Environmental Regulation & Mine Permitting in Ontario

A Presentation to the Ad Hoc Committee on Mining Lake Superior Work Group

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Agenda

- Regulatory Agencies
  - provincial, federal

- Applicable Legislation
  - provincial, federal
  - mineral development sequence

- Ontario’s permitting process

- Issues specific to aboriginal people
  - aboriginal & treaty rights
Regulatory Agencies

- **Principal Provincial agencies**
  - Ministry of the Environment (MoE) *
  - Ministry of Natural Resources (MNR) *
  - Ministry of Northern Development, Mines & Forestry (MNDMF) *
  - Ministry of Labour (MoL) *
  - Ministry of Transportation (MoT) *
  - Ministry of Municipal Affairs and Housing (MMAH)
  - Ministry of Health; Board of Health (MoH)
  - Technical Standards and Safety Agency (TSSA)

* Signatory to One Window Co-ordination Protocol
Regulatory Agencies (cont.)

• Principal Federal Agencies
  – Department of Fisheries and Oceans (DFO)
  – Environment Canada (EC)
  – Canadian Environmental Assessment Agency (CEAA)
  – Natural Resources Canada (NRCan)
  – Transport Canada

Large projects may be referred to the Major Projects Management Office (MPMO)
Applicable Legislation

• Principal Provincial Legislation
  – Mining Act (MNDMF)
  – Environmental Protection Act (MoE)
  – Ontario Water Resources Act (MoE)
  – Environmental Bill of Rights (MoE)
  – Environmental Assessment Act (MoE)
  – Public Lands Act (MNR)
  – Aggregate Resources Act (MNR)
  – Endangered Species Act (MNR)
  – Crown Forest Sustainability Act (MNR)
  – Lakes and Rivers Improvement Act (MNR)
  – Fish and Wildlife Conservation Act (MNR)
Applicable Legislation (cont.)

- **Principal Provincial Legislation** (cont.)
  - Occupational Health and Safety Act (MoL)
  - Health Protection and Promotion Act (MoH)
  - Highway Traffic Act (MoT)
  - Technical Standards and Safety Act, 2000 (TSSA)
  - Dangerous Goods Transportation Act (MoT)
  - Municipal Act (MMAH)
Applicable Legislation (cont.)

- **Federal Legislation**
  - Fisheries Act (DFO)(EC – Metal Mining Effluent Regulations)
  - Canadian Environmental Assessment Act (CEAA)
  - Canadian Environmental Protection Act (EC)
  - Navigable Waters Protection Act (TC)
  - Explosives Act (NRCan)
  - Transportation of Dangerous Goods Act (TC)
Mineral Development Sequence

- Exploration
- Evaluation
- Development
- Production
- Closure
- Post-closure
Mineral Development Sequence:  
**Typical Regulated Activities**

- **Exploration & Evaluation**
  - sewage; garbage; petroleum products; explosives; roads; water crossings; cutting timber; water crossings; water taking; industrial sewage; hazardous waste; openings to surface; pit walls

- **Development & Production**
  - all of the above
  - aggregate; tailings dam design; industrial sewage; water-quality monitoring

- **Closure & Post-closure**
  - taking water; garbage; hazardous waste; industrial sewage; water-quality monitoring, site rehabilitation
Mineral Development Sequence:  
Typical Regulated Activities (cont.)

Site Rehabilitation includes:
- removal of structures
- removal of infrastructure
- sealing of openings
- tailings impoundment integrity (& ARD management*)
- pit wall & waste pile stability
- assessment of crown pillars
- acid drainage remediation*
- site re-vegetation
- recycling
* if necessary
Mineral Development Sequence:  
*Exploration & Evaluation*

**Activities that are not currently regulated:**

- prospecting, small camps
- geological mapping
- airborne geophysics
- ground geophysics
- geochemistry: rock, soil, water, plants
- core and overburden drilling
- establishing trails
- very small “bulk” sample, i.e., generally <10t
Mineral Development Sequence: Exploration & Evaluation (cont.)

Activities that are regulated:

- stripping - Closure Plan if >1 ha (0.25 ha near water) – MNDMF
- cutting timber – MNR
- diamond drilling – requires a notice to MoL
- small bulk sample (<1 kt) on claims requires a Letter of Permission – MNDMF
- large bulk sample (> 1 kt) on any mining land requires a Closure Plan – MNDMF
- petroleum products – TSSA, MoE
- explosives – NRCan
- purchase & transportation of explosives – (MoT, TC)
Mineral Development Sequence:  
*Development & Production*

**Activities that are regulated (E & E plus):**

- environmental assessment – CEAA, MoE
- roads, water crossings, dams - permits needed – MNR
- taking water, waste systems, sewage systems - Certificates of Approval or permits – MoE
- effluent discharge (EC)
- drinking water – MoH, MoE
- land-fill; monitoring for contaminants in air and water - Certificates of Approval – MoE
Mineral Development Sequence:

Development & Production (cont.)

Activities that are regulated (E & E plus):

- road & railroad construction – MNR, MMAH, TC
- entrance to highway; transportation of oversize & dangerous goods - permits needed – MoT
- workplace health & safety – MoL
- municipal zoning (if applicable) – MMAH
- Public Notification – MNDMF
- Closure Plan – MNDMF
- Financial Assurance – MNDMF
Mineral Development Sequence:

Closure & Post-closure

- Taking water – MoE
- Industrial waste – MoE
- Water discharge – MoE
- Rehabilitation – MNDMF
  - permanent closure of openings, open pits, crown pillars
  - removal of structures and infrastructure
  - site grading
  - stability of tailings dams
  - engineered closure of tailings areas for acid drainage or preparation for vegetation
  - maintain FA throughout the process
Ontario’s Permitting Process

1. **Proponent submits Project Description to CEAA**
   - Federal EA if required

3. **Proponent files a Notice of Project Status or a Notice of Material Change to MNDFM**
   - the “Notice” is posted on the Environmental Registry for 30 days, for information
   - any 2 Ontario residents may apply to the Environmental Commissioner for a review under the provincial EAA
   - MNDFM informs proponent that a Closure Plan is required and whether Public Notification is required (Notification is mandatory for Production)
Ontario’s Permitting Process (cont.)

3. **Inter-ministry meeting (OWCP)**
   - convened by MNDMF
   - all provincial regulators and proponent invited
   - federal regulators usually invited
   - proponent presents project plan to regulators
   - regulators inform proponent which activities will require permits or approvals and approximate time frames required to acquire these

5. **Proponent applies for necessary permits from MoE, MNR, DFO etc.**
Ontario’s Permitting Process (cont.)

5. Public Notification (*Mining Act*)
   - proponent presents project to public & collects feedback; reports to MNDMF

7. Proponent prepares CP according to specifications in Ontario Regulation 240/00
   - 14 elements required, including:
     • certification by CFO & “senior officer”
     • certification by appropriate professionals for such things as crown pillar stability & surface water monitoring
     • consultation with “affected First Nations”
Ontario’s Permitting Process (cont.)

7. **Proponent submits certified closure plan (CP)**
   - including Financial Assurance
   - CP is posted on Environmental Registry for 30 days for public comment
   - CP is reviewed by all regulators
   - proponent must be informed within 45 days of submission if plan is accepted for “filing”
   - CP may be returned to proponent for modification and re-filing if it is inadequate

9. **Proponent may begin work only when CP is acknowledged as “filed” or 45-day period has expired.**
Closure Plan: The 14 Elements

- Letter of Transmittal
- Certification
- Project information
- Current project site conditions
- Project description
- Progressive rehabilitation
- Rehabilitation measures – temporary suspension (generally < 6 months)
Closure Plan: The 14 Elements (cont.)

• Rehabilitation measures – inactivity (generally > 6 months)
• Rehabilitation measures – closed out
• Monitoring
• Expected site conditions
• Costs
• Financial Assurance
• Record of business and technical consultation with aboriginal peoples
Financial Assurance

• Equal to the Costs calculated for completion of close out – costs to be at market value
• Payable before work may commence, must be part of filed plan
• Returned to proponent when closure is complete
• Ontario will use FA to complete closure if proponent can not do so
• Companies with great financial strength may self-assure some or all of their liability
Environmental Assessment – Ontario

- **Ontario may require an environmental assessment before Development can begin**
  - Ontario EAA does **not** generally to private sector projects
  - Any resident of Ontario may request the Minister of the Environment to designate a project under the EAA
  - Minister must review the case and make a decision

- **MNDFM is developing a Class EA for mining, to cover**
  - Discretionary disposition of Crown mineral rights
  - Crown-funded rehabilitation projects
  - Possibly, work plan & work permit provisions to be provided for under S.78 of the amended *Mining Act*
Environmental Assessment
Canada

• **Under the Canadian EA Act, there are 3 levels of assessment; in increasing order of stringency these are**
  – screening review
  – comprehensive review
  – full review panel

• **A project may become subject to the CEA Act at any time, if appropriate triggers are tripped**
  – Federal regulators determine the level of review, based on their assessment of the project
Environmental Assessment
Canada (cont.)

• The CEA Act specifies possible actions in more than 100 federal statutes that may trigger a review
  – e.g., request to DFO for authorization for the destruction of fish habitat
  – e.g., construction of new railroad infrastructure

• Some triggers have 2 parts; e.g.,
  – e.g., minimum mill tonnage—3,000 t/day base-metal or 600 t/day gold—and federal lands or money is a component in the project

Federal lands include Indian reserves and lands subject to a land claim that has been accepted for negotiation by Canada and the province
Aboriginal Consultation

**Goals:**

- Mineral sector activities occur in a manner that respects Aboriginal and treaty rights
- Support ongoing relationship building initiatives, information sharing and the promotion of positive relations with Aboriginal communities
- Better ensure that Aboriginal people are able to participate fully in the benefits of mineral sector activities occurring near their communities
- Provide certainty and clarity for prospectors, companies and communities
Access to Legislation

- Ontario’s legislation and regulations online
  http://www.e-laws.gov.on.ca

- Canada’s legislation and regulations online
  http://laws.justice.gc.ca/eng/MainPage
Questions regarding mineral development in Ontario? Contact:

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