*Closure Planning Through the Mineral Exploration and Development Sequence*

**Introduction**

The *Mining Act* (“the **Act**”) and its regulations establish a regulatory approach to the mineral exploration and development sequence in Ontario which is graduated and scalable. The impacts of a project and related rehabilitation requirements often depend on the commodity being mined, the scale of the deposit, the nature of the site, the techniques used, and, especially, the phase of the mineral exploration and development sequence that the project is in.

As a result, the requirements under the Act and its regulations, including requirements for closure plans, are graduated throughout the sequence and proportional to the activities of, and impacts from, each project.

This guidance document explains the difference between the advanced exploration and mine production phases of the mining sequence, as defined in the Act. It also identifies aspects of the closure planning process which are scalable and responsive to the circumstances of specific projects as they evolve.

For further information on the legislative and regulatory requirements for closure plans, please refer to the [Act](https://www.ontario.ca/laws/statute/90m14#BK1) and its regulations, particularly [O. Reg 240/00: Mine Development and Closure under Part VII of the Act](https://www.ontario.ca/laws/regulation/000240).

Proponents are strongly encouraged to correspond with the Mineral Exploration & Development Consultant (“**MEDC**”) assigned to their file for further guidance about their specific circumstances.

**Definitions**

***Advanced Exploration***

Advanced exploration is, as the name suggests, a stage of mineral exploration where the project has progressed beyond the initial early stage exploration (called “early exploration” and regulated separately under the Act) to a phase where exploration projects are larger and have the potential for more significant impacts, but before mine development for commercial production commences.

The definition of “advanced exploration” is tied to specific work activities and, in some cases, includes volumetric, tonnage, or area-based thresholds.

Subsection 139(1) of the Act defines advanced exploration as:

* the excavation of an exploratory shaft, adit or decline;
* the extraction of prescribed material in excess of the prescribed quantity, whether the extraction involves the disturbance or movement of prescribed material located above or below the surface of the ground;
* the installation of a mill for test purposes; or
* any other prescribed work.

The “other prescribed work” referred to in this definition can be found in O. Reg 240/00 at subsection 3(1), and can be summarized as follows:

* new or expanded mine workings;
* reopening of previously closed underground workings;
* alteration or removal of existing rehabilitation work;
* total excavation of material in excess of 1,000 tonnes; and
* surface stripping, where the total area/volume stripped is:
	+ >10,000 m2 or >10,000 m3 within a 500 m radius; or
	+ >2,500 m2 or >2,500 m3 within 100 m of a body of water

If a proponent conducts any of the above activities, it is considered advanced exploration.

***Mine Production***

Subsection 139(1) of the Act defines mine production as “mining that is producing any mineral or mineral-bearing substance for immediate sale or stockpiling for future sale, and includes the development of a mine for such purposes.”

Unlike advanced exploration, this definition is not tied to specific on-the-ground thresholds or activities. Rather, the definition is based on the intention to sell minerals, immediately or in the future. Accordingly, the on-the-ground activities and impacts at the advanced exploration phase may (or may not) be identical to the activities and impacts at the mine production phase.

***Testing***

There is currently only one circumstance where a proponent may sell a mineral or a mineral-bearing substance without being considered by the ministry to be in “mine production”. This is where a claim holder is mining, milling, or refining minerals for the purpose of testing mineral content, pursuant to the applicable permission structure under section 52 of the Act. A proposal to amend the act to allow lease and patent

holders to sell minerals is posted for public feedback and comment (insert link to item 5a).

**Requirements**

***Conditions for Commencing Advanced Exploration or Mine Production***

Pursuant to subsections 140(1) and 141(1) of the Act, it is unlawful to commence either advanced exploration or mine production without a filed closure plan in place. “Filed”, in this context, means accepted by the Director of Mine Rehabilitation (the “**director**”) in the Ministry of Northern Development, Mines, Natural Resources and Forestry (the “**ministry**”).

There are a number of preconditions to a closure plan being filed, namely:

* a Notice of Project Status;
* public notice (mandatory for mine production; only where required by the director, for advanced exploration);
* appropriate consultation with Aboriginal communities, potentially including accommodation measures to mitigate potential adverse impacts on Aboriginal and/or treaty rights, where the Crown’s duty to consult is triggered;
* a posting on the Environmental Registry of Ontario;
* the submission of the final closure plan, along with financial assurance; and,
* written confirmation from the director that the closure plan has been filed.

Specific procedures for several of these steps are found in O. Reg 240/00.

Proponents are also strongly advised to submit a draft closure plan for review and ministry comment prior to the submission of the final closure plan. Drafts may be necessary to fulfill Aboriginal consultation requirements, and aid in identifying any issues early in the closure planning process, thus reducing the likelihood of a closure plan being returned for non-compliance.

Note that a closure plan is not the only authorization required to conduct advanced exploration or mine production. Proponents should be aware of all other regulatory requirements, many of which are administered by other ministries and/or agencies of Ontario or of the federal government, prior to commencing other work.

The ministry is also required to consider its Statement of Environmental Values (SEV) when making decisions which may significantly impact the environment, such as the decision to file a closure plan. The SEV describes how environmental values will be integrated with social, economic and scientific considerations when making such a decision.

***Closure Plans***

The purpose of the Act is “to encourage prospecting, registration of mining claims 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.” At the advanced exploration and mine production phases, the regulation and administration of closure plan requirements is the primary way in which the ministry fulfills this purpose.

A closure plan outlines how all affected land will be rehabilitated after the proposed activity has finished. It must be accompanied by financial assurance in an acceptable form (cash, performance guarantee, letter of credit, reclamation trust, corporate financial test, or other form acceptable to the director).

The primary function of a closure plan is to ensure that, in the event a mine operator is unable or unwilling to rehabilitate the site, the Crown can complete the work. Consistent with the statutory purpose of the Act, this is essential for minimizing the impact of mineral exploration and development on public health, safety, the environment, and the Aboriginal and treaty rights of Indigenous communities.

A closure plan for either advanced exploration or mine production must include at least the items and information set out in Schedule 2 of O. Reg 240/00, in the order set out in that Schedule.

**Scalability and Adaptability**

While both advanced exploration and mine production activities require a closure plan, the length and complexity of a closure plan – as well as the amount of financial assurance required – are proportional to the nature and type of hazard in each case, and its potential impacts to public health and safety, the environment and the Aboriginal and treaty rights of Indigenous communities.

A closure plan for a [modest](#modest) project (as defined below) which is, for example, progressing from early exploration into advanced exploration may be less complex and detailed than a closure plan for a more significant project. Similarly, a late-stage advanced exploration closure plan may be similar in complexity to a mine production closure plan, because of the nature of the activities being undertaken and the hazards that may be created as a result of those activities.

The following sections provide detail on the scalability and adaptability inherent in the closure planning process.

***Legacy Hazards***

As set out in the *Closure Plan Boundary & Land Tenure Guideline,* the ministry does not require proponents engaging in advanced exploration to include the rehabilitation of pre-existing mine hazards in their closure plans, unless the previous mine hazard has been, or will be, materially affected by the proponent.

However, once a proponent moves into mine production, a closure plan is required to provide for the rehabilitation of all mine hazards on the site, whether pre-existing or newly created. This includes the provision of adequate financial assurance for that rehabilitation.

This distinction is intended to support early-stage and advanced exploration on or near legacy mine sites, given that such locations may often have significant potential with respect to either the mineral that was historically mined, or with respect to other minerals.

***Financial Assurance***

Since financial assurance represents the costs of rehabilitating the hazards created (or affected) by the project, the amount of financial assurance is inherently scaled to the project scope.

Financial assurance requirements can change, with the total cost increasing or decreasing, as the proponent proposes material changes to their closure plan and the rehabilitation measures within it. Should a proponent complete some, or all, of the rehabilitation measures provided for in their closure plan, they can apply to the director for a reduction in financial assurance.

***Stages of Project Development***

Pursuant to s. 143(1), proponents cannot undertake advanced exploration or mine production activities that are not included and consistent with a filed closure plan, unless and until the closure plan is amended to incorporate those activities.

The director must be notified of any material expansion or alteration of the project, or any other material change that could reasonably be expected to have a material effect on the adequacy of the closure plan. The director reviews these notices (called “Notices of Material Change”) and determines, on the basis of the information they contain, whether a closure plan amendment is required in the circumstances, as well as the extent of any associated consultation with Aboriginal communities.

Given the dynamic nature of many mineral exploration and development projects, particularly as more is learned about the underlying deposits and site conditions through the process of exploration and development, amendments to closure plans are common.

In connection with these amendments, where rehabilitation requirements increase or decrease as a result of expansions or alterations to the project, the associated financial assurance may also need to change.

Closure plan amendments are required to be submitted to and filed by the director prior to the commencement of proposed activities.

The use of closure plan amendments allows closure plans to scale up over time. Amending a closure plan to cover additional rehabilitation, and provide additional financial assurance, can be appropriate where a proponent’s plans become more ambitious or technologically complex than initially planned; periodic amendments can also allow proponents to use a phased approach to the development of the mine and provision of financial assurance.

For example, where a proponent proposes an open pit operation for the first five years of mine life, and is also considering the possibility of underground development thereafter, an amended closure plan with rehabilitation information and financial assurance for the underground workings would need to be filed before any development work begins; however, content relating to the underground workings may not have been required to be filed with the initial closure plan.

Since advanced exploration and mine production activities cannot commence unless they are included in a filed closure plan, phased approaches to closure planning may not be appropriate for every proponent, depending on the nature of their project and its timelines. Proponents considering this structure are encouraged to discuss it with the MEDC assigned to the file.

Closure plans can also scale down depending on the progress of the proponent’s activities. For example, if a proponent completes progressive rehabilitation work on a site, a closure plan amendment may be submitted to reflect those accomplishments, including a request to decrease the amount of financial assurance held by the ministry, where appropriate, or a request to apply some, or all, of the financial assurance held by the ministry towards newly-added rehabilitation costs.

***Required Content of a Closure Plan under O. Reg 240/00***

Closure plans must be consistent with the requirements of Schedule 2 of O. Reg 240/00 (“the Schedule”) and the Mine Rehabilitation Code of Ontario in Schedule 1 of the same regulation (“the Code”). The Schedule sets out the necessary items and information required in a closure plan, and the Code provides the minimum standards for the rehabilitation activities captured in a closure plan.

The depth of information required in a closure plan is more dependent on the complexity of the project as opposed to the stage of the exploration and development sequence that the project is in.

Some aspects of a closure plan are necessary to include regardless of the complexity of the project. For example, items 1 and 2 required by the Schedule – the letter of transmittal and the certification – are always required.

The level of detail for other items in the Schedule may vary for projects of a different nature and scale.

In the ministry’s experience, examples of modest projects which may need less detailed closure plans, or where certain items or requirements set out in the Schedule may be exempted, include projects:

* with no tailings or waste rock on-site;
* where material is processed off-site;
* using closed loop systems (i.e., no discharge);
* using pre-existing facilities (minimal construction required); and/or
* with no new excavation (e.g., sampling historic waste-rock).

Closure plans must contain sufficient detail for ministry reviewers to evaluate compliance with the Code. This is assessed by the ministry on a case-by-case basis. Proponents are strongly encouraged to communicate regularly with the MEDC on their file as questions arise during the preparation process.

***Project Specific Scalability***

Further project-specific scalability is available to proponents through several available subsections of O. Reg 240/00, as follows:

* O. Reg 240/00 s. 12(7) provides that if any item of information required in a closure plan is not applicable to a project, the proponent shall specifically refer to the item of information in the closure plan, state that the item is not applicable, and provide supporting rationale.

For example, if there are no underground workings present or proposed for a project, then descriptions of shafts, adits, portals, and underground mine plans will not be necessary in the closure plan. The proponent must include those sections in their closure plan as per the structure in the Schedule, indicating therein that the section is not applicable, and why.

* O. Reg 240/00 s. 24(3) provides that the director may specify an alternate use or condition, to which the proponent shall restore the site to, before the project is closed out. This provides proponents the ability to adapt the end land use appropriately to their project.

For example, if a new industrial use is identified for the future of a site, the proponent may request that the director allow that alternate use or condition to be restored to instead of any previously planned site restoration.

* O. Reg 240/00 s. 26 provides that the director may provide written acknowledgement to the proponent that:
	1. it is impracticable to carry out the required measure

For example, consider a proponent who would need to transport topsoil from outside the municipality to meet certain revegetation requirements under the Code. Where a project falls within a municipality prohibiting the addition of non-local topsoil, the proponent may assert that the required measure is inconsistent with a land use control set out in a municipal by-law, and request an acknowledgement from the director; this would allow the closure plan to omit such revegetation requirements or provide an alternative measure to meet the same objective.

If any of the above exemptions or acknowledgements are being contemplated during the development of a closure plan or closure plan amendment, proponents are encouraged to communicate with the MEDC on their file as early as possible. MEDCs may provide proponents with further site-specific advice and guidance as necessary.

For s. 24(3) and s.26 discussed above, proponents must also provide written notification of their intent to the director in advance of submitting their closure plan. This request is to be sent to partVIIsubmissions@ontario.ca (copied to the MEDC where one is assigned to the file) and must clearly identify:

1. Which exemption is being requested for which requirement of the Schedule;
2. The rationale for the request; and
3. All relevant documentation to support the request.

***Consultation***

The Crown has a duty to consult with Aboriginal communities when considering actions or decisions that have the potential to adversely affect a community’s established or credibly-asserted Aboriginal or treaty rights. In some circumstances the duty to consult will include an obligation to provide accommodation that would mitigate adverse impacts on Aboriginal and/or treaty rights. What constitutes appropriate accommodation, where accommodation is warranted, will vary depending on the circumstances of each situation.

Where the duty to consult with one or more Aboriginal communities is triggered in the case of proposed advanced exploration or mine production activities, the Director of Mine Rehabilitation must be satisfied that appropriate consultation has been carried out before making regulatory decisions under the Act, including the decision to file a closure plan or closure plan amendment. In some cases, the final closure plan may be influenced by the outcome of consultation.

Although the required degree of consultation, if any, will depend on the circumstances, the ministry’s experience is that consultation generally increases in depth as projects advance through the mineral exploration and development sequence.

Agreements between mineral companies and Indigenous communities (sometimes referred to as “arrangements”) are not required to obtain regulatory approvals under Ontario’s *Mining Act* and are not regulated under the Act. Such arrangements have become common as an industry best practice, however.

***Further Information***

Proponents are strongly encouraged to reach out to the [Mineral Exploration and Development Section (MEDS)](http://www.infogo.gov.on.ca/infogo/home.html#orgProfile/5997/en) of the ministry as they plan their project and begin to outline their proposed activities. The MEDC assigned to their file should be contacted for guidance about prescribed requirements as well as specific circumstances. Communication is especially important while an advanced exploration or mine production closure plan is being developed, and if a proponent is contemplating requesting one of the above subsections of the Act for further project-specific scalability.

**MEDS Offices and Contact Information:**

Mineral Exploration and Development Section

General Inquiry: 705-670-5865

Sudbury Office

Willet Green Miller Ctr Level B6, 933 Ramsey Lake Rd, Sudbury, ON P3E 6B5

General Inquiry: 705-670-5815

Thunder Bay Office

B002, 435 James St S, Thunder Bay, ON P7E 6S7

General Inquiry: 807-475-1123

Timmins Office

Ontario Government Complex - E Wing, 5520 Hwy 101 E, PO Box 3060, South Porcupine, ON P0N 1H0

General Inquiry: 705-670-5827