# Mineral Exploration and Development Ontario *Mining Act* Regulatory Framework A Graduated Approach

Ministry of Northern Development and Mines

Clive Stephenson P.Geo, Senior Manager,
Mineral Development and Lands Branch
September 28th, 2017

Government of Mongolia Delegation

# Outline

Discuss the graduated approach to regulating mineral development in Ontario, including mine closure and financial assurance concepts.

- Ontario context to mineral development
- Overview of  Ministry of Northern Development and Mines & purpose of *Mining Act*
- History of mining in Ontario
- Aboriginal and treaty rights
- Evolution of the *Mining Act*
- Mine closure in Ontario: Part VII Of the *Mining Act*
- Rehabilitation objectives
- Closure planning
- Financial assurance

# Roles and Responsibilities of Governments in Natural Resources

Local, municipal, Indigenous, provincial, and federal governments in Canada all have different powers to manage their respective non-renewable natural and forestry resources.

**Federal Government**

Section 91 of the Constitution  Act defines the federal government's legislative authority. The Canadian Parliament has the exclusive authority to make laws with respect to:

- Regulating trade and commerce
- Raising money by any mode or system of taxation
- Navigation and shipping
- The sea coast and inland fisheries
- Nunavut

# Exclusive Powers of Provincial Legislatures

**92A.** (1) In each province, the [provincial] legislature may exclusively make laws in relation to:

(*a*) exploration for non-renewable natural resources in the province;

(*b*) development, conservation and management of non-renewable natural resources and forestry resources in the province, including laws in relation to the rate of primary production therefrom; and

(*c*) development, conservation and management of sites and facilities in the province for the generation and production of electrical energy.

# The Purpose of *The Mining Act*

The Mining Act is the provincial legislation that governs and regulates prospecting, mineral exploration, mine development and rehabilitation in Ontario. Purpose:

- To encourage prospecting, staking and exploration for the development of mineral resources,
- in a manner consistent with the recognition and affirmation of existing Aboriginal and treaty rights in section 35 of the Constitution Act, 1982, including the duty to consult,
- and to minimize the impact of these activities on public health and safety and the environment." *Section 2 of the Mining Act*

# The Ontario Context: Free Entry

**In Ontario, the free entry system sets out the rules for acquiring title to Crown owned minerals. It features:**

- The right of prospectors to enter lands containing Crown-owned minerals to undertake mineral exploration
- The right of prospectors to acquire mineral exploration rights by properly staking a claim and having it recorded with the mining recorder
- The exclusive right of the claim holder to carry out further exploration within the area covered by the claim
- The right of the claim holder to obtain a mining lease – the tenure instrument required to undertake mineral production – provided proper procedures and requirements have been complied with.

**Free entry does not include an automatic right to mine. To develop a mine, a lease holder must obtain a wide range of provincial and federal permits and approvals.**

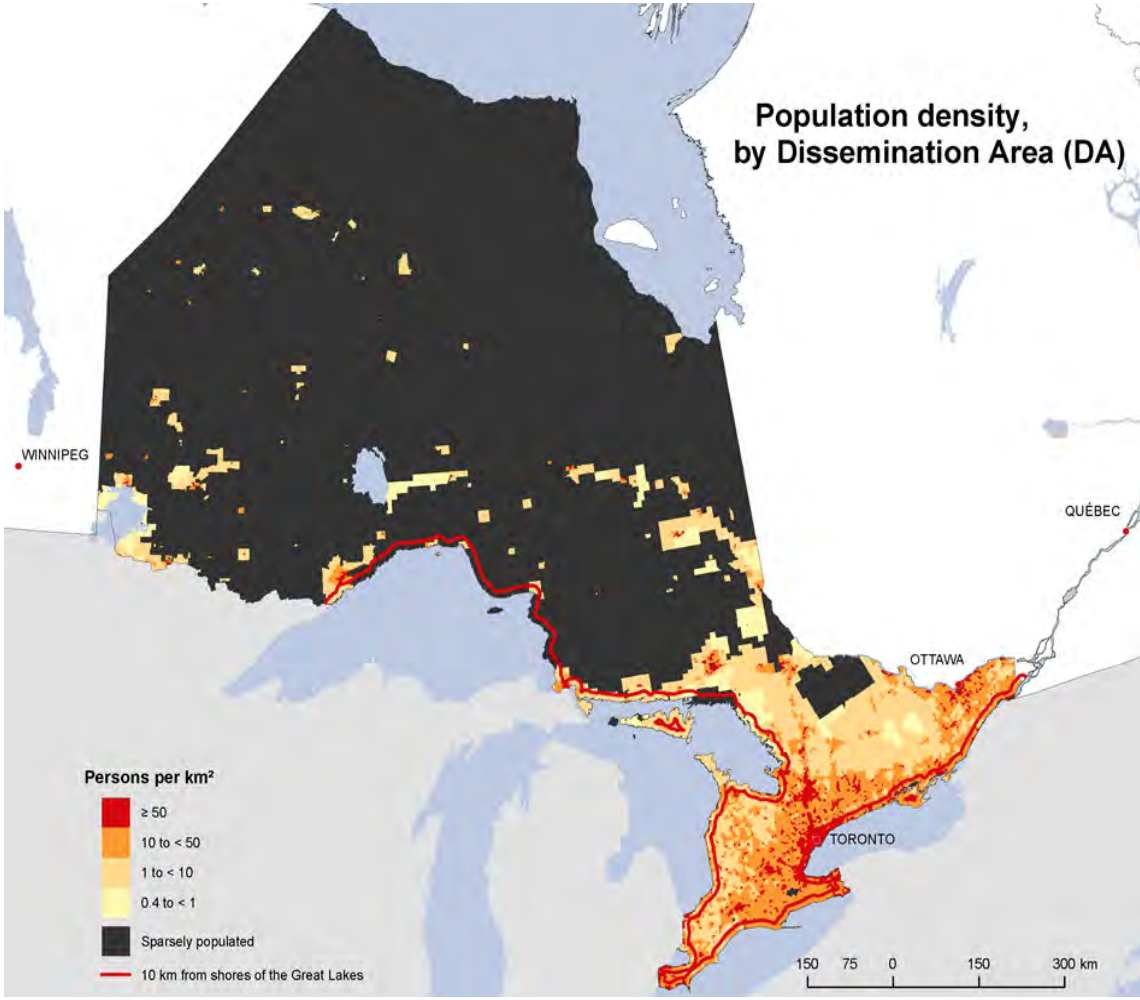
# The Ontario Context: Geography

Mongolia's land base: 1.5 million km$^2$

Ontario's land base: 1 million km$^2$

Ontario population:14 million.

Ontario: 85% live in urban centres, largely in cities on the shores of the Great Lakes.



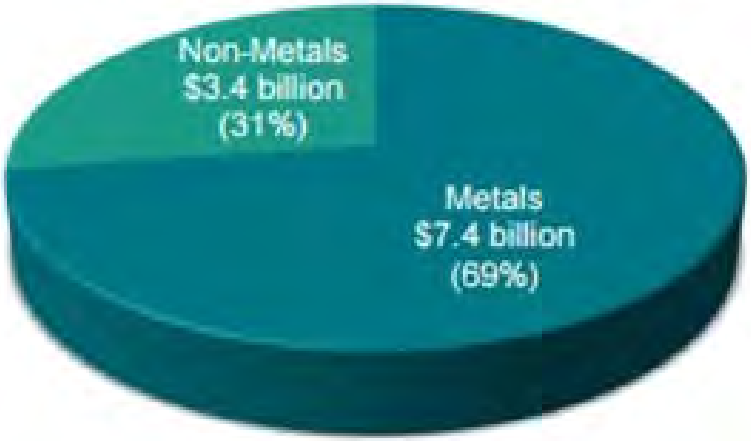
# Ontario Mineral Production Highlights

## Ontario Mineral Production Highlights: 2015

- ✓ Ontario was ***#1 in Canada in 2015*** with a total share of Canadian mineral production of 25.2%.
- ✓ Ontario mineral production was valued at ***$10.8 billion in 2015***, down from $11.0 billion in 2014. Ontario mineral production has exceeded $10 billion dollars for the past 3 years.
- ✓ Ontario produced ***32.9% of Canada's metallic minerals*** and 19.6% of Canada's non-metallic minerals in 2015.
- ✓ The value of ***platinum group metals (PGM) production*** increased from $884 million in 2014 to a ***record value of $916 million*** in 2015. Wallbridge's Broken Hammer Mine in Sudbury contributed to much of the increase.
- ✓ The value of ***gold production*** remains the highest of Ontario minerals at ***$3.4 billion*** in 2015, the second highest value of gold Ontario has ever produced.

# Ontario Mineral Production Highlights

**2015 Ontario Mineral Production:**
Metals vs. Non-Metals

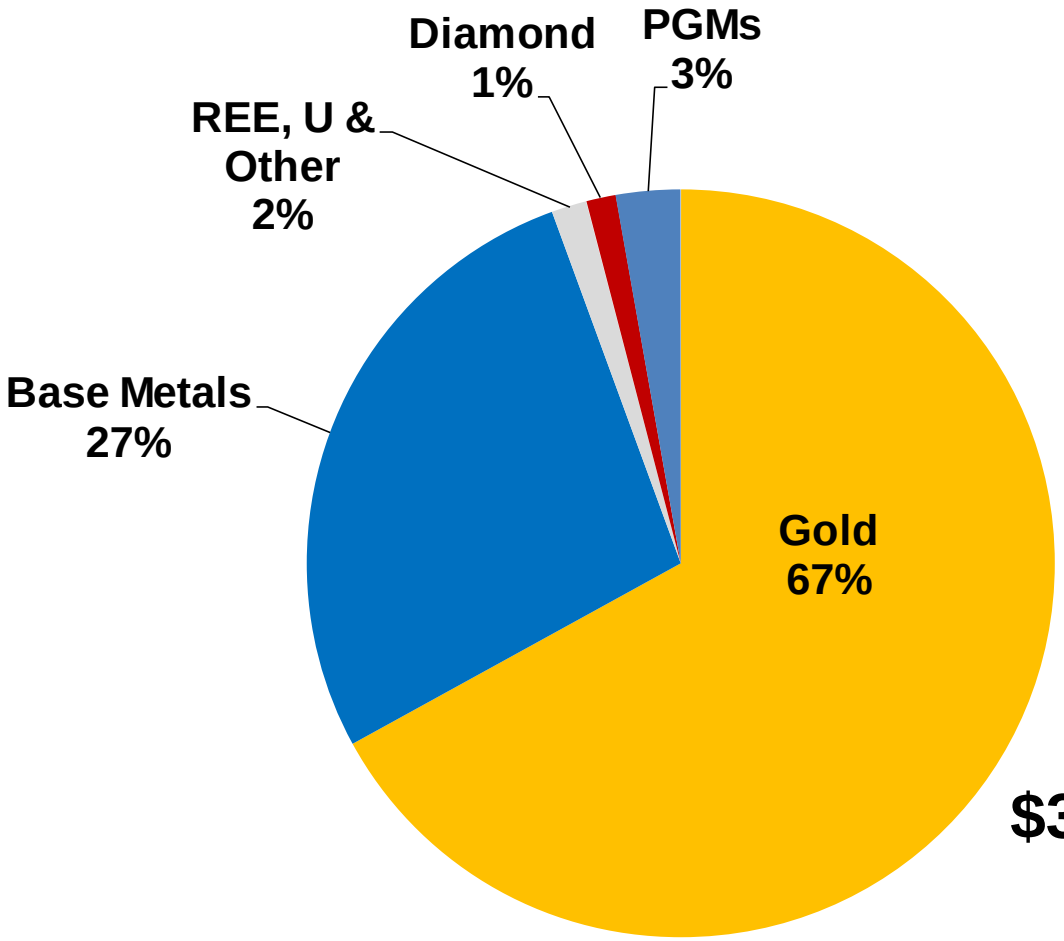



**Ontario's Top 10 Minerals**
(by value in 2015)

| | | $CDN Millions | |
|---|---|---|---|
| 1. | Gold | 3,361 | |
| 2. | Nickel | 1,538 | |
| 3. | Copper | 1,279 | |
| 4. | PGM | 916 | * |
| 5. | Stone | 733 | |
| 6. | Cement | 632 | |
| 7. | Sand and Gravel | 591 | |
| 8. | Salt | 535 | * |
| 9. | Diamonds | 407 | |
| 10. | Zinc | 140 | |

*estimated

# Exploration by Commodity in Ontario 2015




**$393 million total**

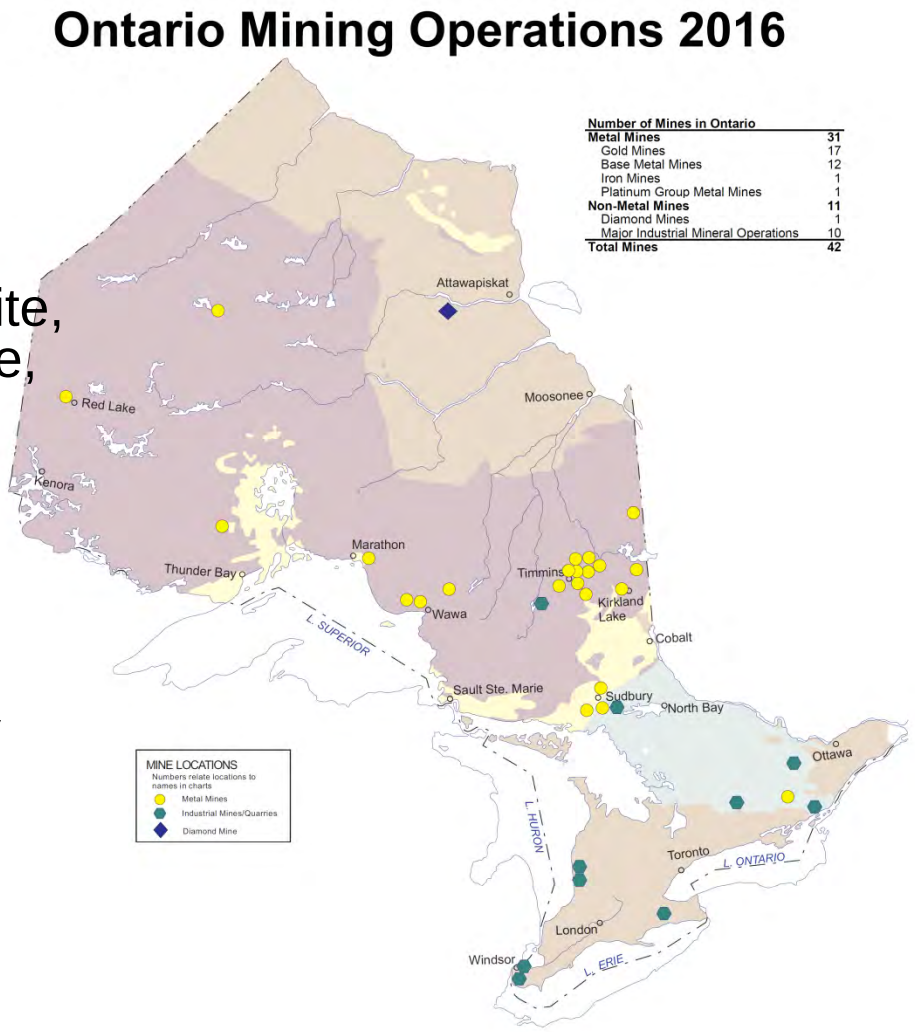
# Mines and Quarries in Ontario

Mines

- 31 metal mining operations:
  - 17 gold, 12 base metal, 1 platinum/palladium, 1 iron
- 1 diamond mine
- 10 industrial mineral operations
  - Salt, gypsum, nepheline syenite, talc, garnet, calcium carbonate, wollastonite

Quarries

- 12 gemstone quarries
  - Include 9 amethyst quarries
- 58 dimension stone and specialty aggregate operations
- 5 cement producers
- 5 brick producers' quarries
- 8 trap rock quarries
- 8 lime producers






Source: Ontario Mining & Exploration Directory 2016

# Exploration in Ontario

30 advanced exploration projects:

- 18 gold, 3 base metals, 3 PGM, 2 diamond, 2 graphite, 1 Rare Earth Elements, 1 Talc/Magnesite.

200 Early exploration projects

- 154 companies.

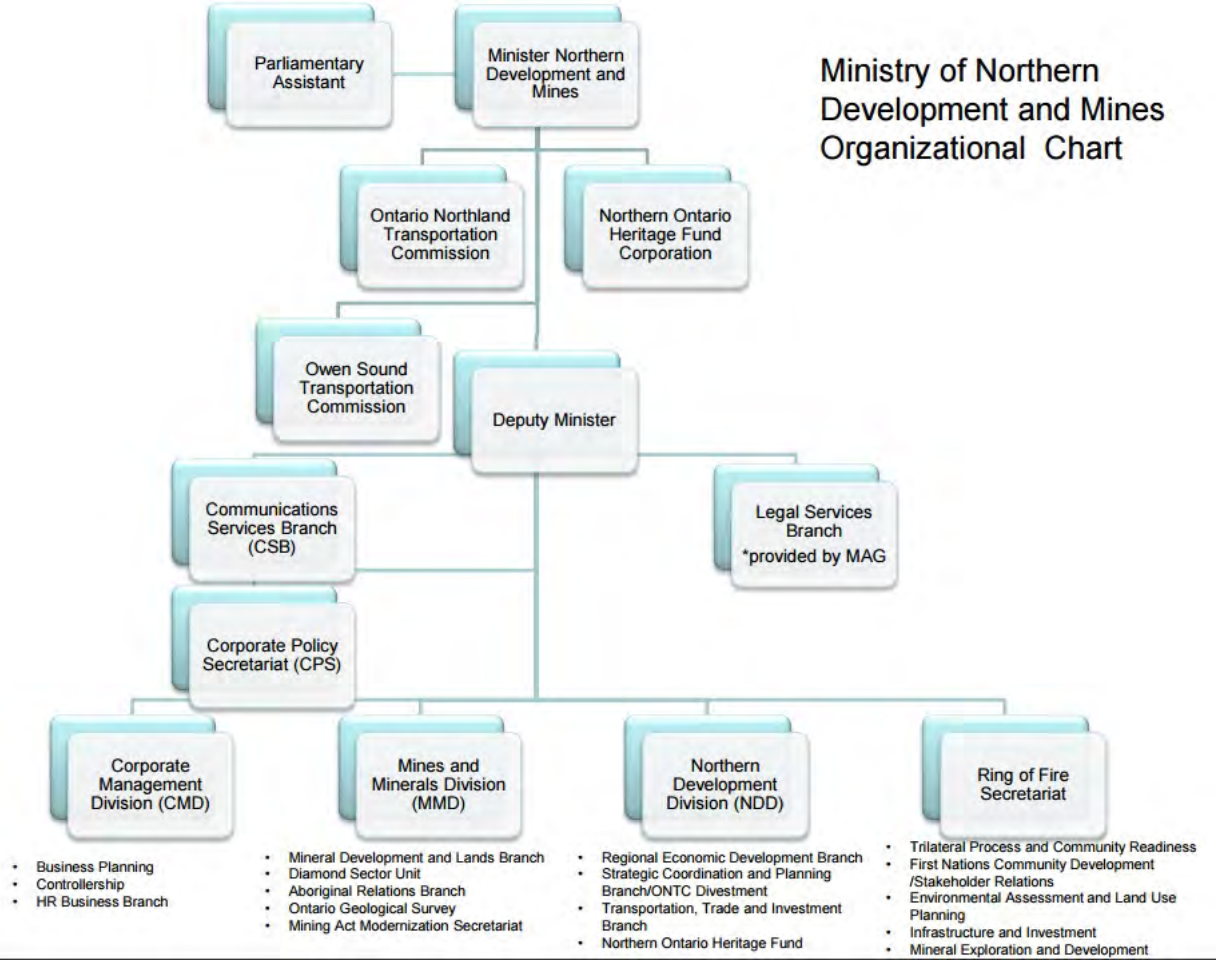
Commodities:

- gold, silver, copper, nickel, cobalt, zinc, platinum group elements, graphite, lithium, amethyst, barite, diamond, dolostone, stone, phosphate, talc, silica, trap rock, aggregates.

# Ontario Mineral Sector

- 256,000 people are employed in Ontario's mining cluster (operating mines, corporate offices, mining supplies & services, legal, financial, engineering, environmental consulting). (OMA)
- Industry payroll is in excess of $1.7 billion.
- Mine supply and service sector employs more than 40,000 people and has an estimated direct economic impact of $6.6 billion!
- $62 million spent on environmental protection in 2011 (OMA).

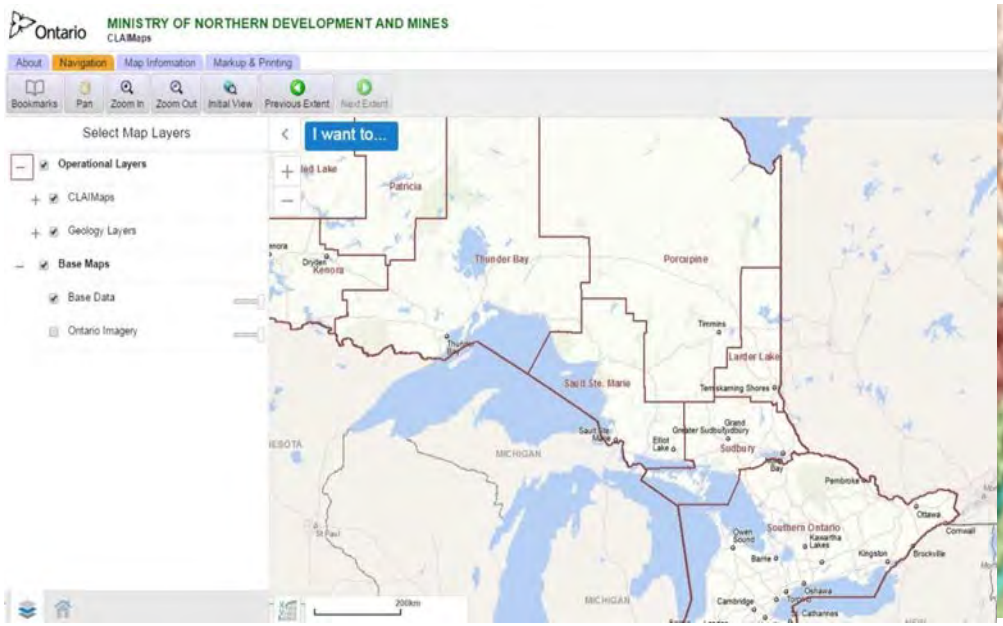
# Ontario's Ministry of Northern Development and Mines (MNDM)




As the lead ministry for the North, the MNDM works to make Northern Ontario and the provincial minerals sector strong, healthy and prosperous.

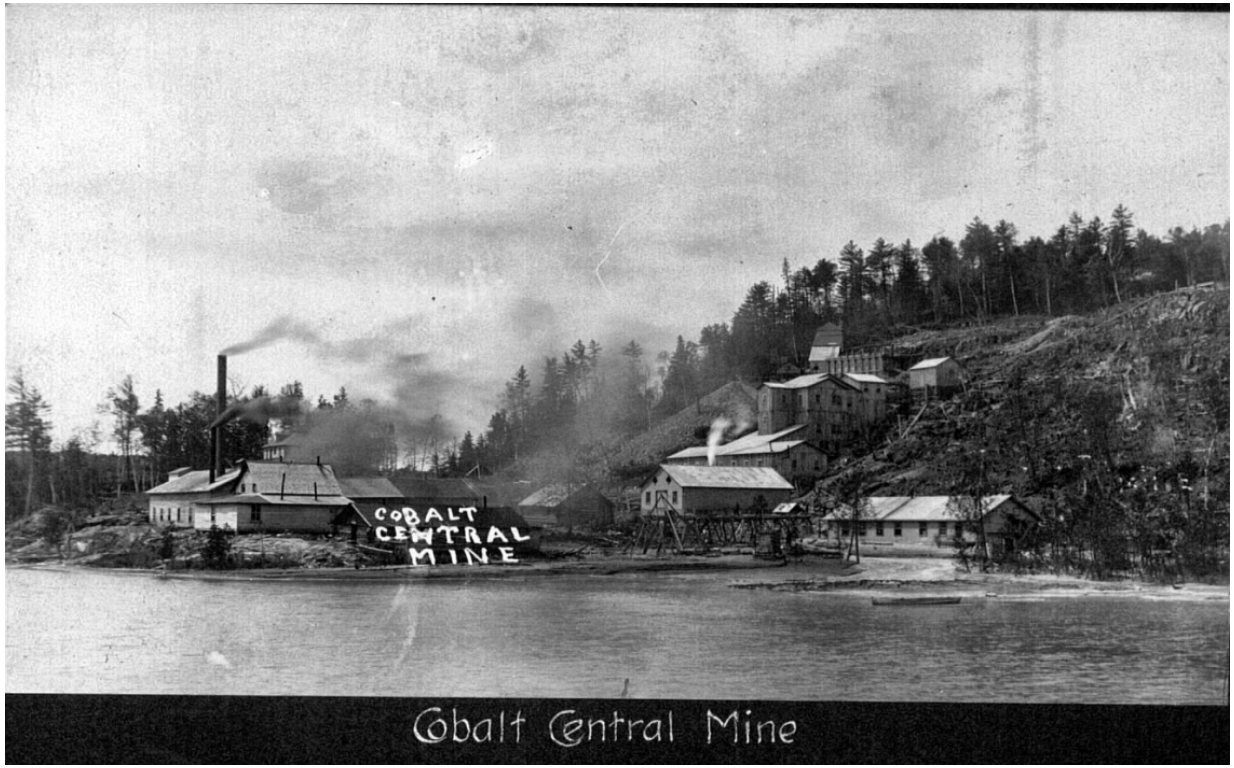
# MNDM-Mines and Minerals Division (MMD)

The Mines and Minerals Division (MMD) works to support responsible land use management and mineral resource development by administration of the *Mining Act*, providing public geoscience information and client services.




# History of Mining in Ontario

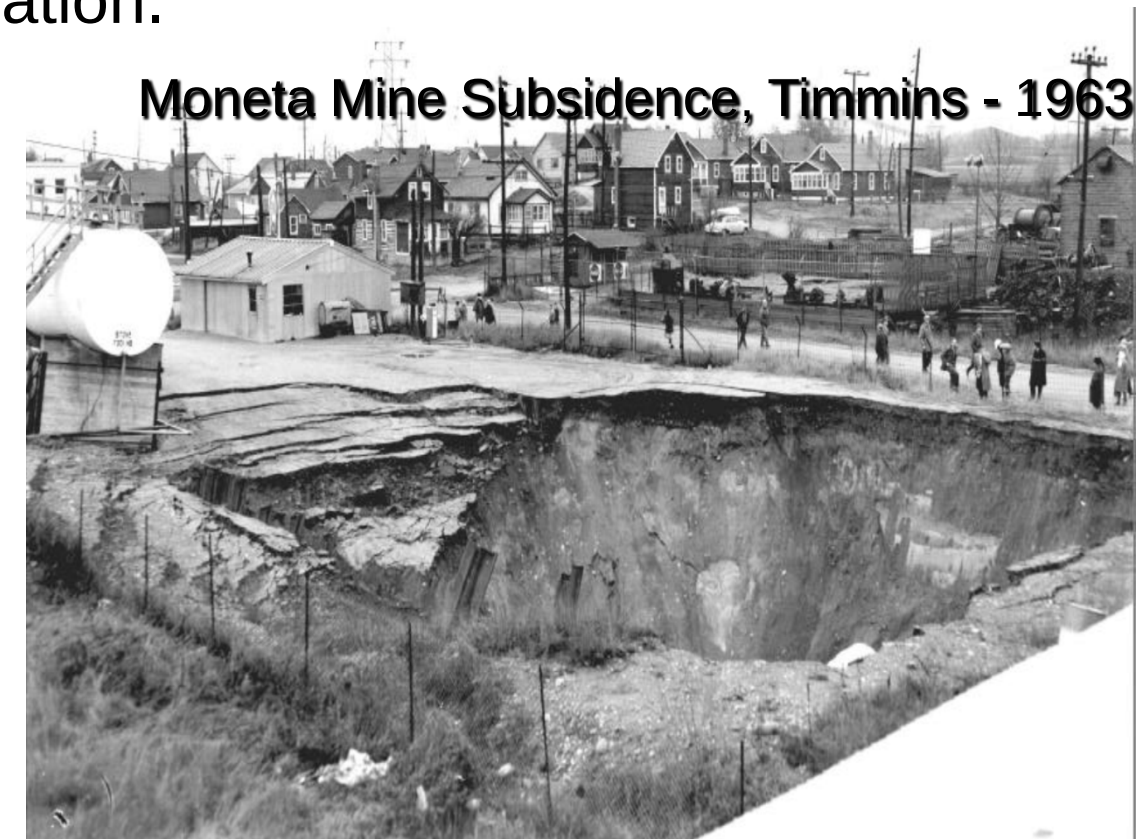
- Mining has occurred in Ontario for over 160 years.
- Ontario's gold mining industry has played a major role in the settlement of the province's north.
- The Cobalt silver boom helped establish Toronto as today's mine financing capital of the world.



# History of Mining in Ontario

- Historic operations typically met the rules of the day.
- Little focus was placed on mine rehabilitation.
- A number of incidents heightened interest in addressing the situation.

Moneta Mine Subsidence, Timmins - 1963



# Mining Act Legislation Development

**Prior to 1990:**

- No legislation in Ontario to mandate, ensure or direct mine closure
- No requirements for mine site rehabilitation.
- Limited corporate responsibility for long-term environmental impacts.
- Ontario acquired liability for abandoned sites as mining lands reverted to Crown Land.


# Abandoned Mines in Ontario

- Approximately 4,411 known abandoned mine sites located within Ontario containing more than 15,208 documented mine features.
- Rehabilitation costs of all known abandoned mines in Ontario have previously been estimated at $500 million.
- New estimates are between $160 to $780 million (excluding unconfined tailings areas).
- About half of all Ontario's abandoned mine sites are estimated to be on Crown Land.
- Rehabilitation costs of all Crown held abandoned mines have been estimated at just under $220 million.

# Kam Kotia Mine, Timmins

# Kam Kotia Cover Then

# Kam Kotia Now

**The final cost for the rehabilitation of the Kam Kotia Mine site is now expected to be in the range of $80 million!**

# Mining Act, 1990 – Part VII Rehabilitation of Mining Lands

- In 1991, Part VII was proclaimed to address the rehabilitation of mines and to;
- ensure mine hazards are remediated;
- require public notice and consultation;
- set out an obligation for proponents of both existing and new mines to submit a Closure Plan;
- included Financial Assurance for Closure.
- placed an obligation on owners of all mine sites, to progressively rehabilitate the site.
- director of Mine Rehabilitation can order an owner of a mine to submit a Closure Plan.
- set out standards for industry to meet at mine closure.

# Mining Act Modernization, 2009

The Act to amend the *Mining Act* (Bill 173) received Royal Assent on October 28th, 2009:

Key changes to the *Mining Act*:

1. Promote mineral exploration and development in a manner that recognizes Aboriginal and treaty rights,
2. to introduce processes that are more respectful of private landowners, and
3. to minimize the impact of mineral exploration and development on the environment.

# Mining Act Modernization

**Phase I** was implemented in 2011 and focused on introducing processes that are more respectful of private landowners by:

- Requiring notice of claim staking be provided to the private land owner by the prospector,
- in Northern Ontario, gave private landowners the ability to apply to have their lands withdrawn from staking.
- Included a less intrusive claim staking process (map staking) for most of southern Ontario.

# Mining Act Modernization

**Phase II** was implemented in 2012 and 2013 and focused on promoting mineral exploration and development in a manner that recognizes Aboriginal and treaty rights, by

- Introducing the new regulatory system of Exploration Plans and Exploration Permits for Early Stage Mineral Exploration.
- Clarifying the Requirements for Aboriginal Consultation.
- Providing for the Withdrawal From Staking of Locations Meeting the Criteria for Sites of Aboriginal Cultural Significance.
- Implementing a Mandatory Mining Act Awareness Program.

# Mining Act Modernization

**Phase III** is being implemented to ensure less intrusive claim staking:

- Moving Ontario's mining lands administration systems from ground staking and paper map staking to online registration of mining claims.
- Creating an online Mining Land Administration System (MLAS) that would enhance client access to Ontario's mining lands data and improve their ability to manage their files online.

# Graduated Regulatory Approach

## *Early Exploration Activities*

### *EXPLORATION PLANS*

- **Geophysical surveys** that require a power generator
- **Line cutting** – where the width of the line is 1.5 m or less
- **Drilling** – drills <150kg in weight
- **Mechanized stripping** – where the total surface area stripped is <100 $m^2$, within a 200 m radius
- **Pitting and trenching** – 1-3$m^3$ in volume, within a 200 m radius

### *EXPLORATION PERMITS*

- **Line cutting** – where the width of the line is >1.5 m
- **Drilling** – drills >150kg in weight
- **Mechanized stripping** – where the total surface area stripped is >100 $m^2$, within a 200 m radius
- **Pitting and trenching** – >3$m^3$ in volume, within a 200 m radius

## *Advanced Exploration and Mine Production*

*Other advanced exploration triggers include:*

- *Requirements for new or expanded underground mine workings;*
- *Reopening of underground workings (e.g., removal of bulkheads, caps, excavation of backfill shafts)*
- *Existing rehabilitation work.*

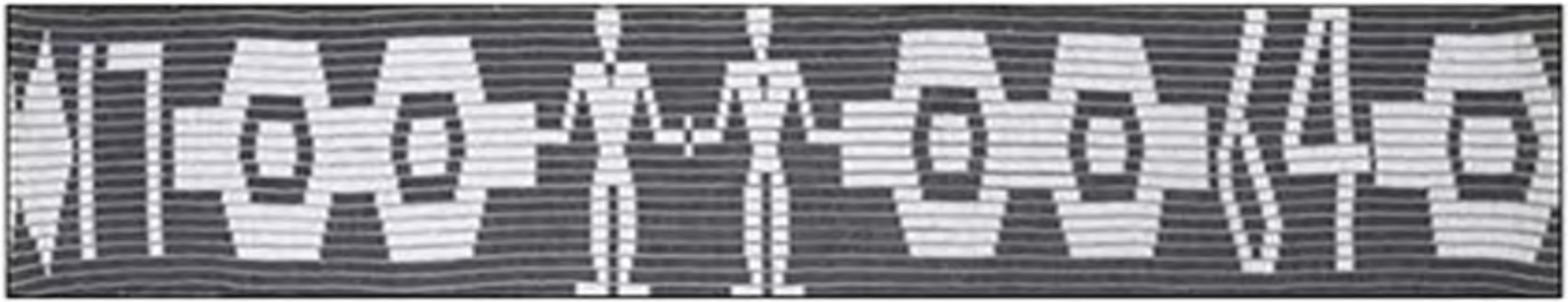
*All advanced exploration activities are subject to* ***closure plans.***

- **Mechanized stripping** – where the total area stripped is >10,000 $m^2$ of surface area, or >10,000 $m^3$ within 500 m radius; **or** >2,500 $m^2$ of surface area, or >2,500 $m^3$ of volume within 100 m of a body of water
- **Test pitting and trenching** – >1,000 metric tonnes (350 $m^3$), within a radius of 500 m

# Aboriginal and Treaty Rights

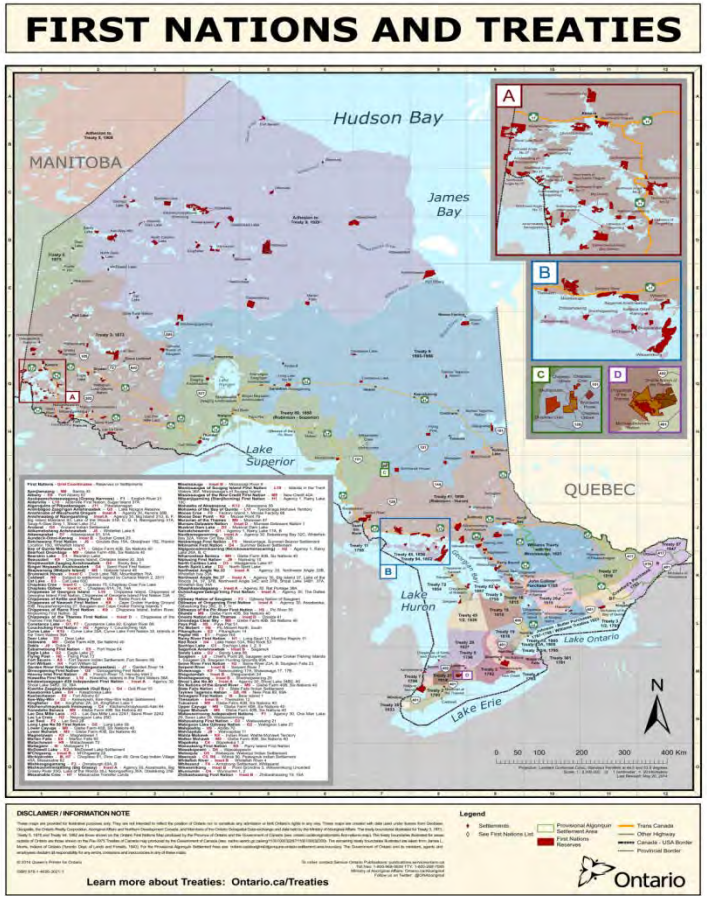
"The fundamental objective of the modern law of Aboriginal and treaty rights is the *reconciliation* of Aboriginal peoples and non-Aboriginal peoples and their respective claims, interests and ambitions."

(*Mikisew*, para. 1, emphasis added).



# Treaties in Ontario

- Ontario is covered by 46 treaties and other agreements such as land purchases.
- These agreements were signed between 1701 and 1930.
- Ontario is unique in Canada for the number and variety of treaties.
- Treaties play an important role in the management of lands and resources.
- First Nations view treaties as solemn promises made between themselves and the Crown.
- Different perspectives on the commitments outlined in treaties has given rise to a number of land claims in Ontario.



# The Duty to Consult

*The duty to consult is triggered when there is a proposed government action or decision and the government has real or constructive knowledge that the action or decision may have an adverse impact on Aboriginal or treaty rights.*

- The Crown has an obligation to:
  - Consult with Aboriginal communities where the duty to consult is triggered;
  - Ensure that activities within its jurisdiction occur in a manner that respects Aboriginal and treaty rights protected under section 35 of the *Constitution Act; and*
  - Continue to encourage industry to engage Aboriginal communities and begin developing a working relationship as early in the mining sequence as possible.

# Elements of Consultation

- A meaningful process of consultation, may involve:
  - Information sufficient to understand the proposal(s)
  - Time to consider, and provide feedback/concerns
  - Consideration of how best to address the concerns
  - Mitigation/accommodation measures as appropriate to address those concerns, which may include changes to the proposal(s)
  - Communication of how the concerns raised have been substantially addressed

# Contrasting Perspectives and Finding a Balance

| **Proponent Perspective** | **Aboriginal Perspective** |
|---|---|
| Free Entry | Free, Prior and Informed Consent |
| Access to the land | ‘We are the land’ |
| Right to explore | Right to benefits from exploration |
| Interests | Rights |
| Benefits – forced to pay | Benefits - accommodation |

- Environment and economic development.
- Traditional culture/ATK and western science/tech/culture.
- Uniqueness and difference among and within Aboriginal peoples and communities.

# Ontario / MNDM Ongoing and Emerging Approach to Aboriginal Relations

- Meet duty to consult obligations
- Build and develop external relations with Aboriginal communities/industry
- Promote actions that support economic development and reconciliation.
- Outreach to industry for support at early exploration.
- Outreach to Aboriginal organizations and communities to support capacity and participation.

# Mine Closure in Ontario
# Part VII Of the Mining Act

An Overview of the Legislation, Regulation and Process

# Overview

- ***Part VII Mining Act*, Rehabilitation of Mining Lands**
  - **Rehabilitation Objectives**
- ***Ont. Reg.240/00***
  - **Schedule 1 Mine Rehabilitation Code of Ontario**
  - **Schedule 2 Closure Plan Contents**
- **Closure Plans**
  - **Progressive Rehabilitation**
  - **Notice of Project Status**
  - **Advanced Exploration**
  - **Mine Production**
  - **Consultation**
  - **Notice of Material Change**
- **Financial Assurance**

# Prospecting and Staking

## Staking a Claim

Squaring a mining claim corner post

Line blazing


Basic claim size

# Grassroots Exploration

- Determines potential for a mineral deposit. Research and Development. Highly speculative.
- Work activities may include:
  - various surveys (geological, geophysical, geochemical)
  - mechanical work including drilling, stripping and trenching
  - in some cases, a company may want to take a small bulk sample
- The impact to the land is tied to the type of work conducted
- Proponents may need either a Plan or a Permit to conduct exploration work & depends upon the type/scope of work to be conducted

# Mining Claim vs. Lease

- ***Mining Claim***
  - A mining claim grants its owner the exclusive rights to explore for minerals on a designated piece of land.
  - The owner of a claim must also perform yearly assessment work.
  - The owner of a mining claim is not granted title or ownership to the land and cannot extract or sell any resources removed from the land.
- ***Mining Lease***
  - A mining claim can be converted into a lease by:
    - Submitting a letter of intent, surveying the land covered by the mining claim and acquiring the surface rights to the land.
  - A lease grants its owner title and ownership to the land, permits the extracting and sale of extracted resources (also removes requirement to perform yearly assessment work).
  - To maintain a lease, rent must be paid annually. A lease expires every 21 years unless it is renewed.

# Advanced Exploration

- Underground exploration involving new or existing mine workings
- Reopening of underground mine workings (e.g. remove cap, excavate backfill)
- Exploration that alters, destroys, removes, impairs any rehabilitation work
- Excavation of > 1,000 tonnes of material
- Surface stripping > 10,000 $m^2$ or >2,500 $m^2$ within 100 m of water body

# Mine Development

## Is the Advanced Exploration Project Feasible?

- In order to confirm there is a profitable deposit, companies will carry out a feasibility study:
  - to assess all aspects of the project, including:
  - Cost of building the mine (roads, airstrips, rail);
  - Size and market value of minerals;
  - Legal framework & tax/royalty regime;
  - Environmental impacts;
  - Accessibility of resource (remoteness);
  - Availability and cost of labour and shelter;
  - Availability of capital;
  - Risk factors (political, economic, social, physical);

- There are few mining companies with expertise, and the funds to develop large mining projects. Costs to develop mines can range from a few million dollars to billions of dollars.

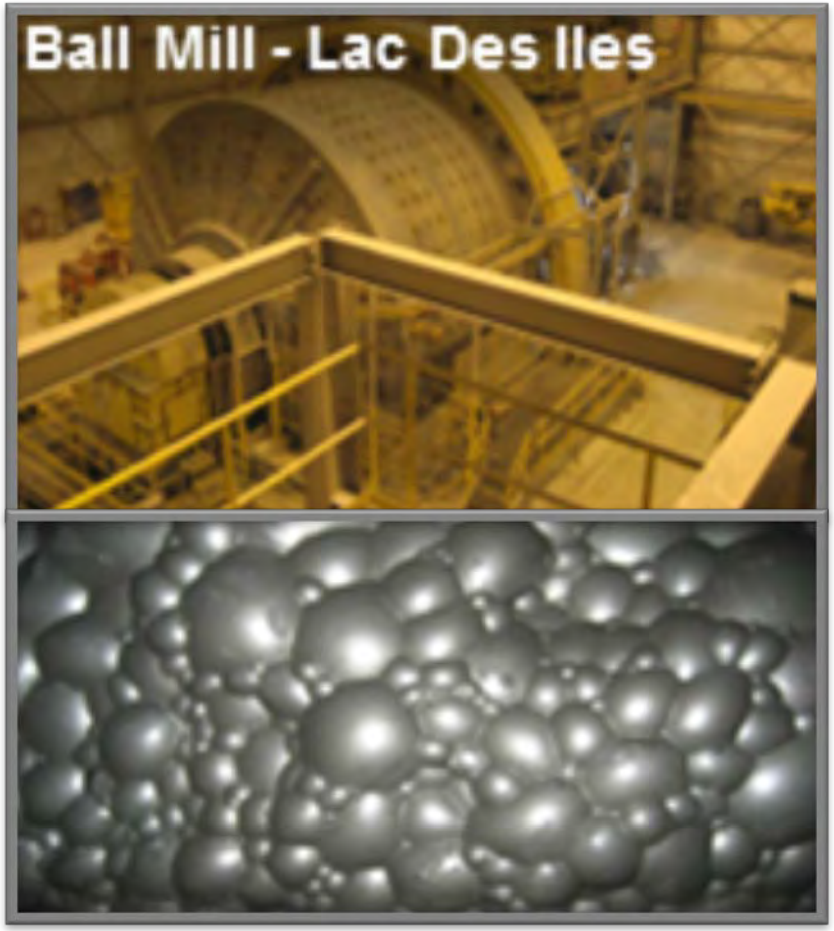
**What are the risks?**
Companies may not be able to raise money to fund their development project. Timelines at this stage are very rigid and any delays related to permitting could jeopardize the project.

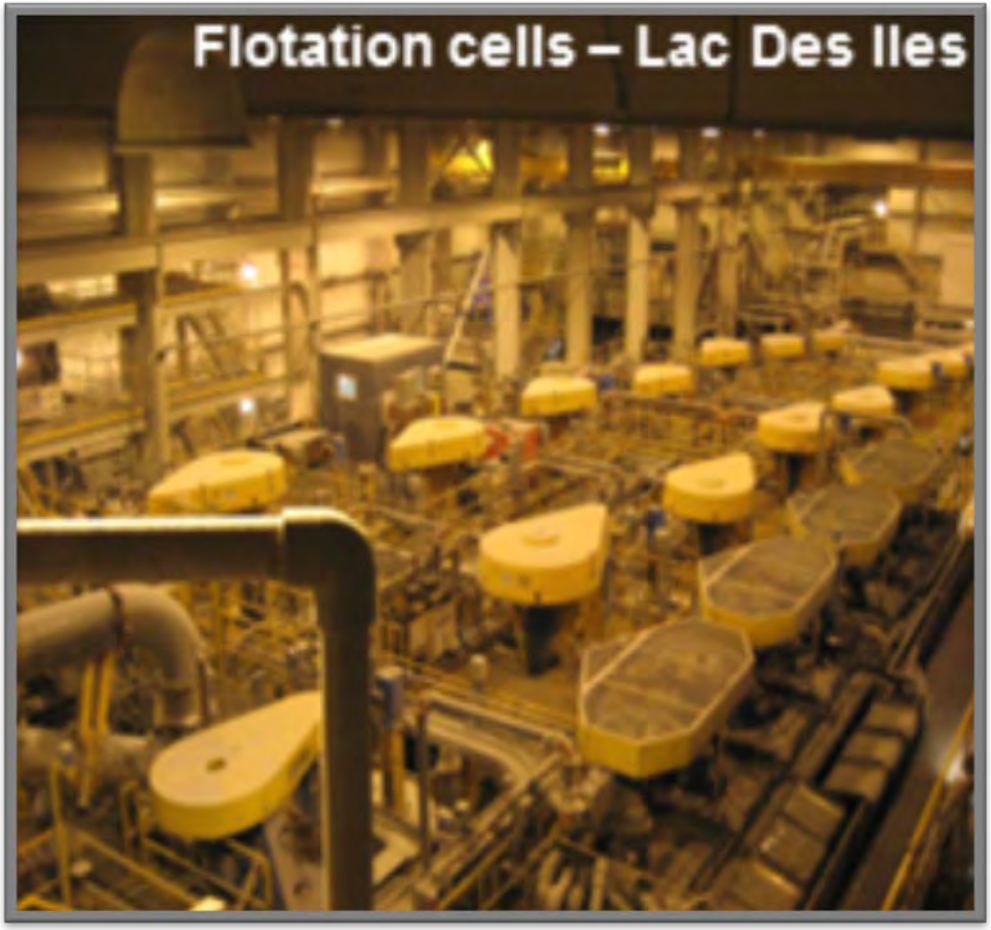
# Mine Production

**Barrick Gold Corp.**

**Williams Mine**

# Mine Production




Whether from an open pit or underground mine, the ore is transported to a mill for processing to separate the minerals or metals from the rock.

# Closure and Rehabilitation

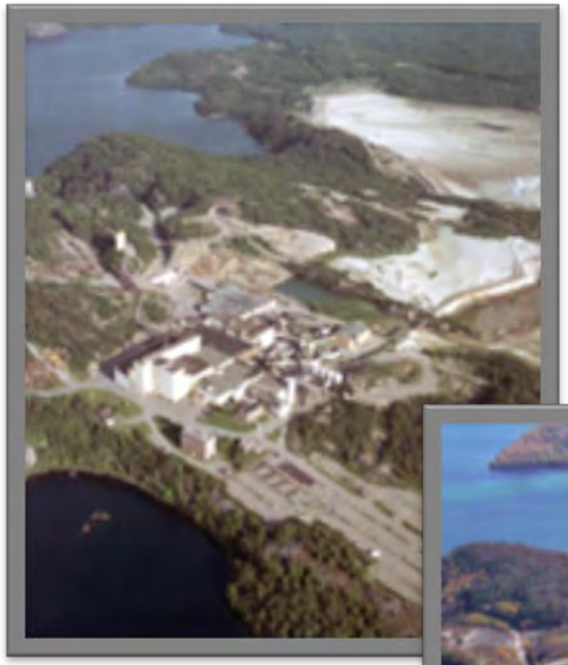
- Close site according to Closure Plan
- Restore the site to natural or another productive state
- Ongoing monitoring may be necessary
- Property reverts to former use or alternate use

3 Phases:

1. Decommissioning
2. Reclamation
3. Post closure care and maintenance

Photos: MNDM, Caland Mine Rehabilitation

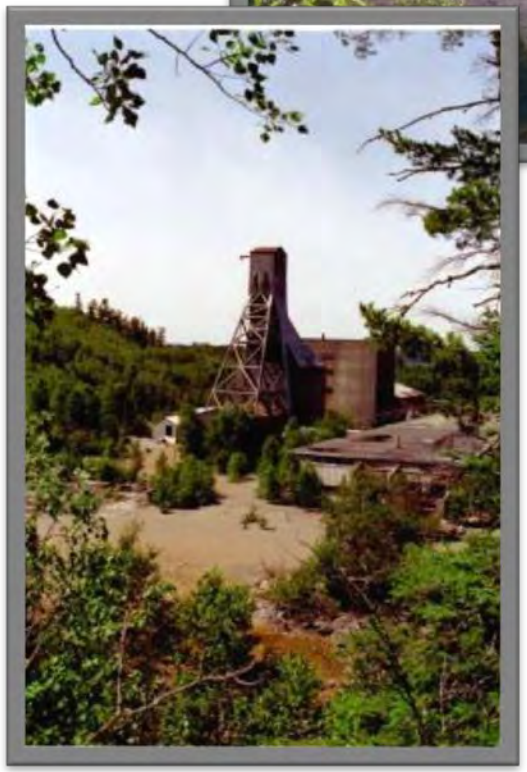
# Closure



Denison Mine
Pre-Closure

Coldstream Mine
Post-Closure

Denison Mine
Post-Closure



Coldstream
Mine
Pre-Closure

# Rehabilitation Objectives


**Minimize impact on public health, safety and environment**

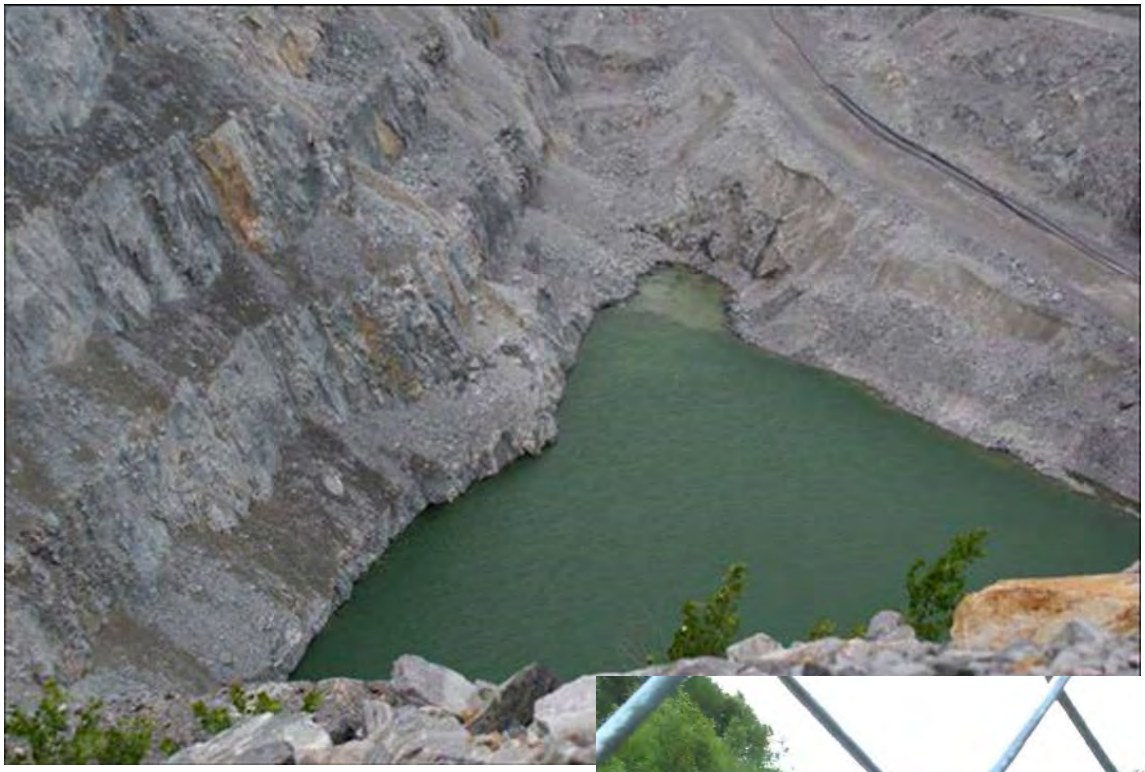
- Mine Rehabilitation Code of Ontario

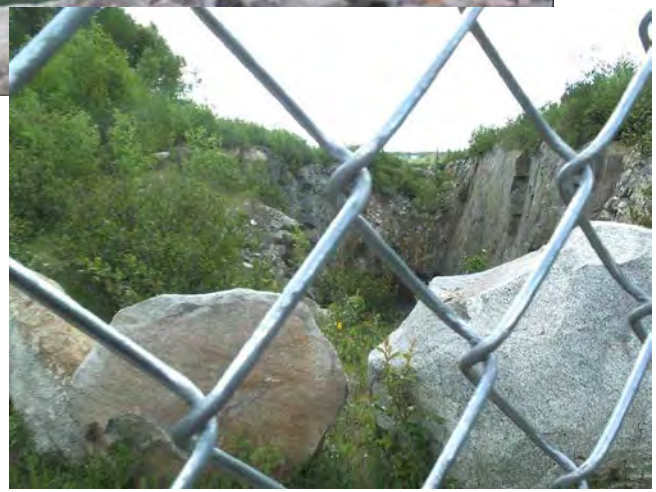
# Prevent Access to Mine Openings

Shafts, raises, stopes
Concrete cap
- Design, concrete strength, thickness

Backfilling, certified
Steel Cap
- Director's authorization
- Temporary Suspension or inactivity

# Open Pits - Maintain Public Safety





- Backfilling
- Flooding
  - if justified
  - egress
  - rock stability
- Fencing
  - boulder
  - chain link

# Crown Pillars

- Stability of Crown Pillar and room and pillar operations
- Ensure long term physical stability
- Geotechnical stability of rockmass
- backfilling

# Dam Safety Guidelines 2007

- Canadian Dam Association.
- www.cda.ca
- Objective – ensure long-term physical stability of tailings dams and other containment structures.
- Procedures and requirements in guidelines shall be considered and incorporated into Closure Plan.

# Surface Water Monitoring

- Water quality satisfactory for aquatic life and other beneficial uses
- Baseline studies.
- Monitoring program: locations,
  - Minimum parameters: pH, solids, metals.
- Baseline studies.
- Treatment and monitoring.

# Ground Water Quality

**Characterize potential impediments to beneficial use of groundwater**

# Metal Leaching and Acid Rock Drainage (ML and ARD)

- Determine potential for ML and ARD prior to operation
  - Drill core, mineral samples, waste rock, tailings
- Prediction Manual for Drainage Chemistry from Sulphidic Geologic Minerals Dec. 2009
- www.mend-nedem.org

# Physical Stability

- Ensure long term physical stability.
- Monitoring.
- Stable condition.
- All mine related structures and workings.
- Crown pillars, pits, rock piles and ….

# Revegetation

- Stabilize, protect from wind and water erosion
- Improve appearance and aesthetics
- Enhance natural vegetation
- Support end use of site
- Soil analysis, amendments
- Contouring
- Inspection and maintenance

# Legislation Relevant to Mineral Development

**Key Applicable Legislation**

- *Mining Act* (Ministry of Northern Development and Mines)
- *Environmental Protection Act* (Ministry of the Environment)
- *Ontario Waters Resources Act* (Ministry of the Environment)
- *Occupational Health and Safety Act* (Ministry of Labour)
- *Public Lands Act* (Ministry of Natural Resources)
- *Lakes and Rivers Improvement Act* (Ministry of Natural Resources)
- *Crown Forest Sustainability Act* (Ministry of Natural Resources)
- *Technical Standards and Safety Act* (Technical Standards and Safety Authority)
- *Planning Act* (Ministry of Municipal Affairs and Housing / Ministry of Health and Long-Term Care)
- *Environmental Assessment Act* (Ministry of the Environment)
- *Fisheries Act* (Fisheries and Oceans Canada (DFO))
- *Canadian Environmental Assessment Act* (CEAA Agency)
- *Public Transportation and Highway Improvement Act* (Ministry of Transportation)
- *Explosives Act* (Natural Resources Canada)

# What does a company have to do before they start advanced exploration?

- Submit a Notice of Project Status to the MNDM.
- Consult with all required parties including Aboriginal communities.
- File a certified Closure Plan with accompanying **financial assurance**.
- Acquire all required permits/approvals from ministries and agencies.

# Closure Plans

- Specific requirements set out in *Ontario Regulation 240/00 – **MINE DEVELOPMENT AND CLOSURE UNDER PART VII OF THE ACT***

- How to Meet Closure Plan Requirements?
  - Outlined in Schedule 1 of O.Reg 240/00 - Mine Rehabilitation Code of Ontario

- What Needs to be in a Closure Plan?
  - Outlined in Schedule 2 of O.Reg 240/00

    Closure Plan Checklist

# Closure Plan Checklist

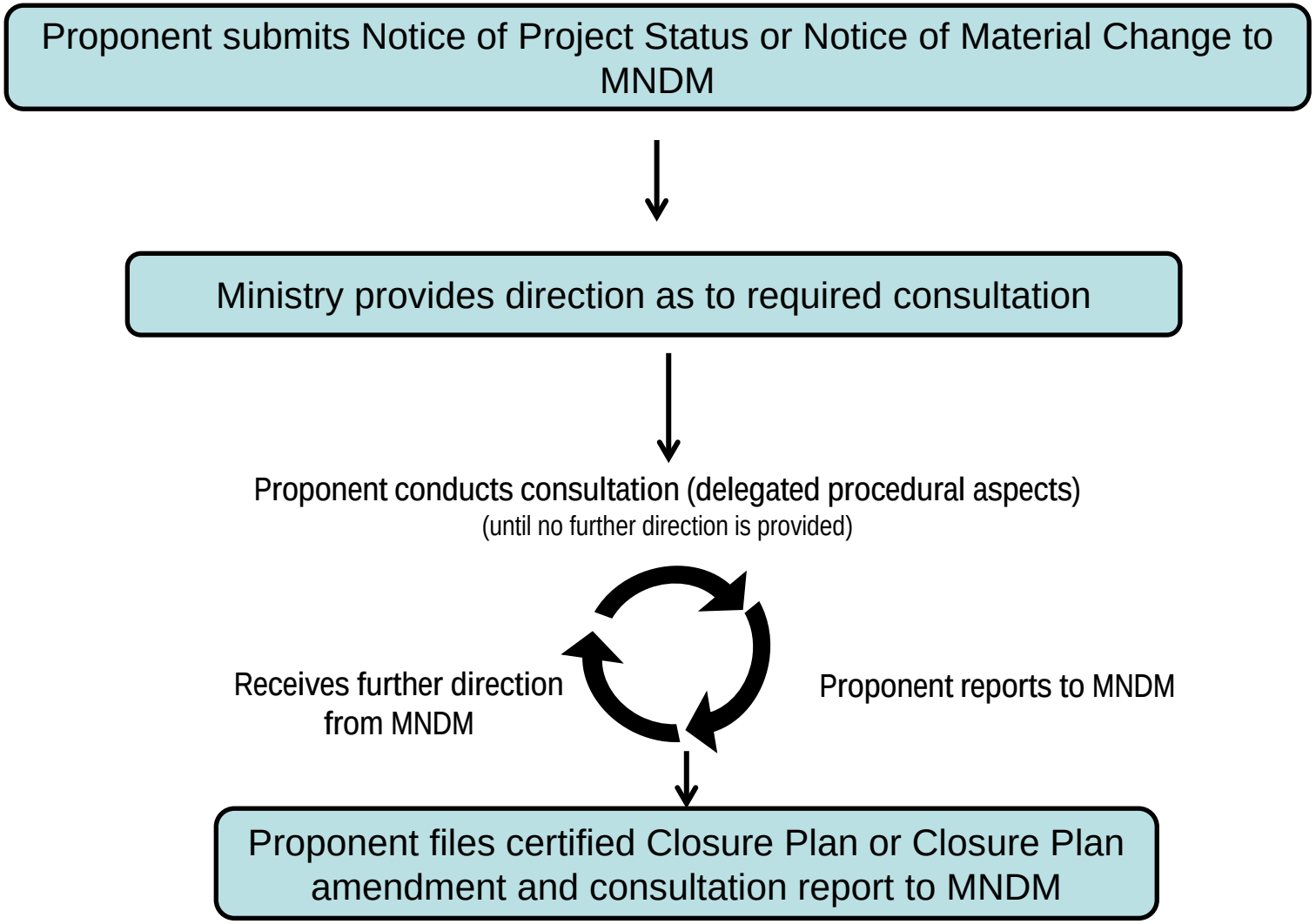
1. Letter of Transmittal
2. Certifications
3. Project Information – location
4. Current Site Conditions
   – - Land Use, aquatic, terrestrial
5. Project Description
   – - Mineralogy, site plan. Production
6. Progressive Rehabilitation
   - Details, schedule
7. Temporary Suspension
   - Rehabilitation Measures
8. State of Inactivity
9. Closed Out
10. Monitoring
    - Physical, biological, chemical
11. Expected Site Conditions
    - Topography, water quality, terrestrial plant and animal life
12. Costs
    - Detailed rehabilitation costs
13. Financial Assurance
    - Form and amount
14. Aboriginal Consultation

# Notice of Material Change

If proponent makes a material change to the project, must submit a Notice of Material Change form to MNDM;

- The Director of Mine Rehabilitation, after review of the Notice of Material Change may:
  - Order proponent to file a CP to rehabilitate a mine hazard;
  - Order amendments to a filed CP; or
  - Order changes to a filed CP or filed CP amendment

# Aboriginal Consultation Process



# Environmental Bill of Rights

- Submitted mine closure plans are required to be posted on Environmental Registry for minimum of 30 days
- Any public comments received are considered in Director's decisions
- Director must file or return Closure Plan within 45 days

# Progressive Rehabilitation

- Progressive rehabilitation may be used to rehabilitate a mine hazard on a non-operating site
- Work is completed according to Mine Rehabilitation Code
- Must submit Rehabilitation Report within 60 days of work completion

# Financial Assurance

- Closure plans, along with financial assurance must be submitted and filed for advanced exploration and new mine production projects prior to those projects commencing.

- Closure plans may also be “ordered” for legacy mine hazards (i.e. historical hazards on sites with an owner.)

# Rationale for Financial Assurance

- Ensures environmental and public safety
- Protects against premature closure  e.g.  economic insolvency
- Limits accrual of public debt
- Reduces public concerns regarding abandoned sites
- MNDM accepts the company's certified closure costs as the amount of required financial assurance
- Companies must provide financial assurance equal to 100% of certified closure costs

# Types of Closure Costs

Closure Costs are calculated by the mining company and their consultants as part of a closure plan. Two types;

**Immediate**

- Costs incurred immediately after closure;
  - Demolition of buildings, capping of openings, removal of scrap, etc., resloping waste piles, revegetation of site, short term monitoring, etc.

**Long Term**

- closure cost is equal to the net present value (NVP) of such certified costs discounted at 3%.
  - Monitoring costs, Water treatment plants Civil works (e.g. tailing impoundments), Physical security (e.g. fencing, shaft caps), Risk analysis - engineering, financial.

# Certification of Closure Costs

Regulation 240/00  Section 12 (2) requires:

the signature by the proponent, if an individual; or
the signature of the CFO and CEO if the proponent is a corporation

- Must certify the cost estimates are based on the market value cost of the goods and services required by the work

# Forms of Financial Assurance

According to Sec. 145 (1) of the *Mining Act*, the financial assurance required as part of a closure plan shall be in one of the following forms and shall be in the amount specified in the closure plan filed with the Director or any amendment to it:

- cash
- a letter of credit from a bank named in Schedule 1 to the Bank Act (Canada)
- a bond of an insurer licensed under the Insurance Act to write surety and fidelity insurance
- a mining reclamation trust as defined in the Income Tax Act (Canada)
- compliance with a corporate financial test in the prescribed manner
- any other form of security, or any other guarantee or protection, including a pledge of assets, a sinking fund or royalties per tonne, that is acceptable to the Director

# Corporate Financial Test (Self Financial Assurance)

- Companies having a single A- rating (Standard and Poor's) or equivalent from at least two specified ratings agencies will be able to fully self-assure for the life of the mine.

- Companies having a rating of BBB- (Standard and Poor's) or equivalent from at least two specified rating agencies will be able to fully self-assure for the first half life of a mine if the first half of the life of a mine is at least four years.

Note: Life of a mine is based on the proponent's proven and probable reserves against planned schedules of production

# Corporate Financial Test and Temporary Suspension

If a site with a filed closure plan that has the corporate financial test as its form of financial assurance is placed into temporary suspension, then according to Sec. 19 of O. Reg. 240/00, the company must:

Provide 25% of the financial assurance:

- within 30 days of the filing of the notice of change of project status indicating that the project has been placed in temporary suspension; and

- no later than the first, second and third anniversaries respectively of the filing of the notice of change of project status indicating that the project has been placed in temporary suspension

# FORMS OF FINANCIAL ASSURANCE ON FILED CLOSURE PLANS (DECEMBER 21, 2014)

- 163 plans filed with associated financial assurance of $1.864 billion

| | | | | |
|---|---|---|---|---|
| **Letter of Credit** | **1,056,914,047** | **56.69** | **125** | **59.81** |
| | | | | |
| **Corporate Financial Test** | **615,341,154** | **33.00** | **9** | **4.31** |
| | | | | |
| **Cash*** | **12,617,354** | **0.68** | **52** | **24.88** |
| | | | | |
| **Surety Bond** | **175,260,731** | **9.40** | **21** | **10.05** |
| | | | | |
| **Pledge of Assets** | **4,258,467** | **0.23** | **2** | **0.96** |
| | **1,864,391,753** | **100** | **209** | **100** |
| | | | | |
| **Note: The number of filed closure plans is 163** | | | | |
| **Some Closure Plans have more than one financial assurance instrument.** | | | | |
| *** The "$ Amount" includes $890,487.05 in accrued interest to June 30, 2016** | | | | |

# Return of Financial Assurance

- Company must submit certified technical report that includes updated closure costs for remaining rehabilitation required
- Site inspection by Ministry staff to ensure work was done according to the regulated standards
- Return of difference between financial assurance held and financial assurance required for remaining updated closure costs

# For more information:

Mining Act, O.Reg.240, Mine Rehabilitation Code
www.e-laws.gov.on.ca
Dam Safety Guidelines
www.cda.ca
Prediction Manual – Acid Rock Drainage
www.mend-nedem.org

| South Office | Northeast Office | Northwest Office |
|---|---|---|
| Sudbury | Timmins | Thunder Bay |
| (705) 670-5815 | (705) 235-1625 | (807) 475-1123 |
| 1-888-415-9845 | 1-888-415-9845 | 1-888-415-9845 |

**www.ontario.ca/minesandminerals**