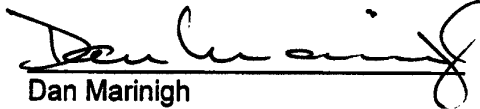


**AN AGREEMENT TO ADDRESS THE ROLES AND RESPONSIBILITIES OF THE  
MINISTRY OF NATURAL RESOURCES AND THE MINISTRY OF THE  
ENVIRONMENT REGARDING AGGREGATE EXTRACTION OPERATIONS WITHIN  
THE PROVINCE OF ONTARIO**

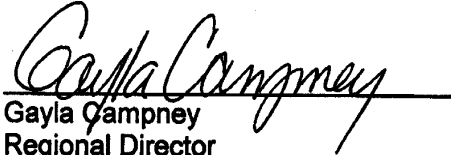
May 2008

MINISTRY OF NATURAL RESOURCES

MINISTRY OF THE ENVIRONMENT



Dan Marinigh  
Director  
Land and Waters Branch  
Natural Resource Management Division



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Date: Approved

June 20, 2008

Date: Approved

May 8/08

# **AN AGREEMENT TO ADDRESS THE ROLES AND RESPONSIBILITIES OF THE MINISTRY OF NATURAL RESOURCES AND THE MINISTRY OF THE ENVIRONMENT REGARDING AGGREGATE EXTRACTION OPERATIONS WITHIN THE PROVINCE OF ONTARIO**

## **Introduction**

The Ministry of Natural Resources (MNR) and the Ministry of the Environment (MOE) are committed to working together to promote stronger, safer communities and a healthy natural environment for Ontarians by ensuring that aggregate operations are managed in an ecologically sustainable and responsible manner. Both ministries agree to work in partnership to contribute to the environmental, social and economic well being of Ontario.

This agreement strives to achieve organizational excellence for improved public service by clarifying the respective roles and responsibilities of both ministries related to aggregate extraction operations within the province.

The MNR is responsible for the administration of the *Aggregate Resources Act* (ARA) and the MOE is responsible for the administration of the *Environmental Protection Act* (EPA) and the *Ontario Water Resources Act* (OWRA).

Where the Ministry of Transportation (MTO) has been delegated authority under the ARA to administer a wayside permit (s.32.1) or an aggregate permit (s.46.1), any reference in this agreement to MNR is applicable to MTO. However, MNR shall still be advised and may participate in any process under an operational procedure.

This agreement sets out operational procedures related to specific areas where there is a shared responsibility by each ministry. Operational procedures have been developed to address environmental complaints resulting from aggregate operations (see Operational Procedure 1) and hydrogeological reviews of new applications and amendments under the ARA (see Operational Procedure 2). Additional operational procedures may be included, with mutual consent of the parties, to address emerging issues, in accordance with this agreement (see Review of Agreement).

The parties agree to cooperate in implementing this agreement.

## **Purpose and Objective**

The objective is to ensure efficient and effective integration of program delivery and to provide quality service which is transparent and understandable to the public, stakeholders and ministry staff.

## **Scope of Application**

This agreement applies to interactions between MNR and MOE with regard to aggregate extraction operations within the province. This includes activities related to new applications and amendments under the ARA (e.g. hydrogeological reviews); complaints received from the public related to water, noise, blasting and dust; water taking permits under the OWRA; and certificates of approval (C of A's) under the OWRA and EPA.

## **Term**

This agreement will come into effect when signed by the respective Directors of MNR and MOE. The operational procedures may be amended at any time with the concurrence of both parties (see Figure 1). The operational procedures will be reviewed annually by delegated staff from the MNR Aggregate and Petroleum Resources Section and the MOE Program Services Section, Eastern Region to evaluate its effectiveness, ensure reviews are completed in accordance with legislated time frames and to make appropriate mutually acceptable adjustments as required.

## **Review of Agreement**

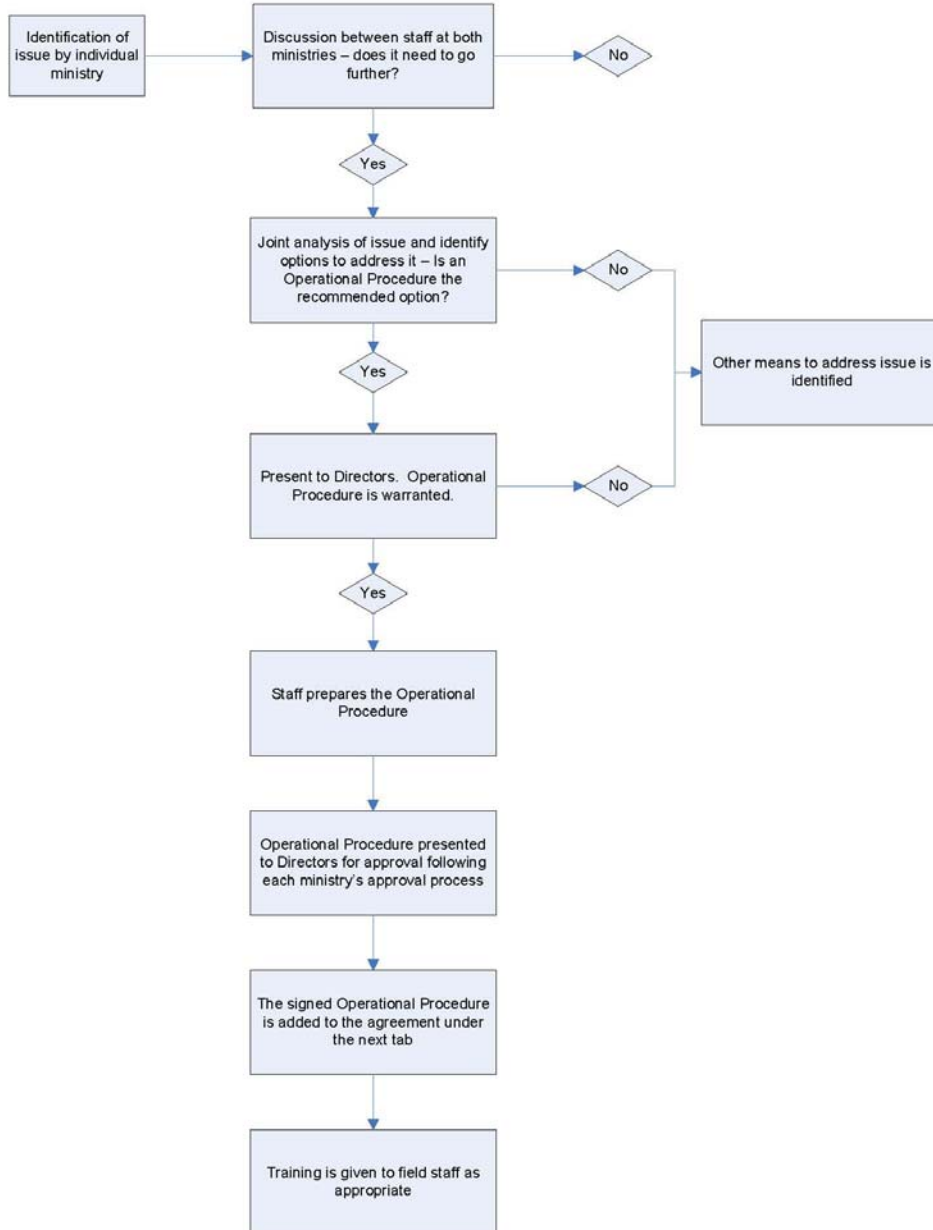
At the annual meeting or at such other times as deemed necessary by both ministries, an operational issue may be discussed. The parties agree to jointly analyze the issue and develop options for resolution. Options may include:

- Comments/input into the existing operational procedure;
- Development of internal documents to ensure that the issue is addressed;
- Possible inclusion of an additional operational procedure to be included in the agreement

Figure 1 is a flow chart illustrating the approval process to develop additional operational procedures. If a new operation procedure is deemed to be the preferred option by staff, a briefing note will be prepared and submitted to the Director of Lands and Waters Branch for MNR and the Regional Director, Eastern Region for MOE. The Directors will meet to determine if the operational procedure is warranted and direct staff appropriately.

Once respective staff has agreed to the operational procedure, it will be presented to the Directors of the respective ministry. The Directors will meet, if deemed necessary, to ensure that both agree to the operational procedure. Each Director will sign the Operational Procedure once it has undergone each ministry's respective approval process. Major policy or procedural changes may require additional approvals by both ministries.

Figure 1 - Flow chart illustrating the approval process to develop additional operational procedures



## **Training**

New operational procedures or changes to existing procedures will be delivered to field staff in each ministry, either jointly or independently, as deemed appropriate.

## **Operational Procedures Implemented**

Operational Procedure 1: To Address Environmental Complaints Regarding Pit and Quarry Operations within the Province of Ontario Between the Ministry of Natural Resources and Ministry of the Environment

Operational Procedure 2: To address the roles of MNR and MOE with respect to the review of hydrogeological reports submitted under the Aggregate Resources Act within Southern Ontario.

## **Appendices**

- Appendix A - Map of Designated Areas under the ARA
- Appendix B - Legislative Mandate under the ARA
- Appendix C - Other Legislative Mandate (not exhaustive)
- Appendix D - Ministry Contacts for Operational Procedures

**Operational Procedure 1:  
OPERATIONAL PROCEDURE TO ADDRESS ENVIRONMENTAL COMPLAINTS  
REGARDING PIT AND QUARRY OPERATIONS WITHIN THE PROVINCE OF  
ONTARIO BETWEEN THE MINISTRY OF NATURAL RESOURCES AND MINISTRY  
OF THE ENVIRONMENT**

**Overview**

The business approaches of MNR's Aggregate Resources Program and MOE's Procedures for Responding to Pollution Incident Reports (PR-PIR), necessitate that both Ministries cooperate to ensure that when the public lodges a complaint regarding an aggregate pit and/or quarry operation, that the complaint is handled in an expeditious, effective and efficient manner. The operational procedure is designed to clarify how MNR and MOE will work together when it comes to potential issues involving the ARA, environmental conditions under the OWRA and the EPA. The success or failure of this operational procedure depends on the willingness and cooperation of staff from both ministries to work together to achieve the needed environmental protection.

There are two scenarios in which a complaint from the public will be received. These are:

Scenario 1 = Complaint about an aggregate operation where MNR has issued a licence, wayside permit or aggregate permit under the ARA; and

Scenario 2 = Complaint about a private land aggregate operation in a part of the province that is not designated by regulation under the ARA.

The following operational procedure is not to be applied in situations where a complaint is received about an illegal operation (i.e. private land operation in a designated area of the province or where an aggregate permit would apply). MNR will undertake its investigation and enforcement procedures in these situations.

Note, where the term "complaint" is used in this operational procedure, staff of MNR shall interpret it in the usual context of the terminology and staff of the MOE shall interpret it to mean Pollution Incident Report (PIR). These terms are used in a broad sense and are in reference to incident reports associated with either ministry's legislation.

Any potential enforcement action described in this operational procedure must be undertaken in accordance with the statutes of limitations as prescribed by the respective legislation under which the enforcement action is being initiated.

## **Principles**

There are six key principles that provide a framework in which the following operational procedure is to be implemented.

1. All complaints respecting MNR licenced or permitted aggregate operations upon receipt are to be directed to and accepted by MNR for assessment.
2. MNR, as lead, is responsible to carry the complaint from receiving it through to notification to complainant regarding the outcome of the complaint in respect to a licensed or permitted aggregate operation. Although MNR is carrying the complaint, MOE will notify complainant and MNR (if a violation is under the OWRA/EPA).
3. Any required legal action will be the lead responsibility of the ministry responsible for the legislation under which the action is being taken.
4. MNR shall first attempt to resolve all complaints either through voluntary abatement and/or through the enforcement tools available to MNR. If voluntarily abatement is not achieved and MNR does not have the necessary tools to enforce compliance of environmentally related complaints, MNR may then request, in writing, abatement/enforcement support from MOE.
5. When required, technical support from MOE to MNR will be provided in accordance with this operational procedure in addressing a complaint about a licenced or permitted aggregate operation.
6. For private lands in non-designated areas, MOE will receive, assess and direct any complaints received related to its mandate.

### Scenario 1 - Designated Areas and Crown Lands

The following operational procedure addresses the process involved in receiving and responding to complaints lodged against an aggregate operation that has been licenced or permitted by MNR under the ARA (see Appendix A – Map of designated areas).

#### Complaint Received

1. Upon receiving a complaint, MNR advises the licensee or permittee that a complaint has been received against their operation. MNR will not disclose the name of the complainant should they wish to remain anonymous.
2. If MOE receives the complaint, MOE District staff will record the particulars of the complaint and direct, in writing, to the appropriate

MNR office and the operator. MOE staff shall log the complaint in MOE's Integrated Divisional System (IDS) as a limitation (category: Compliance, database: Incident Reporting, select New Incident Report, fill out Initial Incident report, select: save as deferred incident report). MOE staff shall print out the Initial Incident report and send a copy by facsimile to MNR.

3. MNR will assess the complaint.
4. If the complaint is in relation to a possible violation that is not under the jurisdiction of the ARA, EPA or OWRA, then MNR will direct the complainant to an appropriate contact (e.g. Ministry of Labour, local municipality, other program area in MNR).

#### ARA Violation Possible (including OWRA/EPA Licensee and Permit Conditions)

5. If the complaint is in relation to compliance with the ARA, regulations, site plan or conditions under the ARA, EPA or the OWRA, then MNR will determine if the operation is in compliance or not.
6. If the operation is in compliance (with the ARA including environmental conditions, under the EPA or the OWRA), then there is no action required by the operator and MNR will notify the complainant.
7. If there are questions as to whether the operation is in compliance with the legislation, MNR will undertake a priority assessment of the complaint in terms of low to high priority for investigation.
8. Where conditions or site plan notes cross-reference the EPA or OWRA (see examples), MNR will contact MOE, in writing, through the local District office for technical support and action. MOE, through the local District office, will provide technical expertise and assistance/action in assessing compliance (e.g. possible well interference due to quarry dewatering).

When MNR requests assistance from MOE District in this manner, MOE staff shall log the complaint in IDS as an incident (category: Compliance, database: Incident Reporting, select New Incident Report, fill out Initial Incident report, select: create incident report).

9. MNR will undertake an investigation in order of priority, highest to lowest as determined by MNR.



10. When MNR undertakes an investigation, the following options can be utilized:
  - a) contact operator and seek voluntary compliance;
  - b) take enforcement action (warning, suspension, charges and/or intent to revoke) under the ARA; or
  - c) where voluntary compliance is not forthcoming, MNR may request MOE's assistance in securing information from the operator.
11. Whether voluntary abatement by the operator or enforcement action by MNR, the complainant will be notified by MNR about the action being taken and the results of the action.

#### No ARA Violation but Possible OWRA/EPA Violation

12. If MNR determines that the operation is in compliance (with the ARA), but that the issue may be a possible violation of OWRA or EPA, then MNR will contact MOE, in writing, through the local District office.
13. When MOE receives notification from MNR about a potential violation, an Incident Report will be filed in IDS by District Staff to track abatement and investigation actions. MOE staff shall log the complaint in MOE's Integrated Divisional System (IDS) as an incident (category: Compliance, database: Incident Reporting, select New Incident Report, fill out Initial Incident report, select: create incident report).
14. If an investigation is determined necessary by MOE the following options can be utilized:
  - a) take enforcement action (Provincial Officer Order, issue ticket, Director's order, warning) under the EPA or OWRA; Noise and blasting complaints must be responded to, and where necessary, the use of the Provincial Officer's Order directing the operator to some action such as initiating a monitoring program
  - b) pursue additional enforcement action with assistance from MOE's Investigations and Enforcement Branch (IEB) in conjunction with MNR.
15. Enforcement action under the EPA/OWRA will be pursued by MOE.
16. MOE will inform MNR and the complainant, in writing, of the action to be taken and the results of the action.
17. If it is determined that no enforcement action is warranted, MOE will advise MNR and the complainant, in writing.

### Technical Support Operational Procedure

Initiating involvement of the MOE, Regional Technical Support Section (T.S.S.), if necessary, starts with the MOE District either receiving a request from the MNR for assistance or the MOE District requiring assistance themselves. MNR is to contact the T.S.S. only through the MOE Districts. The T.S.S. will then respond directly to the MOE District who will then forward any comments/reports/reviews on to MNR. MOE District Staff will be responsible for creating the appropriate IDS files.

### EAAB Noise Section Operational Procedure

Initiating involvement of the MOE, Environmental Assessment & Approvals Branch (EAAB) Noise Section, if necessary, starts with the MOE District either receiving a request from the MNR for assistance or the District requiring assistance themselves. MNR is to contact the EAAB Noise Section only through the Districts. The EAAB Noise Section will then respond directly to the District who will then forward any comments/reports/reviews on to MNR. District staff will be responsible for creating appropriate IDS files.

### **Scenario 2 – Non-designated Areas - Private Lands Only**

The following operational procedure addresses the process involved in receiving and responding to complaints lodged against a private land aggregate operation in a part of the province that is not designated by regulation under the ARA (refer to appendix B for a map showing designated areas of the province). These operations are not subject to the requirements of the ARA and its regulations. If MOE receives a complaint, the following action applies:

1. MNR and/or MOE will determine if the issue is a potential contravention of:
  - a) MNR legislation (i.e. Lakes and Rivers Improvement Act, Fisheries Act) other than the ARA; or
  - b) EPA or OWRA.
2. If there is a possible contravention of MNR legislation other than the ARA, then the complainant will be directed, in writing, by MNR or MOE to a contact with MNR.
3. If there is a possible contravention of the EPA or OWRA, then the complainant will be directed by MNR or MOE to a contact within the local District Office of MOE.
4. If the issue is not related to either of MNR's or MOE's mandate (e.g. Occupational Health and Safety Act, by-law issue under Municipal

Act), then MNR and/or MOE should suggest to the complainant to contact the appropriate Ministry (i.e. Ministry of Labour) or agency (i.e. municipal office if one exists).

5. Where possible contravention of MNR legislation has occurred, MNR will investigate the issue and apply the appropriate procedures to address the matter.
6. MNR will notify the complainant about the assessment, action taken and results of the action.
7. Where possible contravention of the EPA or OWRA has occurred, MOE will assess the issue and take appropriate action as required. This will involve a process as described in steps 13 through 16 as presented in Scenario 1 except that MNR will not be involved.
8. MOE will notify MNR and the complainant, in writing, about the action taken and results of the action.

#### Ongoing Environmental Issues

The Minister of the MNR has the authority under the ARA to amend a licence/permit and/or a site plan. Any request to amend a licence/permit and/or a site plan can be appealed to the Ontario Municipal Board (OMB), in the case of a licence, or the Mining & Lands Commissioner (MLC), in the case of an aggregate permit. Given the possibility of such appeals, and the large number of licences/permits that do not have environmental conditions, it is not reasonable to request MNR to re-open all licences/permits that do not have environmental conditions.

However, in cases where there are recurring environmental concerns at pits or quarries that do not have environmental conditions on their licences/permits, there may be a benefit in revisiting the licences/permits to add such conditions.

Adding environmental conditions to a licence/permit would not relieve MOE of the responsibility to provide technical expertise to MNR during an investigation, but it would ensure that the Province has more effective tools to enforce the ARA and protect the public from environmental impacts.

MOE shall use the following process to approach MNR and request amendments to licences/permits where there are significant recurring or ongoing environmental problems:

1. A significant environmental problem is defined as one resulting in the issuance of at least 2 orders/tickets for same offence in the same year

2. MOE shall provide a report to MNR, which includes details of complaints received and MOE actions, results, and recommendations for amending the licence/permit. Consistent tracking of complaints by MOE District Staff on IDS should ensure that MOE has sufficient information to support its recommendations to MNR.
3. MNR shall seriously consider the information provided by MOE where an operation is causing ongoing environmental problems. MNR shall decide whether to amend the licence/permit, and shall notify MOE in writing of its decision.
4. If MNR agrees to amend the licence/permit, MOE staff shall support MNR upon request at the OMB if the licence is appealed by the licensee or in the case of a permit if appealed to the MLC by the permittee.
5. In the case of new licences/permits MNR will include, as conditions of the licence/permit, minimum standards of environmental protection such as the examples listed below.

**Examples of ARA Licence/Permit Conditions and/or Site Plan Notes that Cross Reference EPA or OWRA Requirements**

1. Where the Ministry of Natural Resources with the assistance of the Ministry of the Environment has determined that the operation of the pit/quarry has caused any well water to be adversely affected, the licensee/permittee shall, at the licensee's/permittee's expense, either deepen the well or replace the well to ensure that historic water production quality standards are maintained for that well. If this pit/quarry operation has caused a water supply problem, the licensee/permittee shall, at their expense, ensure a continuous supply of potable water to the affected land owner.
2. All construction equipment used in any phase of pit/quarry operation shall conform to the Ontario Ministry of the Environment Noise Guidelines for Construction Equipment as prescribed in the ministry's publication NPC115.
3. The licensee/permittee shall comply with Ontario Ministry of the Environment Noise Guidelines for stationary sources as prescribed in the Ministry's publication NPC205 and NPC232.
4. Dust emissions from the licensed/permitted site shall be controlled to ensure compliance with the Environmental Protection Act and Ontario Regulation 346.

5. The licensee/permittee shall apply dust suppressants as frequently as necessary to control dust emissions from internal haul routes, and the type of suppressant, method of application, and the frequency of application shall be in accordance with any requirements of the Ministry of Natural Resources and the Ministry of the Environment.
6. Dust emissions from the licensed/permitted site shall be controlled to ensure compliance to standards set out in ministry publication: "Summary of Point of Impingement Standards, Point of Impingement Guidelines and Ambient Air Quality Criteria".

### **Summary**

For this operational procedure to be effective, MNR must be cognizant of all requirements of the ARA, the regulations, site plans and conditions on all of its licences and permits. The one-window approach with MNR being the first contact in designated areas of the province must be followed. In non-designated areas it is the responsibility of both ministries to work together in support of this operational procedure. It will also be imperative that when MNR approaches MOE for technical support or support in notifying complainants (Scenario 1) that MOE provide that support in all cases. The combination of these commitments should help to ensure an effective operational procedure for addressing complaints related to aggregate operations across the province that are received by either ministry.

It is important for MOE and MNR to maintain a dialogue with respect to this operational procedure to ensure that it is working effectively and provide a level of service to protect the public and meets the objectives of both ministries. To this end, staff from MOE and MNR will review annually the operational procedure and any issues that may arise and make the necessary amendments to the operational procedure.

**OPERATIONAL PROCEDURE 2:**  
**TO ADDRESS THE ROLES OF MNR AND MOE WITH RESPECT TO THE**  
**REVIEW OF HYDROGEOLOGICAL REPORTS SUBMITTED UNDER THE**  
**AGGREGATE RESOURCES ACT WITHIN SOUTHERN ONTARIO**

**Overview**

The intent of this operational procedure is to clarify and co-ordinate the respective roles and responsibilities of both ministries during the review of an application for a pit or quarry licence/permit or a site plan amendment to an existing licence/permit issued under the ARA. The goal is to improve integration and modernization of regulatory responsibilities across ministries and ensure government responses are provided within the legislated timeframes.

Legislated Timeframes

The legislated timeframes for comments and objections are as follows:

- 45 days for a new licence
- 20 days for a new permit
- 30 days for an amendment to a site plan under an existing licence or permit.

**Scope of Application**

This operational procedure applies to all licence and permit applications and site plan amendments (to extract below the water table) situated within Southern Region of MNR where MOE is required, under the ARA, to be circulated.

This operational procedure pertains to the notification and consultation requirements as described within the Aggregate Resources of Ontario Provincial Standards (AROPS).

This operational procedure recognizes that there may be circumstances where MNR may require MOE to comment on applications or site plan amendments not normally circulated to MOE, if MNR deems it necessary.

**Roles and Responsibilities**

The parties agree to undertake the roles and responsibilities as defined below.

Role of the MNR Aggregate Inspector

The Aggregate Inspector's role is to review the application under the ARA to determine compliance with the AROPS and make a determination as to whether

the application should be circulated to MOE; and to write a letter, once the application has been deemed complete, advising the applicant to proceed with the notification/consultation standards.

### Role of the MNR and MOE Hydrogeologist

The role of the MOE and MNR hydrogeologist is to review the hydrogeological report(s) and related material as it pertains to the proposed development and their respective mandates to ensure that impacts are avoided or mitigated to an acceptable level, as appropriate.

As part of the review, the hydrogeologist is to ensure that appropriate geosciences principles were applied by the consultant to come to the presented conclusions, including:

- a reasonable geological model was used, proper and acceptable procedures and assumptions were employed;
- sufficient field work (including mapping, drilling, excavations, pump testing etc.) was conducted;
- proper use of numerical modeling (if applicable); and
- that a comprehensive well survey was conducted in such a manner that a solid understanding of aquifer use, vulnerability, and connectivity to the site has been generated.

If necessary, recommendations regarding appropriate mitigative measures and trigger levels are to be made along with proper site and off site monitoring and reporting requirements. A typical monitoring program varies on a site-by-site basis but regularly includes groundwater monitoring (water table elevations, quality, and temperature); surface water monitoring (elevation, quality, temperature, and flow rates), reporting schedule and the establishment of trigger levels. The monitoring program, mitigative measures and trigger levels can all be recommended as conditions on the licence/permit.

The hydrogeologist will conduct a detailed review including but not limited to the following matters:

- On a broad scale, the impact of development related to groundwater issues;
- Groundwater related parameters utilized such as dewatering volumes, cone of influence, hydraulic conductivity, etc. ;
- Site and regional geology as it applies to the proposed development for data gaps, accuracy, lithology, etc.;
- Methodology of investigation for appropriateness; and
- Monitoring programs, trigger levels, site operations, rehabilitation plans, operational plans, etc. with regard to groundwater impacts.

The initial part of the review process (i.e. desktop review) would be followed (if practicable) by a field visit to ground-truth statements in the report(s).

### Role of MNR's Hydrogeologist

The role of MNR's hydrogeologist is to review the hydrogeological report(s) and related material to assess any potential impact(s) from the proposed development to surface water and associated natural heritage features (e.g. wetlands, ponds, lakes, rivers). The impact to those natural heritage features that are of significance (includes features identified under the Provincial Policy Statement and provincial plans) are assessed, as well as the adequacy of any proposed mitigation, monitoring and/or reporting measures. A comprehensive monitoring program that will be sufficient to detect changes in the groundwater regime and thus changes in the connected surface water features may be required.

The Aggregate Inspector and hydrogeologist will discuss the conclusions stemming from this review with the applicable biologist(s), ecologist(s) and planner(s), to ensure that impacts are avoided or appropriate mitigative measures are recommended, as appropriate.

Communication with the MOE hydrogeologist is essential in eliminating duplication of effort.

### Role of MOE's Hydrogeologist

The role of MOE's hydrogeologist is to review the hydrogeological report(s) and related material to assess potential impacts from the proposed operations to water well supplies (i.e. impacts to drinking water supplies and local domestic wells as a part of the impact to the groundwater system as a whole) and nearby surface water features (i.e. wetlands, ponds, lakes, rivers). Potential impacts, if any, are assessed to ensure that adverse impacts to supplies, and the quality and flow of receiving water bodies are mitigated.

Communication with the MNR hydrogeologist is essential in eliminating duplication of effort.

Review comments will be forwarded to the proponent and to the MNR Aggregate Inspector.

## **Implementation Procedures/Provisions**

(see Figure 2 - Flowchart)

### ARA Application/Amendment Process - Initial Review

1. The Aggregate Inspector will review the application/amendment request under the ARA to determine whether the application has been



completed in accordance with the AROPS/ARA policies and to determine whether circulation to MOE is required.

2. Where the aggregate operation will operate below the water table, and MNR determines that the application/amendment request is complete, the Aggregate Inspector will write a letter, advising the proponent to proceed with the notification/consultation standards and to attach this letter to package being circulated to MOE. The letter will indicate that MOE will not review the application package/reports if MNR's letter is not attached.
3. Where the aggregate operation will not operate below the water table, but MNR feels that circulation to MOE is necessary due to the controversial nature or need for verification (i.e. circulation not normally required), MNR will first discuss the concerns with the MNR hydrogeologist and the Aggregate & Petroleum Resources Section before notifying MOE, in writing, that a review is required and include the reasons for the request. Upon receipt of the request, MOE will undertake the review in accordance with this Operational Procedure.
4. Upon receipt of the application/amendment request, MOE will verify whether the letter is attached and determine whether they are required to comment on the application.
5. If the letter has not been included or MOE determines that they are not required to comment on the application, MOE will notify the proponent and MNR, in writing, that no review will be undertaken and their response will include an explanation of the reason(s).
6. If MOE determines that comments are required, MOE should note the duration of commenting period deadline date.

#### Hydrogeological Review

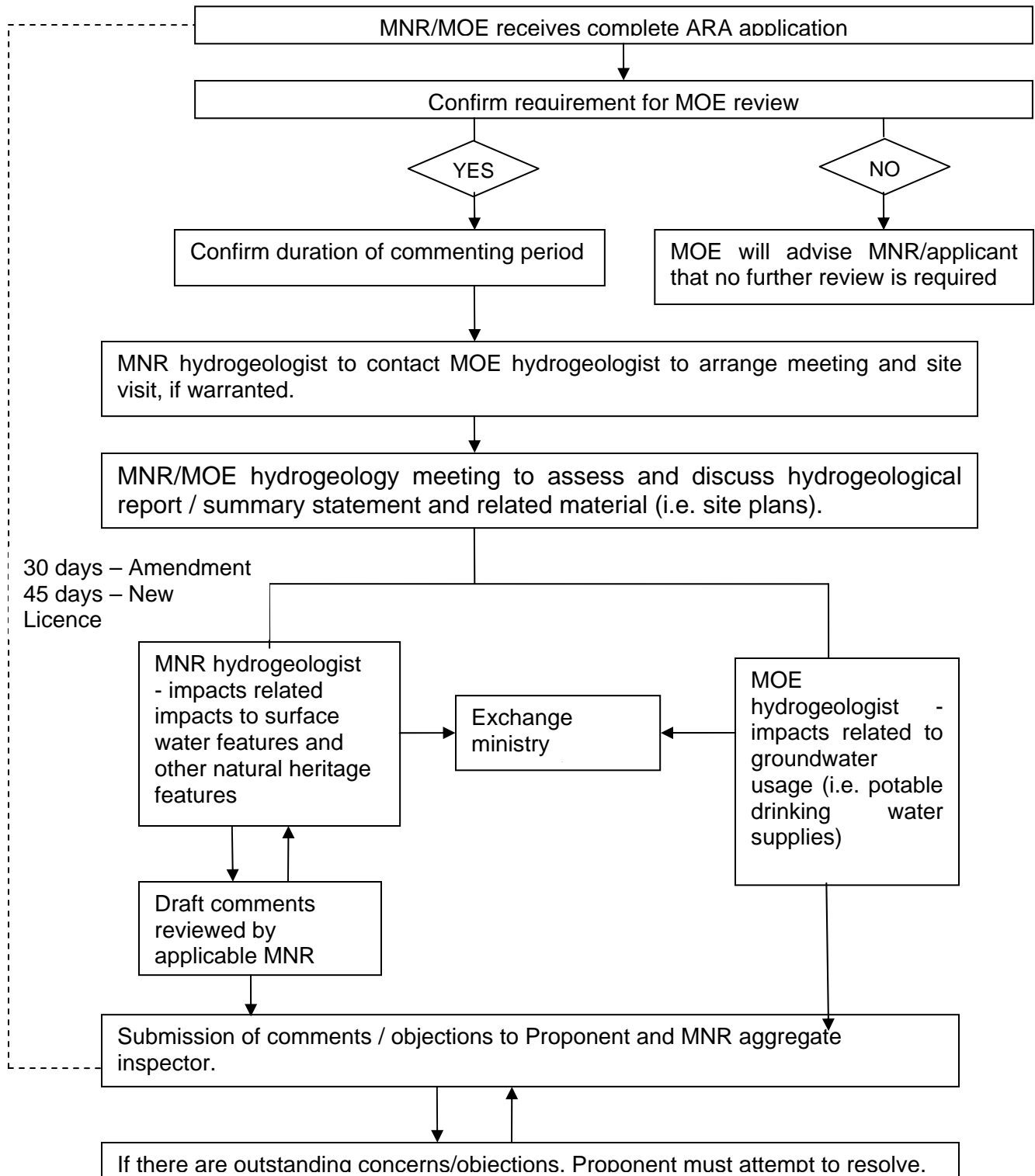
1. As soon as practicable, the MNR hydrogeologist will contact the MOE hydrogeologist to arrange a meeting and a site visit, if warranted.
2. If warranted, the MNR and MOE hydrogeologist will meet to assess and discuss the hydrogeological report and related material (i.e. site plans) including the suitability and completeness of geosciences theories and practices used by the proponent and/or the consultant.
3. Prior to the expiry of the commenting deadline, MNR and MOE staff will exchange their respective ministry comments (i.e. MOE draft comments reviewed by MNR hydrogeologist and MNR draft comments reviewed by MOE hydrogeologist).

4. The Aggregate Inspector/MNR hydrogeologist will discuss MNR and MOE draft comments with applicable MNR district staff (e.g. biologist, planner, ecologist).
5. MOE will forward final comments/issues to the proponent and the MNR Aggregate Inspector within the legislated timeframe.
6. The proponent will attempt to resolve issues and concerns raised by MOE and/or MNR.
7. The MNR and MOE hydrogeologists will continue to be involved in the review process, on an as needed basis, throughout the objection resolution period for new applications, as needed.

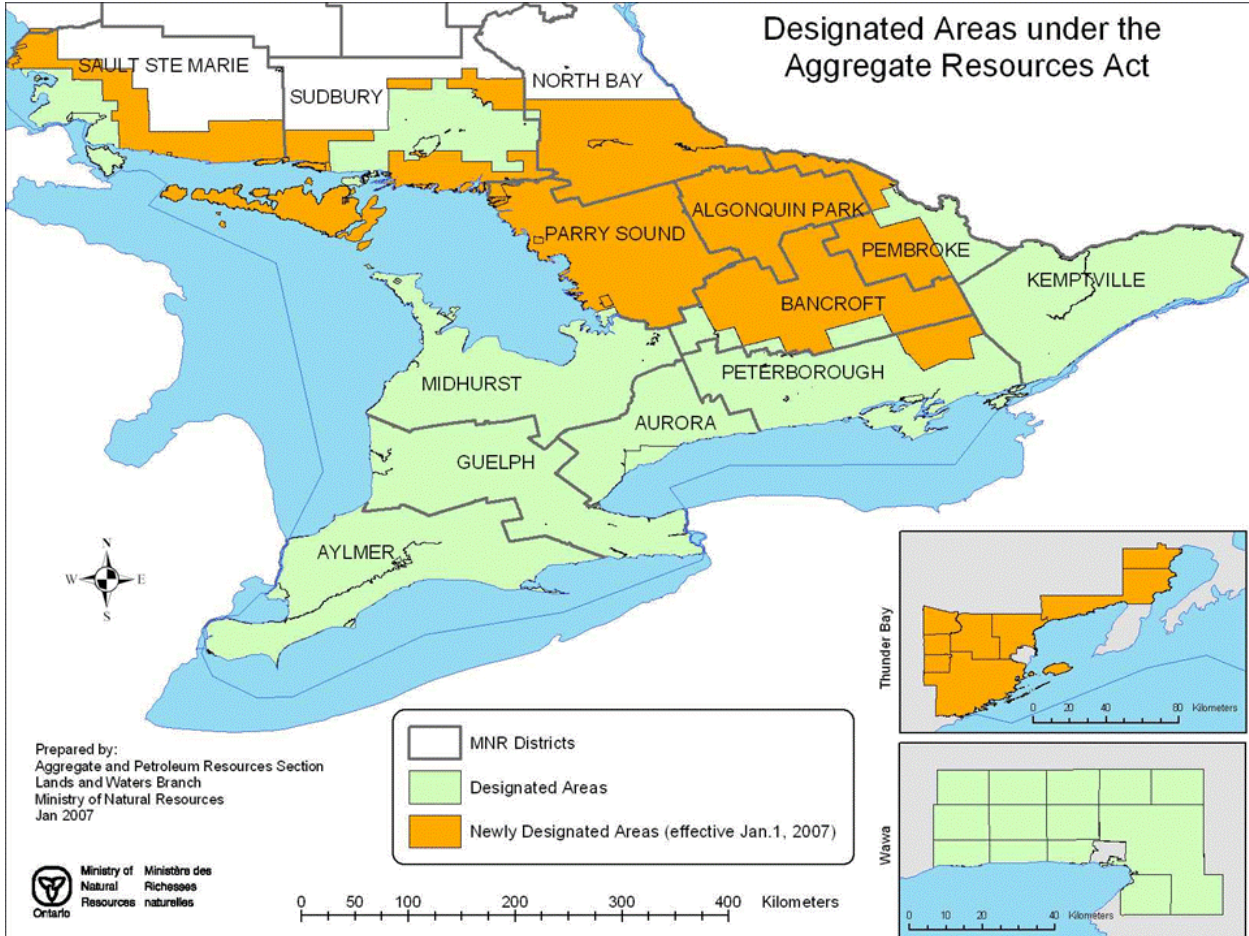
Appeal to the Ontario Municipal Board / Mining and Lands Commissioner

Based on the concerns raised during the review period the appropriate hydrogeologist will attend the hearing as an expert witness.

**FIGURE 2 – FLOW CHART**  
**MNR/MOE HYDROGEOLOGICAL REVIEW OF ARA APPLICATIONS**



# APPENDIX A



## **APPENDIX B LEGISLATIVE MANDATE UNDER ARA**

### **Ministry of Natural Resources**

The ARA is the primary tool in processing an application for a pit or quarry and contains legal timeframes for agencies, municipalities and the public to comment or object to a proposal. The application is proponent driven, with MNR acting as the caretaker of the process and eventually recommending if a licence/permit should be issued and what terms and conditions, in keeping with the purpose of the ARA, should be attached to the licence/permit.

#### The Application Process

In summary, the applicant must submit an application specific to the type of operation. The Site Plan requirements, technical reports, and consultation and notification process are delineated in the Provincial Standards. Once MNR has deemed the application complete, a letter is issued to the proponent. The proponent must circulate on or before the publication date of Form 1, the complete application package (including the letter from MNR) to MOE for comments. MOE has 45 days from the date of publication in which to make comments on the application. Comments are sent to the proponent as well as the District Manager for MNR. The comments and recommendations are incorporated into the licence/permit. The proponent shall attempt to resolve all objections. (see flow charts)

#### The Application Package

The requirements for an application vary on the type of operation being proposed. In essence, there are 3 potential technical reports that MOE may have a role to play:

- Hydrogeological Report
- Noise Assessment
- Blast Design

#### Technical Reports

Under the ARA, if a proposal is intending to excavate into the water table through drag lining in a pit or dewatering a quarry a Hydrogeological Report will be required. This report will identify the potential for adverse effects on ground water and surface water resources and their uses, an impact assessment is required to determine the significance of the effect and feasibility of mitigation. The Hydrogeological Report must be reviewed by an MOE hydrogeologist and if there are any nearby natural features, it must also be reviewed by the MNR hydrogeologist.

### Level 1 Hydrogeological Report

A Level 1 Hydrogeological Report is a preliminary hydrogeological assessment to determine the final extraction elevation relative to the established groundwater table, and the potential for adverse effects to groundwater and surface water resources and their uses.

### Level 2 Hydrogeological Report

A Level 2 Hydrogeological Report must address the potential for adverse effects of the operation on the following features if located within the zone of influence for extraction below the groundwater table and must be prepared by a qualified geoscientist or professional engineer with adequate experience in that field. The report must include the following items:

- Waterwells;
- Springs;
- Groundwater aquifers;
- Surface water courses and bodies;
- Discharge to surface water;
- Proposed water diversion, storage and drainage facilities on site;
- Methodology;
- Description of the physical setting including local geology, hydrogeology and surface water systems;
- Water budget;
- Impact assessment;
- Mitigation measures including trigger mechanisms;
- Contingency plan;
- Monitoring plans; and
- Technical support data in the form of tables, graphs and figures, usually appended to the reports.

### Noise Assessment

If extraction and/or processing facilities are located within (150 metres for a pit or 500 for metres for a quarry) of a sensitive receptor, a noise assessment report is required to determine whether or not provincial guidelines can be satisfied.

### Blast Design

A Blast Design report is required if a sensitive receptor is within 500 metres of the limit(s) of extraction to demonstrate that provincial guidelines can be satisfied.

## **Ministry of the Environment**

### Hydrogeological Report

For the Hydrogeological Report, MOE will review the document as per its legislative mandate.

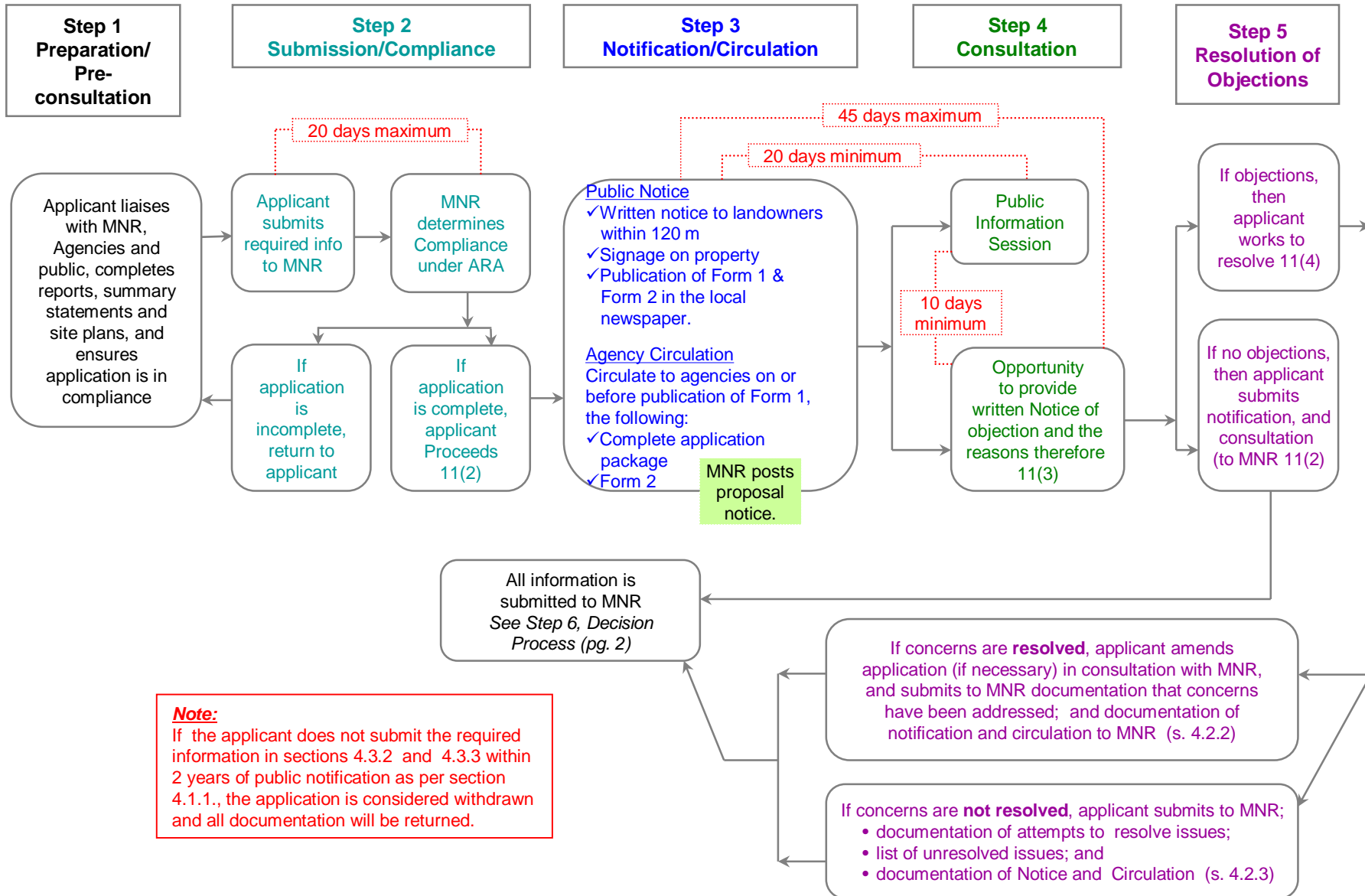
It should be noted that this type of Hydrogeological report under the ARA may not be sufficient to apply for a Permit to Take Water under the OWRA.

#### Noise Assessment and Blast Design

MOE has deemed that the Noise Assessment report and the Blast Design report will not be reviewed by EAAB (Noise and Air) as long as they are prepared by a person with appropriate training and/or experience. Many of the Prescribed Conditions that are attached to a licence/permit contain provisions to deal with these environmental issues

# Licence Application Process

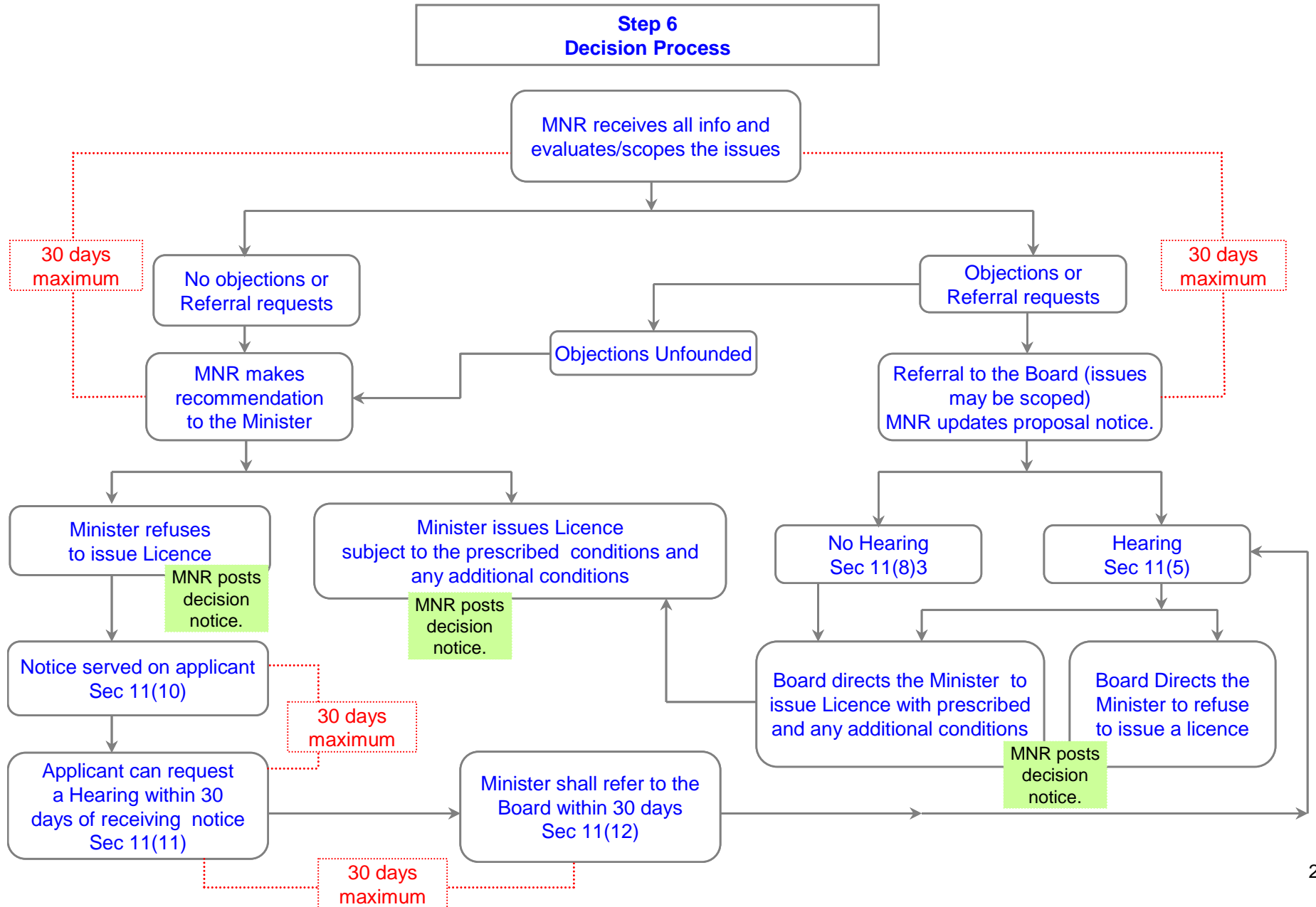
## Under the ARA - Categories 1 to 8





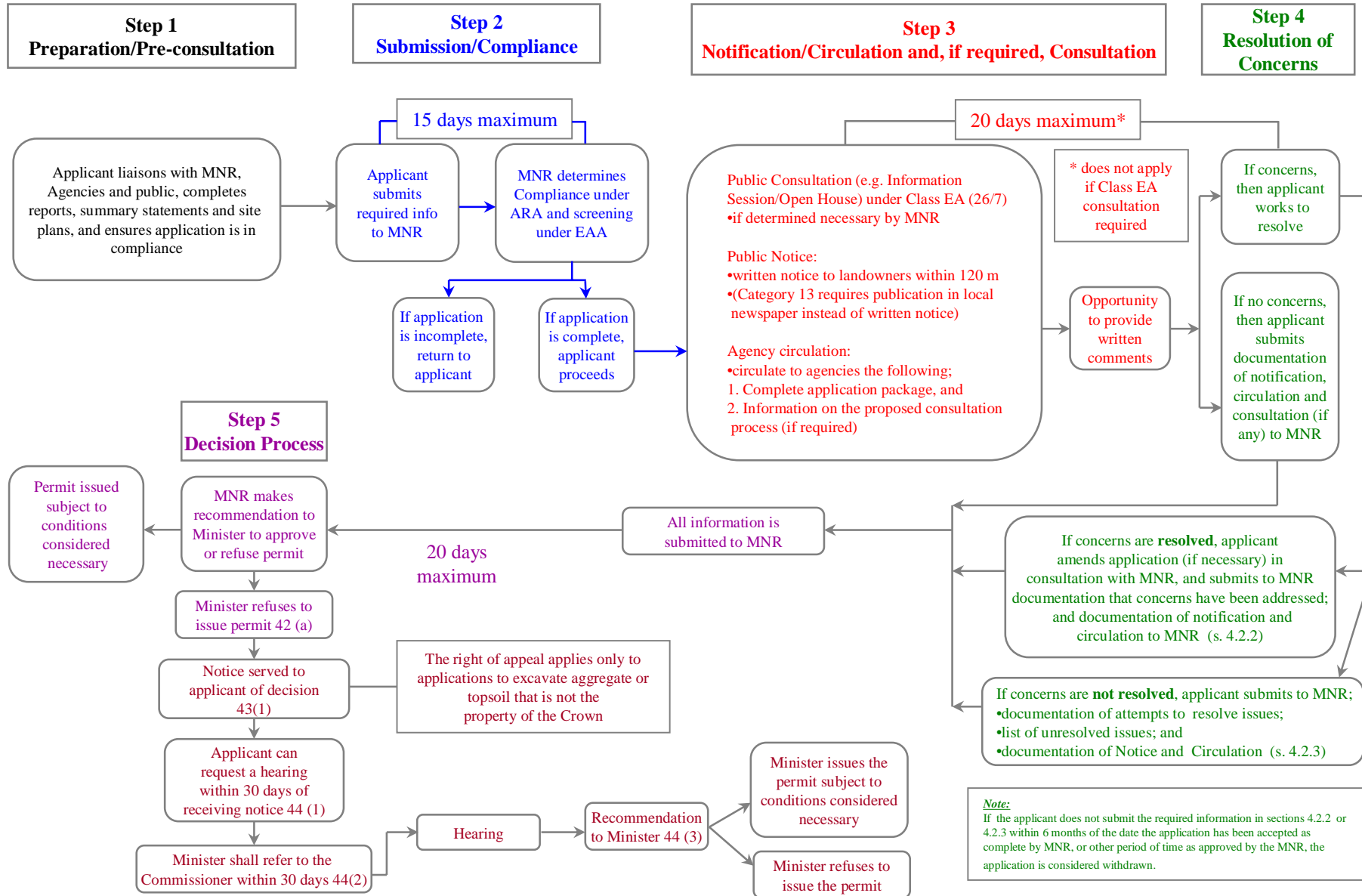
# Licence Application Process

## Under the ARA - Categories 1 to 8



# Aggregate Permit Application Process

## Under the ARA - Categories 9 to 13



## **APPENDIX C: OTHER LEGISLATIVE MANDATES (NOT EXHAUSTIVE)**

### **Ministry of the Environment (MOE)**

The MOE is responsible for several pieces of legislation which have an impact on the aggregate industry. As part of the application process, MOE will have regard for each legislative requirement. The proponent is not required to have the various approvals and permits prior to being granted a licence or permit, but they are required prior to starting operations, or in the case of the Permit to Take Water program (PTTW), prior to the start of taking water.

The following summaries of the various legislative mandates provide context for this operational procedure.

#### Ontario Water Resources Act (OWRA)

The MOE is responsible for the supervision of Ontario's ground and surface water supply.

##### *Certificates of Approval (Sewage)*

Certificates of Approval (C of A's) are issued under the OWRA for industrial sewage works. C of A's are required for facilities that discharge sewage (as defined by the Act) to ground and surface water. Section 53 of the OWRA requires that an approval must be obtained in order to establish, alter, extend or replace any sewage works. Sewage works are defined as works used for the collection, transmission, treatment or disposal of sewage. Operations that require approval include but are not limited to:

- storm water management facilities for industrial sites;
- quarry and mine dewatering systems and wash plants;

##### *Permit to Take Water (PTTW)*

The purpose of the PTTW program is to ensure the conservation, protection and wise use and management of the waters of the province. Permits are controlled and not issued if the taking of more water in a given area would adversely affect existing users or the environment. Anyone taking more than 50,000 litres of water a day, with some exceptions, must obtain a PTTW from the MOE. Where an applicant is not intending to excavate below the water table until a future phase of the operation an application to acquire a PTTW will not be considered by MOE until such time as the applicant/licensee/permittee requires the permit.

#### Environmental Protection Act (EPA)

##### *Certificate of Approval (air)*

Section 9 of the EPA forms the basis for the Air and Noise Approval Program in Ontario. The wording of section 9 is broad, with the result that most industrial processes or modifications to industrial processes and equipment require approval. The ministry can

issue a C of A after receipt of a complete application that demonstrates compliance with the ministry requirements under the EPA, applicable regulations and guidelines. The purpose of the C of A is to require that the proposed activities or changes to the activities are established, altered, extended or replaced in accordance with ministry requirements and to place legally binding requirements on the owner/operator of the facility that are intended to prevent or mitigate environmental impacts. In addition, C of As can include performance standards that:

- protect human health and the environment by reducing the potential for harmful effects;
- require a facility to conform to generally accepted engineering practices with the expectation that it will operate reliably;
- provide minimum requirements for compliance as set out in the EPA, applicable regulations and guidelines; and
- place specific responsibilities on facility owners and operators.

Each C of A is site-specific and can be tailored to the individual circumstances and characteristics of the facility and its local environment. Issuance of a C of A however is not a guarantee that the equipment or facility will operate in compliance with the Act or applicable regulations or guidelines. If, at any time, emissions from the equipment contravene any part of the EPA, O. Reg. 419/05, or any conditions included in the C of A such contravention may become the subject of abatement or enforcement in accordance with section 186 of the Act. In addition, under section 9, the Director may amend or revoke the C of A in accordance with the Director's powers under the EPA.

#### Situations where PTTW are required in an Aggregate Operation

- The taking of more than 50,000 litres per day;
- The putting of water into and/or taking of water out of storage typically from an unlined pond or empoundment, (i.e. washing);
- Other water uses/sources (i.e. drinking water etc.) should be included in the application.

#### When a C of A for Industrial Sewage is required under Section 53 of the OWRA

- If an aggregate operation is discharging directly or indirectly into a ditch, stream, river, pond, lake, etc, as well as surface and subsurface, a C of A is required.

#### Certificates of Approval

The MOE approvals program has been designed to ensure that all undertakings requiring approval are carried out in accordance with legislation including the OWRA, the EPA, the Pesticides Act, the Environmental Assessment Act, the Environmental Bill of Rights, the Safe Drinking Water Act and associated regulations. C of As are required for facilities that release emissions to the atmosphere, discharge contaminants to ground and surface water, provide potable water supplies, or store, transport, process

or dispose of waste. Proponents of these types of activities are required to obtain C of A to ensure that the environment will not be adversely affected.

#### Role of the Environmental Assessment Approvals Branch (EAAB)

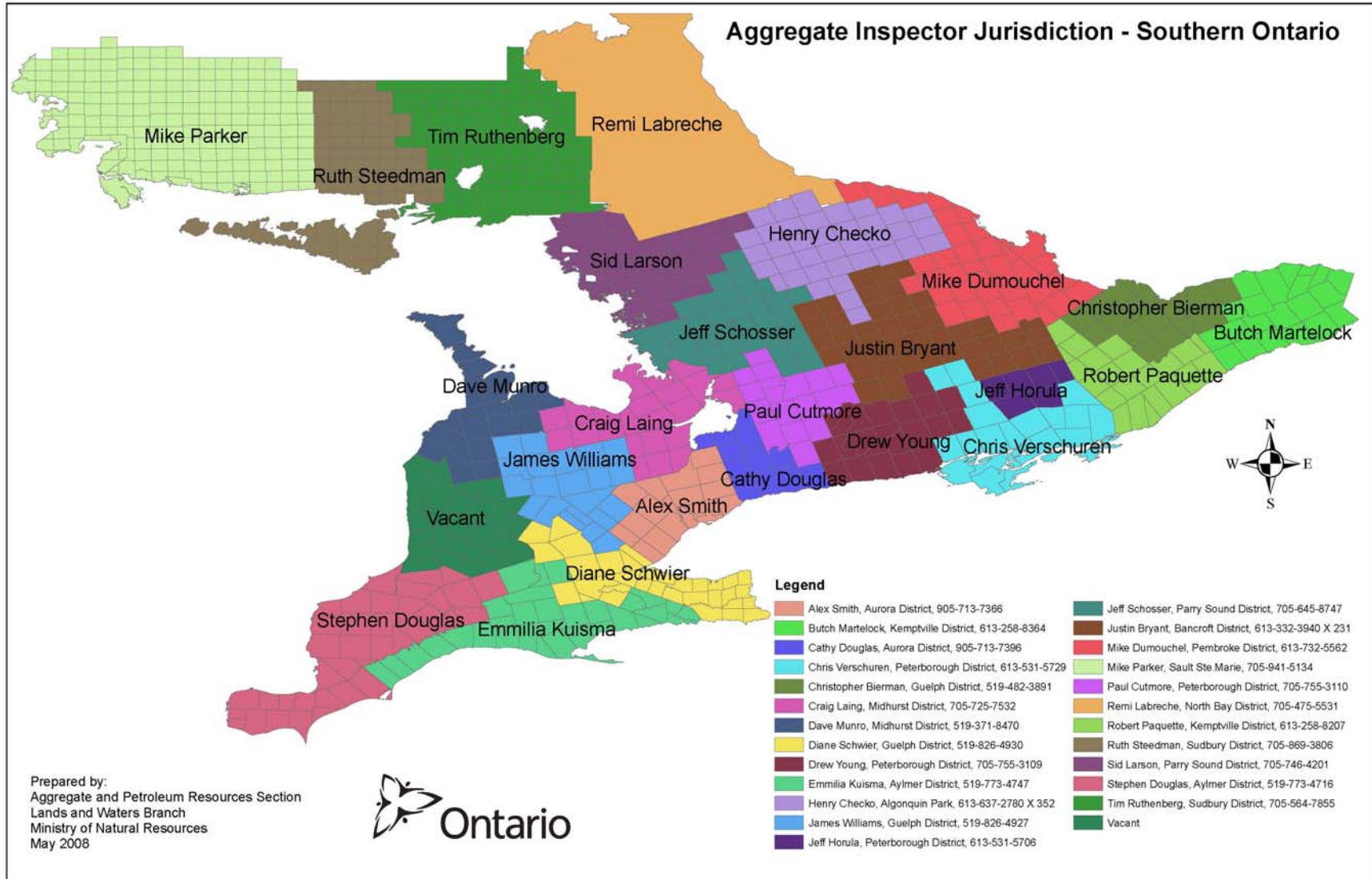
The EAAB of the MOE issues C of A's under the OWRA and the EPA for industrial sewage works, and plant/equipment operation. A C of A is required for facilities that:

- discharge contaminants to ground and surface water. A C of A applies to a quarry or mine dewatering systems and wash plants that dispose wastewater or storm water to surface water bodies, to the surface of the ground and to groundwater.
- Operate equipment that has noise implication.

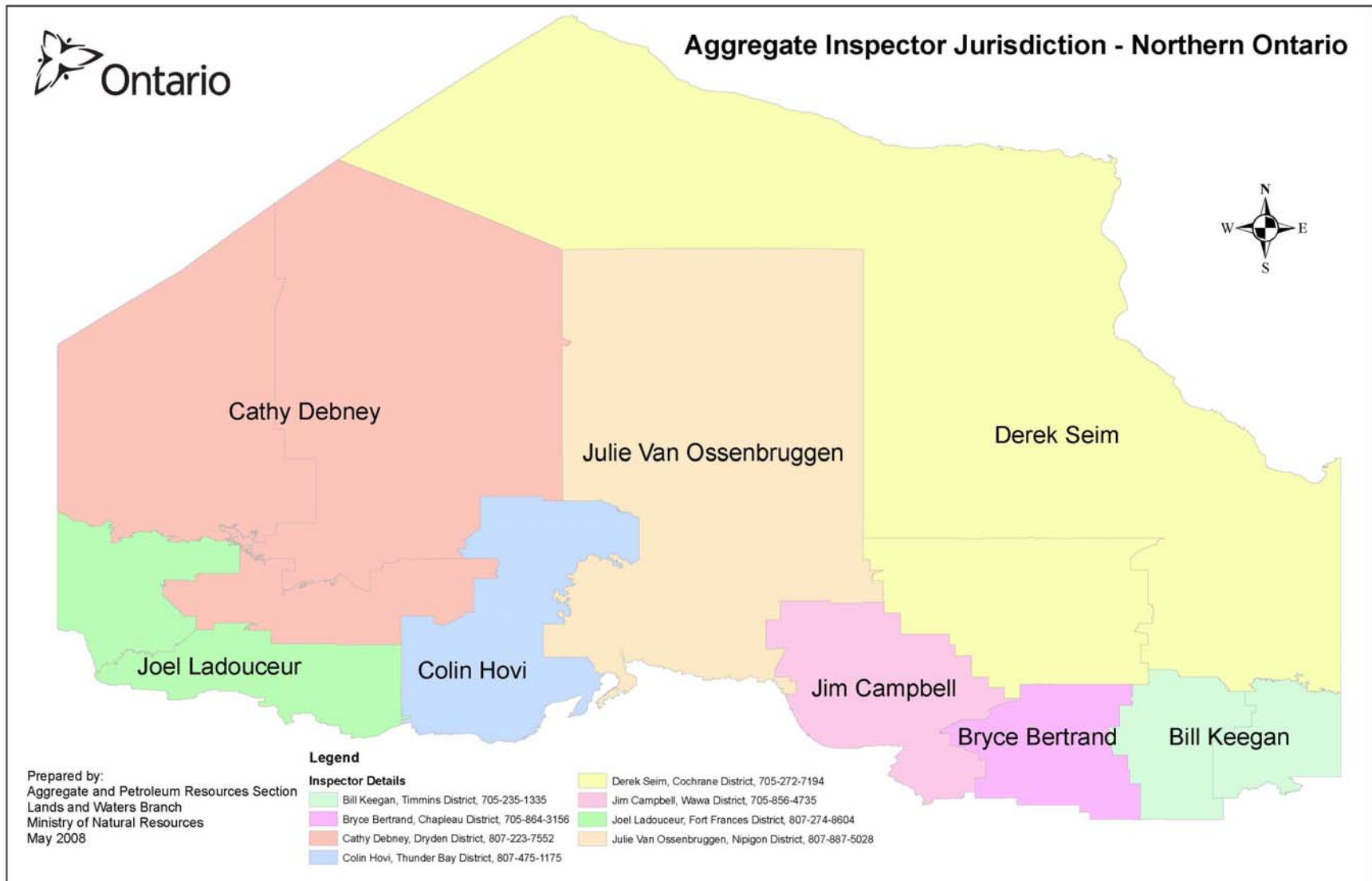
## APPENDIX D - MINISTRY CONTACTS (MNR, MOE, MTO)

### Ministry of Natural Resources Contacts: Field Services Division

Map 1



Map 2



**Aurora District**

50 Bloomington Road West  
Aurora, ON L4G 3G8

Aggregate Inspectors:

Cathy Douglas (905) 713-7396  
Alex Smith (905) 713-7425  
Fax: (905) 713-7359

**Aylmer District**

353 Talbot Street West  
Aylmer, ON N5H 2S8

Aggregate Inspectors:

Stephen Douglas (519) 773-4716  
Emmilia Kuisma (519) 773-4747  
Fax: (519) 773-9014

**Bancroft District**

106 Monck Street, P.O. Box 500  
Bancroft, ON K0L 1C0

Aggregate Inspector:

Justin Bryant (613) 332-3940  
Fax: (613) 332-0608

**Chapleau District**

190 Cherry St  
Chapleau, ON P0M 1K0

Aggregate Inspector:

Bryce Bertrand (705) 864-1710  
Fax: (705) 864-0681

**Dryden District**

479 Government Road, P.O. Box 730  
Dryden, ON P8N 2Z4

Aggregate Inspector:

Cathy Debney (807) 223-3341  
Fax: (807) 223-2824

**Fort Frances District**

922 Scott St.  
Fort Frances, ON P9A 1J4

Aggregate Inspector:

Joel Ladouceur (807) 274-5337  
Fax: (807) 274-4438

**Guelph District**

P.O. Box 21048,  
605 Beaverdale Road  
Cambridge, ON N3C 2W1

Aggregate Inspectors:

(Guelph Office)

Diane Schwier (519) 826-4930  
James Williams (519) 826-4927  
Fax: (519) 826-4905

(Huron/Perth Area Office)

Vacant (519) 482-3891  
Fax: (519) 482-5031

**Hearst District**

(Kapusksing Area Office)  
Government Road, R.R. 2  
Kapusksing, ON P5N 2X8

Aggregate Inspector:

Derek Seim (705) 335-6191  
Fax: (705) 337-9345

**Kemptville District**

P.O. Box 2002, Concession Road  
Kemptville, ON K0G 1J0

Aggregate Inspectors:

Robert Paquette (613) 258-8207  
Chris Bierman (613) 258-8364  
Butch Martelock (613) 258-8264  
Fax: (613) 258-3920

**Midhurst District**

2284 Nursery Road  
Midhurst, ON L0L 1X0

Aggregate Inspector:

Craig Laing (Midhurst) (705) 725-7532  
Fax: (705) 725-7584

(Owen Sound Area Office)

Dave Munro (519) 371-8470  
Fax: (519) 372-3305



**Nipigon District**

5 Wadsworth Dr, P.O. Box 970  
Nipigon, ON P0T 2J0  
Aggregate Inspector:  
Julie vanOssenbruggen (807) 887-5000  
Fax: (807) 997-2993

**North Bay District**

3301 Trout Lake Road  
North Bay, ON P1A 4L7  
Aggregate Inspector:  
Remi Labreche (705) 475-5531  
Fax: (705) 475-5500

**Parry Sound District**

7 Bay Street  
Parry Sound, ON P2A 1S4  
Aggregate Inspectors:  
Sid Larson (705) 746-4201  
FAX: (705) 746-8828  
(Bracebridge Area Office)  
Jeff Schosser (705) 645-8747  
Fax: (705) 645-8372

**Pembroke District**

P.O. Box 220, Riverside Drive  
Pembroke, ON K8A 6X4  
Aggregate Inspector:  
Mike Dumouchel (613) 732-5562  
Fax: (613) 732-2972

**Peterborough District**

300 Water St, P.O. Box 7000  
Peterborough, ON K9J 8M5  
Aggregate Inspectors:  
(Peterborough Area Office)  
Drew Young (705) 755-3109  
Paul Cutmore (705) 755-3110  
Fax: (705) 755-3125

(Kingston Area Office)

Chris Verschuren (613) 531-5729  
Jeff Horula (613) 531-5729  
Fax: (613) 531-5730

**Sault Ste Marie District**

64 Church Street  
Sault St. Marie, ON P6A 3H3  
Aggregate Inspector:  
Mike Parker (705) 949-1231 x 234  
Fax: (705) 949-6450

**Sudbury District**

Suite 5, 3767 Hwy 69 S  
Sudbury, ON P3G 1E7  
Aggregate Inspector:  
Tim Ruthenberg (705) 564-7855  
Fax: (705) 564-7879  
(Espanola Area Office)  
Ruth Steedman (705) 869-1330  
Fax: (705) 869-4620

**Timmins District**

Ontario Government Complex  
1270 Hwy 101 E  
P.O. Bag 3090  
South Porcupine, ON P0N 1H0  
Aggregate Inspector:  
Bill Keegan (705) 235-1335  
Fax: (705) 235-1377

**Thunder Bay District**

Suite B001, Ontario Government Bldg  
435 James St. S.,  
Thunder Bay, ON P7E 6S8  
Aggregate Inspector:  
Colin Holvi (807) 475-1136  
Fax: (807) 475-1527

**Wawa District**

160 Mission Riad, P.O. Box 1160  
Wawa, ON P0S 1K0  
Aggregate Inspector:  
Jim Campbell (705) 856-2396 x 236  
Fax: (705) 856-7511

## **Ministry of the Environment Contacts: Hydrogeological Contacts**

### **Central Region**

Water Resources Supervisor  
Technical Support Section  
Place Nouveau  
8th Flr, 5775 Yonge St  
Toronto ON M2M 4J1  
General Inquiry: 416-326-6700  
Toll Free: 800-810-8048  
Fax: 416-325-6345

### **Eastern Region**

Water Resources Supervisor  
Technical Support Section  
Unit 3, 1259 Gardiners Rd  
PO Box 22032  
Kingston ON K7M 8S5  
General Inquiry: 613-549-4000  
Toll Free: 800-267-0974  
Fax: 613-548-6908

### **Northern Region**

Water Resources Supervisor  
Technical Support Section  
3rd Flr, Suite 331  
435 James St S  
Thunder Bay ON P7E 6S7  
General Inquiry: 807-475-1205  
Toll Free: 800-875-7772  
- Within Area Codes 807 & 705  
Fax: 807-475-1754

### **Southwest Region**

Water Resources Supervisor  
Technical Support Section  
733 Exeter Rd  
London ON N6E 1L3  
General Inquiry: 519-873-5000  
Toll Free: 800-265-7672  
Fax: 519-873-5020

### **West Central Region**

Water Resources Supervisor  
Technical Support Section  
Ellen Fairclough Bldg  
12th Flr,  
119 King St W  
Hamilton ON L8P 4Y7  
General Inquiry: 905-521-7640  
Toll Free: 800-668-4557  
Fax: 905-521-7820

## Ministry of the Environment: Field Contacts

### CENTRAL REGION

#### Regional Office

Place Nouveau  
5775 Yonge St, 8<sup>th</sup> Floor  
Toronto, ON M2M 4J1  
(416) 326-6700

#### Halton-Peel District Office

4145 North Service Road  
Suite 300  
Burlington, ON L7L 6A3  
(905) 319-3847

#### York - Durham

#### District Office

230 Westney Rd. S, 5<sup>th</sup> Floor  
Ajax, Ont. L1S 7J5  
(905) 427-5600

#### Barrie District Office

54 Cedar Point Rd,  
Unit 1203  
Barrie, Ont. L4N 5R7  
(705) 739-6441

#### Metro Toronto District Office

5775 Yonge St  
9th Floor  
North York, ON M2M 4J1  
(416) 326-6700

#### York Region Satellite Office

TBA – Summer 2008  
TBA

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### EASTERN REGION

#### Regional Office

1259 Gardiners Rd, Unit #3  
P.O. Box 22032  
Kingston, Ont. K7M 8S5  
(613) 549-4000

#### Cornwall Area Office

113 Amelia St, 1<sup>st</sup> Floor  
Cornwall, Ont. K6H 3P1  
(613) 933-7402

#### Ottawa District Office

2430 Don Reid Rd  
Ottawa, Ont. K1H 1E1  
(613) 521-3450

#### Belleville Area Office

345 College St E  
Belleville, Ont K8N 5S7  
(613) 962-9208

#### Kingston District Office

1259 Gardiners Rd, Unit #3  
P.O. Box 22032  
Kingston, Ont. K7M 8S5  
(613) 549-4000

#### Peterborough District Office

Robinson Place, S. Tower  
300 Water St, 2<sup>nd</sup> Floor  
Peterborough, ON  
K9J 8M5  
(613) 755-4300

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### NORTHERN REGION

#### Regional Office

435 James St. S, 3<sup>rd</sup> Floor,  
Suite 331  
Thunder Bay, ON P7E 6S7  
(807) 475-1205

#### Thunder Bay District Office

435 James St. S, 3<sup>rd</sup> Floor  
Thunder Bay, ON P7E 6S7  
(807) 475-1315

#### Sault Ste Marie Area Office

289 Bay St, 3rd Floor  
Sault Ste Marie, ON P6A  
1W7  
(705) 942-6354

#### Kenora Area Office

808 Robertson St.  
P.O. Box 5150  
Kenora, ON P9N 3X9  
(807) 468-2718

#### Timmins District Office

Ontario Government Complex  
Hwy 101 E, P.O. Bag 3080  
South Porcupine, ON P0N  
1H0  
(705) 235-1500

#### Sudbury District Office

199 Larch St, Suite 1201  
Sudbury, ON P3E 5P9  
(705) 564-3237

#### North Bay Area Office

191 Booth Rd, Unit 16 & 17  
North Bay, ON P1A 4K3  
(705) 497-6865

**SOUTHWESTERN REGION**

**Regional Office**

733 Exeter Rd  
London ON N6E1L3  
(519) 873-5000

**London District Office**

733 Exeter Rd.  
London, Ont. N6E 1L3  
(519) 873-5000

**Owen Sound District Office**

1580 20<sup>th</sup> St E  
Owen Sound, Ont. N4K 6H6  
(519) 371-2901

**Sarnia District Office**

1094 London Rd.  
Sarnia, Ont. N7S 1P1  
(519) 336-4030

**Windsor Area Office**

4510 Rhodes Dr, Unit 620  
Windsor, Ont. N8W 5K5  
(519) 948-1464

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**WEST CENTRAL REGION**

**Regional Office**

Ellen Fairclough Bldg  
119 King St. W, 12<sup>th</sup> Floor  
Hamilton, Ont. L8P 4Y7  
(905) 521-7640

**Hamilton District Office**

119 King St. W, 9<sup>th</sup> Floor  
Hamilton, Ont. L8P 4Y7  
(905) 521-7650

**Niagara District Office**

301 St. Paul St, 9<sup>th</sup> Flr,  
Suite 15  
St. Catharines, Ont. L2R 7R4  
(905) 704-3900

**Guelph District Office**

1 Stone Road West, 4<sup>th</sup>  
Floor  
Guelph, Ont. N1G 4Y2  
(519) 826-4255

## **Ministry of Transportation Contacts**

### **Central Region, Downsview**

Geotechnical Section  
5th Floor Atrium Tower  
1201 Wilson Avenue  
Downsview, ON M3M 1J8  
Phone: 416-235-5437  
Fax: 416-235-3999  
Contact: D. Billings, Head, Geotechnical  
Engineer

### **Southwestern Region, London**

Geotechnical Section  
659 Exeter Road  
London, ON N6E 1L3  
Phone: 519-649-3017  
Fax: 519-649-3108  
Contact: S. McInnis, Head, Geotechnical  
Section

### **Eastern Region, Kingston**

Geotechnical Section  
355 Counter Street  
Postal Bag 4000  
Kingston, ON K7L 5A3  
Phone: 613-545-4795  
Fax: 613-545-4821  
Contact: D. Sproule, Head, Geotechnical  
Section

### **Northeastern Region, North Bay**

Geotechnical Section  
447 McKeown Avenue  
PO Box 3030  
North Bay, ON P1B 8L2  
Phone: 705-497-5479  
Fax: 705-497-5426  
Contact: D. Smith, Head, Geotechnical  
Section

### **Northwestern Region, Thunder Bay**

Geotechnical Section  
615 South James Street  
PO Box 1177  
Thunder Bay, ON P7C 4X9  
Phone: 807-473-2093  
Fax: 807-473-2168  
Contact: D. Schutte, Head, Geotechnical  
Section