

Appendix A

Ministry Action Plan

Response to Recommendations in the Audit of Code Requirements for Tailings Storage Facilities

June 8, 2021

The Ministry of Energy, Mines and Low Carbon Innovation (Ministry) accepts all recommendations provided by the Chief Auditor in the report entitled, “Audit of Code Requirements for Tailings Storage Facilities” (Report). The following Action Plan provides the Ministry’s commitments to addressing the recommendations provided by the Chief Auditor in the Report. The Ministry has organized the Action Plan under four themes:

- Alignment of Regulations;
- Health, Safety and Reclamation Code and Guidance;
- Interpretation of Code and Compliance Verification; and
- Data Systems.

The Ministry will provide annual updates to the Chief Auditor regarding progress made on each of these actions.

List of Acronyms:

C&E	Compliance and Enforcement
Code	Health, Safety and Reclamation Code for Mines in British Columbia
ENV	Ministry of Environment and Climate Change Strategy
EoR	Engineer of Record
FLNRORD	Ministry of Forests, Lands, Natural Resources Operations and Rural Development
Ministry	Ministry of Energy, Mines and Low Carbon Innovation
MOU	Memorandum of Understanding
NRIS	Natural Resource Inspection System
TSF	Tailings storage facility

Alignment of Regulations

Recommendation 1

Ministry Response & Action

The Ministry, in collaboration the Ministry of Environment and Climate Change Strategy (ENV) and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD), should revisit the Memorandum of Understanding (MOU) regarding the Dam Safety Regulation and its application to TSFs and other structures on mine sites to create a common understanding between Government, TSF operators, and TSF Engineers of Record regarding the regulatory roles of the Ministry, FLNRORD and ENV and the application of existing regulatory requirements to TSFs in B.C.

The MOU for “Regulation of Impoundments and Diversions on a Mine Site” between the Ministry, ENV and FLNRORD is a valuable tool for staff in all three ministries to determine which agency is best placed for regulating respective dams and water management infrastructure on a mine site, including tailings storage facilities. However, this MOU was signed in 2014 and pre-dates the 2016 tailings related revisions to the Health, Safety and Reclamation Code for Mines in British Columbia (Code) and the *Water Sustainability Act*. As such, the MOU warrants review and update to ensure it remains current and relevant for staff and decision makers.

The Ministry has engaged with ENV and FLNRORD to establish a working group to review and update the MOU to ensure it is up-to-date and clear.

ACTION 1

The Ministry will work with ENV and FLNRORD to review and update of the “Memorandum of Understanding for Regulation of Impoundments and Diversions on a Mine Site.”

Target date for working group initiation: 30/09/2021

Target date for final draft: 30/09/2022

Health Safety and Reclamation Code and Guidance

Recommendation 2

Ministry Response & Action

The Ministry should develop and document a change management process for determining when and how B.C.’s regulatory framework for TSFs (including the Code and the Code Guidance Document) will be updated to reflect new management programs, guidelines, standards, external regulations and other sources that inform or seek to inform industry best practice or regulation relating to TSFs.

The Ministry believes that maintaining a world leading regulatory framework for TSFs requires periodic updates of the Code to ensure emerging practices are incorporated as necessary. The Ministry will take a policy approach to address this recommendation by defining triggers for assessing when and how the Ministry’s regulatory framework for TSFs should be updated. This work will include consideration of the key role that qualified professionals who fill the Code mandated roles play in meeting evolving standards of practice for their discipline.

The Ministry will establish a policy that defines triggers for review and, where required, will update key elements of the regulatory framework, which includes the Code, guidance, and policy. This policy will consider the Ministry’s regulatory framework for mining, and not be limited solely to TSFs. The triggers will include consideration of external factors, such as changing standards, external guidelines and management programs, and lessons learned from significant events.

ACTION 2

The Ministry will establish a Review and Update Policy for the Regulatory Framework for TSFs.

Target date for implementation: 31/03/2022

Recommendation 3	Ministry Response & Action
<p>The Ministry should develop a list of and rationale for priority revisions to TSF provisions in the Code to improve clarity, including but not limited to definitions, consistency of terms and the use of vague language.</p>	<p>The Ministry understands the importance of clarity and consistency in regulatory requirements. Given their mandate for ongoing review and improvements to the Code, the Ministry has requested that the Code Review Committee address this recommendation. The Code Review Committee, which is comprised of representatives from Indigenous Nations, industry and labour, has included the review and improvement of tailings related provisions on its priority list for the fiscal year. To address this priority, the Code Review Committee will establish a sub-committee with geotechnical expertise to conduct this work. This sub-committee will review audit findings and recommendations and propose changes to tailings related parts of the Code to improve clarity, consistency, and definitions, and to ensure evolving industry best practices are incorporated as necessary. Proposed changes will be presented to the Code Review Committee for consideration in the ongoing Code review and update process.</p> <p><u>ACTION 3</u> The Ministry has asked the standing Code Review Committee to establish a sub-committee to review the audit findings and recommendations and propose changes to tailings related parts of the Code. The Code Review Committee has confirmed that they will take this work on.</p> <p>Target date for initiation of sub-committee: 30/09/2021</p>
Recommendation 4	Ministry Response & Action
<p>The Ministry should revise the Code Guidance Document to be consistent with the Code, to supply the Ministry’s interpretation of ambiguous Code requirements and to reference the most current sources of external guidance that the Ministry considers significant.</p>	<p>The Ministry understands the importance of guidance to ensure implementation and interpretation of regulations is aligned with Ministry expectations. To address this recommendation, the Ministry will ensure the Code Guidance Document is revised in conjunction with Action 3.</p> <p>Review and update of the Code Guidance Document will be included in the terms of reference for the sub-committee established in Action 3 as the Ministry believes this sub-committee will be best placed to review and recommend parallel improvements to the associated Code Guidance Document as a part of the same process. Proposed revisions will be presented to the Code Review Committee, and the final version of a revised Code Guidance Document will be provided for approval by the Chief Inspector of Mines and the Chief Permitting Officer.</p> <p><u>ACTION 4</u> The standing Code Review Committee has confirmed to the Ministry they will include a review of the Code Guidance Document in the work of the tailings sub-committee, outlined in Action 3.</p> <p>Target date for initiation of sub-committee: 30/09/2021</p>

Interpretation of Code and Compliance Verification

Recommendation 5	Ministry Response & Action
<p>The Ministry should review its current practices respecting TSFs for consistency with the Code and document its interpretations of and expectations regarding compliance with Code requirements to ensure that Ministry staff and regulated parties have a common understanding of the Ministry's compliance verification and enforcement approach.</p>	<p>The Ministry understands the importance of consistency in application of regulatory requirements and is undertaking work to clarify the purpose and use of Code- and permit-required reports.</p> <p>It is critical that inspectors appointed under the <i>Mines Act</i> have a clear understanding of the Ministry's compliance and enforcement approach. To support this, the Ministry has made significant improvements to the onboarding and training program for all inspectors, including training related to policies and procedures, and is committed to continuously improving the content and clarity of that training. While the Ministry has developed policy that outlines compliance verification expectations for inspectors, effective compliance verification also relies on clear regulatory requirements, including requirements established in regulation or authorizations.</p> <p>A significant aspect of compliance verification for geotechnical engineering elements is through the receipt and review of technical reports signed by registered Professional Engineers. These reports are required by both the Code and by permits issued under the <i>Mines Act</i>. As such, the Ministry has identified a need to clarify the purpose of all Code- and permit-required reports. By developing consistent language that defines the purpose of each report, the expectations for achieving compliance will be clear both to industry and provincial inspectors. Towards this purpose, the Code Review Secretariat has commissioned work to review and understand the purpose and use of all Code-required reports. Results of this work will be used to make recommendations to the Code Review Committee regarding clarification of reports required by the Code.</p> <p><u>ACTION 5a</u> Work is underway to review and understand the purpose and use of Code-required reports. Once complete, the Code Review Committee will consider this work when making recommendations to revise the Code to improve clarity.</p> <p>Target date for draft revisions: 30/09/2022</p> <p><u>ACTION 5b</u> The Ministry will update operational policies as required for consistency with the Code.</p> <p>Target date for implementation: ongoing in alignment with Code revisions</p> <p>While the Ministry now has the training tools needed to effectively roll-out changes to the regulatory framework internally, engaging with Indigenous nations, industry and other stakeholders is also a critical piece of effective regulation. The Ministry will create a communication plan to ensure transparent communication regarding changes to regulatory requirements including the Code, policies and guidance.</p> <p><u>ACTION 5c</u> The Ministry will develop and implement communications plans for changes to the regulatory framework.</p> <p>Target date for implementation: timing will align with timing of changes</p>

Recommendation 6	Ministry Response & Action
<p>The Ministry should develop written policies and procedures governing expectations for the geotechnical group regarding prioritization of work across the lifecycle of a mine, including TSF document review and inspections, to support the systematic verification and enforcement of regulatory requirements for TSFs at mines in BC.</p>	<p>The Ministry believes that prioritization of work is important and should be informed by regulatory requirements and Ministry policy. To address this recommendation, the Ministry will enhance the risk-based inspection planning tool and develop a policy outlining the role of technical reviewers, both of which will provide guidance to inform prioritization of regulatory oversight activities related to TSFs.</p> <p>The Ministry’s Compliance Management Framework and recent organizational restructuring reflects the Ministry’s work to increase clarity of roles, allocate resources efficiently, support prioritization of work, and coordinate delivery of compliance activities with other regulatory agencies. The Ministry has long taken a risk management approach to inspection planning and is developing a tool to articulate risk-based inspection planning criteria for technical disciplines including geotechnical. The Ministry will implement this tool for geotechnical inspection planning to improve transparency and support a systematic approach to inspection planning.</p> <p><u>ACTION 6a</u> The Ministry will continue implementation of the Risk-based Inspection Planning Tool to the technical disciplines.</p> <p>Target Date for Implementation: 30/06/2021</p> <p>In conjunction with the work to reconcile the purpose of Code-required reports outlined in Action 5a, the Ministry is preparing a “Role of the Technical Reviewer” policy to clarify the purpose of and expectations for review of technical reports submitted either as a part of a permit application, a notification, a Code or permit requirement, or in response to a compliance action. This policy will outline the role of professional reliance adopted by the Ministry during technical document review and will delineate the regulator’s role in verifying that mine managers have completed the work required to ensure their tailings storage facilities are safe.</p> <p><u>ACTION 6b</u> The Ministry will complete the Role of the Technical Reviewer Policy.</p> <p>Target Date: 31/03/2022</p>

Data Systems

Recommendation 7

Ministry Response & Action

The Ministry should ensure that data systems are used in a manner that is in accordance with policies and procedures, including the Compliance and Enforcement Policy (2020) and the Mine Inspection Procedure (2018). Data systems should be used consistently across the inspectorate to support systematic compliance verification and enforcement of regulatory requirements for TSFs at mines in B.C.

The Ministry is committed to continuously improving use of its evolving data systems for major mines to assist with information tracking and follow-up.

Over the past two and a half years, Ministry data systems that track, store and aggregate authorization and compliance information for mine management have been substantially enhanced. In February 2018, the Ministry adopted the Natural Resource Inspection System (NRIS) for conducting and documenting inspections and has been continually improving that system to meet the needs of the mines inspectorate. In July 2018, the Ministry implemented “Core”, a new digital system designed to become the central, modern, and trusted internal system to track and store mine related regulatory oversight information. In February 2019, the digital systems team released MineSpace, a proponent portal to share and receive information directly to and from mines. These three systems are connected to ensure consistency and accessibility of information. Ultimately, they also support increased transparency of regulatory information as ongoing updates are made to the public BC Mine Information website, which provides regulatory information from the Ministry, ENV and the Environmental Assessment Office.

Training of staff to support proper usage of these relatively new and evolving systems has been critical to their success to date. In recognition of this, training is an ongoing priority for the systems development teams. Specifically, this includes monthly training sessions, IT expert office hours and helpdesk functions accessible by all staff. The Regulatory Management Unit conducts regular quality assurance checks to confirm that the systems are being used in accordance with policies. This recommendation will inform those quality assurance checks going forward.

Action 7a

The Ministry will continue implementation of IT training and support, including regular training sessions, and helpdesk functions.

Action 7b

The Ministry will continue quality assurance checks to confirm appropriate system usage and inform ongoing staff training.

Target Date: ongoing