The Environment and Mining

An Overview of Ontario’s Regulatory Framework

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Michelle McChristie, Great Lakes Advisor
Ministry of the Environment
Purpose

• To provide an overview of the mandate of the Ministry of the Environment and the environmental requirements for various stages of a mine’s development

• To provide an overview of the Ministry of the Environment’s regulatory process

Lac des Iles Mine
North American Palladium
Ministry of the Environment

• Our Mandate
  – The Ministry of the Environment is responsible for protecting clean and safe air, land and water to ensure healthy communities, ecological protection and sustainable development for present and future generations of Ontarians.
  – This mandate is sanctioned by several pieces of legislation, including the Ontario Water Resources Act (OWRA), the Environmental Protection Act (EPA), Pesticides Act (PA), the Environmental Assessment Act (EAA), the Environmental Bill of Rights (EBR), and the Services Improvement Act (SIA), together with numerous Regulations made under these Acts.
Ontario’s Environmental Statutes

• Ontario Water Resources Act
  – Permit to Take Water
  – Sewage Works Certificate of Approval
  – General prohibition regarding the discharge of pollutants to water

• Environmental Protection Act
  – Waste Management Certificate of Approval (sites and systems)
  – Waste Generator Registration
  – Air Certificate of Approval
  – Spills and Emergencies
  – General prohibition regarding the discharge of pollutants

• Environmental Assessment Act
  – Provincial and Federal Coordination

• Environmental Bill of Rights
Certificate of Approval

What is a Certificate of Approval?

- A Certificate of Approval is a document, which:
  - identifies the person(s) responsible;
  - identifies the location of the equipment and process;
  - describes the equipment and process;
  - may place requirements on the design, use, operation and maintenance of the equipment and process, including monitoring and reporting;
  - states that the equipment and process are approved under either the Environmental Protection Act or Ontario Water Resources Act;
  - is signed by a Director; and
  - references the supporting documentation that quantifies discharges or emissions and operations.
Environmental Bill of Rights

• The Environmental Bill of Rights (EBR) establishes the rights and procedures which enable residents of Ontario to participate in the making of environmentally significant decisions by the government.

• It is designed to hold the provincial government accountable to the public for those decisions.

• Instruments, such as Certificates of Approval must be posted on the EBR for a mandatory 30-day review period.

www.ebr.gov.on.ca

Winston Lake Mine
Inmet Mining Corp.
Ontario Water Resources Act

- Requires a **Permit to Take Water** for withdrawals greater than 50,000 litres/day, including dewatering (applies to the capacity of the pump)

- Requires a **Certificate of Approval** for the operation of sewage works (includes the collection, treatment and disposal of sewage)
  - Applies to domestic sewage works that discharge effluent to surface water and subsurface systems with a capacity greater than 10,000 litres/day (e.g. large septic tank and leaching bed systems)
  - Includes industrial sewage works - any works that collect, transmit, treat or dispose of wastewater generated from industrial activities

Nipigon Bay
Photo by Margaret Evans
The Environmental Protection Act includes provisions for **spills prevention**, reporting:

- A “spill”, when used with reference to a pollutant, means a discharge,
  - (a) into the natural environment,
  - (b) from or out of a structure, vehicle or other container, and
  - (c) that is abnormal in quality or quantity in light of all the circumstances of the discharge.

**Spill prevention and spill contingency plans** must be developed and implemented to:

- (a) prevent or reduce the risk of spills of pollutants; and
- (b) prevent, eliminate or ameliorate any adverse effects that result or may result from spills of pollutants, including,
  - (i) plans to notify the Ministry, other public authorities and members of the public who may be affected by a spill, and
  - (ii) plans to ensure that appropriate equipment, material and personnel are available to respond to a spill. 2005, c. 12, s. 1 (14).
Every person having control of a pollutant that is spilled and every person who spills or causes or permits a spill of a pollutant shall notify the following persons of the spill, of the circumstances thereof, and of the action that the person has taken or intends to take with respect thereto,

(a) the Ministry;
(b) any municipality within the boundaries of which the spill occurred or, if the spill occurred within the boundaries of a regional municipality, the regional municipality;
(c) where the person is not the owner of the pollutant and knows or is able to ascertain readily the identity of the owner of the pollutant, the owner of the pollutant; and
(d) where the person is not the person having control of the pollutant and knows or is able to ascertain readily the identity of the person having control of the pollutant, the person having control of the pollutant.
Environmental Protection Act

Prohibition, discharge of contaminant

• 14. (1) Subject to subsection (2) but despite any other provision of this Act or the regulations, a person shall not discharge a contaminant or cause or permit the discharge of a contaminant into the natural environment, if the discharge causes or may cause an adverse effect. 2005, c. 12, s. 1 (5).

Exceptions

• (2) Subsection (1) does not apply to,
  • (a) a discharge that is authorized under this Act or the Ontario Water Resources Act, if the discharge does not cause and is not likely to cause an adverse effect; or
  • (b) a discharge of a contaminant that arises when animal wastes are disposed of in accordance with normal farming practices, if the only adverse effect that is caused or that may be caused by the discharge is an adverse effect referred to in clause (a) of the definition of "adverse effect" in subsection 1 (1). 2005, c. 12, s. 1 (5).

When Ministry to be notified, adverse effect

• 15. (1) Every person who discharges a contaminant or causes or permits the discharge of a contaminant into the natural environment shall forthwith notify the Ministry if the discharge is out of the normal course of events, the discharge causes or is likely to cause an adverse effect and the person is not otherwise required to notify the Ministry under section 92. 2005, c. 12, s. 1 (6).
Environmental Protection Act

- A **Certificate of Approval** is required for a waste disposal facility required prior to using, operating, establishing, altering, enlarging or extending a waste management system or a waste disposal site.
  - A system includes the means through which waste is collected (e.g. trucks)
  - A site includes a transfer station, processing facility or disposal site

- A **Certificate of Approval** is required for the discharge of an airborne contaminant into the natural environment, including noise.

- Regulation 347
  - Regulates the storage and transportation of hazardous wastes.
  - Identifies the type / amount of waste is registerable or hazardous
Environmental Assessment Act

• The Environmental Assessment Act does not apply to private sector proponents of projects (such as mines), unless designated by regulation or a proponent voluntarily agrees to complete an environmental assessment (EA)

• EAs are required for large scale complex projects with the potential for significant environmental effects. An EA application consists of a terms of reference and an EA.

• A terms of reference is the work plan for how an EA will be prepared. The EA documents the results of a proponent's planning and decision-making process. The EA includes the proponent's identification and evaluation of alternatives, their environmental effects, impact management measures, and record of consultation.
The Canadian Environmental Assessment Act (federal legislation) applies whenever a federal authority has a specified decision-making responsibility in relation to a project - whether as a proponent proposing a project; a land administrator; a source of funding; or, as a regulator issuing a licence, permit or approval.

- Ontario shares EA responsibility with the federal government and supports the need for harmonization; a formal agreement establishes administrative mechanisms and guides coordination for projects subject to both federal and provincial EA requirements.

- The Agreement maintains the current level of environmental standards and the legislative and decision-making responsibilities of both governments. While projects requiring both provincial and federal EA approvals will still require separate approvals, effective communication will be provided between parties with clear roles and responsibilities. Decisions will also be based on the same body of information and there will be an ability to coordinate the timing of announcements related to a proposed project.
Approval Process

• The process typically begins with pre-application consultation:
  – a dialogue between the proponent, the Ministry, and possibly the public, prior to
    the submission of an application for approval
  – the consultation is meant to assist proponents in defining the environmental
    objectives for the project, such as effluent requirements, determining the
    requirements regarding characterisation of the source of raw water, establishing
    general acceptability of the proposed technology, identifying any special approval
    related requirements, and determining the need for public consultation/notice.
  – initiated by contacting the local District Office of the Ministry.

• Once the objectives of the project and approval requirements are understood, applications are submitted:
  – Applications for Permits to Take Water are formally made to the Regional Office
  – Applications for Certificates of Approval are formally made to the Director of the
    Environmental Assessment and Approvals Branch
Inspections

• An Environmental Officer (EO) is a provincial officer who has the legal authority to enter a facility to conduct an inspection under environmental legislation in Ontario.

• EOs are responsible for monitoring compliance with Certificates of Approval and Permits to Take Water

• In general, one EO is assigned to each facility and completes inspections pursuant to permits, certificates of approval and related requirements

• Inspection reports include a summary of the approved works, monitoring requirements and results, reporting requirements, audit sampling results (collected by the EO), and an overall assessment of whether the facility is operating in accordance with the Certificate of Approval
Enforcement

• Compliance issues noted during the inspection are recorded in a ministry incident report.
• Incident reports are used to track the compliance issue and response actions undertaken by both the ministry and the company.
• A compliance issue will be evaluated to determine whether it constitutes:
  – A known or anticipated human health or environmental impact or
  – A potential, uncertain environmental hazard.
• Depending upon the circumstances (e.g. type of non-compliance, type of facility, and compliance history) and following the ministry’s Compliance Policy*, the Provincial Officer may:
  – In the case of an emergency or spill that poses an immediate danger to human health or to the environment, require immediate action to be taken.
  – Undertake a voluntary abatement plan or a mandatory abatement plan (e.g. issue a Provincial Officer’s Order).
  – Issue a ticket under Part I of the Provincial Offences Act.
  – Refer the issue to the ministry’s Investigation and Enforcement Branch.

*Available on the ministry’s website www.ene.gov.on.ca
Further information:

Ministry of the Environment

www.ene.gov.on.ca

Statutes and Regulations

www.e-laws.gov.on.ca/index.html


http://www.mndm.gov.on.ca/mines/mg/mindev/practitionersguide.pdf