The application of agricultural source material (ASM) to land.
- 4) The storage of agricultural source material.
- 5) The management of agricultural source material.
- 6) The application of non-agricultural source material (NASM).
- 7) The handling and storage of non-agricultural source material.
- 8) The application of commercial fertilizer to land.
- 9) The handling and storage of commercial fertilizer.
- 10) The application of pesticide to land.
- 11) The handling and storage of pesticide.
- 12) The application of road salt.
- 13) The handling and storage of road salt.
- 14) The storage of snow.
- 15) The handling and storage of fuel.
- 16) The handling and storage of a dense non-aqueous phase liquid (DNAPL).
- 17) The handling and storage of an organic solvent.
- 18) The management of run-off that contains chemicals used in the de-icing of aircraft.
- 19) An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.
- 20) An activity that reduces the recharge of an aquifer.
- 21) The use of land as livestock grazing or pasturing land, an outdoor confinement area or a farm animal yard.

Activities that present the greatest potential to affect municipal drinking water sources are identified as significant threats to drinking water using a scientific process as outlined in the Technical Rules: Assessment Report (MOECC, 2009) and the detailed circumstances as set out in the Table of Drinking Water Threats (MOECC, 2009).

The approved Assessment Report: Grand River Source Protection Area (2012) (hereafter referred to as Grand River Assessment Report) presents the findings of technical studies carried out to identify **vulnerable areas** in the City of Guelph and to assess the relative risk presented by activities within the vulnerable areas. Vulnerable Areas include **Wellhead Protection Areas (WHPA)** and **Intake Protection Zones (IPZ)**. The delineated vulnerable areas, and the assigned **vulnerability scores**, are the basis for the policy areas defined in the Grand River SPP. The vulnerable areas for the City of Guelph include **Issue Contributing Areas (ICA)** that have been delineated for water sources where a **Drinking Water Issue** has been identified. The ICA delineates the area where an activity may contribute to the identified drinking water issue. In the City of Guelph, drinking water issues were identified for trichloroethylene (TCE) at several wells (with a relatively extensive ICA (ICA-TCE)) and for nitrate for one well (local ICA (ICA-NIT)). Under the CWA, all activities that may

contribute to the drinking water issue are considered to be significant threats and will be managed by the applicable policies in the Grand River SPP.

The Grand River Assessment Report includes documentation of preliminary work carried out to identify activities that are potentially significant threats to drinking water. This work has provided a basis for planning the work programs and effort required by the RMO/RMI to come into compliance with the Grand River SPP.

As of July 1, 2016, the policies of the Grand River SPP only apply to activities that are threats to water quality as outlined in Table 1. The City of Guelph is working with its partners in the SPP to develop policies that will apply to threats to water quantity, such as diversion of recharge. A RMP may be required in the future to address specific water quantity threats to be identified in future policy.

2.7 When/Where is a Risk Management Plan Required?

The Grand River SPP sets out the policies and policy areas within the City of Guelph where activities that are a significant threat to drinking water will be managed using a RMP under Section 58 of the *CWA*. Table 1 presents a summary of the Policy Areas in terms of Vulnerable Area, ICA, and Vulnerability Scores and the minimum circumstance, or trigger, where the prescribed threats would be significant and require management by RMP. RMPs are required for existing and future (proposed) activities that meet the circumstances set out in Table 1. The RMO/RMI can enforce the policies of the Grand River SPP at any time when an activity is observed to which a RMP is required.

The Policy Areas are illustrated on Figure 1. Figure 1 is also available on the City of Guelph Website. The MOECC has prepared a mapping tool that can be used to prepare a local map that illustrates the policy areas (or vulnerable areas) that apply to a specific property based on street address. This tool is available to Landowners/Operators/Applicants at:

<http://www.applications.ene.gov.on.ca/swp/en/index.php>

In some cases more than one Policy Area may apply within a property. Typically, the policy associated with the highest vulnerability score will apply. The RMO may make decisions on a case-by-case basis for large properties or properties with multiple activities that a RMP is not required where an activity to which a Section 58 policy may apply is not occurring, or proposed to occur within the Policy Area.

2.7.1 Existing Activities

In the City of Guelph, the Grand River SPP defines an activity to be “existing” if:

- a) It is engaged in at a particular location in a vulnerable area on the effective date of this SPP
- b) It has been engaged in at a particular location within a vulnerable area at any time within five (5) years prior to the effective date of this SPP but not on the day before the effective date and such activity has been resumed within five (5) years following the effective date of this SPP.

It relates to a replacement facility or structure of similar size and capacity to service an existing activity.

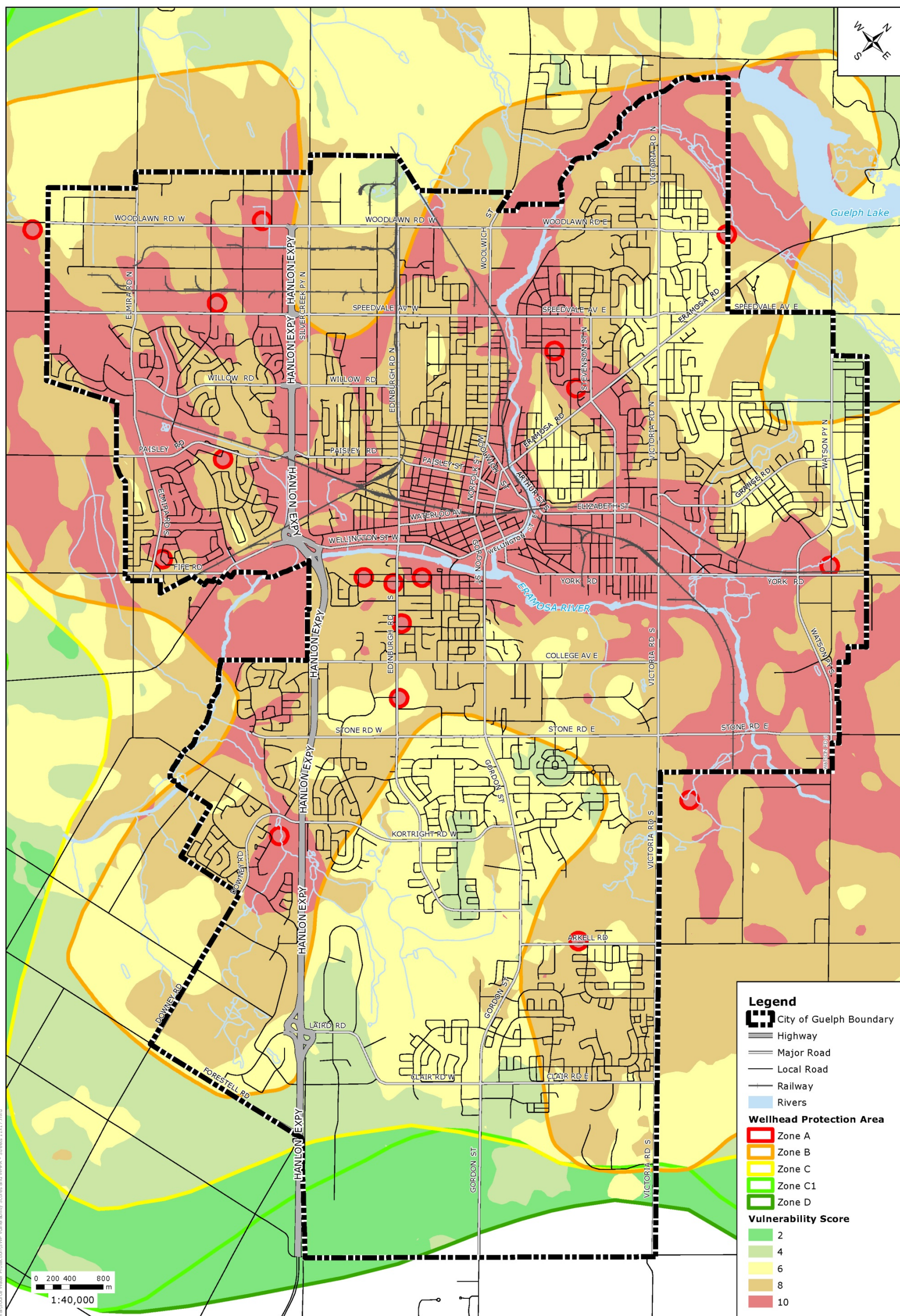
Table 1 Risk Management Plan Triggers – City of Guelph

Prescribed Drinking Water Threat Activity		Source Protection Plan Policy Number	Policy Area		Risk Management Plan Triggers
			Vulnerable Area WHPA/ICA	Vulnerability Score(s)	
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act	CG-CW-4	WHPA-A WHPA-B WHPA-C *ICA-NIT *ICA-TCE	10 10, 8 8 All All	<ul style="list-style-type: none"> Activity exempt from MOECC Approval under Part V of the EPA. RMP not required for storage of hazardous or liquid industrial waste or waste as described in clauses (p), (q); (r); (s); (t), or (u) of the definition of hazardous or liquid industrial waste in O. Reg. 347 (General – Waste Management) made under the <i>EPA</i> that are to be managed by an education and outreach program developed by the City of Guelph.
3,4	The application of agricultural source material to land or the storage of agricultural source material.	CG-CW-17	WHPA-A WHPA-B *ICA-NIT	10 10 All	<ul style="list-style-type: none"> Activity not addressed by a <i>Nutrient Management Plan</i> or <i>Strategy</i> under the <i>Nutrient Management Act</i>. RMP will be based on minimum requirements of a <i>Nutrient Management Plan</i> or <i>Strategy</i> as per the <i>Nutrient Management Act</i>.
8,9	The application of commercial fertilizer to land and/or storage of commercial fertilizer.	CG-CW-23	WHPA-A WHPA-B *ICA-NIT	10 10 All	<ul style="list-style-type: none"> Activity not addressed by a <i>Nutrient Management Plan</i> or <i>Strategy</i> under the <i>Nutrient Management Act</i>. Storage > 2,500 kg of commercial fertilizer (existing, new or expanded) RMP will be based on minimum requirements of a <i>Nutrient Management Plan</i> or <i>Strategy</i> as per the <i>Nutrient Management Act</i>.
10,11	The application of pesticide to land and/or the handling and storage of pesticide.	CG-CW-26	WHPA-A WHPA-B	10 10	<ul style="list-style-type: none"> Activity not addressed by a Prescribed Instrument (MOECC) Quantity Trigger by Table of Drinking Water Threats Exemption for future handling or storage of greater than 2500 kg of pesticide or greater than 250 kg of pesticide for retail sale in WHPA-A. RMP to incorporate <i>best management practices</i>, monitoring, and an inspection protocol.
14	The storage of snow.	CG-CW-32.2	WHPA-A WHPA-B *ICA-NIT	10 10 All	<ul style="list-style-type: none"> RMP required within vulnerable areas where this activity is or would be a significant threat.

Table 1 Risk Management Plan Triggers – City of Guelph

Prescribed Drinking Water Threat Activity		Source Protection Plan Policy Number	Policy Area		Risk Management Plan Triggers
			Vulnerable Area WHPA/ICA	Vulnerability Score(s)	
15	The handling and storage of fuel.	CG-CW-34 b.	WHPA-A WHPA-B	10 10	<ul style="list-style-type: none"> Storage of > 2,500 L of fuel RMP can be scoped to a “<i>Contaminant Management Plan</i>” and include monitoring, reporting and auditing to requirements of the <i>Technical Standards and Safety Authority (TSSA)</i>.
16	The handling and storage of a <i>dense non-aqueous phase liquid (DNAPL)</i> .	CG-CW-37 b.	WHPA-A WHPA-B WHPA-C *ICA-TCE	All	<ul style="list-style-type: none"> New or expanded handling of storage of DNAPL outside of WHPA-A Existing handling and storage of DNAPL within a vulnerable area where it is a significant threat (WHPA-A to C). RMP can be scoped to a Contaminant Management Plan & monitoring, reporting and auditing to requirements of TSSA.
17	The handling and storage of an <i>organic solvent</i> .	CG-CW-40	WHPA-B	10	<ul style="list-style-type: none"> Existing and future handling and storage of Organic Solvents within WHPA-B.
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard.	CG-CW-44	WHPA-A WHPA-B *ICA-NIT	10 10 All	<ul style="list-style-type: none"> Activity not addressed by a <i>Nutrient Management Plan or Strategy</i> under <i>Nutrient Management Act</i>. RMP will be based on minimum requirements of a <i>Nutrient Management Plan or Strategy</i> as per the <i>Nutrient Management Act</i>.
<p>Note:</p> <p>* Vulnerability scores do not apply within a delineated Issue Contributing Area (ICA). Any activity within an ICA that contributes to the drinking water issue is a significant threat. A RMP will be required for any activity that contributes to the drinking water issue within the ICA.</p>					

Figure 1 City of Guelph Source Protection Plan Policy Areas



1:\gms\staging\Engineering\GIS\Source Protection\Map Vulnerability Scores and WHPA - Streets 11x17.mxd
 Produced by the City of Guelph
 Infrastructure, Development & Enterprise
 Engineering and Capital Infrastructure Services
 June 2, 2016

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**City of Guelph
Wellhead Protection Areas and
Vulnerability Scores**

The City of Guelph is unique in that the extent of the vulnerable area where activities are or would be a significant drinking water threat is essentially the entire area of the city (Figure 1). As a result, approximately 943 activities on 613 land parcels were identified as potential significant threats in the Grand River Assessment Report. The City of Guelph has developed a strategy to prioritize review of the “existing activities” based on the proximity to the drinking water sources and the potential significance of the identified threat. The RMO/RMI will work through this priority list to ensure that a RMP is agreed to or established, where required, in accordance with the process set out in Section 3. A separate verification program may also be carried out to verify that potential threat activities identified in the Grand River Assessment Report are in fact a significant drinking water threat and require a RMP. Where these activities do not require a RMP, the Landowner/Operator will be advised accordingly.

2.7.2 Proposed Activities

Section 59 of the *CWA* sets out requirements for the RMO to review applications for planning approvals or changes to a building/use within the Policy Areas where the policies of the Grand River SPP may apply. The City of Guelph has updated the processes in place for approval of planning applications, Committee of Adjustment applications, and Building Permits to include an opportunity for the RMO to review and identify activities that may require a RMP. Details on this process are available on the City of Guelph web-site or from Planning Services, the Office of the Clerk, Building Services and the [*Source Water Protection Program Coordinator*](#).

The Source Water Protection Program Coordinator will review applications and assist the RMO in identifying activities that are either prohibited under Section 57 of the *CWA*, or for which a RMP is required. If a RMP is not required, the RMO will issue a **Notice – Section 59 (2)(a) – Section 57 and 58 do not apply** to document the findings of this review and to allow the application to proceed to approval. When an activity is proposed to which a RMP is required and sufficient understanding of the activity and the person who will be engaged in the activity is available, the RMO will negotiate a RMP following the process outlined in this guidance document (See Section 3). When the RMO and the Applicant have agreed to a RMP, the RMO will issue a **Notice – Section 59 (2) (b)** to document the agreement to a RMP. As per Section 59 of the *CWA*, an application for development under the Planning Act is not considered complete, and a Building Permit cannot be issued until the RMO has issued a Notice under Section 59 (2).

The Grand River SPP includes provisions to ensure that the process of obtaining approval for proposed activities is not overly onerous by not requiring review by the RMO and a Notice – Section 59 (2) for:

- 1) Activities that are part of a solely residential land use; and
- 2) Circumstances identified by the RMO where the activities in a development application or a building permit application will not likely result in a significant threat to drinking water sources.

“Solely residential” uses refer to a new or existing parcel of land where the existing or proposed use is only residential in nature. Any secondary or additional use on the parcel of land, such as, but not limited to, an accessory retail or institutional use, will require review under Section 59 of the *CWA*.

2.8 Who Prepares a Risk Management Plan?

The person who is, or who will be, engaged in the threat activity has the primary responsibility to work with the RMO/RMI for the City of Guelph to prepare, negotiate, and agree to a RMP. The City of Guelph has developed template formats for the RMP as set out in Section 4. The RMP templates can be prepared by the Landowner/Operator/Applicant, or another party retained on behalf of a Landowner/Operator/Applicant. In some cases, a technical consultant with expertise in the specific activities and risk management measures may provide value in preparing the RMP.

The RMO for the City of Guelph will work with Landowners/Operators as part of negotiations to determine an efficient path to achieve timely preparation of the required RMP.

2.9 Can I Be Exempt from Preparing a Risk Management Plan?

A RMP will not be required by the City of Guelph when:

- The observed/proposed activities are not considered to be a significant threat to drinking water based on the Table of Drinking Water Threats and circumstances consistent with the Grand River SPP policies; or
- A Section 60 *Risk Assessment* has been submitted and accepted by the RMO; or
- A Prescribed Instrument has been amended by the issuing agency to conform with the *CWA* and the policies of the Grand River SPP for management of activities regulated by Section 58; or.
- The Landowner/Operator will agree to stop, move or change the identified restricted activity(ies) such that it(they) ceases (cease) to be a significant threat to the municipal drinking water source within a time frame of less than one (1) year.

2.9.1 Existing or Proposed Activities are Not A Significant Threat

A RMP will not be required if review of existing or proposed activities does not confirm that the activity is a significant threat to drinking water. The policies of the Grand River SPP will still apply and an activity that is regulated by Section 58 cannot be carried out in an area where a policy that uses Section 58 applies unless a RMP is negotiated with, and agreed to, by the RMO.

2.9.2 Risk Assessments

Section 60 of *CWA* provides the opportunity for the person engaged in an activity that is a significant threat to drinking water to undertake a Risk Assessment to be exempt from negotiating a RMP. The Risk Assessment will be carried out as per the requirements of the *CWA* and associated regulations/guidance and submitted to the RMO.

Persons who are engaged in an activity that is identified as a potential significant threat to drinking water and who wish to proceed with preparing and submitting a Risk Assessment are encouraged to discuss this option with the City of Guelph RMO as part of the Initial Consultation. The RMO will confirm that there is potential for a Section 60 Risk Assessment to be successful and will provide appropriate guidance on what can be included in a Section 60 Risk Assessment in the City of Guelph and specify qualifications required by the author of the Section 60 Risk Assessment. The

RMO will request that the person engaged in the activity submit a written notice of their intention to carry out a Section 60 Risk Assessment prior to submission. Submission of a Section 60 Risk Assessment does not guarantee acceptance by the RMO and a RMP may still be required.

2.9.3 Prescribed Instruments

An activity can be exempt from a RMP if the RMO is satisfied that the activity will be adequately managed under the terms and conditions of a Prescribed Instrument. Details for such exemptions are provided in Section 61 of O.Reg. 287/07 of the *CWA*.

In this case, a Prescribed Instrument may be in place to manage another activity, and the terms and conditions of the Prescribed Instrument will also manage the activity for which a RMP would be required.

When a Prescribed Instrument is in place that will manage the activity for which a RMP is required, the person who is engaged in, or is proposed to engage in the activity may give the RMO a notice that identifies the Prescribed Instrument (Section 61 (2) O.Reg. 287/07) and shall, at the same time give the RMO a copy of the Prescribed Instrument identified in the notice. This notice is to identify where a Statement of Conformity has been provided by the Issuing Agency to demonstrate that the Prescribed Instrument has been updated to align with the objectives of the *CWA* and the relevant policies of the Grand River SPP.

When a Prescribed Instrument is not currently in place, the person who is engaged in, or is proposed to engage in, the activity may give the RMO a Notice that describes the actions that the person will take to obtain a Prescribed Instrument to regulate the restricted activity to conform with the policies set out in the Grand River SPP (Section 61 (7) O.Reg. 287/07).

2.9.4 Cessation of Activities

The policies in the Grand River SPP require a RMP to be negotiated for any activity to be managed under Section 58. The City of Guelph has identified that in some cases it may be possible to stop, move or change the activity such that it ceases to be a significant threat to drinking water. In this case there is merit to promote this action in place of a RMP if the Landowner/Operator is agreeable and able to implement the actions in a time frame that is adequate to protect the municipal drinking water sources. The City of Guelph also recognizes that effort will be required to negotiate, implement and enforce a RMP and that this effort can be reduced or eliminated entirely if the Landowner/Operator can agree to the option to stop, move or change the activity. Ultimately, this result will be the most effective method of protecting the groundwater resource.

For the purpose of considering the option to stop, move or change the activity to remove the significant threat as “an exemption where a RMP will not be required”, the City of Guelph proposes to use a time frame of one (1) year by which these actions are to be taken. In the event that a longer time period is required by the Landowner/Operator, the City of Guelph will request that a RMP be put in place to manage activities in the interim and to document the timing of the actions to be taken.. The RMP will need to be amended or terminated when the restricted activity is stopped, moved, or changed.

2.10 What Are Risk Management Measures?

Risk management measures are defined as a set of actions, procedures and policies aimed at the reducing a significant drinking water threat in accordance with Section 22 of the *CWA*. The MOECC has developed a *Risk Management Measures Catalog* (RMMC) as a web based resource tool that is intended to be used by owners, operators and/or RMOs in identifying risk management measures that are appropriate for the contaminant type (chemicals or pathogens), the water supply type (groundwater or surface water) and the “Management Target”. The eight “Management Targets” presented in the RMMC are:

- Reduction of Potential for Release of the Chemical of Concern at the Source
- Effective System Design for Reducing Contaminants
- Effective Operational Practice for Reducing Contamination
- Reduction in Potential Contamination Following a Spill/ Discharge/Release
- Characterization Tools for Identification of Contamination
- Education and Awareness
- Industrial Commercial & Institutional Water Efficiencies
- Water Supply Increase

The RMMC is available to assist in identifying detailed risk management measures that may be effective for identified activities and circumstances. The RMMC can be found at: <http://www.trcgauging.ca/RmmCatalogue/QualityBrowse.aspx>

Table 2 provides an overview of the Management Targets and some examples of typical high-level measures that would fulfil these objectives. The Management Targets are also considered in two categories that either focus on the prevention of release or provide responsive action in the event of a release. The first five Management Targets apply to activities that are water quality threats and the last two targets apply to activities that are water quantity threats. Education and awareness can be a management target for both water quantity and water quality threats.

TABLE 2 - RISK MANAGEMENT MEASURES

Management Target	Objective	Risk Management Measure Examples
Reduction of Potential for Release of the Chemical of Concern at the Outset	Prevention of Release	<ul style="list-style-type: none"> • Stop activity/circumstance. • Locate activities that are or would be significant threats outside of vulnerable areas. • Change the activity/circumstance to use alternate chemicals/processes that are not a significant threat to drinking water (i.e. substitution). • Reduce volumes of chemicals stored.
Effective System Design for Reducing Contaminants	Prevention of Release	<ul style="list-style-type: none"> • Utilize industry best management practices to design process, including practices that will prevent leakage and improve detection of leaks. • Update processes/equipment (to remove aging, outdated, or obsolete infrastructure). • Provide adequate containment in the event of a leak/release/spill. • Minimize contact/exposure of contaminants and rainwater/runoff. • Design measures for leak detection, monitoring, and emergency response. • Minimize opportunities for chemical release to the environment.
Effective Operational Practice for Reducing Contamination	Prevention of Release	<ul style="list-style-type: none"> • Utilize industry best management practices for process operation, including practices that will prevent leakage and improve detection of leaks/releases/spills. • Routine Inspections of system condition and follow-up Action with maintained documentation • Maintain and Monitor Inventory of Chemicals. • Spill Contingency Action and Notification Plan. • Implement measures for leak detection, monitoring, and emergency response. • Provide training and if necessary certification to operators (including response and notification training).
Characterization Tools for Identification of Contamination	Responsive Action	<ul style="list-style-type: none"> • Characterization of hydrogeologic setting, groundwater flow patterns, hydraulic connection to municipal water supply. • Delineation of contaminant extent in soil / groundwater. • Provide understanding/design information for responsive actions.

TABLE 2 - RISK MANAGEMENT MEASURES

Management Target	Objective	Risk Management Measure Examples
<p>Reduction in Potential Contamination Following a Spill/ Discharge/Release</p>	<p>Responsive Action</p>	<ul style="list-style-type: none"> • Locate point of release and estimate volume of release, type of chemical and timing. • Implement emergency response (containment and initial removal of contaminants) • Characterize groundwater flow system. • Physical removal of contaminants (if possible). • Use of in situ methods to promote removal of, or transformation of, contaminants (oxidation, biotransformation, etc.). • Installation of hydraulic containment or a barrier to prevent contaminants from moving toward the drinking water source. • Groundwater treatment.
<p>Education and Awareness</p>	<p>Prevention of Release</p>	<ul style="list-style-type: none"> • Promote training programs for operators and casual staff.
<p>Industrial Commercial & Institutional Water Efficiencies</p>	<p>Preservation of Water Quantity</p>	<ul style="list-style-type: none"> • To be updated with risk management measures for water quantity threats.
<p>Water Supply Increase</p>	<p>Preservation of Water Quantity</p>	<ul style="list-style-type: none"> • To be updated with risk management measures for water quantity threats.

2.11 How will Risk Management Measures be Assessed?

The City of Guelph recognizes that assessment of the adequacy of existing or proposed risk management measures will be at the discretion of the RMO based on professional judgement and experience. The RMO will therefore review and evaluate the conditions at each property and condition using the following key questions:

1. Can the activity be stopped, moved or changed?
2. Is the activity/circumstance occurring on a scale that has reasonable potential to affect the nearest municipal drinking water supplies?
3. Are risk management measures in place such that there is reasonable potential to prevent a release that would affect the nearest municipal drinking water supply?
4. Are additional risk management measures required?

The City of Guelph would like to see that risk management measures that address each of the Management Targets identified in Table 2 are in place and ideally that there are more than one measure in place from each management target class. This objective is consistent with the “*Multiple Barrier Approach*” in protecting the existing and future water sources, so that there is confidence that there is a back-up measure in place in the event that any single measure fails. The RMO will also give priority to risk management measures that are considered to have a high degree of potential effectiveness.

2.12 Are There Different Categories of Risk Management Plan?

The City of Guelph has developed a category classification system for use by the RMO in establishing the scope and requirements of the RMP and the measures required to meet the objectives of the RMP. The RMP categories are:

- Category 1** – Existing risk management measures are sufficient to ensure that the activity ceases to be or does not become a significant threat to drinking water sources.
- Category 2** – Risk management measures designed to reduce potential for contamination are required to ensure that the activity ceases to be or does not become a significant threat to drinking water sources.
- Category 3** – Risk management measures designed to reduce potential contamination following a spill/discharge are required to ensure that the activity ceases to be or does not become a significant threat to drinking water sources.

Tables 3, 4, and 5 provide additional information on the RMP Categories.

As a result of the principles used to develop the RMP Categories, RMPs required as a result of an application for a development approval or building permit will typically be Category 2. In the case where the application involves a change to or an expansion of an existing activity, it may be possible in some cases to extend the coverage for a Category 1 RMP to address the proposed changes. In the case where an application is to expand an existing activity, the RMO will work with the Landowner/Operator/Applicant to establish one RMP to address existing and proposed activities.

The RMP category will define the scope, content and format requirements of the RMP.

TABLE 3 - CATEGORY 1 - RISK MANAGEMENT PLAN

Principle for Classification	Decision Considerations	Minimum Risk Management Plan Content
<p>Existing risk management measures are sufficient to ensure that the activity and circumstances cease to be or do not become a significant drinking water threat</p>	<ul style="list-style-type: none"> • Document existing risk management measures • Assess and confirm that existing risk management measures are sufficient to ensure that the activity and circumstance ceases to be a significant drinking water threat. <p>Existing Risk Management Measures may be considered sufficient if:</p> <ul style="list-style-type: none"> ○ Activity and process conforms to current best management practices. ○ Chemical Quantities stored are relatively small ○ Chemical Quantities are handled and stored in manner such that there is a low potential for release to the environment. ○ Potential for releases to occur can be readily observed and acted upon (for example – a container is dropped and breaks during handling). ○ Containment or prevention measures are shown to have an adequate factor of safety and/or back-up system. ○ There is confidence that the activities and potential for release to the environment are well understood. <p>Existing Risk Management Measures may be considered insufficient if (Category 2 or 3 RMP required):</p> <ul style="list-style-type: none"> ○ More than one potential significant threat activity/circumstance is occurring and all activities/circumstances are not adequately addressed by existing risk management measures. ○ The activity/circumstance involves underground storage of fuel, organic solvents or dense non-aqueous phase liquids. ○ The activity involves direct application or release to the environment (through controlled application). ○ There is evidence that a spill/release has occurred in the past. 	<ul style="list-style-type: none"> • Property/Site Information • Vulnerable Area and Vulnerability Score. • Description of Significant Threat Activities • Documentation of existing risk management measures • Spill/Release – Notification and Response Plan • Documentation of Handling and Storage Practices • Plan for keeping records • Reporting Requirement • Requirement to Notify RMO on change of activity/ ownership • Agreement to RMP by the RMO

TABLE 4 - CATEGORY 2 - RISK MANAGEMENT PLAN

Principle for Classification	Decision Considerations	Minimum Risk Management Plan Content
<p>Risk management measures designed to reduce potential for contamination are required to ensure that the activity and circumstances cease to be or do not become a significant drinking water threat</p>	<ul style="list-style-type: none"> • Activity and circumstance can be stopped or moved to a location with a lower vulnerability score to eliminate potential to be significant drinking water threat (> 1 year required). • Activity and circumstance can be altered/changed such that it ceases to be a significant drinking water threat (i.e. reduce quantity of chemicals stored to be below trigger quantity or providing an alternative chemical to replace the chemical of concern) (> 1 year required). • Additional risk management measures can be implemented such that the activity and circumstance ceases to be a significant drinking water threat. <p>Additional risk management measures can:</p> <ul style="list-style-type: none"> ○ Provide a barrier or secondary containment that will prevent a release of chemicals. ○ Update the activity/circumstance to conform to current best management practices. ○ Change the process to reduce potential for chemical release. ○ Reduce the area of direct application. <p>Existing and additional risk management measures may be considered insufficient to provide confidence that the activity/circumstance will cease to be a significant threat if (Category 3 RMP required):</p> <ul style="list-style-type: none"> • More than one significant threat activity/circumstance is occurring and all activities/circumstances will not likely be addressed by existing and proposed risk management measures. • There is evidence (including potential evidence) that a release/spill has occurred or that the activity involves application of the chemicals of concern. • In the opinion of the RMO that additional site characterization and data collection is required to provide confidence that the potential threat to the drinking water source is well understood and that the proposed measures will be effective in reducing the potential threat. 	<ul style="list-style-type: none"> • Property/Site Information • Vulnerable Area and Vulnerability Score. • Description of Significant Threat Activities (Reference Numbers from Table of Drinking Water Threats) • Documentation of existing risk management measures • Description of additional risk management measures proposed • Monitoring Program (Optional at discretion of (RMO)) • Spill/Release – Notification and Response Plan • Documentation of Handling and Storage Practices • Plan for keeping records • Reporting Requirement • Requirement to Notify RMO on change of activity/ ownership • Agreement to RMP by the RMO
<p>Additional Minimal Requirements for a Category 2 RMP are shown in Blue Bold Text. Scope of other content may be greater than Category 1.</p>		

TABLE 5 - CATEGORY 3 - RISK MANAGEMENT PLAN

Principle for Classification	Decision Considerations	Minimum Risk Management Plan Content
<p>Risk management measures designed to reduce potential contamination following a spill/release or application of chemical of concern are required to ensure that the activity and circumstances cease to be or do not become a significant drinking water threat</p>	<ul style="list-style-type: none"> • Additional risk management measures to prevent release of chemicals to the environment required such that the activity/circumstances cease to be a significant drinking water threat (as per Category 2 evaluation). • Appropriate notifications and actions have been taken with respect to reporting a historical spill/release to the environment and the appropriate authorities (typically MOECC) are involved to oversee and direct actions. • The RMO may request additional assistance from the appropriate authorities (typically MOECC) to ensure that risk management measures have been employed to reduce the potential threat to the municipal water supply source. • The RMO may work with the Landowner/Operator to voluntarily take actions with respect to existing contaminants, such as: <ul style="list-style-type: none"> ○ Undertake site-specific characterization of groundwater conditions (groundwater flow patterns, and water quality) to improve understanding of potential to affect drinking water sources and to assess the value of other risk management measures (remedial response) . ○ Establish site-specific monitoring to confirm presence/absence of contaminants in groundwater at site and to trigger a response plan to protect municipal water sources. ○ Design and implement additional risk management measures to remove/control potential contaminants in groundwater and monitor performance. ○ Develop Site-specific plans or strategies to deal with multiple activities, large scales, and significant drinking water threats due to short time of travel to a municipal drinking water supply and/or high vulnerability scores. 	<ul style="list-style-type: none"> • Property/Site Information • Vulnerable Area and Vulnerability Score. • Description of Significant Threat Activities (Reference Numbers from Table of Drinking Water Threats) • Documentation of existing risk management measures • Description of additional risk management measures proposed • Site Characterization Plan (Optional) • Monitoring Program • Spill/Release – Notification and Response Plan • Documentation of Handling and Storage Practices • Plan for keeping records • Reporting Requirement • Requirement to Notify RMO on change of activity/ ownership • Agreement to RMP by the RMO
<p>Additional Minimal Requirements for a Category 3 RMP are shown in Blue Bold Text. Scope of other content may be greater than Category 2.</p>		

3.0 Risk Management Plan Development Process

The City of Guelph has developed a process to develop, agree to, implement, and enforce a RMP as illustrated in Figure 2. Figure 2 outlines the responsibilities for each step between the RMO and the Landowner/Operator.

The steps in the RMP Development Process are:

The steps in the process are:

- Step 1 – RMO Identifies that Source Protection Plan Policies that Require a RMP Apply
- Step 2 – RMO Consults with Landowner/Operator
- Step 3 – RMO Determines Whether a RMP is Required
- Step 4 – RMO Determines RMP Category and Requirements
- Step 5 – RMO and Landowner/Operator Negotiate/Prepare/Agree to RMP
- Step 6 – RMO Issues Notice of Acceptance of RMP
- Step 7 – Landowner/Operator Implements RMP.

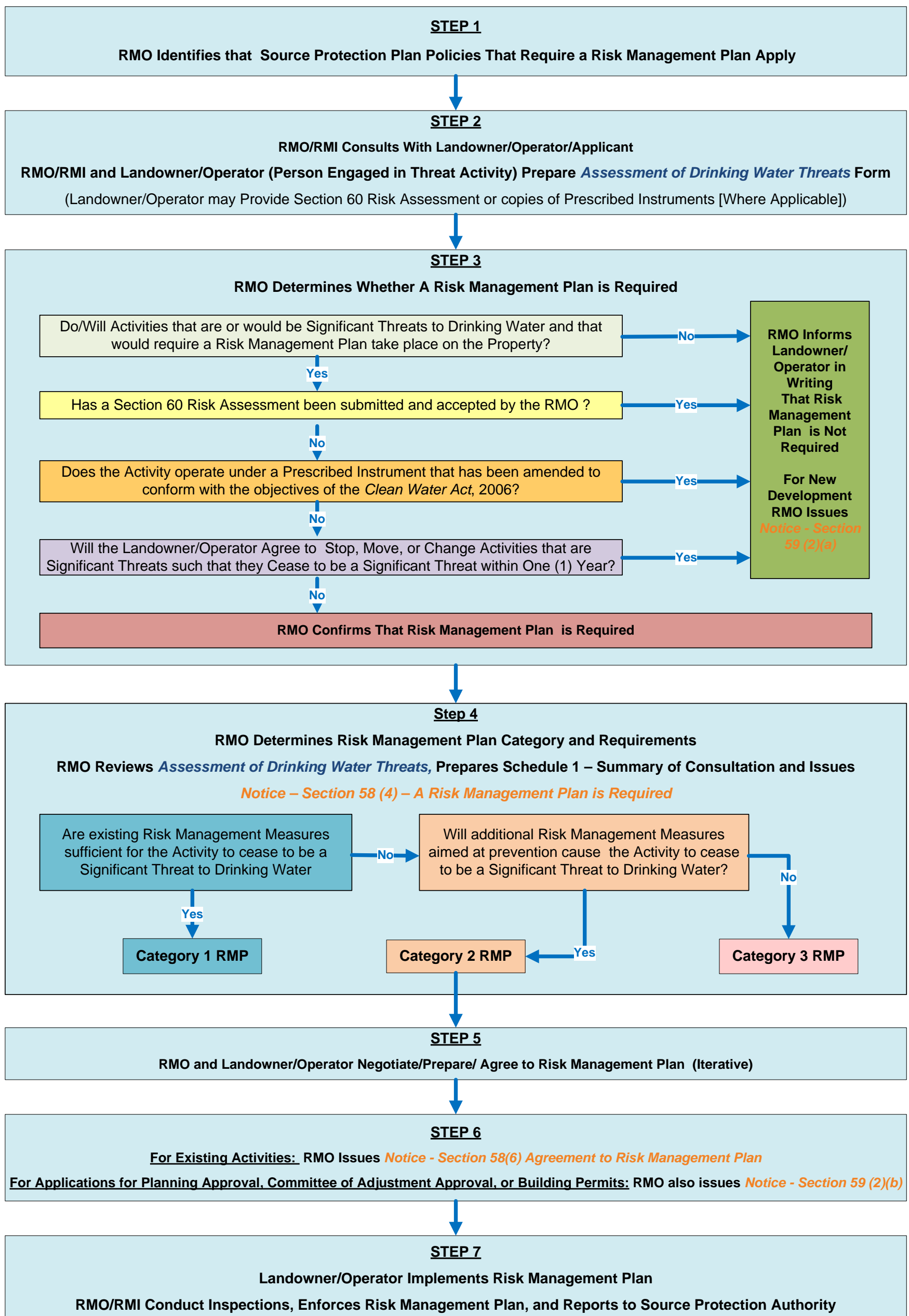
3.1 Step 1- RMO Identifies that Source Protection Plan Policies that Require a Risk Management Plan Apply

A RMP will be required for any activities that are identified to be managed by a RMP within the corresponding Policy Areas in the Grand River SPP.

The databases, maps and other information used to prepare the Grand River Assessment Report are the primary source of information available to the RMO to identify properties where an existing activity and its *circumstance* has potential to be a significant threat to drinking water and where an RMP may be required as dictated by policies in the Grand River SPP. The RMO will be working through the existing activities/properties identified in the Grand River Assessment Report to first confirm that the activity is taking place and where it is, to negotiate a RMP with the Landowner/Operator. A prioritized system has been established to ensure that the most significant activities are addressed quickly and effectively.

Landowners/Operators who may be engaged in activities that may require a RMP will receive a letter from the RMO to inform them that Section 58 policies may apply and that they will be expected to work with the RMO to confirm and put a RMP in place. Applicants for development approvals, or a building permit, will receive a similar letter as the outcome of the Section 59 Policy Applicability Review (See section 3.3).

Figure 2 - Risk Management Plan Development Process



3.2 Step 2- RMO Consults with Landowner/Operator

Consultation with the City of Guelph RMO is a mandatory component of the RMP development process. The objective of the consultation is to provide education to the Landowner/Operator regarding the process and to obtain site-specific information for use in decision making. Consultation will involve a two-step process:

- 1) Consultation between the Landowner/Operator and the RMO followed by,
- 2) Assessment of Drinking Water Threat Activities

The consultation will consist of a meeting with the City of Guelph RMO, and in some cases the RMI. Consultation may occur at the subject property or at the City of Guelph offices. Meeting at the subject property will provide the RMO/RMI an opportunity to observe conditions to appreciate activities taking place or proposed and to assist in decisions regarding the applicability of policies or on the content of a RMP. For meetings at the City of Guelph, the RMO/RMI will typically schedule a site visit to confirm that information conveyed by the Landowner/Operator is accurate.

The RMO/RMI will work with the Landowner/Operator to identify activities that are occurring, or are proposed, on the property that are subject to regulation under the Grand River SPP (regulated activities). The RMO/RMI will assist the Landowner/Operator in filling out a survey of existing activities using the *Assessment of Drinking Water Threat Activities* (See Appendix B). Where regulated activities are identified, the RMO/RMI will work with the Landowner/Operator to identify risk management measures that are in place and to discuss the potential effectiveness of these measures. This will include discussions of equipment, facilities, or actions that the Landowner/Operator may not recognize as a risk management measure. The RMO/RMI will also work with the Landowner/Operator to assess potential gaps that are considered to present a risk to the municipal drinking water sources that are to be addressed through the RMP.

The *Assessment of Drinking Water Threat Activities* is designed to be customized to individual property owners to reflect the activities that are occurring on individual properties. The Initial Screening of Prescribed Drinking Water Threats (Form 2) is intended to identify which of the detailed forms (2A through 2L are to be filled out for discussion with the RMO.

The *Assessment of Drinking Water Activities* form will be available in electronic format from the City of Guelph website or from the RMO.

3.3 Step 3 – RMO Determines Whether a Risk Management Plan is Required

Upon completion of the consultation and submission of the *Assessment of Drinking Water Threat Activities* form, the RMO will conduct a thorough review of available information to make decisions as to the requirement for a RMP (See Section 2.6).

When the RMO finds that a RMP is not required, the RMO will issue an *Information Letter – Risk Management Plan Not Required*. When a RMP is required, The RMO will prepare and issue the Landowner/Operator/Applicant a *Notice – Section 58 (4) Risk Management Plan Required* and proceed with Steps 4 through 7.

For an activity proposed as part of an application for development approval or a building permit, the RMO will advise the Applicant that a RMP is required and issue an **Information Letter – Risk Management Plan Required**. Upon receipt of this advice/Information Letter, the Applicant will work with the RMO to follow Steps 4 through 7 of this process to negotiate, prepare, agree to, and implement a RMP.

3.4 Step 4 – RMO Determines RMP Category and Requirements

When the RMO determines that a RMP is required, the RMO will inform the Landowner/Operator/Applicant with an opinion with respect to the adequacy of existing risk management measures, a decision on the Category of RMP that is required, and an outline of the expected content for the RMP.

3.5 Step 5 – RMO and Landowner/Operator Negotiate/Prepare/Agree To Risk Management Plan

The objective of this step is for the RMO is to reach agreement with the Landowner/Operator to put in place a mutually acceptable RMP that will reduce the threat to drinking water from the identified restricted activities such that the activity is no longer a significant threat to the municipal water supply. This objective is established by the Grand River SPP and Section 22.2 of the *CWA*.

The Landowner/Operator/Applicant will be expected to work in consultation with the RMO to develop a RMP that is acceptable to both parties. The RMO has powers under the *CWA* to issue notices and orders to enforce a RMP in the event that agreement on a RMP cannot be reached.

The negotiation process will result in the assembly of a draft RMP. Upon preparation of the draft RMP, the RMO and the Landowner/Operator/Applicant will agree upon a date, upon which they will finalize the draft RMP. Legal review may be required by either party.

The draft RMP Sections and RMP Schedules will be reviewed by the RMO and the Landowner/Operator/Applicant and revised until the RMP and the RMP Schedules can be agreed to by both parties. The RMO will negotiate with the Landowner/Operator/Applicant to agree to an RMP that:

- Is considered be effective to meet the overall objective to manage activities that are considered to be a significant threat to the municipal drinking water source;
- Is consistent and fair (relative to other RMPs for a similar activity);
- Is clear and enforceable; and
- Reflects the business interests of the Landowner/Operator while providing confidence that the overall objective will be achieved.

The approach that the RMO takes to RMP negotiations will vary for each individual situation. For example, a voluntary RMP negotiation may be more cooperative and result in a less formal process. A non-voluntary RMP negotiation may require a more formal process that involves use of Part IV powers available under the *CWA*. Negotiations are expected to involve components that are both voluntary and non-voluntary.

3.6 Step 6 – RMO Issues Notice of Agreement to Risk Management Plan

Upon acceptance of the RMP, the RMO shall issue a *Notice – Section 58 (6) – Agreement to Risk Management Plan* to the Landowner/Operator/Applicant along with a copy of the RMP.

3.7 Step 7 – Landowner/Operator Implements Risk Management Plan

The Landowner/Operator/Applicant will be responsible to implement the RMP on the effective date of the RMP.

The Landowner/Operator/Applicant will be responsible to implement the actions outlined in the RMP under the authority of the *CWA*, the Official Plan of the City of Guelph, and local by-laws. The RMP may specify a schedule for implementation of specific actions and requirements to report to the RMO/RMI upon completion of specific activities.

The RMO/RMI may schedule an inspection after an implementation date or after receipt of notices or reports from a Landowner/Operator/Applicant to confirm that the RMP is in place. Subsequent inspections will be scheduled on a regular frequency that correlates with the perceived risk/threat from the activities.

4.0 Risk Management Plan Content / Format

The *CWA* and associated regulations and guidance prepared by the MOECC provide direction on the expected content of a RMP. The City of Guelph has developed a format for RMP submissions that is intended to promote consistency, comply with required legislation, and present a reasonable amount of effort on behalf of both the RMO (and staff) and the Landowner/Operator.

The City of Guelph has developed a format for RMP submissions (Guelph RMP Template) that: is designed to address the recommended minimum content requirements; is intended to promote consistency, comply with required legislation; and is to share the effort to prepare the RMP between RMO (and staff) and the Landowner/Operator. The Guelph RMP Template is structured as an agreement with mandatory sections with site-specific details provided in a series of schedules. The Guelph RMP Template is provided in Appendix C.

The mandatory sections of the Guelph RMP Template include:

- ***RMP Section 1 – Property/Site and Landowner/Operator Information***
- ***RMP Section 2 – Source Protection Program Information***
- ***RMP Section 3 – Landowner/Operator Responsibilities***
- ***RMP Section 4 – Role of the Corporation of the City of Guelph***
- ***RMP Section 5 – Agreement to Risk Management Plan***

The RMP schedules that are to be prepared to document the detailed responsibilities of the Landowner/Operator include:

The details of each individual RMP will be attached to the core RMP document as a series of schedules that are referenced in the responsibilities section:

- ***RMP Schedule 1 – Summary of Consultation***
- ***RMP Schedule 2 – Site Activities and Existing Risk Management Measures***
- ***RMP Schedule 3 – Proposed Risk Management Measures***
- ***RMP Schedule 4 – Monitoring & Reporting Program***
- ***RMP Schedule 5 – Contingency and Emergency Response Plan***
- ***RMP Schedule 6 – Communications Plan***
- ***RMP Schedule 7 – Special Considerations.***

RMP Sections 1 to 5 of the Guelph RMP Template and RMP Schedule 1 are to be prepared by the City of Guelph RMO based on information to be provided by the Landowner/Operator and on information exchanged during mandatory consultation.

RMP Schedules 2 to 6 reflect mandatory risk management measures as required under the *CWA*. RMP Schedule 7 is optional and will be used to provide site-specific risk management measures or considerations that are not consistent with RMP Schedules 2 through 6. The RMP Template includes optional forms for each of RMP Schedules 2 – 6 that reflect different levels of detail/complexity that may be required in the RMP.

The responsibility for completing RMP Schedules 2 through 7 will be assigned by the RMO in the completed RMP Schedule 1. Table 6 outlines the optional template forms available for RMP Schedules 2 through 7. Form A typically represents a more simple option and in many cases indicates that a generic schedule is to be prepared by the RMO to indicate that this RMP Schedule is not required in this RMP. Form B has also been prepared to reflect a generic condition that typically does not consider site-specific conditions. Form C will be used for situations where more detailed information is required. The RMO will typically be responsible for preparing the RMP Schedules that utilize the “generic” forms. Input from the Landowner/Operator/Applicant will be sought for forms that involve site-specific considerations.

The City of Guelph will maintain current versions of the Guelph RMP Templates, RMP Schedules and the optional Forms to be used in preparing a RMP via the City of Guelph Website.

TABLE 6 - RMP Content Requirements

<i>RMO to select an RMP Category and highlight the schedule and form required based on site-specific information.</i>									
RMP Schedule	Form	Title	Initially to be prepared by		RMP Category				
			RMO	Owner/ Operator	Category 1	Category 2	Category 3		
1		Summary of Consultation	A	Site-Specific	X		X	X	X
2		Site Activities and Existing Risk Management Measures	A	Managed DNAPL Threat		X	X	X	
			B	Detailed Characterization		X		X	X
3		Additional Risk Management Measures Proposed	A	No Additional Risk Management Measures Proposed	X		X		
			B	Additional Risk Management Measures Proposed - Prevention		X		X	
			C	Additional Risk Management Measures Proposed – Prevention and Threat Reduction		X			X
4		Monitoring and Reporting Program	A	No Monitoring & Reporting	X		X	X	
			B	Generic Monitoring & Reporting	X		X	X	X
			C	Site-Specific Monitoring & Reporting		X		X	X
5		Contingency & Emergency Response Plan	A	No Contingency & Emergency Response Plan	X		X	X	
			B	Generic Contingency & Emergency Response Plan	X		X	X	X
			C	Site-Specific Contingency & Emergency Response Plan		X		X	X
6		Communications Plan	A	No Communications Plan	X		X		
			B	Generic Communications Plan	X		X	X	X
			C	Site-Specific Communications Plan		X		X	X
7		Special Considerations	A	No Special Considerations	X		X	X	X
			B	Site-Specific Special Considerations	X			X	X

5.0 Compliance and Enforcement

A RMP will be in force once it is agreed to by the City of Guelph RMO and the Landowner/Operator/Applicant. The Landowner/Operator/Applicant will be responsible for implementing and complying with the terms and conditions in the RMP. The City of Guelph RMO can utilize the powers under the *CWA* to enforce compliance. The Landowner/Operator/Applicant will have rights to seek amendments to the plans or to make appeals of Orders issued by the RMO to the Environmental Review Tribunal (ERT).

5.1 Amendments

A Landowner/Operator or the RMO/RMI may initiate actions to amend a RMP. Amendments will typically be requested by the Landowner/Operator to update for changes in property or business ownership to reflect changes in responsible party or parties, or when changes in an activity are considered to reduce the requirements for risk management measures. For example, if Landowner/Operator takes action to stop an activity associated with a significant drinking water threat, the RMP can be updated, or possibly terminated.

Amendment requests will typically fall into the following categories:

- Administrative amendments;
- Changes to activities;
- Changes to improve effectiveness of the RMP; or
- Changes to Grand River SPP Policies or Policy Areas.

5.1.1 Administrative Amendments

Administrative amendments to a RMP are required to update a RMP to reflect changes in responsible parties (property sale, business sale, etc.) or to correct non-technical errors identified in the RMP.

5.1.2 Changes to Activities

The RMP will require the Landowner/Operator to request an amendment to the RMP to address changes to activities on the property. This amendment is required to ensure that the previously agreed to risk management measures continue to be effective to ensure that the activity ceases to be, or does not become, a significant drinking water threat.

Changes to activities may also be identified during the course of an inspection by a RMO or RMI. In this case, the Inspection Report will direct the Landowner/Operator to seek an amendment of the RMP and provide a compliance date. The RMI may issue an **Order – Section 63 (1) – Contravention of Section 57 or 58** or an **Order – Section 63 (4) – Failure to Comply with RMP Provision** to seek an amendment to the RMP if an amendment is not agreed to by the compliance date.

In the event that an activity, that is considered to be a significant threat to drinking water, ceases to occur, the amendment to the RMP may result in a decision by the RMO that a RMP is not required. The RMO will issue an *Information Letter – Risk Management Plan Not Required* and terminate the previously agreed to RMP.

5.1.3 Changes to Improve Effectiveness of the Risk Management Plan

The RMO/RMI may seek an amendment to a RMP in the event that additional information gathered during inspections or monitoring associated with the RMP identifies that the in-place risk management measures are not being sufficiently effective for the activity to cease to be a significant drinking water threat. This situation would typically be identified during the course of an inspection and the Inspection Report will direct the Landowner/Operator to seek an amendment of the RMP and provide a compliance date. The RMI may issue an *Order – Section 63(1) – Contravention of Section 57 or 58* or an *Order – Section 63(4) – Failure to Comply with RMP Provision* to seek an amendment to the RMP if an amendment is not agreed to by the compliance date.

5.1.4 Changes to Source Protection Plan Policies or Policy Areas

Changes to the Grand River SPP policies or Policy Areas may result in a requirement to revisit and amend a RMP. The areas where policies apply are determined based on the delineation of vulnerable areas and vulnerability scores presented in the Grand River Assessment Report. These vulnerable areas and vulnerability scores may change in the future as new municipal water supply wells are brought on line, municipal water supply wells are decommissioned, or when new information is available to update vulnerability scores.

When changes to the Grand River SPP Policy Areas (Vulnerable Areas, Vulnerability Scores, Issue Contributing Areas) are identified in an update to the Grand River Assessment Report, the RMO/RMI will conduct a review of existing RMPs to identify situations where the applicable policies may have changed. The RMO will identify RMPs that may require amendments to include new policies or to identify where policy requirements have been removed. The RMO will then proceed to work with each Landowner/Operator to negotiate an appropriate amendment to the RMP. In the event that an activity is no longer considered to be a significant threat to drinking water, the amendment to the RMP may result in a decision by the RMO that a RMP is not required. The RMO will issue an *Information Letter – Risk Management Plan Not Required* and terminate the previously agreed to RMP. In some cases, the RMO/RMI may initiate an inspection and follow the approach in Section 5.8.2 to amend the RMP.

Updates to the Grand River Assessment Report and to the Grand River SPP are anticipated to provide policies and policy areas that deal with significant threats to water quantity. Existing RMPs will be reviewed to determine whether there is potential that an amendment to the RMP is required to comply with these policies. These situations will be addressed through an inspection and following the approach in Section 5.8.2 to amend the RMP.

5.2 Inspections

The City of Guelph will establish an inspection program to verify that the Landowner/Operator is complying with the RMP. Inspections will be carried out by a RMI who has completed the training required under the *CWA* and with relevant experience regarding the type of activities to be inspected. The inspections will:

- Confirm that activities occurring on-site are consistent with the RMP.
- Confirm that risk management measures as outlined in the RMP are in place and working effectively.
- Confirm that contingency and response plans, as outlined in the RMP, are in place, up to date, and working effectively.
- Confirm that education and training responsibilities, as outlined in the RMP, are in place.
- Confirm that records are being maintained as outlined in the RMP.
- Confirm that actions outlined in previous Orders have been taken.
- Identify any activities or hazards that may present a threat to the City of Guelph drinking water supply that are not effectively managed by the existing RMP.
- Identify any activities or situations that are not in compliance with the RMP and notify the Landowner/Operator. An order to comply and to demonstrate compliance may be required.

Inspections may either be scheduled or unscheduled.

Scheduled inspections will be coordinated with the Landowner/Operator in advance and will provide notice that an inspection is to be carried out. This type of inspection will typically ensure that responsible personnel are available and present to participate in the inspection. Unscheduled inspections will be carried out without notice to the Landowner/Operator. This will allow the RMI to confirm that day-to-day operations are in compliance with the RMP and that specific actions have not been undertaken to comply with an RMP specifically for the inspection.

Unscheduled inspections may be prompted by a history of non-compliance, reports of activities that do not comply, reported spills or uncontrolled releases. Unscheduled inspections may also be carried out for activities that are considered to present a greater threat to the municipal water supply, either based on the activity or distance from the nearest municipal well.

A **Record of Inspection** will be provided to the Landowner/Operator within 10 business days following an inspection. The **Record of Inspection** will document the date, time and duration of inspection activities, identify individuals contacted, and identify non-compliance items, where observed.

5.3 Enforcement

The RMP is designed to be a negotiated instrument that is developed cooperatively between the Landowner/Operator and the RMO such that activities cease to be or do not become significant threats to drinking water. The CWA provides powers to municipalities that the RMO/RMI can use to enforce compliance with an agreed upon RMP. The following powers will be available to the City of Guelph for use when cooperative efforts to agree to and maintain compliance with a RMP fail.

5.3.1 Part IV Powers

Part IV of the *CWA* provides municipalities (RMO/RMI) with powers to take actions to put a RMP in place, or to enforce compliance with an agreed upon RMP. These powers include:

- Authority to enter property, without a warrant, for the purpose of conducting an inspection, provided reasonable notice has been given to the occupant of the property.

- Obtain warrants to enter property, for the purpose of conducting an inspection, when entrance is not granted by the occupant of the property.
- Collect samples, conduct tests and measurements during the course of an inspection. This may include coordinating excavations or borehole investigations.
- Require operation or use of a piece of equipment that is part of the business
- Examine, record or copy documents or data, or require documents or data to be produced.
- Remove documents or data (all to be returned) (A receipt is to be provided)
- Require any person to answer reasonable inquiries related to the purpose of the inspection.

5.3.2 Non-Compliance Actions

In the event that non-compliance with the terms of a RMP is identified during the inspection, the RMI will issue written notification of non-compliance and request that the Landowner/Operator voluntarily take action to bring the RMP into compliance by a specified date. If the terms of the RMP are not in compliance by the specified date, the RMI may issue an Order to the Landowner/Operator to take specified actions by a specified time. Failure to comply with an Order may result in fines or charges of an offence under Part IV of the *CWA*.

5.3.3 Notices

Part IV of the *CWA* allows an RMO/RMI to issue Notices under the following circumstances:

- To require an RMP to be prepared/negotiated/agreed upon (Section 58 (4)).
- To document agreement on a RMP (Section 58 (6)).
- To notify a Landowner/Operator of a deadline to establish an agreement on a RMP and the intent of the RMO to establish a RMP (Section 58 (7)).
- To notify an Applicant for planning approvals or building permits that Section 57 and 58 do not apply (Section 59 (2)(a)).
- To notify an Applicant for planning approvals or building permits that a RMP has been negotiated (Section 59 (2)(b)).
- To notify a Landowner/Operator of the intent to enter property (Section 62 (6)).
- To notify a Landowner/Operator of the intent to cause things to be done (Section 64 (2)).
- To notify a Landowner/Operator of the reason for issuance of an Order (Section 70(1)).
- To notify a Landowner /Operator that the RMO refuses to establish a RMP and to initiate an appeal for a hearing by the ERT (Section 70 (3)).
- To notify a Landowner/Operator that incomplete information has been provided regarding a Prescribed Instrument (Section 61 (6) O.Reg. 287/07).
- To notify a Landowner/Operator that a Statement of Conformity with a Prescribed Instrument is due in support of Section 61 exclusion (Section 61 (6) O.Reg. 287/07).
- To notify the Landowner/Operator that a Prescribed Instrument and Statement of Conformity is to be obtained (Section 61 (8) O.Reg. 287/07).

- To notify a Landowner/Operator of an extension to the date that a Prescribed Instrument is due (Section 61 (9) O.Reg. 287/07).
- To notify the Landowner/Operator of termination of an extension to the date that a Prescribed Instrument is due (Section 61 (10) O.Reg. 287/07).

5.3.4 Orders

Part IV of the *CWA* allows an RMO/RMI to issue Orders to a Landowner/Operator under the following circumstances:

- To establish a RMP when agreement cannot be reached with the Landowner/Operator (Section 58 (10)).
- To establish a RMP at the request of the Landowner/Operator (Section 58 (12))
- To prepare a report describing the manner in which an activity that is a significant drinking water threat is being engaged (Section 61(1))¹.
- To comply with Section 57 (1) or Section 58 (1) of the CWA (Section 63 (1))
- To enforce conditions of an existing RMP (with a time established for compliance) (Section 63 (1) and 63 (4)).
- To provide temporary relief from sections 57(1) and 58(1) of the CWA (Section 63 (3)).
- To comply with directions to be specified in an enforcement order by a date specified in the order (Section 63 (4)).
- To seek out an amendment to the RMP (Section 63 (4)).
- To report to the RMO/RMI on compliance with an order (Section 63 (4)).
- To cause things to be done (Section 64).
- To pay to have things done (Section 67).
- To permit access for things to be done (Section 80).

All orders will contain a statement to notify the Landowner/Operator of their rights to appeal the Order to the ERT.

5.3.5 Penalties

Failure to comply with an Order issued by an RMO/RMI can result in a charge of one of the following offences to Part IV of the *CWA*:

- I. Failure to comply with Section 57 (prohibited activities)
- II. Failing to establish a RMP when required (Section 58).
- III. Failure to comply with an Enforcement Order (Section 63).

¹ A RMO may order an Owner/Operator to provide a report that describes the manner in which the activity is being conducted (or proposed to be conducted). The order may ask for details of Risk Management Measures that are being (or proposed to be) taken for the protection of drinking water sources. This can occur when a complex set of activities/processes are taking place or are proposed to take place on the property.

- IV. Failure to comply with RMO Order to prepare a disclosure report (Section 61)
- V. Obstruction or submission of false information

Charges can be brought by the RMO/RMI after an investigation to confirm that there is evidence to demonstrate that an offence has been committed and that the Landowner/Operator has not taken steps to comply with issued Orders.

Charges will be dealt with through the Ontario Provincial Offences system. Conviction may result in penalties to be imposed by a Judge. Individuals may be fined up to \$25,000/day as long as the offence continues and up to \$50,000/day for subsequent offences. Corporations may be fined up to \$50,000/day as long as the offence continues and up to \$100,000/day for subsequent offences. The court may order the person to take necessary actions to address an adverse effect on drinking water sources.

5.4 Appeals

The Landowner/Operator has the right to appeal an Order issued by the RMO/RMI by requesting a hearing by an ERT. To do so, the Landowner/Operator must serve written notice of their requirement for a hearing to the ERT and the RMO/RMI within 60 days after an Order is issued by the RMO/RMI. The written notice must:

- Identify parts of the order that are opposed.
- Outline why the Landowner/Operator objects to the order
- Describe the grounds upon which the Landowner/Operator intends to rely at the hearing.

The RMO may also provide notice of a requirement for a hearing by the ERT for situations in which the RMO refuses to establish or amend a RMP. The written notice must include the reasons for the refusal. This provision is expected to be used only in rare cases where an impartial opinion is required to assist in resolving disputes that prevent negotiation of a RMP.

The ERT will make a decision either to confirm the Order, alter an Order or to revoke an Order. The decision made by the ERT is final and there is no right of further appeal. The ERT may make an order for costs against either party, where the conduct of the party has been unreasonable, frivolous or vexatious or the party has acted in bad faith.

5.5 Records and Public Accessibility

Section 54(1), Part IV of the *CWA* outlines record keeping requirements as part of the Source Protection Planning Process. The City of Guelph must retain a copy of the following for documents for 15 years:

- Every RMP (and any amendments) agreed to or established
- Every Notice or Order issued under Part IV of the CWA.
- Every risk assessment submitted and every acceptance of a risk assessment by the RMO.
- Any other record required for administering Part IV of the CWA.

In addition, every Notice, Order, acceptance of a Risk Assessment and RMP must be made available to the public (as per Section 54(3) of the *CWA*).

APPENDICES

Appendix A

Glossary of Terms

Activity: One or a series of related processes, natural or anthropogenic that occur within a geographic area and may be related to a particular land use.

Best Management Practice: A best management practice (BMP) is a method or technique that has consistently shown results superior to those achieved with other means, and that is used as a benchmark. BMPs are used in a number of business and industrial sectors.

Circumstance: A specific condition outlined in Column 2 of the Table of Drinking Water Threats for which an activity is considered to be a threat to drinking water for a given vulnerability score and vulnerable area.

Dense non-aqueous phase liquids (DNAPLs): A dense non-aqueous phase liquid (DNAPL) is a heavier-than water liquid that is only slightly soluble in water. The Table of Drinking Water Threats specifically identifies the following chemicals or chemical classes as having potential to be significant threats to drinking water: 1,4 Dioxane, perchloroethylene or tetrachloroethylene, trichloroethylene, vinyl chloride and polycyclic aromatic hydrocarbons (PAH). The first four chemicals are common chlorinated solvents, often used in industrial processes and dry cleaning; PAH is found in a variety of liquid substances and fuels including creosote, coal tar, and some crude oils. Oils that contain polychlorinated biphenyls (PCB) are considered to be DNAPL contaminants but are not included in the Table of Drinking Water Threats due to the relatively low solubility.

Drinking water issue: A substantiated (through scientific means) condition relating to the quality of water that interferes, or is anticipated to interfere, with the use of a drinking water source by a municipal residential system or designated system (Technical Rules: Assessment Report (MOECC, 2009), Rules 114 to 117). Typically reflects a parameter whose concentration is either greater than the established drinking water standard or where a trend of the parameter concentration is increasing with potential to be greater than the drinking water standard.

Drinking water threat: A drinking water threat refers to an activity or condition that adversely affects or could adversely affect the quality or quantity of any water that is or may be used as a source of municipal drinking water.

Grand River Source Protection Plan: The Grand River Source Protection Plan describes the Grand River watershed, identifies the vulnerable areas related to drinking water sources, identifies the types and numbers of significant threats to water quality, and outlines the policies and programs to manage activities such that they cease to be or do not become significant.

Issue Contributing Area: The area within a vulnerable area where activities, conditions that result from past activities, and naturally occurring conditions may contribute to the parameter or pathogen (Technical Rules: Assessment Report (MOECC, 2009), Rule 115(3)).

Landowner/Operator: The person who is, or will be engaged in an activity that requires a Risk Management Plan and who has the authority to agree to a Risk Management plan for an identified activity, land area or business. An applicant for a planning approval, Committee of Adjustments approval, or a Building Permit would be considered as a Landowner/Operator.

Multiple Barrier Approach: A Multiple Barrier Approach was recommended by Justice Dennis O'Connor for the prevention of drinking water contamination. The primary barriers were recommended to be:

- Protection at the source (via source protection plans/*CWA*);
- Safe Water treatment systems (*Safe Drinking Water Act*);
- Monitoring and testing (at source, and in distributed water – *Safe Drinking Water Act*)
- Training and licensing (*Safe Drinking Water Act*);
- Inspection and enforcement (*Safe Drinking Water Act*).

The philosophy of the multiple barrier approach is an effective method to ensure that RMPs will be effective to reducing the potential threat presented by an activity that is regulated by source protection plan policy.

Negotiated Instrument: A Risk Management Plan (RMP) is defined as a negotiated instrument. Once agreed upon by the two parties, a RMP is a legally binding document. Persons who conduct activities that are in violation of a RMP are subject to fines.

Notice: A notice is a tool for communication and engagement. It encourages those potentially affected to review the applicable policies and make them aware of the potential obligations.

Notice – Section 58 (6) – Agreement to a Risk Management Plan: A notice issued by the Risk Management Official to document the agreement to a Risk Management Plan as per Section 58(6) of the *CWA*.

Notice – Section 59 (2): A notice issued by the Risk Management Official to communicate the findings on the review of the applicability of Grand River SPP policies to which Section 59 of the *CWA* applies for proposed activities. A *Notice – Section 59 (2)(a) – Section 57 and 58 Do Not Apply* will document that Grand River SPP policies do not apply to the property. A *Notice – Section 59 (2)(b)*.

Orders: An order allows the Risk Management Official and/or Risk Management Inspector to deal with non-compliance in a timely and effective manner. Orders can be issues to a person, corporation, government or a receiver/trustee in bankruptcy.

Policy Area: The area to which source protection plan policies apply. A Policy Area is typically a vulnerable area with a defined vulnerability score, and/or an Issue Contributing Area.

Prescribed Instrument: Prescribed instruments are documents issued by the provincial government, and allow an instrument holder to conduct actions authorized under the respective legislation. Instruments contain specific terms and conditions for which an activity is undertaken.

- Prescribed Instruments under the Clean Water Act include:
- Ministry of the Environment and Climate Change (MOECC) – Environmental Compliance Approvals, Municipal Drinking Water Licence and Drinking Water Works Permit, Permits to Take Water, Pesticide Permits, Renewable Energy Approval
- Ministry of Natural Resources and Forestry (MNRF) – Aggregate Instruments
- Ministry of Agriculture, Food and Rural Affairs (OMAFRA) – Nutrient Management Instruments

Risk Management Measures: A set of actions, procedures and policies aimed at the reducing a significant drinking water threat in accordance with Section 22 of the Clean Water Act.

Risk Management Measures Catalogue: The MOECC has developed a set of Risk Management Measures that can be selected to manage a significant drinking water threat. The Risk Management Measures Catalogue is one tool that will be used by RMOs to select appropriate risk management measures that are considered appropriate for the activity and circumstances taking place.

Risk Management Inspector (RMI): Risk Management Inspector’s responsibilities will include conducting inspections, enforcing the RMPs, and ensuring compliance with Part IV of the Clean Water Act. The RMI is a City of Guelph employee, who has been appointed by Council and has the appropriate training and qualifications, under the Clean Water Act.

Risk Management Official (RMO): Risk Management Official’s responsibilities will include administering and enforcing Part IV policies set out in the Source Protection Plan and negotiating or establishing RMPs. The RMO is a City of Guelph employee, who has been appointed by Council and has the appropriate training and qualifications, under the Clean Water Act.

Risk Management Plan (RMP): A RMP is a legally binding document that is developed with the person engaged in the activity in consultation with the City of Guelph’s Risk Management Official (RMO) to ensure that all significant drinking water threats on the property are managed in such a way so that they cease to be or do not become a threat to the City of Guelph’s existing and future municipal drinking water supply.

Significant Drinking Water Threat: A drinking water threat refers to an activity or condition that adversely affects or could adversely affect the quality or quantity of any water that is or may be used as a source of drinking water. Significant Drinking Water Threats pose the greatest risk to drinking water and must be managed in accordance with the Clean Water Act.

Source Protection Areas and Regions (SPAs and SPRs): Each Source Protection Plan will focus on a source protection area that represents a watershed. Source protection areas are initially established using the existing 36 Conservation Authority boundaries as outlined under the Conservation Authorities Act. For administrative efficiency the 36 source protection areas are grouped together to form larger Source Protection Regions. The MOECC has created 11 Source Protection Regions created through a Minister’s regulation. There are 8 remaining source protection areas that are not be grouped together, for a total of nineteen regions and areas.

Source Protection Committees (SPCs): The Source Protection Committee's role is to guide the collaborative process that will identify the sources of drinking water, the threats to water quality and water supplies, and propose actions that can be taken to protect municipal drinking water supplies. Members of the Committee are represented by municipalities, Conservation Authorities, farmers, businesses, industries, and residents.

Source Protection Plan (SPP): The Source Protection Plan outlines the various policies that will be used to manage the significant drinking water threats. The SPPs are locally developed under the guidance and direction of the Source Protection Committee.

Source Water Protection Program Coordinator: A position established in the City of Guelph with the responsibility to conduct initial review of applications for planning and development approvals or building permits to identify whether activities proposed are restricted under Section 59 of the *CWA*. The Source Water Protection Program Coordinator will work with applicants, Landowners and Operators to fill in the Section 59 Policy Applicability Review forms and will assist the RMO in preparing draft Section 59 notices for final review and issuance by the RMO.

Vulnerable area: There are four types of vulnerable areas as defined in the Source Protection program within which an activity or a condition may be identified in the assessment report and may require action to reduce a threat to drinking water. Vulnerable areas include:

- Surface Water Intake Protection Zones (IPZs);
- Wellhead Protection Areas (WHPAs);
- Significant Groundwater Recharge Areas (SGRAs); and
- Highly Vulnerable Aquifers (HVAs).

Surface Water Intake Protection Zone (or IPZ): An area that is related to surface water intake for a municipal water supply and within which it is desirable to regulate or monitor drinking water threats (Also Intake Protection Zone).

Wellhead Protection Area (or WHPA): An area that is related to a wellhead for a municipal water supply and within which it is desirable to regulate or monitor drinking water threats. The WHPA are typically defined in four (4) zones as follows:

- WHPA-A – Distance within 100 m of the municipal well supply.
- WHPA-B – Distance within a calculated 2-year time-of-travel to a municipal well supply.
- WHPA-C – Distance within a calculated 5-year time-of-travel to a municipal well supply.
- WHPA-D – Distance within a calculated 25 year time-of-travel to a municipal well supply.

Significant Groundwater Recharge Area (or SGRA): An area within which it is desirable to regulate or monitor drinking water threats that may affect the recharge of an aquifer.

Highly Vulnerable Aquifer (or HVA): An aquifer on which external forces have, or are likely to have, a significant adverse effect, and includes the land above the aquifer.

Vulnerability Rating: A Vulnerability Rating of High, Medium, or Low has been determined for the City of Guelph. The Vulnerability Rating is determined by a science based approach that considers soil type and thickness and the depth to the water table or bedrock.

Vulnerability Score: Every property in the City of Guelph has a Vulnerability Score. The score ranges from 4 to 10 with 10 being the most vulnerable. The vulnerability score has been calculated using a science based approach, considering soils, depth to the water table and proximity to municipal drinking water sources.

APPENDIX B

Assessment of Drinking Water Threat Activities

Assessment of Drinking Water Threat Activities

Purpose:

This form has been prepared by the City of Guelph Risk Management Official (RMO) for use in consultation with a person(s) who may be engaged in an activity that is identified as a potential significant threat to drinking water in an area where policies in the Grand River Source Protection Plan (Grand River Source Protection Authority, 2015) require management of the activity by a RMP.

Significant threats to drinking water are defined under *The Clean Water Act, 2006* and the detailed circumstances presented in the Table of Drinking Water Threats (Ministry of the Environment and Climate Change (MOECC, 2009). For the purpose of this form the person who is engaged in a significant threat activity will be referred to as the “Landowner/Operator”.

This form will be used by the RMO to:

- Confirm that activities associated with the property are or are not a Significant Threat to Drinking Water under *The Clean Water Act, 2006*.
- Evaluate the effectiveness of existing “risk management measures” in reducing the potential for the activities to be a Significant Threat to Drinking Water.
- Identify the risk management measures required to ensure that the identified activities cease to be or do not become significant threats to drinking water in the City of Guelph.

The ***Assessment of Drinking Water Threat Activities*** form has been designed to be prepared by the RMO, or a Risk Management Inspector (RMI) in consultation with the Landowner/Operator and also to provide a record for use in field verification of the existing activities by the RMO/RMI. The RMO/RMI will make decisions following consultation, site inspection (where required), and review of other relevant information provided by the Landowner/Operator.

Following consultation, the RMO will provide the Landowner/Operator with a ***completed Schedule 1 - Summary of Consultation***. Schedule 1 will provide:

- A decision as to whether a RMP is required;
- Classification of the type of RMP required;
- A review of existing risk management measures;
- Identification of additional risk management measures to be included in the RMP.

Instructions – Assessment of Drinking Water Threat Activities

- 1) Provide information on property, land use, and history (Form 1).
- 2) Fill out Form 2 – Initial Screening of Prescribed Drinking Water Threats
- 3) Fill out Detailed Threat Evaluations (Forms 2A to 2K) as indicated by the responses to Form 2.
- 4) If at least one answer to Form 2 is “Yes” fill out Form 2L to describe preferential pathways to the subsurface that may affect the assigned vulnerability rating for the property.
- 5) If the answers to each item in Form 2 are “No”, the RMO will review the land use, site activities, and conduct an initial site visit to verify information presented on the ***Assessment of Drinking Water Threat Activities*** form.
- 6) The RMO will supplement and verify information provided on Forms 2A to 2L as part of an initial site visit.
- 7) The RMO will prepare Form 3 and compile the completed Assessment of Drinking Water Threat Activities forms, verify information, and maintain this information as a record of the consultation, existing activities, and existing risk management measures.

If the RMO determines from review of all available information that the existing or proposed activities are not a significant threat to municipal drinking water supplies in the City of Guelph, the RMP will issue an ***Information Letter – Risk Management Plan Not Required***.

If the RMO determines that a RMP is required, the RMO will issue a ***Notice – Section 58 (4) A RMP is Required***. The RMO will then proceed to negotiate with a RMP with the Person engaged in the activity. In the event that the Landowner and the person(s) engaged in the activity are not the same, the RMO will negotiate the RMP with the person engaged in the activity, who will then be responsible for implementation of, and compliance with the agreed upon RMP. In some cases, the Landowner may wish to be included in the development and negotiation of the RMP.

The 21 activities that are presented in Form 1 are defined as Prescribed Drinking Water Threats as per O.Reg. 287/07 made under *The Clean Water Act, 2006*. More detail describing these activities and the circumstances under which they are considered to be significant drinking water threats is available from the Tables of Drinking Water Threats (MOECC, 2009). Additional information on identification of drinking water threats in the City of Guelph is available from the Approved Assessment Report – Grand River Source Protection Area, Grand River Source Protection Authority, 2015.

Assessment of Drinking Water Threat Activities

Form 1 – Landowner/Operator Information			
1-1	Facility/Business Name:		
1-2	Property Address:		
1-3	Contact Address:		
1-4	Assessment Roll Number:		
1-5	Name of Facility Owner/ Operator:		
	Contact Information: Telephone: Fax: E-Mail:		
1-6	Name of Landowner: (If Different)		
	Contact Information: Telephone: Fax: E-Mail:		
1-7	What is the land use?:	<input type="checkbox"/> Low Density Residential (single detached and semi-detached)	<input type="checkbox"/> High Density Residential (Including townhouses and apartments)
		<input type="checkbox"/> Commercial – Mixed Use (including home businesses)	<input type="checkbox"/> Commercial/ Institutional – Office
		<input type="checkbox"/> Commercial - Retail	<input type="checkbox"/> Commercial – Food Service
		<input type="checkbox"/> Commercial – Warehousing	<input type="checkbox"/> Institutional
		<input type="checkbox"/> Industrial	<input type="checkbox"/> Agricultural
		<input type="checkbox"/> Parks/Parkettes	<input type="checkbox"/> Conservation lands
		<input type="checkbox"/> Roads/Walkways/ Parking Areas	<input type="checkbox"/> Vacant/ Undeveloped
1-8	When was the property developed?:		
1-9	When did the current land use start on the property?:		
1-10	How many years in current operation/ownership?:		
1-11	Describe history of property: (past land uses, owners, etc., attach additional information if necessary)		

Assessment of Drinking Water Threat Activities

Form 2 – Initial Screening of Prescribed Threat Activities						
Do any of the following Activities take place on the property?		No	Yes	Not Sure	Confirmed by RMO/ RMI	If "Yes" Fill Out Detailed Threat Evaluation Form #
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the <i>Environmental Protection Act</i> . (See Appendix)					2A
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage.					2B
3	The application of agricultural source material to land.					2C
4	The storage of agricultural source material.					2C
5	The management of agricultural source material.					2C
6	The application of non-agricultural source material to land.					2D
7	The handling and storage of non-agricultural source material.					2D
8	The application of commercial fertilizer to land.					2E
9	The handling and storage of commercial fertilizer.					2E
10	The application of pesticide to land.					2F
11	The handling and storage of pesticide.					2F
12	The application of road salt.					2G
13	The handling and storage of road salt.					2G
14	The storage of snow.					2G
15	The handling and storage of fuel.					2H
16	The handling and storage of a dense non-aqueous phase liquid.					2I
17	The handling and storage of an organic solvent.					2J
18	The management of runoff that contains chemicals used in the de-icing of aircraft.					See RMO
19	An activity that takes water from an aquifer or a surface water body without returning the water taken to the same aquifer or surface water body.					2K
20	An activity that reduces the recharge of an aquifer.					2K
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard.					2C
	Is there potential for a Transport Pathway					2L

Assessment of Drinking Water Threat Activities

Form 2A - Detailed Threat Evaluation – Waste Disposal Site						Confirmed by RMO/RMI		
1	Is the property registered through Ontario's Hazardous Waste Information Network (HWIN)? <i>[If yes, please provide HWIN Reference Number, otherwise No]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
2	Is the property registered as a Waste Receiver through the Ontario Ministry of the Environment and Climate Change (MOECC)? <i>[If yes, please provide Waste Receiver Number, otherwise No]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
3	Does the property have an Ontario MOECC Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) for waste storage or waste disposal? <i>[Y/N]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
	a)	If the property has a MOECC C of A or ECA– please provide Reference Number & Expiry Dates:						
	b)	If the property has a MOECC C of A or ECA – please indicate C of A or ECA Type (e.g. Hazardous Waste storage):						
				Petroleum Refining Waste	Hazardous Waste or Liquid Industrial Waste	Municipal Waste	Industrial or Commercial Waste	Verified by RMO/RMI
4	Identify the types of waste disposed : <i>(Check all that apply):</i>							
5	Estimate area of waste storage	< 1 Hectare						
		1 -10 Hectares						
		>10 Hectares						
6	Can waste disposal activities be stopped, moved or changed?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
7	Are storage area(s) for waste disposal clearly identified?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
8	Is there secondary containment for stored waste?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
9	Is the property used to store or dispose of Polychlorinated Biphenyl (PCB) waste?: <i>[If yes, provide details to RMO]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
10	Are any other liquid wastes stored on the property <i>[If Yes, provide documentation to RMO for review]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
11	Is there a leak detection monitoring system?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
12	Have liquid waste products or leachate effluents leaked or infiltrated into the subsurface?: <i>[If Yes, provide documentation to RMO for review]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
13	Is there a monitoring network in place?: <i>[If Yes, provide documentation to RMO for review]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			
14	Is there knowledge of waste contaminants in groundwater outside the property boundary? <i>[If Yes, provide documentation to RMO for review]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No			

Assessment of Drinking Water Threat Activities

Form 2A - Detailed Threat Evaluation – Waste Disposal Site			Confirmed by RMO/ RMI
15	Have measures been taken to remove/contain waste contaminants from the subsurface?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	Is there a Health and Safety Program in place?: (i.e. MSDS sheets, labels on containers, WHMIS training, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18	Is there training and certification for employees? (i.e. operational training, emergency response, WHMIS, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2B - Detailed Threat Evaluation – Sewage Storage and Handling			
Sanitary Sewage Systems			Confirmed by RMO/RMI
1	Is the property serviced by municipal sanitary sewers?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
2	Does the property have a septic system, outhouse, earth-pit privy, privy vault, greywater system, cesspool, or leaching bed system (including systems that are no longer actively used)?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
3	Does the property have a holding tank that is used to store sewage to be hauled away?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
4	Can sanitary sewage storage and handling activities be stopped, moved or changed?		<input type="checkbox"/> Yes <input type="checkbox"/> No
5	Does the sewage system on the property service more than one residence/building/property?		<input type="checkbox"/> Yes <input type="checkbox"/> No
6	Is the capacity of the sewage system greater than 10,000 L/day?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
	a)	If Yes, Is there a Certificate of Approval (C of A) or Environmental Compliance Approval (ECA) to operate?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	b)	If the property has a C of A or ECA – please provide MOECC Reference Number: & Expiry Date:	
Stormwater Management Facilities			Verified by RMO/RMI
7	Is there a stormwater management facility on the property?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
	a)	If Yes, Is there a C of A or ECA to operate?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	b)	If the property has a C of A or ECA – please provide MOECC Reference Number & Expiry Date :	
8	Can stormwater management activities be stopped, moved or changed?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
9	Are there systems in place to promote infiltration of excess water from precipitation events, such as permeable pavements, infiltration galleries, oil-grit separators, etc.?:		<input type="checkbox"/> Yes <input type="checkbox"/> No

Assessment of Drinking Water Threat Activities

Form 2C - Detailed Threat Evaluation – Agricultural Activities				
Agricultural Source Material (ASM) refers to biosolids and liquid generated from agricultural manure				Confirmed by RMO/RMI
1	Is ASM stored on the property?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Can ASM activities be stopped, moved or changed?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	How much nitrogen is estimated within the stored ASM?: <i>[Select Maximum]</i>	< 0.5 tonnes	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		0.5 – 5 tonnes	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		> 5 tonnes	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Not Known	<input type="checkbox"/> Yes <input type="checkbox"/> No	
4	How is the ASM stored?:	<i>Temporary field nutrient storage site at or above grade</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<i>Temporary field nutrient storage site at or below grade</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Permanent nutrient storage facility below grade	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Permanent nutrient storage facility partially above and below grade	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Permanent nutrient storage facility at or above grade	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Other <i>[Provide Description to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are storage area(s) for ASM clearly identified?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Is there secondary containment for stored ASM?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Is ASM applied to the land on the property?		<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	What is the typical area to which ASM is applied:	< 1 Hectare	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		1 – 10 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		> 10 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	Is ASM application regulated by a Nutrient Management Plan, or Environmental Farm Plan?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Are best management practices in place, such as:	Testing of nutrient demand of soil prior to application	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Cover crops	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Buffer strips	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Application regulated by meteorological factors	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Other <i>[Provide Description to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Is the application of ASM carried out by a trained operator (including owner or contractor)?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2C - Detailed Threat Evaluation – Agricultural Activities			
Agricultural Source Material (ASM) refers to biosolids and liquid generated from agricultural manure			Confirmed by RMO/RMI
12	Do ASM application contractors (including operators) receive training on the importance of optimizing ASM application to maximize crop yield?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Does ASM application equipment contain meters for regulating the rate of spreading?: <i>(calibration and inspection of meters?)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	If Y to #13, Are meters regularly calibrated and inspected?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Is there a monitoring network in place?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Is there knowledge of ASM contaminants in groundwater outside the property boundary?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	Have measures been taken to remove/contain ASM contaminants from the subsurface?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Livestock/Outdoor Confinement/Farm-Animal Yard			
19	Is land used for livestock grazing or pasturing, outdoor confinement or as a farm animal yard?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20	Is land used for livestock grazing or pasturing, outdoor confinement or as a farm animal yard regulated by a Nutrient Management Plan?: <i>[If Yes, please provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Are riparian areas fenced off and excluded from grazing?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
22	Are areas of concern located upgradient of well(s)?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
23	Are vegetated buffers in place to allow runoff to infiltrate into soil?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2D - Detailed Threat Evaluation – Non-Agricultural Source Material			
Non-Agricultural Source Material (NASM) refers to biosolids from non-agricultural sources that include sewage treatment facilities, pulp and paper mills, and food processing operations.			Confirmed by RMO/RMI
1	Is NASM stored on the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	How much nitrogen is estimated within the stored NASM?: [Select Maximum]	< 0.5 tonnes	<input type="checkbox"/> Yes <input type="checkbox"/> No
		0.5 – 5 tonnes	<input type="checkbox"/> Yes <input type="checkbox"/> No
		> 5 tonnes	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Not Known	<input type="checkbox"/> Yes <input type="checkbox"/> No
3	How is the NASM stored?:	Temporary field nutrient storage site at or above grade	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Temporary field nutrient storage site at or below grade	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Permanent nutrient storage facility below grade	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Permanent nutrient storage facility partially above and below grade	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Permanent nutrient storage facility at or above grade	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Other [Provide Description to RMO]	<input type="checkbox"/> Yes <input type="checkbox"/> No
4	Can NASM activities be stopped, moved or changed?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
5	Are storage area(s) for NASM are clearly identified?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
6	Is there secondary containment for stored NASM?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
7	Is NASM applied to the land on the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	What is the typical area to which NASM is applied?:	< 1 Hectare	<input type="checkbox"/> Yes <input type="checkbox"/> No
		1 – 10 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No
		> 10 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No
9	Is the Application of NASM carried out by a trained operator (including owner or contractor)?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Do NASM application contractors (including operators) receive training on the importance of optimizing NASM application to maximize crop yield?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11	Does NASM application equipment contain meters for regulating the rate of spreading? :	<input type="checkbox"/> Yes <input type="checkbox"/> No	
12	If Yes to #11, Are meters regularly calibrated and inspected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Is there a monitoring network in place? [If Yes, provide documentation to RMO for review]	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Is there knowledge of NASM contaminants in groundwater outside the property boundary?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Have measures been taken to remove/contain NASM contaminants from the subsurface?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Is there an Emergency Response Plan in place?: [If Yes, provide to RMO for review]	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2E - Detailed Threat Evaluation – Commercial Fertilizers				Confirmed by RMO/RMI
1	Are Commercial Fertilizers handled or stored for:	Use on the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		For Wholesale Sale?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		For Retail?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		For Manufacture/Processing?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	How much Commercial Fertilizer may be handled or stored on the property? <i>[Select Maximum]</i>	No fertilizer stored:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		< 10 kg:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		10 kg– 100 kg:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		100 kg – 2.5 Tonne:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		>2.5 Tonne:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
3	Can commercial fertilizer activities be stopped, moved or changed?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4	Are storage area(s) for commercial fertilizers clearly identified?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5	Is there secondary containment for stored commercial fertilizers?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
6	Is commercial fertilizer applied to the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7	What is the typical area to which Commercial Fertilizer is applied?:	< 0.5 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		0.5 – 10 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		> 10 Hectares	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8	What is the typical nitrogen content of the Commercial Fertilizer?:	< 5%	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		5 – 25%	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		> 25%	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9	What is the typical phosphorus content of the Commercial Fertilizer?:	< 5%	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		5 - 25%	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		>25%	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10	Is Commercial Fertilizer Application regulated by a Nutrient Management Plan, or Environmental Farm Plan? <i>[If Yes, please provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No		
11	Are there measures in place to prevent Commercial Fertilizer from being released to soil or groundwater? <i>[If Yes, provide to Details to RMO]:</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Assessment of Drinking Water Threat Activities

Form 2E - Detailed Threat Evaluation – Commercial Fertilizers			Confirmed by RMO/RMI
12	Is the Application of Commercial Fertilizer carried out by a trained operator (including owner or contractor)?: <i>[If Yes, provide copies of certificates to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Do Commercial Fertilizer application contractors (including operators) receive training on the importance of optimizing fertilizer application to maximize crop yield	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Are best management practices in place, such as:	Testing of nutrient demand of soil prior to application?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Cover crops?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Buffer strips	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Application regulated by meteorological factors?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Other?: <i>[Provide Description to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No
15	Does Commercial Fertilizer application equipment contain meters for regulating the rate of spreading?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	If Yes to #15, Are meters regularly calibrated and inspected?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	Is there a monitoring network in place? <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Is there a Health and Safety Program in place?: (i.e. MSDS sheets, labels on containers, WHMIS training, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2F - Detailed Threat Evaluation – Pesticides					Confirmed by RMO/RMI
1	Are pesticides stored or applied on the property that contain the following ingredients? <i>[Identify all that apply in each column]:</i>	Pesticide:	Stored	Applied	
		MCPA	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Mecoprop	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Atrazine	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Dicamba	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		2,4-D	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Dichloropropene-1,3	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		MCPB	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Metalaxyl	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Pendimethalin	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Glyphosate	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Metalochlor or s-Metalochlor	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Are Pesticides stored for:	Use on the property?	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		For Wholesale Sale?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		For Retail Sale?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		For Manufacture/Processing?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3	Are more than 2,500 kg of pesticide stored or handled for use on the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
4	Are more than 250 kg of pesticide stored or handled for retail sale?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
5	Can pesticide activities be stopped, moved or changed?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
6	Are Storage area(s) for pesticides clearly identified?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
7	Is there secondary containment for stored pesticides?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
8	Pesticides are applied on the property to an area that is:	< 1 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		1– 9.9 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		10 – 100 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		>100 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
9	Are best management practices in place, such as:	Buffer strips?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		Application regulated by meteorological factors?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
		Other?: <i>[Provide Description to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No		
10	Does Pesticide application equipment contain meters for regulating the rate of spreading?	<input type="checkbox"/> Yes <input type="checkbox"/> No			
11	If Yes to #10, Are meters regularly calibrated and inspected?	<input type="checkbox"/> Yes <input type="checkbox"/> No			
12	Are any approvals in place governing pesticide storage on the property? <i>[If Yes, provide copies to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No			

Assessment of Drinking Water Threat Activities

Form 2F - Detailed Threat Evaluation – Pesticides			Confirmed by RMO/RMI
13	Are there measures in place to prevent stored pesticides from being released to soil or groundwater?: <i>[If Yes, provide details to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Is there a monitoring network in place?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Are pesticides being applied by a licensed contractor?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	Is there a Health and Safety Program in place? (i.e. MSDS sheets, labels on containers, WHMIS training, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2G - Detailed Threat Evaluation – Road Salt and Snow Storage				Confirmed by RMO/RMI
Storage of Road Salt				
1	How much salt may be stored on the property at any time for use in de-icing?: [Select Maximum]	No salt stored	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		< 10 kg	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		10 kg– 100 kg	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		100 kg – 1 Tonne	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		>1 Tonne	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2	What is the type of salt stored:	Fine Road Salt?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		Coarse Road Salt?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		Sand and Salt Mix?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		Other?: [Please Describe]	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3	Can road salt storage activities be stopped, moved or changed?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
4	Are storage area(s) for road salt clearly identified?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
5	Are measures in place to keep stored salt dry and minimize exposure to rain, snow or wind (i.e. roofs, plastic bags, etc.)?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
6	Are measures in place to keep soluble salt parameters from infiltrating into the underlying soil?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
Application of Road Salt				
7	What is the typical area to which salt is applied?:	< 10 m ²	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		10 – 100 m ²	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		100 – 1,000 m ²	<input type="checkbox"/> Yes	<input type="checkbox"/> No
		>1,000 m ²	<input type="checkbox"/> Yes	<input type="checkbox"/> No
8	Is the application of salt carried out by a Smart About Salt approved contractor?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9	Do salt application contractors (including operators) receive training on the importance of minimizing salt application?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
10	Is there guidance in place to minimize excess application of salt?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
11	Does salt application equipment contain meters for regulating the rate of spreading?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
12	If Yes to #11, Are meters regularly calibrated and inspected?:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2G - Detailed Threat Evaluation – Road Salt and Snow Storage				Confirmed by RMO/RMI
Snow Storage				
13	Is the property used to store snow that may contain salt from application on roads and on the property?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Is the snow stored in an area:	0.01 to 0.5 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		0.5 to 1 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		1 to 5 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		> 5 Hectares?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Is the snow stored:	On paved surfaces that drain to adjacent soil?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		On paved surfaces that drain to storm water systems?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		On native soil that can drain to surface water features?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		On native soil where drainage will infiltrate locally?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16	Can snow storage activities be stopped, moved or changed?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
17	Are storage area(s) for snow clearly identified?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
Risk Management Measures				
18	Are any of the following alternatives to salt application being used?:	Urea Products	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Reduced-Chloride Products	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Chloride Free-Products	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Beet Juice	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Other <i>[Please Describe to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Have salt parameters (sodium and chloride) leached into the subsurface and affected local groundwater?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
20	Is there a monitoring network in place?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Is there knowledge of salt contaminants (sodium and chloride) in groundwater outside the property boundary?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
22	Have measures been taken to remove/contain salt contaminants (sodium and chloride) from the subsurface?:		<input type="checkbox"/> Yes <input type="checkbox"/> No	
23	Is there an Emergency Response/Contingency Plan in place?: <i>[If Yes, Provide to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2H - Detailed Threat Evaluation – Fuel					Confirmed by RMO/RMI	
1	Is the property registered for fuel storage with the Technical Safety and Standards Authority (TSSA)?:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
2	If the property is registered with TSSA – please provide Reference Number:					
3	If the property is registered with TSSA, is there a Contaminant Management Plan in place?: <i>[If Yes, provide to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No			
4	Is the property considered to be a Bulk Plant as per O.Reg 217/01 (Liquid Fuels)?:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
5	Is the property considered to be a Facility as per O.Reg. 213/01 (Fuel Oil)?:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
			Gasoline	Diesel Fuel / Heating Oil	Aviation Fuel	Other (Identify fuels, oils, lubricants)
6	Identify the types of fuel used or stored <i>(Check all that apply)</i> .					
7	How much fuel may be on-site <i>(Maximum)</i> ?:	< 25 L (Jerry Can)				
		25 – 250 L (Drum)				
		250 – 2,500 L				
		> 2,500 L				
8	How many containers/tanks?:					
9	Are the containers/tanks:	Portable?:				
		Above-Ground?:				
		Below-Ground?:				
		Inside Buildings?:				
10	Can fuel storage and handling activities be stopped, moved or changed?:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
11	Is secondary containment in place to contain leakage before it reaches the soil/groundwater?	Fully?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
		Partially?:	<input type="checkbox"/> Yes <input type="checkbox"/> No			
12	Are storage area(s) for fuel clearly identified?:		<input type="checkbox"/> Yes <input type="checkbox"/> No			
13	Is there a leak detection monitoring system?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No			
14	Do you know if fuel has historically been released or leaked into the subsurface?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure			
15	Have historical spills or leaks been reported to the MOECC?:		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure			
16	Is there a monitoring network in place?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No			

Assessment of Drinking Water Threat Activities

Form 2H - Detailed Threat Evaluation – Fuel			Confirmed by RMO/RMI
17	Are fuel storage systems inspected by a TSSA certified Technician?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18	Is there knowledge of fuel contaminants in groundwater outside the property boundary?: <i>[If Y, Provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Have measures been taken to remove/contain contaminants from the subsurface?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Is there a Health and Safety Program in place?:(i.e. MSDS sheets, labels on containers, WHMIS training, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2I - Detailed Threat Evaluation – Dense Non-Aqueous Phase Liquid (DNAPL)				Confirmed by RMO/ RMI			
1	Is the property registered for chemical storage with the Technical Safety and Standards Authority (TSSA)?:	<input type="checkbox"/> Yes <input type="checkbox"/> No					
2	If the property is registered with TSSA – please provide Reference Number:						
3	If the property is registered with TSSA, is there a Contaminant Management Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No					
4	Are any of these chemicals or chemical classes (i.e. PAH) used or stored?: <i>[Indicate all that apply]</i> . Chemicals are typically listed on material data safety sheets (MSDS) <i>* See List of Polycyclic Aromatic Hydrocarbon Compounds in Appendix</i>	Tetrachloroethylene/ Perchloroethylene (PCE)	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
		Trichloroethylene (TCE)	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
		Vinyl Chloride (VC)	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
		Dioxane-1,4 (1,4-Dioxane or 1,4D)	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
		Polycyclic Aromatic Hydrocarbons (PAH)*	<input type="checkbox"/> Yes	<input type="checkbox"/> No			
5	What size are individual containers <i>[Indicate all that apply]</i> .	DNAPL Chemical or Chemical Class:	PCE	TCE	VC	1,4-D	PAH
		< 1 L Packages					
		1 – 25 L containers					
		> 25 L containers					
6	What is the total volume of these chemicals that may be stored on-site (Indicate <i>Maximum for each chemical/chemical class and Site Maximum</i>)?	< 25 L					
		25 – 250 L					
		250 – 2,500 L					
		> 2,500 L					
7	How many containers/tanks?						
8	Are the containers/tanks:	Portable?:	<input type="checkbox"/> Yes <input type="checkbox"/> No				
		Above-Ground?:	<input type="checkbox"/> Yes <input type="checkbox"/> No				
		Below-Ground?:	<input type="checkbox"/> Yes <input type="checkbox"/> No				
		Inside Buildings?:	<input type="checkbox"/> Yes <input type="checkbox"/> No				
9	Are DNAPL liquids poured, decanted, or mixed from stored containers as part of the activity?:	<input type="checkbox"/> Yes <input type="checkbox"/> No					
10	Can DNAPL activities be stopped, moved or changed?	<input type="checkbox"/> Yes <input type="checkbox"/> No					
11	Are storage area(s) for DNAPL clearly identified?:	<input type="checkbox"/> Yes <input type="checkbox"/> No					

Assessment of Drinking Water Threat Activities

Form 2I - Detailed Threat Evaluation – Dense Non-Aqueous Phase Liquid (DNAPL)			Confirmed by RMO/ RMI
12	Are other liquids stored that may contain chlorinated solvent or polychlorinated chlorinated biphenyl chemicals?: <i>[If Yes, provide details to RMO]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
13	Is secondary containment in place to contain leakage before it reaches the soil/groundwater?:	Fully?: <input type="checkbox"/> Yes <input type="checkbox"/> No	
		Partially?: <input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Is there a leak detection monitoring system?: <i>[If Y, Provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Do you know if DNAPL has historically been released or leaked into the subsurface?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
16	Have historical spills or leaks been reported to the MOECC?:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
17	Is there knowledge of DNAPL contaminants in groundwater outside the property boundary?: <i>[If Yes, provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
18	Is there a monitoring network in place? <i>[If Yes, Provide documentation to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Have measures been taken to remove/contain DNAPL contaminants from/in the subsurface?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
20	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Is there a Health and Safety program in place?: (i.e. MSDS sheets, labels on containers, WHMIS training, etc.)	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2J - Detailed Threat Evaluation – Organic Solvents						Confirmed by RMO/RMI
1	Is the property registered for chemical storage with the Technical Safety and Standards Authority (TSSA)?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No	
2	If the property is registered with TSSA – please provide Reference Number			<input type="checkbox"/> Yes	<input type="checkbox"/> No	
3	If the property is registered with TSSA, is there a Contaminant Management Plan in place?: <i>[If Yes, provide to RMO for review]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No	
4	Are any of these organic solvent chemicals handled or stored?: <i>[Indicate all that apply].</i>	Carbon Tetrachloride (CT)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
		Chloroform (CFM)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
		Methylene Chloride (MC)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
		Pentachlorophenol (PCPH)		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
5	What size are individual containers?: <i>[Indicate all that apply].</i>	Organic Solvent:	CT	CFM	MC	PCPH
		< 1 L Packages				
		1 – 25 L containers				
		> 25 L containers				
6	What is the total volume of Organic Solvents that may be stored on-site?: <i>(Indicate maximum for each chemical and Site Maximum)?</i>	< 25 L				
		25 – 250 L				
		250 – 2,500 L				
		> 2,500 L				
7	How many containers/tanks?					
8	Are the containers/tanks:	Portable?:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
		Above-Ground?:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
		Below-Ground?:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
		Inside Buildings?:		<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9	Are organic solvent liquids poured, decanted, or mixed from stored containers as part of the activity?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No	
10	Can organic solvent activities be stopped, moved or changed?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No	
11	Are storage area(s) for organic solvents clearly identified?:			<input type="checkbox"/> Yes	<input type="checkbox"/> No	
12	Are other liquids stored that are considered to be organic solvents?: <i>[If Yes, provide details to RMO]</i>			<input type="checkbox"/> Yes	<input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2J - Detailed Threat Evaluation – Organic Solvents				Confirmed by RMO/RMI
13	Is secondary containment in place to contain leakage before it reaches the soil/groundwater?:	Fully?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Partially?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
14	Is there a leak detection monitoring system?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
15	Have organic solvent chemicals historically released or leaked into the subsurface?:		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
16	Have historical spills or leaks been reported to the MOECC?:		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
17	Is there knowledge of organic solvent contaminants in groundwater outside the property boundary?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Sure	
18	Is there a monitoring network in place?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
19	Have measures been taken to remove/contain organic solvent contaminants from the subsurface?: <i>[If Yes, provide documentation to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
20	Is there an Emergency Response Plan in place?: <i>[If Yes, provide to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No	
21	Is there a Health and Safety program in place?: (i.e. MSDS sheets, labels on containers, WHMIS training, etc.)		<input type="checkbox"/> Yes <input type="checkbox"/> No	

Assessment of Drinking Water Threat Activities

Form 2K - Detailed Threat Evaluation – Water Quantity			
Water Use			Confirmed by RMO/RMI
1	Is there a water supply well on the property?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
2	Is the well actively used?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
3	Is the well used for residential purposes?:		<input type="checkbox"/> Yes <input type="checkbox"/> No
4	If no, what purpose is the well used for?:		
5	Is there a Permit to Take Water issued by the MOECC?: <i>If Yes, provide Reference Number and a copy of the Permit to Take Water</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No
	a)	Please estimate daily average water taking (L):	
	b)	Please estimate maximum daily water taking (L):	
6	Is the used water:	Consumed (removed from property in containers or product)?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Returned to the environment on the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Directed to a municipal sewer system?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
7	Are measures in place to minimize water use/consumption?: <i>[If es, provide details to RMO for review]</i>		<input type="checkbox"/> Yes <input type="checkbox"/> No
Reduction of Recharge			Confirmed by RMO/RMI
8	What portion of the property contains impervious surfaces? [%]		<input type="checkbox"/> Yes <input type="checkbox"/> No
9	Is precipitation run-off from impervious services:	Directed to return to the environment on the property by infiltration?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Directed to a storm sewer system and infiltrated on the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No
		Directed to a storm sewer system and removed from the property?:	<input type="checkbox"/> Yes <input type="checkbox"/> No

Assessment of Drinking Water Threat Activities

Form 2L - Detailed Threat Evaluation – Transport Pathways

Transport Pathways may consist of excavations for building foundations, utilities, boreholes, or other subsurface structures that may potentially increase the vulnerability score that was assigned in the Vulnerability Assessment presented in the approved Assessment Report. Evaluation of transport pathways is required to ensure that existing or proposed risk management measures can be effective.

In some cases, identification of a transport pathway may change the assigned vulnerability rating and hence the applicable policies. A transport pathway will not change applicable policy for a property located in WHPA-A (Vulnerability Score = 10); WHPA-B with Vulnerability Score = 10 and other areas where the assigned vulnerability rating is high)

Wells			Verified by RMO/ RMI	
1	Are any of the following types of wells present on the property (if more than one, please provide number):	Dug Water Supply Wells?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Drilled Water Supply Wells?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Irrigation Wells?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Dewatering Wells?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Geothermal Wells?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Monitoring Wells?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Drywell or soakaway pit?:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		Other? <i>(Please describe)</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No	
2	Are the wells identified above currently in use?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
3	Are there any wells on the property that are not currently in use?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
4	Are there any records of former wells that have been abandoned in accordance with O.Reg. 903 (as Amended)? <i>[If Yes, provide available documentation or depths to the RMO to confirm]:</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No		
5	Are the wells sufficiently deep to intersect bedrock or the municipal water supply aquifer ? <i>[If Yes, provide available documentation or depths to the RMO to confirm].</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No		
Excavations, Utilities, Foundations, Tunnels or other Subsurface Structures			Verified by RMO/ RMI	
6	Are there any excavations for utilities foundations, or other structures in place that extend to a depth up to 2.5 m below ground surface?:	<input type="checkbox"/> Yes <input type="checkbox"/> No		
7	Are there any excavations, foundations, tunnels or other structures that extend to a depth more than 2.5 m below the low point of grade on the property?: <i>[If Y, provide available documentation to RMO for review].</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No		

Assessment of Drinking Water Threat Activities

Form 3 – Confirmation of Information Provided		
Form Number	Form Review Status	
	Required	Accepted
Form 1 – Landowner/Operator Information	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2 – Initial Screening of Prescribed Threat Activities	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2A – Detailed Threat Evaluation – Waste Disposal Site	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2B – Detailed Threat Evaluation- Sewage Storage and Handling	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2C – Detailed Threat Evaluation – Agricultural Activities	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2D – Detailed Threat Evaluation – NASM	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2E – Detailed Threat Evaluation – Commercial Fertilizers	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2F – Detailed Threat Evaluation – Pesticides	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2G – Detailed Threat Evaluation – Road Salt and Snow Storage	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2H – Detailed Threat Evaluation – Fuel	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2I – Detailed Threat Evaluation – DNAPL	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2J – Detailed Threat Evaluation – Organic Solvents	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2K – Detailed Threat Evaluation – Water Quantity	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Form 2L – Detailed Threat Evaluation – Transport Pathways	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes
Date of Consultation:		
Date of Site Visit:		
Site Visit By:		
The information provided in the Assessment of Drinking Water Threat Activities form has been checked and accepted by:		
Date Assessment of Drinking Water Threat Completion:		
Qualification:	<input type="checkbox"/> Risk Management Official <input type="checkbox"/> Risk Management Inspector	
Notes:		

Assessment of Drinking Water Threat Activities

Assessment of Drinking Water Threat Activities

APPENDIX

A Waste Disposal Site within the Meaning of Part V of the Environmental Protection Act means:

- (a) any land upon, into, in or through which, or building or structure in which, waste is deposited, disposed of, handled, stored, transferred, treated or processed, and
- (b) any operation carried out or machinery or equipment used in connection with the depositing, disposal, handling, storage, transfer, treatment or processing referred to in clause (a).

If uncertain as to whether this definition will apply to activities on the subject site, please indicate “Not Sure” in Table 2 and the RMO/RMI will conduct a more detailed review to determine if activities on the site are regulated by policies in Chapter 8 of the Grand River Source Protection Plan

Polycyclic Aromatic Hydrocarbon Compounds Referenced in the Table of Drinking Water Threats:		
Acenaphthene	Benzo(b)fluoranthene	Fluoranthene
Acenaphthylene	Benzo(g,h,i)perylene	Indeno(1,2,3-cd)pyrene
Anthracene	Benzo(k)fluoranthene	Naphthalene
Benz(a)anthracene	Benzo(a)phenanthrene	Phenanthrene
Benzo(a)pyrene	Dibenz(a,h)anthracene	Pyrene

APPENDIX C

Risk Management Plan Template

RMP Part 1-5 and RMP Schedules 1-7

Risk Management Plan

This Risk Management Plan (RMP) has been prepared in accordance with guidance set out by the City of Guelph to meet the requirements of *The Clean Water Act, 2006 (CWA)* and applies to the property and activities described herein.

The objectives of the RMP are:

- To document a binding agreement between The Corporation of the City of Guelph and the Landowner/Operator to describe activities/circumstances on the property and the existing or proposed risk management measures to be implemented to manage the activities/circumstances such that they cease to be or do not become a significant drinking water threat to the municipal drinking water sources for the City of Guelph.
- To document the responsibilities of the Landowner/Operator in implementing the RMP.
- To document the role of The Corporation of the City of Guelph in enforcing the RMP using tools/powers provided under Part IV of *The Clean Water Act, 2006*.

The Landowner/Operator is the person who is undertaking the Activity that the RMO identifies as a significant threat to municipal drinking water sources in the City of Guelph in accordance with the *CWA* and the policies of the approved Grand River Source Protection Plan (hereafter referred to as Grand River SPP). The Landowner/Operator is responsible for carrying out actions defined by the RMP after it has been agreed to by the Landowner/Operator and the Risk Management Official for the City of Guelph.

The Guelph RMP Template contains the following mandatory sections:

- RMP Section 1 – Property/Site & Landowner/Operator Information
- RMP Section 2 – Source Protection Program Information
- RMP Section 3 – Landowner/Operator Responsibilities
- RMP Section 4 – Role of The Corporation of the City of Guelph
- RMP Section 5 – Agreement to Risk Management Plan

The Guelph RMP Template contains the following schedules:

- RMP Schedule 1 – Summary of Consultation
- RMP Schedule 2 – Site Activities and Existing Risk Management Measures
- RMP Schedule 3 – Additional Risk Management Measures Proposed
- RMP Schedule 4 – Monitoring & Reporting Program
- RMP Schedule 5 – Contingency and Emergency Response Plan
- RMP Schedule 6 – Communications Plan
- RMP Schedule 7 – Special Considerations (optional).

Risk Management Plan

RMP Sections 1 to 5 of the RMP Template and RMP Schedule 1 are to be prepared by the City of Guelph Risk Management Official (RMO) based on information to be provided by the Landowner/Operator and on information exchanged during mandatory consultation.

RMP Schedules 2 to 6 reflect mandatory Risk Management Measures as required under the *CWA*. RMP Schedule 7 is optional and will be used to provide site-specific risk management measures or considerations that are not consistent with Schedules 2 through 6. The RMP Template includes optional forms for each of Schedules 2 – 6 that reflect different levels of detail/complexity that may be required in the RMP. For example, an activity may dictate that detailed, site-specific, risk management measures are required to protect drinking water sources, but that a simple, universal or generic approach may be appropriate for communications. The optional forms will be used to prepare the draft RMP Schedules but will not be referenced distinctly in the final RMP (I.e., The selected “form” will become RMP Schedule 2).

The responsibility for completing RMP Schedules 2 through 7 will be assigned by the RMO in the completed RMP Schedule 1. For sites with activities/circumstances where the RMO considers that most simple or universal option for the RMP Schedules will be effective (Form A), the RMO will prepare the draft Schedule. For sites with Activities/Circumstances where site-specific detail is required for each Schedule to be effective, the RMO will assign responsibility for preparing the draft RMP Schedules to either the Landowner/Operator or the RMO. The responsibility may also be shared at the discretion of the RMO.

The draft RMP Sections and RMP Schedules will be reviewed by the RMO and the Landowner/Operator and revised until the draft RMP Sections and the RMP Schedules are accepted by both parties. The RMO will negotiate with the Landowner/Operator to agree to a RMP that:

- Is considered be effective to meet the overall objective to manage activities that are considered to be a significant threat to the municipal drinking water source;
- Is consistent (relative to other RMPs for a similar activity)
- Is clear and enforceable; and
- Reflects the business interests of the Landowner/Operator while providing confidence that the overall objective will be achieved.

When the RMO and the Landowner/Operator are in agreement, they will prepare a final copy of the RMP and sign. The RMO will then issue the Notices required under the *CWA*.

Risk Management Plan



RMP Section 1 – Property/Site – Landowner/Operator Information		
1-1	Facility/Business Name:	
1-2	Address:	
1-3	Contact Address: (If different than above)	
1-4	Tax Assessment Roll Number:	
1-5	Name of Landowner:	
	Contact Information: Telephone: Fax: E-Mail:	
1-6	Name of Business Owner or Operator: (If Different)	
	Contact Information: Telephone: Fax: E-Mail:	

Risk Management Plan

RMP Section 2 – Source Protection Program Information													
2-1	Source Protection Region	Lake Erie Source Protection Region											
2-2	Source Protection Area	Grand River Source Protection Area											
2-3	Drinking Water Supply	City of Guelph Municipal Water Supply System											
2-4	Nearest Municipal Well (s)	Northwest	Paisley		Northeast	Clythe Creek		Southwest	Dean Ave.		Southeast	Glen Collector	
			Calico			Emma			Downey Road			Arkell 1	
			Queensdale			Helmar			Edinburgh			Arkell 6	
			Sacco			Park 1 & 2			Membro			Arkell 7	
			Smallfield						University			Arkell 8	
									Water Street			Arkell 14	
												Arkell 15	
												Burke	
												Carter Wells	
2-5	Vulnerable Area: (Check All That Apply)	WHPA					WHPA-Q						
		A	B	C	D	E	1	2					
		Issue Contributing Area					TCE						
							NIT						
2-6	Vulnerability Score(s) (List all that Apply to Property)												

Risk Management Plan

2-7 Applicable Risk Management Plan Policies - City of Guelph				
Prescribed Drinking Water Threat under <i>The Clean Water Act, 2006</i>		Source Protection Plan Policy #	RMP Required	Trigger Activity or Circumstance
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act	CG-CW-4		<ul style="list-style-type: none"> RMP required within vulnerable areas where this activity is or would be a significant threat
3	The application of agricultural source material to land.	CG-CW-17		<ul style="list-style-type: none"> Activity not addressed by a Nutrient Management Plan or Strategy under the Nutrient Management Act. RMP will be based on Nutrient Management Plan or Strategy as per the Nutrient Management Act.
4	The storage of agricultural source material.			
8,9	The application and storage of commercial fertilizer to land.	CG-CW-23		<ul style="list-style-type: none"> Activity not addressed by a Nutrient Management Plan or Strategy under the Nutrient Management Act. Storage > 2,500 kg of commercial fertilizer (existing, new or expanded) RMP will be based on a Nutrient Management Plan or Strategy as per the Nutrient Management Act.
10	The application of pesticide to land.	CG-CW-26		<ul style="list-style-type: none"> > 2500 kg Stored or handled for use or > 250 kg for retail sale. RMP to incorporate best management practices, monitoring, and an inspection protocol.
11	The handling and storage of pesticide.			
14	The storage of snow.	CG-CW-32.2		<ul style="list-style-type: none"> RMP required within vulnerable areas where this activity is or would be a significant threat.
15	The handling and storage of fuel.	CG-CW-34		<ul style="list-style-type: none"> Storage of > 2,500 L of fuel RMP can be scoped to a “Contaminant Management Plan” and include monitoring, reporting and auditing to requirements of the Technical Standards and Safety Authority (TSSA).
16	The handling and storage of a dense non-aqueous phase liquid.	CG-CW-37		<ul style="list-style-type: none"> New or expanded handling of storage of DNAPL outside of WHPA-A Existing handling and storage of DNAPL within a vulnerable area where it is a significant threat (WHPA-A to C). For threat that is TSSA regulated – RMP shall be scoped to a Contaminant Management Plan & monitoring, reporting and auditing to requirements of TSSA.
17	The handling and storage of an organic solvent.	CG-CW-40		<ul style="list-style-type: none"> Existing and future handling and storage of Organic Solvents within WHPA-B.
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard.	CG-CW-44		<ul style="list-style-type: none"> Activity not addressed by a Nutrient Management Plan or Strategy under Nutrient Management Act. RMP will be based on Nutrient Management Plan or Strategy as per the Nutrient Management Act

Risk Management Plan

RMP Section 3 – Landowner/Operator Responsibilities	
3-1	The Landowner/Operator warrants that the current site activities and existing risk management measures as outlined in RMP Schedule 2 (attached) are in-place and agrees to maintain these activities, except as may be changed by Additional Risk Management Measures Proposed defined in RMP Schedule 3 (attached).
3-2	The Landowner/Operator agrees to implement the Additional Risk Management Measures Proposed as per RMP Schedule 3 (attached). RMP Schedule 3 contains an identification of the need for additional Risk Management Measures, justification for proposed measures, and an implementation schedule.
3-3	The Landowner/Operator agrees to implement the Monitoring and Reporting Program as per RMP Schedule 4 (attached).
3-4	The Landowner/Operator agrees to implement the Contingency and Emergency Response Plan as outlined in RMP Schedule 5 (attached).
3-5	The Landowner/Operator agrees to implement the Communications Plan as outlined in RMP Schedule 6 (attached).
3-6	[Optional] The Landowner/Operator agrees to implement other actions as defined as Special Considerations in RMP Schedule 7 (Attached).
3-7	The Landowner/Operator agrees to notify the City of Guelph Risk Management Official in writing within 30 days in the event that the property or business is sold. The Risk Management Official will then take appropriate steps to re-negotiate the Risk Management Plan with the new Landowner/Operator, if required.
3-8	The Landowner/Operator agrees to notify the City of Guelph Risk Management Official and Risk Management Inspectors (RMO/RMI) of proposed changes to site activities (including chemical usage and storage) or to in-place or proposed risk management measures as set out in Schedules 2 and 3 in order that this Risk Management Plan can be updated.
3-9	The Landowner/Operator agrees to provide access to all buildings and facilities to the City of Guelph RMO/RMI to conduct inspections on request. Inspections by the RMO/RMI may be scheduled in advance to confirm implementation of the RMP by specified dates, scheduled in advance on a regular basis by the RMO/RMI to confirm compliance, or may be without notice.
3-10	The Landowner/Operator agrees to carry out actions outlined in any Inspection Reports or Orders that may be issued in the future by the City of Guelph RMO/RMI pertaining to this RMP.
3-11	The Landowner/Operator agrees to pay any fees, taxes, and interest as per City of Guelph policies and any fines/penalties (plus tax and interest) issued by the City of Guelph RMO.

Risk Management Plan



RMP Section 4 – Role of The Corporation of the City of Guelph	
4-1	The Risk Management Official(s) and Risk Management Inspector(s) for the Corporation of the City of Guelph will enforce this RMP in accordance with Part IV of <i>The Clean Water Act, 2006</i> and policies presented in the approved Grand River Source Protection Plan. Part IV powers include authority to conduct inspections, identify non-compliance with the RMP and Source Protection Plan policies, issue Orders to enforce compliance with the RMP, and to lay charges for non-compliance with an Order under the <i>Provincial Offences Act</i> .
4-2	On acceptance of this RMP, The City of Guelph Risk Management Official (RMO) shall implement inspection programs as deemed necessary to confirm that the Landowner/Operator is complying with the RMP and to confirm that Activities and Circumstances outlined in Schedule 2, cease to be or do not become a significant threat to drinking water sources.
4-3	The City of Guelph RMO will negotiate changes and updates to amend this RMP in accordance with Part IV of <i>The Clean Water Act, 2006</i> . Requests for an amendment may be initiated by either the Landowner/Operator or the City of Guelph RMO. The RMO has authority to Order an amendment. An amendment is required for a change in property ownership or business ownership (See Part 3-7). An amendment will typically involve re-negotiation and agreement to the amended RMP.
4-4	The City of Guelph RMO/RMI shall advise the Owner/Operator of non-compliance with the RMP requirements and, if necessary, issue an Order outlining actions and time frames to be followed to achieve compliance. An Order may require the Owner/Operator to provide access to the property in order for work to be carried out.
4-5	In the event of non-compliance, the City of Guelph RMO/RMI may issue an Order to work to be done to comply with an issued Order.
4-6	The City of Guelph RMO shall include information for this Risk Management Plan in the Annual Report to be submitted to the Source Protection Authority.
4-7	The City of Guelph RMO shall provide records relating to this RMP to the public in accordance with provincial regulations and City of Guelph policies.

Risk Management Plan

RMP Section 5 – Agreement to Risk Management Plan	
RMP Designation:	
RMP Effective Start Date:	
RMP Review Date:	
Inspection Frequency:	
Landowner/Operator	Risk Management Official
<p>I/We agree to carry out the Risk Management Plan as described as described in Parts 1 to 4 and as detailed in Schedules 2 through 7.</p> <p>By signing this agreement, we acknowledge that we are aware of our rights to appeal Orders issued by the City of Guelph Risk Management Official to the Environmental Review Tribunal.</p> <p>I/we confirm that we have the authority to bind the corporation.</p>	<p>I hereby agree to the Risk Management Plan as described in Parts 1 to 4 and as detailed in Schedules 2 through 7 on behalf of The Corporation of the City of Guelph.</p>
Signed:	
Position:	Risk Management Official
Company:	The Corporation of the City of Guelph
Date:	

Risk Management Plan

RMP Schedule 1 Summary of Consultation

RMP Designation:		
<p>This document provides a summary of the Consultation carried out for the Risk Management Plan between the Landowner/Operator who is engaged in an activity that is a potential significant threat to drinking water and the City of Guelph Risk Management Official.</p> <p>This Schedule is organized to provide the following information:</p> <ul style="list-style-type: none"> • Part 1 – Property/Landowner/Operator Information • Part 2 – Information on Water Sources and Vulnerable Areas • Part 3 – Summary of Existing Threat Activities and Circumstances • Part 4 – Confirmation of Risk Management Plan Requirement • Part 5 – Evaluation of Existing Risk Management Measures • Part 6 – Identification of RMP Category and Objectives for Proposed Risk Management Measures • Part 7 – Risk Management Plan Content Specification • Part 8 – Special Considerations 		
Consultation Date:		
Time & Duration:		
Attendees		
Name:	Affiliation	Position / Responsibility
	City of Guelph	Risk Management Official
	City of Guelph	Risk Management Inspector
	City of Guelph	
		Landowner/Operator
		Landowner/Operator

Part 1 – Property/Landowner/Operator Information		
1-1	Facility/Business Name	
1-2	Property Address	
1-3	Contact Address	
1-4	Tax Assessment Roll Number	
1-5	Name of Facility Owner/ Operator	
	Contact Information: Telephone: Fax: E-Mail:	
1-6	Name of Landowner (If Different)	
	Contact Information: Telephone: Fax: E-Mail:	

Part 2 – Information on Water Sources and Vulnerable Areas								
2-1	Source Protection Region							
2-2	Source Protection Area							
2-3	Drinking Water Supply							
2-4	Nearest Municipal Well (s)							
2-5	Vulnerable Area: (Check All That Apply)	WHPA					WHPA-Q	
		A	B	C	D	E	1	2
		IPZ-1:		IPZ-2:		IPZ-3:		
		Issue Contributing Area:						
		Issue Parameter:						
2-6	Vulnerability Score(s):							

Part 3 – Summary of Existing Significant Threat Activities and Circumstances					
Prescribed Drinking Water Threat Activity <i>[Remove rows for Activities not Occurring]</i>		Circumstance		Existing Risk Management Measures	
		Reference Number(s)	Summary Description	Confirmed (Y/N)	Adequate to Manage Threat (Y/N)
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act				
2	The establishment, operation or maintenance of a system that collects, stores, transmits, treats or disposes of sewage				
3	The application of agricultural source material to land.				
4	The storage of agricultural source material.				
5	The management of agricultural source material				
6	the application on non-agricultural source material				
7	The handling and storage of non-agricultural source material				
8	The application of commercial fertilizer to land.				
9	The handling and storage of commercial fertilizer.				
10	The application of pesticide to land.				
11	The handling and storage of pesticide.				
12	The application of road salt.				
13	The handling and storage of road salt				
14	The storage of snow.				
15	The handling and storage of fuel.				
16	The handling and storage of a dense non-aqueous phase liquid.				
17	The handling and storage of an organic solvent.				
18	The management of runoff that contains chemicals used in the de-icing of aircraft				
19	An activity that takes water from an aquifer or surface				

Part 3 – Summary of Existing Significant Threat Activities and Circumstances						
Prescribed Drinking Water Threat Activity <i>[Remove rows for Activities not Occurring]</i>		Circumstance			Existing Risk Management Measures	
		Reference Number(s)	Summary Description	Confirmed (Y/N)	Adequate to Manage Threat (Y/N)	
	water body without returning the water taken to the same aquifer or surface water body					
20	An activity that reduces the recharge of an aquifer					
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard.					

Part 4 – Confirmation of Risk Management Plan Requirement

	A Risk Management Plan is not required based on the observed activities/ circumstances	
	A Risk Management Plan is not required base on provision of an updated Prescribed Instrument that adequately manages identified threat activities	
	A Risk Management Plan is not required base on submission and acceptance of a Risk Assessment in accordance with Section 60 of <i>The Clean Water Act</i> , 2006.	
	A Risk Management Plan is not required based on agreement with the Landowner/Operator to stop, change, or move the identified threat activity within one (1) year.	
	A Risk Management Plan is required to address the following Activities: <i>[Check All That Apply]</i>	
Prescribed Drinking Water Threat Activity		Source Protection Plan Policy That Triggers RMP
1	The establishment, operation or maintenance of a waste disposal site within the meaning of Part V of the Environmental Protection Act	CG-CW-4
3	The application of agricultural source material to land.	CG-CW-17
4	The storage of agricultural source material.	CG-CW-17
8	The application of commercial fertilizer to land.	CG-CW-23
9	The handling and storage of commercial fertilizer.	CG-CW-23
10	The application of pesticide to land.	CG-CW-26
11	The handling and storage of pesticide.	CG-CW-26
14	The storage of snow.	CG-CW-32.2
15	The handling and storage of fuel.	CG-CW-34
16	The handling and storage of a dense non-aqueous phase liquid.	CG-CW-37
17	The handling and storage of an organic solvent.	CG-CW-40
19	An activity that takes water from an aquifer or surface water body without returning the water taken to the same aquifer or surface water body	To Be Determined
20	An activity that reduces the recharge of an aquifer	To Be Determined
21	The use of land as livestock grazing or pasturing land, an outdoor confinement area, or a farm-animal yard.	CG-CW-44

Part 5 – Evaluation of Existing Risk Management Measures:

Risk Management Measures				
Management Target	Focus	Measure Description	In Place? (Y/N)	Adequate ? (Y/N)
Reduction of Potential for Release of the Chemical At The Outset	Prevention of Release	• Stop the activity/ circumstance		
		• Move activities/circumstance outside of vulnerable area		
		• Change the activity/ circumstance to use an alternate chemical or process (substitution)		
Effective System Design for Reducing Contaminants	Prevention of Release	• Utilize Best Management Practices for Design of Process		
		• Update processes/equipment		
		• Leak containment capacity		
		• Minimize exposure to rain/runoff		
		• Measures in place to detect leaks, monitor, and initiate emergency response		
Effective Operational Practice for Reducing Contamination	Prevention of Release	• Inspections		
		• Chemical inventory		
		• Process and leak detection monitoring		
		• Spill Response, Emergency Response, or Contingency Plans		
		• Training and certification		
Characterization Tools for Identification of Contamination	Responsive Action	• Characterization of hydrogeologic setting, groundwater flow patterns and hydraulic connection to water supply		
		• Delineation of contaminant extent		
		• Monitoring wells & monitoring program		
Reduction in Potential Contamination Following a Spill/Discharge/ Release	Responsive Action	• Knowledge of spill, point of release, chemical type, volume and timing		
		• Physical removal of contaminants (including groundwater treatment)		
		• In Situ remediation methods		
		• Hydraulic Containment		
Education and Awareness	Prevention of Release	• Education and awareness programs		
		• Communications plan		
Industrial, Commercial and Institutional Water Efficiencies	Preservation of Water Quantity	• Water Conservation Measures		
Water Supply Increase		• Alternate Water Sources		

The Landowner/ Operator is encouraged to develop a RMP to, as a minimum, address the inadequacies identified above such that risk management measures are in place to provide confidence that the identified activity or circumstance will cease to be or not become a significant drinking water threat. Where appropriate, risk management measures will be selected from each Management Target category. Selection of measures is not prescribed, but is to be justified based on an evaluation of feasibility, costs, and likely effectiveness. The RMO will review the proposed additional RMMs through additional consultation or as proposed as a draft Schedule 3 (See RMP Template) to confirm that the RMP objectives can be met.

Part 6 – Identification of RMP Category and Objectives for Proposed Risk Management Measures:

Category 1

The existing Risk Management Measures, as confirmed by the RMO in Part 3 and to be documented in Schedule 2 of the RMP, are considered to be sufficient to cause the observed activities/circumstances to cease to be, or not become, a significant threat. No additional risk management measures are proposed at this time.

Category 2

Additional Risk Management Measures are required so that the observed activities/circumstances cease to be or do not become a significant drinking water threat. Risk Management Measures intended to prevent future releases are to be considered to:
[RMO to confirm which risk management measures may apply]

- 1) Stop some or all of the activity (ies) identified in Part 4 so that it (they) is (are) no longer a significant threat to drinking water.
- 2) Move some or all of the activity (ies) identified in Part 4 so that it (they) is (are) no longer a significant threat to drinking water.
- 3) Change some or all of the activity (ies) identified in Part 4 to reduce potential for a chemical release.
- 4) Maintain the existing Risk Management Measures as confirmed by the RMO in Part 3 and to be documented in Schedule 2 of the RMP.
- 5) Provide the following new Risk Management Measures or updates/improvements to the existing Risk Management Measures: [Provide list of improvements to be implemented]
 - *[RMO to list new RMM or Improvements Required]*
- 6) Update some or all of the activity (ies) identified in Part 4 so that they conform to current best management practices.
- 7) Provide the training and certification to staff and consultants who may be involved in carrying out activities or implementing aspects of this RMP.

Category 3

Additional Risk Management Measures are required so that the observed activities/circumstances cease to be or do not become a significant drinking water threat. Risk Management Measures to prevent future release of chemicals are as outlined above for Category 2 are to be proposed in addition to measures to:

- 8) Conduct investigations to assess potential presence of contaminants in soil/groundwater, characterize groundwater flow systems and delineate presence of dissolved contaminants in the City of Guelph municipal water supply aquifer(s).
- 9) Initiate actions to control or remove identified contaminants in soil or groundwater such that they do not present a significant threat to the City of Guelph municipal water supply.

The Landonner/ Operator is encouraged to develop a RMP to meet the objectives outlined above. These objectives are placed in an order that is considered to provide the maximum confidence that the RMP will meet the objectives to prevent the threat activity from affecting the identified water sources. Selection of measures is not prescribed, but is to be justified based on an evaluation of feasibility, costs, and likely effectiveness. The RMO will review the RMMs through additional consultation or as proposed as a draft Schedule 3 (See RMP Template) to confirm that the RMP objectives can be met.

Part 7 - RMP Content Specification

RMO to select an RMP Category and highlight the schedule and form required based on site-specific information.

Schedule	Form	Title	Initially to be prepared by		RMP Category			
			RMO	Landowner / Operator	Category 1	Category 2	Category 3	
1		Summary of Consultation	A	Site-Specific	X			
2		Site Activities and Existing Risk Management Measures	A	Managed DNAPL Threat		X		
			B	Detailed Characterization		X		
3		Additional Risk Management Measures Proposed	A	No Additional Risk Management Measures Proposed	X			
			B	Additional Risk Management Measures Proposed - Prevention		X		
			C	Additional Risk Management Measures Proposed – Prevention and Threat Reduction		X		
4		Monitoring and Reporting Program	A	No Monitoring & Reporting	X			
			B	Generic Monitoring & Reporting	X			
			C	Site-Specific Monitoring & Reporting		X		
5		Contingency & Emergency Response Plan	A	No Contingency & Emergency Response Plan	X			
			B	Generic Contingency & Emergency Response Plan	X			
			C	Site-Specific Contingency & Emergency Response Plan		X		
6		Communications Plan	A	No Communications Plan	X			
			B	Generic Communications Plan	X			
			C	Site-Specific Communications Plan		X		
7		Special Considerations	A	No Special Considerations	X			
			B	Site-Specific Special Considerations	X			

Part 8 – Special Considerations:

The following special considerations are to be addressed through Schedule 7 of the RMP:

- *[List considerations to be considered for Schedule 7 (or State that “No Special Considerations are required for this RMP)]*

Risk Management Plan

RMP Schedule 2 – Form A

Site Activities and Existing Risk Management Measures Managed DNAPL Threat

RMP Designation:	
<p>The Handling and Storage of Dense Non-Aqueous Phase Liquid (DNAPL) is confirmed to occur on the property.</p> <p>The DNAPL chemicals are:</p> <ol style="list-style-type: none"> 1) Within individual containers of a size less than 1 L. 2) Not present in a total volume greater than 100 L. 3) Transferred and stored in larger containers upon paved/concrete surfaces either adjacent to or within buildings. 4) Used in specific applications as part of the on-site business and managed and disposed in accordance with best management practices and not released to the subsurface. <p>Risk Management Measures are in place to:</p> <ol style="list-style-type: none"> 1) Maintain an inventory of DNAPL Chemicals handled/stored on-site. 2) Maintain a record of hazardous DNAPL Chemicals in accordance with Workplace Hazardous Materials Information System (WHMIS) requirements 3) Provide WHMIS training to employees who may handle or be exposed to the DNAPL chemicals. 4) Provide training and direction to employees to implement a spill response plan. 	
Agreed to By:	
Landowner/Operator	Risk Management Official
Signed:	
Position:	Risk Management Official
Company:	City of Guelph
Date:	

Risk Management Plan

RMP Schedule 2 – Form B

Site Activities and Existing Risk Management Measures

Detailed Characterization

RMP Designation:											
<i>Itemize the products/chemicals handled/stored on-site and measures in place to reduce likelihood of a release to the natural environment: (Include Agricultural source Material (ASM) [manure], fertilizers, pesticides, fuels, Dense Non-Aqueous Phase Liquids (DNAPLs) and Organic Solvents)</i>											
Product Name	Significant Threat Constituent		Individual Container Size (L or Kg)				Total Mass/ Volume	Secondary Containment Measures in Place			
	Name	Proportion	< 1	1-10	10 – 100	Specify	Kg (Mass) or L (Volume)	Secondary Packaging	Impervious Surfaces	Engineered Containment	
Describe other Containment Measures (if any):											
<i>Characterize application of products/chemicals to the ground surface that can infiltrate into the natural environment: (Include Agricultural source Material (ASM) [manure], fertilizers, pesticides)</i>											
Product Name	Area of Application (Include Units)	Frequency			Application Rate						
		Annually	Seasonally	Specify	Describe	Not Metered	Metered to Crop Need	Metered to industry standard			
<p>1) Describe other activities/circumstances that have been identified as a significant threat to drinking water:</p> <ul style="list-style-type: none"> <i>[Describe activities/circumstances here (for agricultural threats describe acreage, livestock type and numbers, how ASM is managed, etc.)].</i> 											

RMP Designation:

- 2) Provide details of Prescribed Instruments that are in place to manage the identified threat activities:
 - *[Provide details of Prescribed Instruments]*
- 3) Describe risk management measures that are in place to regulate and minimize the potential threat for stored or applied chemicals to be released to the environment:
 - *[Describe in place risk management measures here (include inventory control, barriers, packaging, handling practices, etc. – see RMM Catalog for assistance)]*
- 4) Describe how the on-site activities and procedures are considered to conform to current best management practices:
 - *[Describe attributes of best management practices here (see RMM Catalog for assistance)]*
- 5) Provide details of known or suspected leaks or releases to the environment and the actions taken (including notification of MOE/MOECC):
 - *[Insert details of historical leaks and list reports/ references]*
- 6) Describe monitoring (if any) carried out as part of the activity:
 - *[Provide details on monitoring (Include process monitoring of potential leakage, soil, air, or groundwater quality - records of monitoring may be requested for review by the RMO/RMI)]*
- 7) Describe contingency or emergency response plans (if any) carried out as part of the activity:
 - *[Provide details on contingency actions (including triggers) and emergency response measures (Provide written plan documents to the RMO/RMI)]*
- 8) Describe investigations (if any) carried out to assess potential presence of contaminants in soil/groundwater, characterize groundwater flow systems and delineate presence of dissolved contaminants in the City of Guelph water supply aquifer:
 - *[Provide details on investigations & provide report copies to RMO]*
- 9) Describe actions currently in place (if any) to control or remove identified contaminants in soil or groundwater such that they do not present a significant threat to the City of Guelph municipal water supply:
 - *[Describe site remediation actions & provide documentation to RMO].*
- 10) Describe training and certification requirements of staff and consultants who work are involved with activities considered to be a significant threat to drinking water:
 - *[List training and certification requirements].*

RMP Designation:		
<i>Agreed to By:</i>		
Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 3 – Form A

No Additional Risk Management Measures Proposed

RMP Designation:		
<p>No additional risk management measures are proposed for this Risk Management Plan beyond what is currently being carried out at the property.</p>		
<i>Agreed to By:</i>		
Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 3 – Form B

Additional Risk Management Measures Proposed - Prevention

RMP Designation:	
<p>The Landowner/Operator agrees to carry out the following additional Risk Management Measures:</p> <ol style="list-style-type: none"> 1) <i>[Stop the following activity (ies) so that it (they) is (are) no longer a significant threat to drinking water]:</i> <ul style="list-style-type: none"> • <i>[List activities to be stopped here].</i> 2) <i>[Move the following activity (ies) so that it (they) is (are) no longer a significant threat to drinking water]:</i> <ul style="list-style-type: none"> • <i>[List activities to be moved here].</i> 3) Provide additional secondary containment for potential spills of liquid chemicals by: <ul style="list-style-type: none"> • <i>[Insert secondary containment actions here]</i> 4) Update the following activities so that they conform to current best management practices: <ul style="list-style-type: none"> • <i>[Insert updates to conform to best management practices here]</i> 5) Change the existing activities as follows to reduce potential for a chemical release: <ul style="list-style-type: none"> • <i>[Insert changes to existing activities here].</i> 6) Provide the following training and certification to staff and consultants who may be involved in implementing aspects of this RMP: <ul style="list-style-type: none"> • <i>[List training and certification requirements].</i> 7) Implement the Additional Risk Management Measures Proposed on acceptance of the RMP or as defined above for individual measures. The Risk Management Measures are to remain in place as long as the activity/circumstance that is a significant drinking water threat is being carried out on the property. The Landowner/Operator may review Risk Management Measures and revise the Risk Management Plan on agreement of the Risk Management Official. 	
Agreed to By:	
Landowner/Operator	Risk Management Official
Signed:	
Position:	Risk Management Official
Company:	City of Guelph
Date:	

Risk Management Plan

RMP Schedule 3 – Form C

Additional Risk Management Measures Proposed – Prevention and Threat Reduction

RMP Designation:	
<p>The Landowner/Operator agrees to carry out the following additional Risk Management Measures:</p> <ol style="list-style-type: none"> 1) [<i>Stop the following activity (ies) so that it (they) is (are) no longer a significant threat to drinking water</i>]: <ul style="list-style-type: none"> • [<i>List activities to be stopped here</i>]. 2) [<i>Move the following activity (ies) so that it (they) is (are) no longer a significant threat to drinking water</i>]: <ul style="list-style-type: none"> • [<i>List activities to be moved here</i>]. 3) Provide additional secondary containment for potential spills of liquid chemicals by: <ul style="list-style-type: none"> • [<i>Insert secondary containment actions here</i>] 4) Update the following activities so that they conform to current best management practices: <ul style="list-style-type: none"> • [<i>Insert updates to best management practices here</i>] 5) Change the existing activities as follows to reduce potential for a chemical release: <ul style="list-style-type: none"> • [<i>Insert changes to existing activities here</i>]. 6) Conduct investigations as outlined below to assess potential presence of contaminants in soil/groundwater, characterize groundwater flow systems and delineate presence of dissolved contaminants in the City of Guelph water supply aquifer: <ul style="list-style-type: none"> • [<i>Provide details on investigations</i>] 7) Initiate actions to control or remove identified contaminants in soil or groundwater such that they do not present a significant threat to the City of Guelph municipal water supply: <ul style="list-style-type: none"> • [<i>Insert site remediation actions</i>]. 8) Provide the following training and certification to staff and consultants who may be involved in implementing aspects of this RMP: <ul style="list-style-type: none"> • [<i>List training and certification requirements</i>]. 9) Implement the Additional Risk Management Measures Proposed on acceptance of the RMP or as defined above for individual measures. The Risk Management Measures are to remain in place as long as the Activity/Circumstance that is a significant drinking water threat is being carried out on the property. The Landowner/Operator may review Risk Management Measures and revise the Risk Management Plan on agreement of the Risk Management Official. 	
<p>Agreed to By:</p>	

Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 4 – Form A

No Monitoring & Reporting Program

RMP Designation:		
<p>A “Monitoring & Reporting Program” is not required for this Risk Management Plan.</p>		
<i>Agreed to By:</i>		
Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 4 – Form B

Generic Monitoring & Reporting Program

RMP Designation:		
<p>The Owner/Operator agrees to carry out the following actions as part of the Monitoring & Reporting Program:</p> <p>1) Maintain an inventory of substances/chemicals purchased, stored and handled/sold. Maintain records that demonstrate that substances/chemicals have been accounted for. Inventory records to be available for inspection by RMO/RMI on request.</p> <p><i>Agreed to By:</i></p>		
Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 4 – Form C

Site-Specific Monitoring & Reporting Program

RMP Designation:	
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The Landowner/Operator agrees to carry out the following actions as part of the Monitoring & Reporting Program:

- 1) Maintain an inventory of substances/chemicals purchased, stored and handled/sold. Maintain records that demonstrate that substances/chemicals have been accounted for. Inventory records to be available for inspection by RMO/RMI on request.
- 2) *[Provide training to staff/ contractors to carry out the Monitoring and Reporting Program in accordance with this RMP.]*
- 3) *[Maintain/Establish process monitoring consisting of:]*
 - *[Describe Monitoring Stations/Equipment – for example, in-line chemical sensor or vapour monitor]*
 - *[Describe data measurement frequency – for example, continuous (with data recorder); daily, hourly, etc.]*
 - *[Describe alarms on automated sensors]*
- 4) *[Maintain/Establish Groundwater Monitoring Network consisting of:]*
 - *[## Shallow groundwater monitoring wells – Provide location map, Table of well construction details and established reference elevations, and Well Records or Logs (with well construction diagrams).]*
 - *[## Deep groundwater monitoring wells (typically in municipal water supply aquifer) – Provide location map, Table of well construction details and established reference elevations, and Well Records or Logs (with well construction diagrams).]*
- 5) *[Maintain/Establish Surface Water Monitoring Network consisting of:]*
 - *[## Surface Water Stations – Provide location map, construction details, and established reference elevations.]*
- 6) *[Conduct Groundwater Monitoring consisting of:]*
 - *[groundwater elevation monitoring – Describe method & planned frequency – continuous/ manual. If continuous indicate frequency of data collection and type of instrument].*
 - *[Water Quality Sampling – Describe monitoring parameters, frequency, and sample collection protocols (can be attached).]*
- 7) *[Establish “Monitoring Triggers” for each medium sampled that will used to initiate Contingency Actions (RMP*

RMP Designation:		
<p><i>Schedule 5</i>).</p> <p>8) <i>[Describe records of monitoring and laboratory testing results to be maintained and reports to be generated (frequency).]</i></p>		
Agreed to By:		
Owner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 5 – Form A

No Contingency & Emergency Response Plan

RMP Designation:		
<p>A “Contingency and Emergency Response Plan” is not required for this Risk Management Plan.</p>		
<i>Agreed to By:</i>		
Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 5 – Form B

Generic Contingency & Emergency Response Plan

RMP Designation:	
<p>The Landowner/Operator agrees to carry out the following actions as part of the Contingency & Emergency Response Plan:</p> <ol style="list-style-type: none"> 1) Implement the following Emergency Response Actions in the event of a spill or an uncontrolled release of a chemical that may present a threat to drinking water as outlined in Schedule 2: <ul style="list-style-type: none"> • Undertake emergency response or first aid as required to address immediate physical threats. • Notify the City of Guelph RMO/RMI that a spill or uncontrolled release has occurred. • Notify the Ontario Ministry of the Environment Spills Hot-Line at 1-800-268-6060. • Undertake actions to contain spreading of the spill. • Undertake actions to minimize the ability for chemicals to enter groundwater or surface water. • Estimate volume of chemicals that may have entered groundwater or surface water. 2) Keep records of Emergency Response Actions. 3) Review the Contingency and Emergency Response Plan on an annual basis. Provide records of changes or updates to the City of Guelph RMO. 	
Agreed to By:	
Landowner/Operator	Risk Management Official
Signed:	
Position:	Risk Management Official
Company:	City of Guelph
Date:	

Risk Management Plan

RMP Schedule 5 – Form C

Site-Specific Contingency & Emergency Response Plan

RMP Designation:	
<p>The Landowner/Operator agrees to carry out the following actions as part of the Contingency & Emergency Response Plan:</p>	
<p>1) Implement the following contingency actions when monitoring results exceed the “Trigger Value” established in Schedule 4:</p> <ul style="list-style-type: none"> • Notify the City of Guelph RMO/RMI that the Trigger Value (s) is (are) exceeded and that Contingency Actions are being initiated. • <i>[List Site-Specific Contingency Actions]</i> • <i>[Describe End-Point for Contingency Action, for example – contingency action will be stopped after monitoring shows that the Trigger Value (s) is (are) no longer exceeded over a specified time interval.]</i> 	
<p>2) Implement the following Emergency Response Actions in the event of a spill or an uncontrolled release of a chemical that may present a threat to drinking water as outlined in Schedule 2:</p> <ul style="list-style-type: none"> • Undertake emergency response or first aid as required to address immediate physical threats. • Notify the City of Guelph RMO/RMI that a spill or uncontrolled release has occurred. • Notify the Ontario Ministry of the Environment Spills Hot-Line at 1-800-268-6060. • Undertake actions to contain spreading of the spill. • <i>[List Site-Specific Emergency Response Actions]</i> • Undertake actions to minimize the ability for chemicals to enter groundwater or surface water. • Estimate volume of chemicals that may have entered groundwater or surface water. 	
<p>4) Keep records of Contingency and Emergency Response Actions.</p>	
<p>5) Review the Contingency and Emergency Response Plan on an annual basis. Provide records of changes or updates to the City of Guelph RMO.</p>	
Agreed to By:	
Landowner/Operator	Risk Management Official
Signed:	
Position:	Risk Management Official
Company:	City of Guelph
Date:	

Risk Management Plan

RMP Schedule 6 – Form A

No Communications Plan

RMP Designation:		
<p>A “Communications Plan” is not required for this Risk Management Plan.</p>		
<i>Agreed to By:</i>		
Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

Schedule 6 – Form B

Generic Communications Plan

RMP Designation:	
<p>The Landowner/Operator agrees to carry out the following actions as part of the Communications Plan:</p> <ol style="list-style-type: none"> 1) Notify the City of Guelph RMO in the event that there is a need to change or update the Site Activities (RMP Schedule 2). 2) Notify the City of Guelph RMO in the event that there is a need to change or update the Existing Risk Management Measures (RMP Schedule 2). 3) Notify the City of Guelph RMO in the event that there is a need to change or update the Additional Risk Management Measures Proposed (RMP Schedule 3) 4) Notify the City of Guelph RMO in the event that there is a need to change or update the Monitoring & Reporting Program (RMP Schedule 4). 5) Notify the City of Guelph RMO in the event that there is a need to change or update to the Contingency & Emergency Response Plan (RMP Schedule 5). 6) Maintain the following records for review by the City of Guelph RMO/RMO on request: <ul style="list-style-type: none"> • Records of timing for implementation of Risk Management Measures (RMP Schedule 3). • Inventory Records • Inspection Reports • Monitoring Reports • Records documenting Contingency or Emergency Response Actions. 	
Agreed to By:	
Landowner/Operator	Risk Management Official
Signed:	
Position:	Risk Management Official
Company:	City of Guelph
Date:	

Risk Management Plan

Schedule 6 – Form C

Site-Specific Communications Plan

RMP Designation:	
<p>The Landowner/Operator agrees to carry out the following actions as part of the Communications Plan:</p> <ol style="list-style-type: none"> 1) Provide the City of Guelph RMO with changes to the inventory of products, and/or their chemical components, that are potential threats to drinking water, as outlined in RMP Schedule 2, including: <ul style="list-style-type: none"> • Brand Name • Name of significant threat chemical • Proportion of product that is the significant threat chemical • Quantity stored (maximum) • Container Size(s) • MSDS Sheets 2) Notify the City of Guelph RMO in the event that there is a need to change or update the Site Activities (RMP Schedule 2). 3) Notify the City of Guelph RMO in the event that there is a need to change or update the Existing Risk Management Measures (RMP Schedule 2). 4) Notify the City of Guelph RMO in the event that there is a need to change or update the Additional Risk Management Measures Proposed (RMP Schedule 3) 5) Notify the City of Guelph RMO in the event that there is a need to change or update the Monitoring & Reporting Program (RMP Schedule 4). 6) Notify the City of Guelph RMO in the event that there is a need to change or update to the Contingency & Emergency Response Plan (RMP Schedule 5). 7) [<i>List Site-Specific Communications Plan Requirements – ie. Provide “specified” reports to the Guelph RMO on “specified” frequency</i>]. 8) Maintain the following records for review by the City of Guelph RMO/RMO on request: <ul style="list-style-type: none"> • Records of timing for implementation of Risk Management Measures (RMP Schedule 3). • Inventory Records • Inspection Reports • Monitoring Reports • Records documenting Contingency or Emergency Response Actions. 	

- *[List Site-Specific records to be maintained]*

Agreed to By:

Landowner/Operator		Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 7 – Form A

No Special Considerations

RMP Designation:		
<p>There are no “Special Considerations” to be included in this Risk Management Plan that are not addressed in RMP Schedules 1 through 6.</p> <p>Agreed to By:</p>		
	Landowner/Operator	Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		

Risk Management Plan

RMP Schedule 7 – Form B

Site Specific Special Considerations

RMP Designation:		
<p>The Landowner/Operator agrees to carry out the “Special Considerations as listed below in addition to the responsibilities defined in RMP Schedules 2 through 6 of this RMP:</p> <p>1) [<i>List Site-Specific “Special Considerations”</i>].</p> <p>2)</p> <p>3)</p> <p>4)</p> <p>Agreed to By:</p>		
	Landowner/Operator	Risk Management Official
Signed:		
Position:		Risk Management Official
Company:		City of Guelph
Date:		