

Ontario Mining Act Fact Sheet

Mine Closure Plans Your Right to Know!

Part VII – Rehabilitation of Mining Lands

In Ontario, a mining company cannot (re)commence mining operations until a certified Closure Plan and associated Financial Assurance are in place. The requirements for a Closure Plan, including Financial Assurance, are set out in Part VII of the Mining Act and elaborated in Ontario Regulation 240/00 (Amended to Ontario Regulation 282/03) – Mine Development and Closure under Part VII of the Act.¹

Mines that existed prior to 1991 when new legislation and regulation came into effect in Ontario have been required to prepare a Closure Plan and post Financial Assurance. Closure Plans are still outstanding (and being developed) for three existing, operating mines.

In planning for closure, there are four key objectives that must be considered:

1. protect public health and safety;
2. alleviate or eliminate environmental damage;
3. achieve a productive use of the land, or a return to its original condition or an acceptable alternative; and,
4. to the extent achievable, provide for sustainability of social and economic benefits resulting from mine development and operations.²

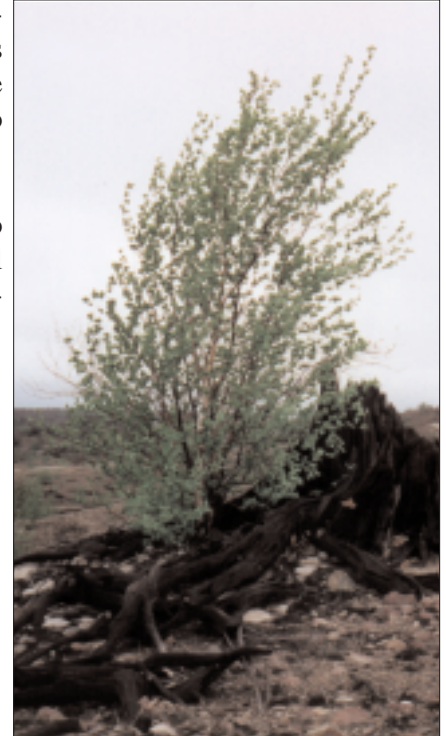
Impacts that change conditions affecting these objectives are often broadly discussed as the 'impacts' or the environmental impacts of a site or a closure plan. It is convenient to consider potential impacts in four groupings:

Physical stability - buildings, structures, workings, pit slopes, underground openings etc. must be stable and not move so as to eliminate any hazard to the public health and safety or to prevent material erosion of the terrestrial or aquatic environment. Engineered structures must not deteriorate and fail.

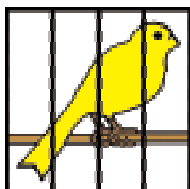
Geochemical stability - minerals, metals and 'other' contaminants must be stable, that is, must not leach and/or migrate into the receiving environment at concentrations that are harmful. Weathering oxidation and leaching processes must not transport contaminants, in excessive concentrations, into the environment. Surface waters and groundwater must be protected against adverse environmental impacts resulting from mining and processing activities.

Land use - the closed mine site should be rehabilitated to pre-mining conditions or conditions that are compatible with the surrounding lands or achieve an agreed alternative productive land use. Generally the former requires the land to be aesthetically similar to the surroundings and capable of supporting a self-sustaining ecosystem typical of the area.

Sustainable development - elements of mine development that contribute to (impact) the sustainability of social and economic benefit, post mining, should be maintained and transferred to succeeding custodians.³



Falconbridge Mine Site, Sudbury – Black Stump with New Life
Photo credit: Jamie Kneen



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Where does Closure fit within the life of a mine?

A Closure Plan is required before a proponent starts advanced exploration. Even if the proponent doesn't plan to start mine production for a number of years, if any activities that the company is undertaking trigger a Closure Plan requirement, it must submit a Closure Plan, as required under the Mining Act. The Ontario Mining Act requires progressive rehabilitation throughout the life of the mine. The "active" stage of closure and rehabilitation requires 2 – 10 years, while monitoring to ensure the physical and chemical stability of the environment can last for decades, if not centuries. The Ontario Mining Association estimates the Life of a Mine as being:

Staking and Regional Surveys	1-2 years
Basic (Grassroots) Exploration	3-4 years
Advanced Exploration	5-10 years
Development and Production	20 years
Closure and Rehabilitation	2-10 years
Monitoring	5-100 years

When is a Closure Plan prepared?

A mining company must prepare a Closure Plan before starting (or re-starting) advanced exploration or starting (or re-starting) mine production. "Advanced exploration" includes the following types of work:

1. Exploration carried out underground involving the construction of new mine workings or expanding the dimensions of existing mine workings.
2. Exploration involving the reopening of underground mine workings by the removal of fixed or permanently fastened caps or bulkheads, or involving the excavation of backfilled shafts, raises, adits or portals.
3. Exploration that may alter, destroy, remove or impair any rehabilitation work done in accordance with Part VII of the Act or a filed closure plan.
4. Excavation of material in excess of 1,000 tonnes;
5. Surface stripping on mining lands where the area over which the surface stripping is carried out is greater than 10,000 square metres or where the volume of the surface stripping is greater than 10,000 cubic metres.
6. Surface stripping on mining lands where the area over which the surface stripping is carried out is greater than 2,500 square metres or where the volume of the surface stripping is greater than 2,500 cubic metres, if the surface stripping

is carried out within 100 metres of a body of water. O. Reg. 240/00, s. 3 (1); O. Reg. 282/03, s. 1.

What is the objective of a mine closure plan?

A Closure Plan describes measures, including protective measures, that the mining company takes during the entire life of the mine to rehabilitate the mine site. These rehabilitation measures aim to restore the site to its former use or condition or to make the site suitable for a use that the Director of Mine Rehabilitation determines. The Closure Plan includes a requirement that the company post a financial assurance to cover the costs of rehabilitation to protect the taxpayer in the event of a corporate default.

Does the community have any input into the Closure Plan?

Before starting (or restarting) advanced exploration or mine production, the Mining Company must publish a notice in a local newspaper and hold a public information session in the area where the project is located. The public notice includes a description of the project, indicating the nature, size and extent of related work to be carried out to complete the project. The company must address any questions raised by the public in the preparation of the final Closure Plan and provide the Director of Mine Rehabilitation with the names and comments from the public information session within 15 days of the event. The company must also report on any consultations carried out with aboriginal peoples affected by the project, including a description of their comments and responses.

Can the public comment on the final Closure Plan?

The mining company must submit eight – eleven copies of the Closure Plan to the Director of Mine Rehabilitation. A notice that the Director has received the Closure Plan is posted on the Ontario Environmental Registry (http://www.ene.gov.on.ca/envision/env_reg/ebr/english/index.htm)⁴. The notice is in the form of a proposal that is subject to a public comment period. The website posting includes a brief description of the mining project, the main components of the Closure Plan and information about where the Closure Plan is available for public review. There is a specified comment period – often 30 days. The Ministry of Northern Development and Mines must make every reasonable step to ensure that all comments relevant to the proposal received as part of the public participation process are considered in making a decision. The decision to accept (or not) the Closure Plan is again posted on the Ontario Environmental Registry, with any conditions set by the Director. Technically, the Director "acknowledges receipt" of the Closure Plan according to the provisions of the Mining Act.

What is contained in a Closure Plan?

The requirements of a Closure Plan are set out in Schedule 2 of Regulation 240/00. If you are planning to read a Closure Plan, you should review the requirements (available at http://www.e-laws.gov.on.ca/DBLaws/Regs/English/000240_e.htm). In summary, a Closure Plan must include:

1. Letter of transmittal, signed and dated by the proponent.
2. A Statement of Certification (see section below for more details).
3. Project Information: name and address of the mining company, details of land tenure, site plans details.
4. Current project site conditions: including current land use of the site and adjacent lands that may be affected by the project; topographical details; surface and ground water conditions; details of plant and animal life; details of previous activities that may have resulted in mine hazards or contamination of soils or waters.
5. Project Description: including minerology; anticipated mining activities; plans for building and infrastructure development; details on the production, handling and disposal of tailings, waste rock, ore, concentrate and overburden; details of waste management systems; plans for water management or treatment systems; plans for the storage of petroleum products, chemicals, explosives, hazardous and toxic substances; and the proposed project schedule.
6. Progressive Rehabilitation Measures: details, including a schedule, of steps that will be taken continually and sequentially during the entire period of the mine to rehabilitate the mine site so that the site is restored to its former use or condition OR is made suitable for a use determined by the Director of Mine Rehabilitation.
7. Rehabilitation Measures during a Temporary Suspension: steps that will be taken to prevent personal injury or property damage during a planned or unplanned suspension of the project, including steps to restrict access to the project site; to control effluents; to ensure stability of waste rock piles, tailings and other impoundment structures, etc. During a Temporary Suspension, the mine site is to be continuously monitored by the proponent.
8. Rehabilitation Measures during a State of Inactivity: steps that will be taken to prevent personal injury or property damage during an indefinite suspension of the project, during which the site is not being continuously monitored by the proponent. Information to be included: measures to restrict access to the site; details of how all mine openings will be secured; measures to monitor, monitor or rehabilitate tailings impoundment areas, landfill or waste management sites; measures to remove or manage petroleum products & chemicals; measures to secure mechanical and non-essential electrical systems; site inspection program to ensure that the required rehabilitative measures are in place.
9. Rehabilitation Measures as a result of closing out the project means steps that will be taken to prevent personal injury, environmental or property damage at the final stage of closure. Information to be included: details on how all mine openings will be secured; details of how all building, power transmission lines, pipelines, transportation corridors and other infrastructure will be dealt with; steps that will be taken to test soils for contamination; measures to ensure stability of tailings, water or other impoundment structures; measures to ensure the revegetation of all disturbed areas; a schedule of rehabilitative measures to be implemented before the project can be considered to be closed out.
10. Monitoring: details of programs and procedures to ensure the physical stability of mine hazards and the chemical stability of tailings, stockpiles and effluents and any biological monitoring to assess the effects of the project on any biological communities.
11. Expected Site Conditions: a description of specified lands uses for the site after the project is closed out including topography, water quality and quantity, plant and animal life.
12. Costs: details of the expected costs of implementing the rehabilitation measures and monitoring programs required to close out the site, including at least a detailed expenditure schedule and an itemized estimate of capital costs and operating costs based on the market value of the material goods and services provided. The costs for implementing rehabilitation measures are public information.
13. Financial Assurance: the form and amount of the financial assurance to be provided and all financial and commercial information used to establish the financial assurance (see below for more details)
14. Consultation with Aboriginal peoples: the consultations carried out with all Aboriginal peoples affected by the project, including a description of their comments and responses, if any, to the closure plan.

Can the decision be challenged?

Any resident of Ontario who has an “interest” in a decision may seek permission or “leave” to appeal the decision to approve or not approve the Closure Plan. The appeal must be made within 15 days of the decision appearing on the Environmental Registry. Details of how to proceed with an appeal are available at: http://www.ene.gov.on.ca/envision/env_reg/ebr/english/ebr_info/Right_to_appeal.htm.

Where can the public review a Closure Plan?

The Closure Plan is available at Ministry of Northern Development and Mines, Mineral Development and Lands Branch in Sudbury. Depending on the location of the mine, the plan may also be available in the closest regional Mineral Development Office of MNDM – this information will be included in the proposal posting on the Ontario Environmental Registry. Where the interests of a municipality, First Nation or other entity are affected by the mine, the Closure Plan would also be made available to them. In Timmins, for example, Closure Plans for mines affecting that municipality are available in the Planning Office. The public can also contact the mine or mine office for a copy of the Closure Plan.

What makes it a “certified” Closure Plan?

The Chief Financial Officer and one other senior officer of the proponent (mining company) must sign a standard certificate (included in the Regulation), that includes statements that the Closure Plan complies with all aspects of the Mining Act and that the financial assurance will cover the costs of rehabilitation.

Does the Closure Plan have to be “certified”?

Section 142 of the Mining Act provides the opportunity for a proponent to submit a proposed Closure Plan for approval (rather than a certified Closure Plan). However, according to MNDM, no one has ever submitted a Closure Plan under this section of the Act.

What is “Financial Assurance”?

The Closure Plan must specify the form and amount of financial assurance to be provided by the proponent. The amount of the financial assurance must be adequate and sufficient to cover the cost of all the rehabilitation work that is described in the Closure Plan. In calculating the amount required for implementing the rehabilitation work, the proponent must base its costs on the market value cost of the goods and services required by the work.

Financial assurance may be in the form of cash, a letter of credit from a bank named in Schedule I to the Bank Act, a bond of a guarantee company approved under the Guarantee Companies Securities Act or through meeting a corporate financial test (self-assurance). The form of self-assurance

being provided is **confidential** – it is included in the Closure Plan that is submitted to MNDM but is **NOT** publicly available. Section 145(10) of the Mining Act preserves the confidentiality with respect to all financial and commercial information relating to the establishment of a proponent’s financial assurance. This section of the Act takes precedence over the Freedom of Information and Protection of Privacy Act.

There is debate/different perspectives within the Ministry of Northern Development and Mines about what aspects of Financial Assurance are publicly available and what is confidential. A legal perspective is that the company submitted the information on the premise that it was confidential. To have access to the information, an individual would have to make a request through Freedom of Information (FOI) to release the data. The Ministry of Northern Development and Mines would receive the FOI request and would have to contact the company to ask “permission” to release the information. MNDM would require an explanation from the company why the information could not be released in order to decline the FOI request.

Why is Financial Assurance important?⁵

Financial assurance is a financial instrument that guarantees that there are sufficient funds available to ensure the proper closure of a mine in the event that a mining company can’t meet its closure plan obligations, usually as a result of financial insolvency. Having adequate financial assurance protects taxpayers from paying for mine closure costs that can run from several million to several hundred million dollars per mine. While the proponent must include the form of Financial Assurance (e.g. cash, letter of credit, bond or self-assurance) in the Closure Plan, this information is not available in the publicly available version of the Closure Plan. This information may be available in the proponent’s Financial Statement or the Annual Information Form which is submitted to the Security’s Commission. Information about publicly listed companies is available at www.sedar.com. Look under “Company Profiles” – companies are listed alphabetically. From the page listing corporate data on the company, click on [View This Company’s Public Documents](#).

What is the approval process for Closure Plans?

The certified Closure Plan is filed with the Director of Mine Rehabilitation. As noted above, this information is posted on the Ontario Environmental Registry as a proposal which is subject to a public comment period. Written comments received within the guidelines set out on the website will be considered as part of the decision-making at the Ministry. Within 45 days of the filing of the Closure Plan, the Director either acknowledges, in writing, receipt of the closure plan OR returns the closure plan if it doesn’t address all the reporting requirements. The written acknowledge-

ment is the de facto approval – with the written acknowledgement, the mining company can start or restart advanced exploration or mine production. (Note: If the Director fails to respond within 45 days, the Plan is automatically “filed” – i.e. approved). If the closure plan is deemed “deficient”, it is returned to the proponent who makes the necessary changes. The Closure Plan would then be resubmitted for the Director and again posted on the Environmental Registry, with a public comment period.

Are there standards for mine rehabilitation?

Standards, procedures and requirements for rehabilitation of mines and mine hazards are set out in the Mine Rehabilitation Code of Ontario, included as Schedule I of Regulation 240/00. The Code contains objectives and design or monitoring specifications related to:

- Protection of Mine Openings to Surface
- Open Pits
- Stability of Crown Pillars and Room and Pillar Operations
- Tailings Dams and other containment structures,
- Surface Water Monitoring
- Ground Water Monitoring
- Metal Leaching and Acid Rock Drainage Requirements
- Physical Stability Monitoring
- Revegetation

The Director of Mine Rehabilitation may exempt a proponent from complying with a standard, procedure or requirement IF the Director determines that the closure plan meets or exceeds the specific objectives the Code.

What’s the process if the Closure Plan is amended?

The proponent must submit an amendment to the Closure Plan any time the Closure Plan is materially deficient. The amendment may be required due to a change initiated by the proponent – for example, an expansion of operations (e.g. expansion of the size of a tailings disposal area); change in how operations are being undertaken or a change in the cost of planned rehabilitation activities. The amendment could also be required due to an order from the Ministry of Northern Development and Mines which has identified a deficiency through a site inspection. The amendment is submitted to the MNDM for approval and is posted on the Environmental Registry as an information item. A public comment period is NOT required. While the Ministry doesn’t have to wait to public comments for make a decision, in practice, it would consider any comments received.

What happens if a mine is sold?

An approved Closure Plan is transferred to the new owner of the mine. The new owner, however, must provide adequate Financial Assurance in an allowable form before the property is transferred.

Government References on the Internet:

Ontario Regulation 240/00 *Mine Development and Closure under Part VII of the Act*.

http://www.e-laws.gov.on.ca/DBLaws/Regs/English/000240_e.htm

For links to the *Mining Act* and Enabling Regulations (12) see <http://www.canlii.org/on/laws/sta/m-14/>

Ontario Environmental Registry. http://www.ene.gov.on.ca/envision/env_reg/ebr/english/index.htm

Ontario Ministry of Northern Development and Mines, contact information for mine rehabilitation and mine hazards:

http://www.mndm.gov.on.ca/mndm/mines/mg/rehab/default_e.asp

NGO Reports:

Financial Options for the Remediation of Mine Sites: a preliminary study. MiningWatch Canada, July 2001. Available at

http://miningwatch.ca/cms/index.php?/Abandoned_Mines/Financial_Options_fo

The Mining Reclamation Regime in the Northwest Territories: a Comparison with Selected in Canadian and U.S. Jurisdictions.

M.M Wenig and K. O’Reilly, January 2005. Available at

<http://www.carc.org/2005/mining49.NWTMiningReclam%20final%20-21Jan05.pdf>

Endnotes

¹ http://www.e-laws.gov.on.ca/DBLaws/Regs/English/000240_e.htm

² Mine Closure, Dr. A. Robertson, S. Shaw. Accessed at: <http://technology.infomine.com/enviromine/issues/closure.html> (July 12, 2005)

³ Ibid.

⁴ From this site, you can easily access notices that have been posted in the last day or in the last week or by searching using the key word “closure” and selecting Northern Development and Mines for the Ministry.

⁵ Taken from “The Costs of Mining: Underwriting Mine Closure Risk” by David Chambers in The Corporate Ethics Monitor, Volume 17, Issue 1, January – February 2005.