

INTENTIONS PAPER
PUBLIC INTEREST BONDING STRATEGY

Decommissioning and Closure of Industrial Projects

SPRING 2024



Ministry of
Environment and
Climate Change Strategy

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1. About this document

The Ministry of Environment and Climate Change Strategy (the ministry) is developing a new regulatory framework for decommissioning and closure of industrial projects in British Columbia.

This intentions paper summarizes policy concepts and seeks input from First Nations, Indigenous organizations, industry partners, local governments, members of the public, non-government organizations and other interested parties through upcoming engagement opportunities. Feedback received during engagement will help shape the regulatory framework for the Public Interest Bonding Strategy.

2. Introduction

2.1 What is the Public Interest Bonding Strategy?

Under the *Environmental Management Act*, the new regulatory framework is intended to ensure owners of high-risk industrial projects pay for decommissioning and closure of their sites 100% of the time.

This initiative was created to address the minister's 2020 bonding mandate commitment:

“With support from the Minister of Energy, Mines and Low Carbon Innovation, take steps to ensure owners of large industrial projects are bonded moving forward so that they – not taxpayers – pay the full costs of environmental cleanup if their projects are abandoned.”

In December 2022, the mandate was updated to:

“As you continue to make progress on items in your previous mandate letter, over the remaining period of this mandate I expect you to prioritize making progress on the following: Deliver the first phase of British Columbia's new bonding policy toward ensuring owners of large industrial projects are bonded moving forward so that they – not British Columbians – pay the full costs of environmental cleanup if their projects are abandoned.”

The Public Interest Bonding Strategy aims to put effective and efficient policies in place to ensure industry funds are available for decommissioning and closure, while supporting responsible industry production and investment. To achieve this objective, the strategy is driven by the following guiding principles:

- Polluter pays;
- Uphold the [Declaration on the Rights of Indigenous Peoples Act](#);
- Risk-based approach;
- Maintain industry competitiveness and financial viability;
- Reduce and mitigate environmental risk;
- Transparent and accountable decisions; and
- Consistent, compatible and fair decision-making.

These principles define success and act as key criteria in the regulatory framework's development. For further details about these principles, see the 2022 discussion paper on the ministry [website](#).

2.2 Project scope

Recent instances of companies not fulfilling their decommissioning and closure obligations have highlighted the need to review how the B.C. government approaches financial assurance. The Public Interest Bonding Strategy involves a comprehensive two-phased review:

- Phase 1 – Review of financial assurance mechanisms under the *Environmental Management Act* (EMA) and the *Mines Act*, focusing on foreseen cleanup costs for existing active and new projects that pose high environmental and financial risk.
 - Phase 1A – Enabling powers under EMA
 - Phase 1B – Enabling regulatory framework
- Phase 2 – Review of financial assurance mechanisms for foreseen and unforeseen cleanup costs under a broader range of statutes, with the aim of improving co-ordination of financial assurance across B.C. ministries.

While the ministry is leading project delivery under EMA, the Ministry of Energy, Mines and Low Carbon Innovation is focused on the *Mines Act* and is responsible for assurance requirements for major mines in British Columbia.

The new regulatory framework for decommissioning and closure of industrial projects will add to the following existing security requirements under EMA (see Figure 1):

- Authority to require security for discharge of waste to environment with specific obligations for hazardous waste facilities and landfills.
- Authority to require security in the event of a spill.
- Authority to require security for management of contamination.

If an active site is determined to be already contaminated under Part 4 of EMA, separate remediation requirements apply (including security, where applicable). Similarly, projects already determined to be abandoned may be managed by other government programs are not in scope of this project and not discussed in this paper.

The new framework will apply to active existing and new projects, not to facilities that are already closed.

Figure 1: Security requirements in the Ministry of Environment and Climate Change Strategy



The Ministry of Environment and Climate Change Strategy administers the *Environmental Management Act* (EMA), which regulates industrial and municipal waste discharges, pollution, hazardous waste and contaminated site remediation. EMA's Waste Discharge Regulation prescribes what industries, trades, businesses, operations, and activities require authorizations to discharge or release waste to the air, water and land under the act.

EMA includes provisions for collecting financial assurance from industries for waste discharge authorizations and remediation activities. It enables a director to require financial assurance as a condition of a permit, or approval for waste discharges that are not otherwise covered in a regulation or code of practice. As a result, nearly all activities and facilities authorized under the act can be subject to a financial assurance requirement at the discretion of statutory decision makers.

The financial assurance requirements under EMA do not cover all risks associated with decommissioning and closure of industrial sites; therefore, amendments through Bill 29 were developed for the Bonding Framework.

2.3 Regulatory framework

The new regulatory framework (illustrated in Figure 2) will rely on laws and regulations passed by the Legislative Assembly of B.C. to govern decommissioning and closure of industrial projects in British Columbia.

In November 2023, [Bill 29 – *Environmental Management Amendment Act*](#), was passed to require industry owners to prepare decommissioning and closure plans (D&C plans), and provide security for high-risk industrial projects.

These powers will come into force by regulation, and include:

- New authority to require industrial projects to prepare D&C plans, and provide security in relation to EMA orders;
- New authority to order a facility to commence decommissioning and closure;
- New authority to use stop work order as part of escalation of compliance actions if D&C plan and security not received per authorization; and,
- New cost recovery provisions, including the ability to register a lien or judgment certificate.

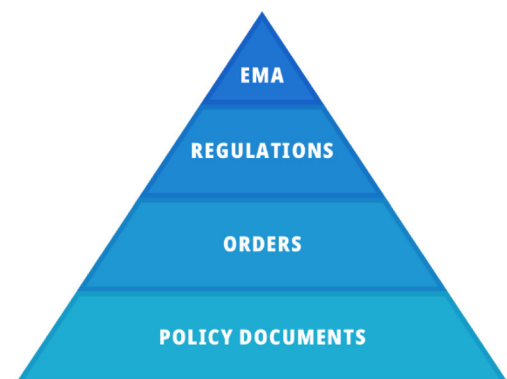


Figure 2: Regulatory framework

Similar legislation and policy are already used by the Ministry of Energy, Mines and Low Carbon Innovation (EMLI) and the BC Energy Regulator (BCER).

Under the Mines Act and the Major Mines Reclamation Security Policy (Interim), EMLI ensures permittees for major mines pay the full cost of environmental cleanup and reclamation. The policy considers risk of default and requires full reclamation security from greatest risk mining projects.

While security requirements have been in place for many years, BCER implemented a new system under the Energy Resource Activities Act in April 2022 to determine the amount of security required based on financial health. This approach (called the Permittee Capability Assessment) aims to reduce the liabilities to the B.C. government and relieve pressure on the Orphan Site Reclamation Fund, by requiring companies to actively reduce site liabilities.

The Bonding Framework will align with EMLI and BCER, and ensure there are no overlaps in security requirements.

3. Seeking Indigenous perspectives

The ministry acknowledges and respects the many First Nations – each with unique cultures, languages, and legal traditions – and the territories and treaty areas in which the ministry’s work spans.

As part of government’s commitment to true and lasting reconciliation with Indigenous Peoples in B.C., the B.C. government passed the *Declaration on the Rights of Indigenous Peoples Act (Declaration Act)* in November 2019. The *Declaration Act* aims to create a path forward that respects the human rights of Indigenous Peoples, while introducing better transparency and predictability when the Province and Indigenous peoples work together.

For the ministry, reconciliation means approaching engagement with a mindset on building partnerships, being responsive to new regulatory approaches, and fostering open and consistent information sharing with Indigenous communities.

In keeping with this commitment and the guiding principles of the Public Interest Bonding Strategy, the ministry undertook a series of engagement sessions with First Nations and Indigenous organizations in spring 2022. The sessions considered preliminary concepts for the project and explored potential outcomes and opportunities. Key themes identified through these workshops were summarized in a [report](#).

This intentions paper supports open and informed dialogue with First Nations and Indigenous organizations on the proposed regulatory framework. Presented concepts incorporate this approach and propose ways in which First Nations can be involved in the lifecycle of an industrial site through decommissioning and closure.

The ministry looks forward to continuing to learn and collaborate with First Nations to ensure the future regulatory framework is grounded in Indigenous perspectives.

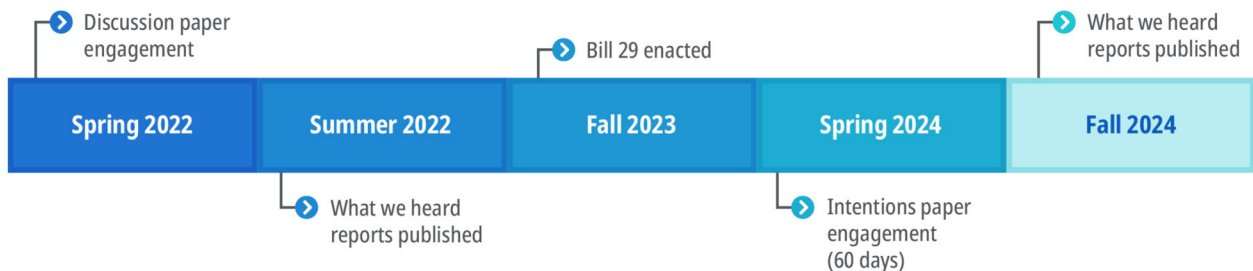
4. Engagement and consultation

The ministry recognizes that meaningful engagement and consultation with First Nations, Indigenous organizations, industry, non-government organizations, local governments, and the broader public are essential to developing a robust regulatory framework for the Public Interest Bonding Strategy.

As shown in Figure 3, the ministry first issued a discussion paper on preliminary considerations in spring 2022, which guided project engagement, including five Indigenous workshops and six public webinars. Feedback gathered was analyzed and published in two What We Heard Reports in summer 2022. These findings informed the development of Bill 29 (passed in fall 2023) and policy concepts presented in this intentions paper.

The ministry is now engaging on the regulatory framework in this intentions paper and will be hosting a series of public webinars and Indigenous workshops to solicit feedback. Following the close of the 60-day engagement period, feedback on the intentions paper will be published in two What We Heard Reports in fall 2024.

Figure 3: Past and future engagement milestones



To read the Public Interest Bonding Strategy 2022 discussion paper, engagement session presentation, and What We Heard Reports, visit the project [website](#).



5. Regulatory framework for decommissioning and closure of industrial projects

The ministry is currently developing the overarching regulatory framework for new decommissioning and closure (D&C) requirements, which includes the following policy topics (Figure 4):

- Risk-based approach to determine if an industrial project requires a D&C plan;
- Requirements for D&C plans including content, engagement with Indigenous peoples, local governments, and implementation once operations cease;
- Clear expectations for estimating the cost of decommissioning and closure;
- Risk-based approach to determining if an industrial project requires assurance to ensure D&C plan obligations are funded;
- Methods to determine assurance amount and form;
- Alignment with existing ministry compliance and enforcement framework to ensure new closure and security requirements are fulfilled; and,
- Cost recovery provisions to strengthen the B.C. government’s ability to recover public funds spent on environmental cleanup if owners fail to meet their obligations.

While most of the policy areas are new, the ministry intends to incorporate the existing [compliance and enforcement model](#) to help ensure industrial projects comply with the regulatory framework.

Figure 4: Intentions paper policy topics



The framework will rely on a range of policy documents (e.g., guidelines, manuals, administrative policy tools, standard operating procedures) to guide transparent, consistent, and accountable decision making. The framework will inform the director’s authority to make statutory decisions and issue orders specific to D&C plans and assurance.

The ministry will use orders introduced through the legislative amendments in Bill 29 as legal tools throughout the bonding process to support consistent and accountable bonding requirements.

A **responsible person** is an owner of the facility or a person who is in control of or responsible for any operation located at the facility, but does not include a person excluded by regulation (i.e., employee with no legal or beneficial interest in the profits resulting from activities taking place at the facility).

If a site is abandoned, the total amount of costs incurred by government in excess of security (if any given), is a debt due to government by an accountable person. An **accountable person** is an owner of the facility and/or a person who was 'responsible person' in relation to the facility immediately before operations ceased, unless excluded by regulation.

Orders will be issued to responsible person to obtain information, D&C plans and security for the site, and when directing the facility to close the site or stop work. Further details on how orders will be used to support the regulatory framework are summarized in Figure 5 (and referenced throughout the paper, where applicable).

Figure 5: How are orders used to support the regulatory framework?



Information Order
To provide information about operations and activities taking place at a facility.



D&C Plan Order
To prepare and submit a D&C plan and address deficiencies in the plan.



Security Order
To provide security in relation to D&C plan obligations.



Site Closure Order
To direct the facility to execute the D&C plan.



Stop Work Order
If a D&C plan order or security order is not fulfilled, the minister can issue a stop work order.


The ministry intends to further clarify definitions of responsible and accountable persons in the regulatory framework. Exclusion will apply to people who may be caught by the broad definitions, and don't have substantial interest or control to warrant the imposition of these requirements. For example, a secured creditor may or may not exercise control over or impose requirements regarding activities at a facility. One policy option could be to exclude the creditor from the responsible person unless they undertook measures to impose facility requirements (i.e., acted as owner or operator of the facility). Other exclusions may also be considered pending engagement input.

6. Risk-based determination

6.1 Introduction: Two-step process

The regulatory framework will apply to new (future) and existing active industrial projects authorized to discharge waste to the environment under the *Environmental Management Act*. The [Waste Discharge Regulation](#) includes two schedules (Schedule 1 and 2) that list 68 industries, trades, businesses, operations, and activities prescribed under the regulation. These activities are in scope of this strategy and its risk-based determination approach.

The ministry intends to focus on industries and projects that pose a high risk of insolvency and abandonment of a site and/or high environmental liability (priority projects). This will involve a two-step risk determination process to assess which new and existing active authorizations are prioritized to develop a D&C plan and provide assurance.



Risk-Based Determination

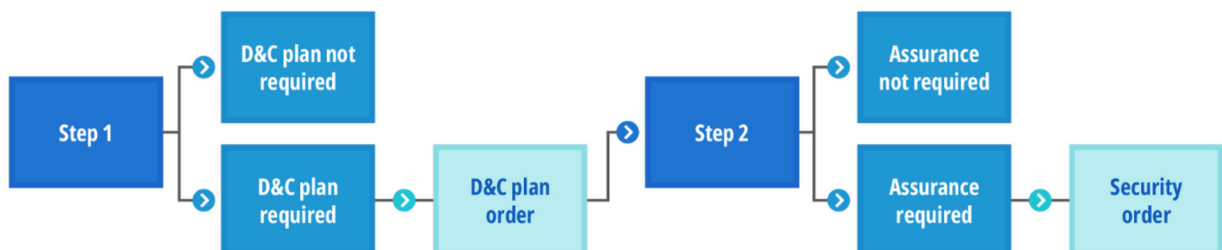
STEP 1: Identify high-priority industries/projects that will be ordered to provide a D&C plan.
Some projects will not require D&C plans.

STEP 2: Identify high-risk projects that will be ordered to provide assurance.
Some projects that require D&C plans will not require assurance.

The risk determination process considers industry-level characteristics and project-specific factors. The ministry intends to apply this process to all active projects – existing projects with active authorizations and new projects applying for authorization – to create a fair and consistent framework.

Figure 6 shows the two-step process for assessing risk of a site and requirements for D&C plans and security.

Figure 6: Risk Determination Process



6.2 Risk Determination Step One: Which projects will require decommissioning and closure (D&C) plans?

Step one of the risk-based determination approach is designed to screen in projects considered as high-risk under the Waste Discharge Regulation. This step considers project-specific information to classify projects as “requiring a D&C plan” or “not requiring a D&C plan”. Dependent on the outcome of the internal analysis, the ministry may require the project to prepare a D&C plan. This determination may be repeated throughout the project lifecycle in response to new facility information including operational or ownership changes.

The ministry intends to apply a screening tool to all projects with operations that include any “industries, trades and businesses, operations and activities” (activities) listed in Schedule 1 of the Waste Discharge Regulation. The proposed screening tool considers facility ownership, location, and the types of activities taking place on site to assess whether a project is required to prepare a D&C plan.

The ministry intends to require D&C plans for the following projects:

- Existing active projects that include one of the following Waste Discharge Regulation Schedule 1 activities:
 - Chemical and Chemical Products
 - Metal Processing and Metal Product Manufacturing
 - Metal Smelting
 - Iron and Steel Foundry and Metal Refining
 - Paper, Pulp
 - Refined Petroleum and Coal Products
 - Private Municipal Sewage Management with Environmental Management Act fees greater than \$50,001
- New (future) projects that include one or more of the 40 prescribed Waste Discharge Regulation Schedule 1 activities.

The ministry does not intend to require D&C plans from:

- Government owned projects;
- Projects located on federal land;
- Projects with similar requirements under the *Mines Act* or the *Energy Resource Activities Act*;
- Private landfills or hazardous waste management projects with similar requirements under the *Environmental Management Act*.

The ministry may determine that projects not captured by the screening tool have exceptional circumstances that warrant the need for a D&C plan. These considerations will include unique site circumstances (i.e., financial risk and environmental liability factors). This aspect of step one is intended to provide the ministry with the ability to respond to emerging circumstances and site-specific information provided by First Nations, local governments, the public and ministry staff. If exceptional circumstances apply, the project may be ordered to provide a D&C plan.

To inform this stage of the regulatory framework, the ministry will use the following orders to obtain information and require responsible persons to prepare and provide D&C plans for industrial projects.



Information Orders

Information orders will be issued in step one to require a responsible person to provide information about activities taking place at the facility. For example, the ministry may issue an information order to answer screening questions, confirm existing D&C plan requirements, determine if risk situations apply, etc.



Decommissioning and Closure (D&C) Plan Orders

If step one identifies a project as a high priority, the ministry will issue a D&C plan order. The order will include details on what to include in the plan, when to submit it, etc.

7. Decommissioning and closure plan requirements

7.1 Decommissioning and closure plan requirements

The ministry intends to develop regulatory requirements for responsible persons to prepare and submit a decommissioning and closure (D&C) plan for specified facilities captured by step one of the risk-based determination approach (Section 6.2). The ministry intends to require qualified professionals to prepare some or all parts of D&C plans.

Proposed content requirements for D&C plans are summarized in Appendix 1, and include:

- Project specific information;
- Inventory of all substances or things capable of causing pollution and/or contamination;
- Description of all necessary activities to safely decommission and close a facility;
- Cost estimates for all decommissioning and closure activities; and
- Summary of engagement activities.

The *Environmental Management Act* definition of facility applies to this project:

"specified facility" means a facility used for a prescribed industrial or commercial purpose or activity.

The information provided in a D&C plan must be sufficient for the ministry to safely decommission and close the specified facility if the site is abandoned. The description of activities required to close a site must include sufficient details on how a responsible person intends to safely manage (remove, dispose, destroy, treat, monitor, etc.) all substances or things capable of causing pollution and/or contamination.

In addition, D&C plans may include roles, responsibilities and schedules for carrying out all activities to decommission and close the site. This regulatory framework intends for D&C plans to be completed by qualified professionals or qualified persons.

Qualified professional: A person with the training, experience and expertise in a discipline relevant to the subject matter or activities set out in the regulation or guidance, and who is registered with the appropriate B.C. professional organization, is acting under that organization's code of ethics and is subject to disciplinary action by that organization.

Qualified person: Where there is no category of qualified professional and a qualified person is used, specify the education, professional qualifications and experience necessary for the qualified person.

7.2 Updating D&C plans

The ministry intends to require D&C plans to be reviewed and updated (if required) every five years, or when there are significant changes in the operations at the facility (e.g., change in ownership, authorizations or operations, including changes to the inventory of substances capable of causing pollution or contamination). The responsible person must work with a qualified professional to review and update the plan, and provide updated cost estimates (if required). The ministry intends to make the D&C plans publicly available, including cost estimates.

7.3 Pause in operations: Safeguarding

All facilities that are captured by proposed regulations will be required to prepare D&C plans (EMA Section 91.82) and implement the plans when operations cease (EMA Section 91.83). However, it is reasonable to expect that some facilities may temporarily cease or pause some or all operations, with the intention to restart in the foreseeable future. In these circumstances, a facility may not be required to begin implementing all D&C plan activities upon pausing operations. When preparing D&C plans, qualified professionals can propose “safeguarding” activities as part of the plan to reduce risks during a pause in operations (see Section 9 for more information on ceasing activities and closing a site). In these circumstances, the ministry may only require security for safeguarding activities.

All D&C plans require a detailed summary of activities to safely decommission and close a facility. Where applicable, D&C plans may also include safeguarding activities to support temporary pause in operations. Proposed safeguarding activities must ensure the facility maintains ongoing safety and environmental protection and may include safe management, removal and/or disposal of substances; ongoing maintenance and monitoring of equipment, buildings and infrastructure; and ensuring all reasonable precautions and actions are taken to reduce risks from substances capable of causing pollution.

For facilities that are approved to implement safeguarding actions, D&C plans will be reviewed and updated following implementation of safeguarding activities. The statutory decision maker will review the updated D&C plan and determine if the site must begin implementing further D&C actions if a temporary pause in facility operations becomes permanent.

7.4 Cost estimates

Estimating the cost of D&C activities helps to understand the potential liability of a site if it is abandoned. The amount of liability may inform whether a site is required to provide assurance, and how much financial security would be appropriate (see Section 8.1.1 and 8.1.2).

To accurately reflect the potential liability, the estimates should calculate the costs of a third party carrying out the proposed actions summarized in the D&C plan. This may include project management and administrative costs associated with the proposed actions. Estimates may also account for changes in costs between review periods, whether reviews are for security renewal or D&C plan updates.

A qualified professional or qualified person familiar with the cost of completing the work is expected to develop the estimates and provide supporting information in the D&C plan submission.

This may be reviewed by First Nations and local governments as part of the broader engagement on the D&C plan.

7.5 Engagement on D&C plans

Responsible persons may be required to engage with Indigenous peoples during the preparation of a D&C plan, and with local governments where projects are located on private land within the local government jurisdiction. Engagement requirements may include sharing draft D&C plans, offering meetings to discuss D&C plans, receiving and responding to written correspondence, and providing a summary of engagement to the ministry.

The ministry intends to develop Indigenous engagement requirements in partnership with First Nations.

8. Security form and amount determination

8.1 Risk Determination Step Two: Which projects will require assurance?

Step two occurs after the ministry has received a D&C plan from a responsible person (Section 6.2). Not every industrial project required to prepare a D&C plan will also be required to provide assurance.

As part of the risk-based determination approach, step two will examine project and company-specific information and determine which projects will be ordered to provide assurance via a security order.

This project-by-project approach produces an objective, well-rounded, site-specific analysis of risk to inform decisions under the new regulatory framework.

8.1.1 Assessment of company and project-specific risk

Step two of the risk-based determination approach is based on financial risk and considers environmental liability. Financial risk is the likelihood that a company may fail to meet its D&C obligations. Environmental liability is the cost the B.C. government would incur to implement a D&C plan if the site is abandoned.

Financial Risk Analysis

As the regulatory framework is implemented, the ministry intends to refer to the financial risk factors (Table 1) to determine a company/project's financial risk level. The six factors include: company background, compliance history, corporate policies, financial performance, project specific factors and industry performance.

Table 1: Step Two - Financial Risk Factors

ID	Risk Factor	Details
1	Company background	Operation size, years in operation, number of ownership changes, summary of assets in B.C.
2	Compliance history	Number of warnings and administrative monetary penalties (AMPs) issued to the responsible person, dollar value per AMP, percentage of all advisories and/or warnings the responsible person has made reasonable efforts to rectify, and previous abandonments.
3	Corporate policies	Environmental policies, plans and procedures, anti-fraud policies.
4	Financial performance	Revenue growth, net income margin, return on assets, current ratio, debt to equity ratio, earnings before interest, taxes, depreciation, and amortization (EBITDA*) to interest coverage ratio, debt to EBITDA ratio.
5	Project specific factors	Risk register, maintenance plan, decommissioning estimate to project capital expenditure rating ratio.
6	Industry performance	Similar ratios to compliance history but look at the overall industry and will add significance to how the individual project behaves, compared to industry standard.

* EBITDA = earnings before interest, taxes, depreciation or amortization

The financial risk analysis considers each of the six factors described above and assigns a score based on the information provided in the D&C plan, compliance history, and industry performance data from ministry records. Each risk factor has a weight assigned based on its likelihood and potential impact. If the required information is not provided in the D&C plan, the ministry intends to score the project at the highest risk level for that factor. The ministry will add the scores together to assign an overall financial risk score that classifies a project as high,

medium, or low risk. Financial risk scores will be expressed as a percentage to assist with calculating the amount of assurance to require.

Projects with a high financial risk score will be required to provide assurance. The amount of assurance will be equal to the environmental liability of the site (i.e., 100% of the cost of fulfilling D&C plan obligations).

Environmental Liability

If a project's cost of D&C activities (environmental liability) is above a certain dollar amount or threshold, the ministry may require assurance even if the project's financial risk score is low to medium. This is up to the discretion of the director. In this situation, the amount of assurance required would be proportional to a project's financial risk score (i.e., a percentage of the cost of fulfilling D&C plan obligations). Research into the environmental liability threshold amount is ongoing and the ministry welcomes your input.

If the risk-based determination process identifies a project as high risk, the ministry intends to issue a security order requiring the responsible person to provide assurance. The order will include details on the amount (Section 8.1.2) and form (Section 8.2) of assurance required (either as security only or security and risk reduction actions).



Security Orders

The director may, at any time after a D&C plan is submitted, order a responsible person to give security to ensure they fulfil D&C plan obligations.

8.1.2 Amount and form of assurance

If the ministry determines that a site is required to provide assurance, one of the following formulas will be used to determine how much assurance must be provided by the responsible person:

High financial risk score:

Amount of assurance (\$) = cost of D&C activities (\$)

Medium/Low financial risk score AND cost of D&C activities above monetary threshold:

Amount of assurance (\$) = (proportional) financial risk (%) x cost of D&C activities (\$)

Assurance = risk reduction actions + securities

The amount of assurance required will reflect the financial risk score and cost of D&C activities (environmental liability) for the project. This assurance will be provided in the form of risk reduction actions and/or securities, depending on the site. Further details specific to risk reduction actions and securities are provided in Section 8.1.3 and Section 8.2.

8.1.3 Risk reduction actions

The ministry intends to encourage reduction of environmental liability by promoting risk reduction actions. These actions are intended to reduce cost of decommissioning and closure to British Columbians, if the site is abandoned, while providing an option for the responsible person to provide less security up front.

The ministry does not intend to prescribe specific risk reduction actions. Instead, qualified professionals may propose actions in an optional risk reduction action plan (RRAP) in the D&C plan. Site-specific RRAPs may include proactive actions to reduce environmental liability (i.e., before decommissioning and closure or safeguarding), along with a proposed timeline to complete the work.

The ministry intends to review each RRAP to determine if, when undertaken, RRAP completion reduces risk onsite, and will calculate the amount of security required from site-specific environmental liability. The actions outlined in each RRAP would be taken off the environmental liability amount, and the remainder would be collected by way of a security. As described in Section 7.4, environmental liability is calculated at the rate of a third-party contractor, as per costs the B.C. government would incur if the site is abandoned. This would mean the responsible person could save money by doing the work ahead of time, instead of providing security for these actions.

Additionally, the ministry intends to review RRAPs more frequently than the overall D&C plans and will require responsible persons to complete regular reviews and provide progress reports on the RRAP work. If the actions proposed in the RRAP are not completed as per the timeline, and there are no extenuating circumstances that explain the delay, the ministry intends to require responsible persons to provide security for the liability associated with the unfinished work.

8.2 Type of security

Collecting financial security will provide the B.C. government recourse in the event of non-performance of D&C obligations. To identify the best options for industrial projects under the *Environmental Management Act*, the ministry considered different forms of security, jurisdictional trends across North America and globally, and input received from the 2022 external engagement.

Preferred forms of security are summarized in Table 2 and include irrevocable letters of credit, surety bonds and cash / cash equivalents. The ministry intends to allow a project's securities to be paid in various forms.

Table 2: Preferred forms of security

Security type	Description
Irrevocable letter of credit (ILOC)	An ILOC is a document issued by a financial institution (i.e., accredited bank) that assures a monetary amount as required by the B.C. government. At the government's request, the bank will make funds available should the applicant be unable or unwilling to fulfill their financial obligations.
Surety bonds	Surety bonds are legally binding agreements that satisfy the financial security requirements of the B.C. government and protect interested parties against financial risk. They provide a guarantee that the applicant will comply with all required statutory or contractual obligations. A surety bond is an alternative to ILOC and can provide less easily accessible funds attached to statutory or contractual obligations, as outlined in D&C plans.
Cash/cash equivalents	Cash/cash equivalents are highly liquid forms of security, which are accessible to responsible persons with limited access to the above forms of security. The ministry intends to accept cash and/or cash equivalents in situations where ILOCs or bonds are impractical or not possible. Currently, the only acceptable cash equivalents by the Ministry of Finance are short-term deposits, guaranteed investment certificates, registered marketable bonds or treasury bill notes..

In addition, the ministry will not accept parental guarantees. Furthermore, while the ministry is continuing research into qualifying environmental trusts and pooled funds to inform future policy options, these policy options are not moving ahead at this time.

8.3 Managing financial assurance and returning securities

To encourage industrial projects to plan decommissioning activities well in advance of site closure, the ministry intends to incentivize progressive cleanup opportunities that can reduce site liability and security obligations. Securities handling practices will follow existing government policy and procedures to ensure transparent, consistent, and accountable security management. The ministry intends to introduce new internal processes to hold securities and apply a robust review/refresh protocol to ensure securities are up to date. Security handing practices will follow policy documents (i.e., manuals, guidelines, standard operating procedures) to ensure transparent, consistent, and accountable practices.

The ministry intends to reduce or return securities to the responsible person when D&C plan obligations are completed or reduced to the satisfaction of the director. The ministry also intends to return securities when a new responsible person has taken over the property and its associated liabilities, and the new responsible person has replaced the existing security.

9. Ceasing operations, pausing operations, and closing a site

The regulatory framework will require D&C plans to be implemented when operations cease, or in some circumstances when operations pause. The ministry intends to define ceasing operations after a point in time when a facility is no longer carrying out one or more of the site authorizations or activities. The ministry intends to define pausing operations as being after a point in time when an operation is suspended or idled but intends to restart in the foreseeable future. Facilities will be required to notify the ministry when operations cease or pause.

Once a facility has ceased operations, D&C plans must be implemented within 12 months (see timelines below). For facilities that have paused operations, the safeguarding portion of the D&C plan must begin implementation within 12 months. If the ministry determines that the facility has ceased operations and have not begun implementation, the Director can issue a site closure order directing responsible persons to implement actions listed in the D&C plan or safeguarding portion of the plan. The orders will include implementation timeline obligations and may require the responsible person to submit a report respecting the closure.



Site Closure Orders

If the ministry determines that operations have ceased at a facility, the director may order a responsible person to decommission and close the facility in accordance with its D&C plan and submit a report respecting the closure once complete.

Implementation timelines being considered by the ministry for D&C plans are presented in Figure 7. The timeline will be included in the site closure orders, which will be issued when the ministry confirms the site has ceased operations (permanently or temporarily).

The ministry intends to apply the following timeline implementation requirements:

- For decommissioning and closure activities (permanent closures):
 - The ministry must be notified within 30 days of ceasing operations.
 - Within 12 months of ceasing operations, implementation of D&C activities must begin.
 - The ministry intends to require D&C plans be fully implemented and the site closed within five years of ceasing operations, with opportunities for alternate timelines to meet the specific needs of a project.
 - Some activities such as monitoring, and maintenance will be ongoing.
- For safeguarding activities (temporary closures):
 - The ministry must be notified within 30 days of pausing operations.
 - Safeguarding activities must begin implementation within 12 months of pausing operations.
 - Safeguarding activities must be completed within two years of pausing operations. Some activities such as monitoring and maintenance will be ongoing.

- After implementing safeguarding actions, the D&C plan must be updated to reflect the changes to the operation. Once the plan has been updated and reviewed by the ministry, the facility may need to implement decommissioning and closure activities.
- For all types of closure:
 - Facilities must always operate in accordance with all regulations and authorizations, and ensure the safety and integrity of the facility during decommissioning and closure.
 - Ongoing monitoring and maintenance, as required.

The ministry recognizes that qualified professionals may propose alternate timelines for implementing D&C plans and safeguarding activities to meet the unique needs of a project. In both instances, the D&C plan must be submitted to the ministry for review and consideration and include reasonable timelines. During implementation of a D&C plan, proponents will also be given opportunities to request extensions of approved timelines to meet the unique needs of a project.



Figure 7: D&C plan Implementation (with and without safeguarding included)

10. Compliance and enforcement

Ministry compliance & enforcement personnel work to ensure responsible persons comply with regulatory requirements under the *Environmental Management Act (EMA)* and its regulations. The environmental compliance model uses a consistent, risk-based approach to ensuring compliance and assesses each situation on its own merits. Ministry inspectors verify compliance by conducting inspections to ensure regulated parties are following the requirements designed to protect the environment and human health, and to provide them with the opportunity to improve their environmental business practices.

Inspections can be carried out on-site or as an office assessment reviewing information received by the ministry. Please refer to the [Environmental Compliance](#) website for more information.

In the context of the regulatory framework, compliance can be assessed against any of the orders issued by statutory decision makers. If D&C plan and security orders are not fulfilled by responsible persons, the minister has the authority to issue a stop work order as per Bill 29 legislative amendments to EMA, which will come into force upon regulation.



Stop Work Orders

In addition to the tools available to the ministry through the compliance model, the Bonding Framework also includes stop work orders that can be issued by the minister if responsible persons do not fulfil D&C plan or security orders.

11. Cost recovery

The ministry intends to introduce cost recovery mechanisms to ensure industry pays for decommissioning and closure of abandoned project sites.

The ministry cost recovery model for the regulatory framework will ensure all types of activities contributing to the overall cost of cleanup are documented to maximize return of expenses.

Cost recovery, as introduced through Bill 29, will consider use of government employees or contractors, government vehicles, consulting and professional services, government equipment, private goods, research, and analytical services related to D&C plan activities.

12. Engagement process and how to provide input

The ministry seeks your input on the intentions paper outlining B.C.'s new regulatory framework and welcomes comments on the proposals outlined in this document.

To provide feedback on this intentions paper, please visit engage.gov.bc.ca to complete the survey and/or share your comments. Engagement submissions will be accepted until June 9, 2024 at 4:00 p.m.

To support feedback, the ministry will be hosting a series of webinars and workshops to engage with First Nations, Indigenous organizations, industry, non-government organizations, local governments, financial sector, and members of the public. If you would like to attend, please visit engage.gov.bc.ca for event dates and details on how to sign up.

All submissions will be treated with confidentiality by ministry staff and contractors when preparing consultation reports. Please note that comments you provide and information that identifies you as the source of those comments could be made public, either through a decision by the ministry or if a Freedom of Information request is made under the *Freedom of Information and Protection of Privacy Act*.

Thanks for taking time to consider this document and submit feedback.

Appendix 1: Decommissioning and closure plan template

The Ministry of Environment and Climate Change Strategy is proposing all decommissioning and closure (D&C) plans include the following information:

1. Executive Summary.
2. Contact information for the company, responsible persons and qualified professional(s).
3. Additional company information to assess financial risk, including:
 - Financial ratios, including financial status, historical financial performance and revenue growth to understand financial performance of the organization;
 - Information on the background of the company, including size, number of ownership changes, summary of assets in B.C., and years in operation; and
 - Any corporate policies (e.g., pollution prevention plans, environmental emergency plans, financial policies).
4. Project specific information, including:
 - Type of activity taking place on the site and all active authorizations for the site;
 - Site location, including maps showing site location within the province and project footprint on the site.
5. An inventory of substances capable of causing pollution and/or contamination, including:
 - Detailed inventory of all substances capable of causing pollution/contamination that are on site or used in processes onsite (e.g., products, by-products, wastes, etc.), the maximum amount of each substance stored onsite, and the locations within the facility/site;
 - An inventory of all buildings and equipment that contain substances capable of causing pollution/contamination, (e.g., asbestos) and the locations within the site; and
 - Any relevant pollution prevention plans, environmental controls, and monitoring or detection systems.
6. Summary of decommissioning and closure actions, including:
 - Detailed descriptions of all decommissioning and closure actions, including schedules for the anticipated timing and/or duration for all activities;
 - Safeguarding actions (if applicable);
 - Risk reduction actions (if applicable);
 - Descriptions of how all the substances and equipment/facilities listed in the inventory will be safely managed, demolished, removed, decontaminated, disposed, destroyed, etc.;
 - Detailed information on any substances, equipment, and/or facilities listed in the inventory that will remain onsite, and how these will be safely managed, stabilized, maintained, monitored, etc.;
 - Detailed information on how the actions taken to decommission and close the site will prevent contamination of the site;
 - Identification of locations on site where decommissioning and closure actions will be carried out; and
 - Roles and responsibilities for carrying out actions.

7. Cost estimates for all actions necessary to safely decommission and close the site.
 - Detailed information of costs associated with each action outlined in the plan, including project management and administrative costs.
 - Reflect cost of a third party completing the actions.
 - Account for changes in costs between review periods.
8. Summary of engagement with Indigenous peoples and local governments, including:
 - Information provided by responsible person;
 - Written correspondence; and
 - Summary of engagement and changes made as a result of discussions.
9. Risk reduction action plan (if applicable).
 - If any actions described in the summary of decommissioning and closure actions, include detailed descriptions on any proposed risk reduction actions, including timing of these actions, and the risk associated with these actions.
 - This plan should be attached as an appendix to allow for more frequent revisions than the main component of the D&C plan.





Ministry of
Environment and
Climate Change Strategy