

Ministry of Energy, Mines and Low Carbon Innovation

Annual Progress Update on Actions to Address Recommendations from the Chief Auditor Fiscal Year 2022/23

December 2023



Contents

Introduction 2

Audit: Code requirements for tailings storage facilities, 2021 3

Audit: Worker protection in mobile equipment near water, 2022 7

Appendix A: Actions completed for currently reported audits prior to FY 2022/23..... 11

Introduction

The Ministry of Energy, Mines and Low Carbon Innovation (EMLI) is committed to continuous improvement of the mining regulatory framework, and related policies and practices. The work of the Chief Auditor and their team is a key program area designed to highlight areas for improvement and make recommendations. EMLI takes the results of these audits seriously and is committed to responding accordingly. Additionally, EMLI has formally committed to providing the Chief Auditor with annual written progress updates on any actions taken to address previous audit recommendations until those recommendations have been implemented.¹

EMLI has prepared this progress update for fiscal year 2022/23. This update includes progress on actions related to audits released prior to March 31, 2023. As such, this progress update will report out on actions related to the following audits:

- *Code requirements for tailings storage facilities* (June 2021)
- *Worker protection in mobile equipment near water* (April 2022)

Previous Ministry Progress Updates can be found at <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mine-audits-unit/ministry-progress-updates>. A list of previously completed audit actions for audits included in this update can be found in *Appendix A - Actions completed for currently reported audits prior to FY 2022/23*.

For more information about the work of Chief Auditor and EMLI's responses to audits, see the <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/mine-audits-unit>

List of Abbreviations:

CRC	Code Review Committee	MOU	Memorandum of Understanding
Code	Health, Safety and Reclamation Code for Mines in British Columbia	OCIM	Office of the Chief Inspector of Mines
EMLI	Ministry of Energy, Mines and Low Carbon Innovation	QA/QC	Quality Assurance/Quality Control
ENV	Ministry of Environment and Climate Change Strategy	TSF	Tailing storage facilities
FOR	Ministry of Forests		

¹ For more information, see the Memorandum of Understanding Between the Chief Auditor and the Ministry of Energy, Mines and Low Carbon Innovation on the Mine Audits Unit website: https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/mine-audits-and-effectiveness-unit/emli_chief_auditor_memorandum_of_understanding.pdf

Audit: Code requirements for tailings storage facilities, 2021

Code requirements for tailings storage facilities, 2021					
Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
1	The Ministry of Energy, Mines and Low Carbon Innovation (EMLI), in collaboration with the Ministry of Environment and Climate Change Strategy (ENV) and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (now Ministry of Forests, FOR), should revisit the Memorandum of Understanding (MOU) regarding the Dam Safety Regulation and its application to tailing storage facilities (TSF) 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, FOR and ENV and the application of existing regulatory requirements to TSFs in B.C.	EMLI will work with ENV and FOR to review and update the “Memorandum of Understanding for Regulation of Impoundments and Diversions on a Mine Site.”	September 30, 2022	In Progress (Previously delayed)	In summer 2022, EMLI and MOF agreed to delay the review of the MOU to complete an analysis of options respecting agency roles and responsibilities for freshwater dams on mine sites. In early 2023, the two agencies agreed to move forward with updates to the MOU that will provide greater clarity around the roles and responsibilities of each agency. The agencies are currently in collaborative review of a draft MOU and anticipate finalizing the MOU by the end of 2023.

Code requirements for tailings storage facilities, 2021

Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
5	EMLI 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 EMLI staff and regulated parties have a common understanding of EMLI's compliance verification and enforcement approach.	a. Work is underway to review and understand the purpose and use of Code-required reports. Once complete, the CRC will consider this work when making recommendations to revise the Code to improve clarity.	On-going	In progress	<p>As noted in the FY 2021/22 Audit Progress Update, the CRC established the Part 10 Sub-committee,² which is currently reviewing requirements related to TSFs in Part 10. This work continued throughout FY2022/23 and included a review of Code-required reports as it related to the scope of this work. EMLI will continue to track this action and report on progress until the CRC completes this work and makes recommendations on possible revisions.</p> <p>In addition to the on-going review of the Code, EMLI developed a process to track, monitor and assess compliance with Code-required reports for Major Mines.</p>
		b. EMLI will update operational policies as required for consistency with the Code.	On-going	Completed	<p>As noted in the FY 2021/22 Audit Progress Update, a Policy Management Framework is complete. EMLI will use this policy to guide updates to mining-related operational policies and ensure consistency with the Code. EMLI will continually review and update this policy as part of the implementation plan.</p> <p>The Policy Management Framework has been integrated into the core work for reviewing and updating mining-related operational policies. As such, EMLI has assessed this on-going action as completed for audit progress reporting.</p>

² More information about the standing Code Review Committee and the Part 10 Sub-committee can be found at <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/health-safety/health-safety-and-reclamation-code-for-mines-in-british-columbia/codereview#:~:text=About%20the%20Code%20Review%20Committee&text=The%20Committee%20has%20equal%20representation,improve%20worker%20health%20and%20safety>

Code requirements for tailings storage facilities, 2021

Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
5		c. EMLI will develop and implement communications plans for changes to the regulatory framework.	Timing will align with timing of changes	On-schedule	This action is related to Action 5a. The communications plan will be implemented once the CRC has had the opportunity to review the revisions put forward by the Part 10 sub-committee and is ready for external engagement. This is anticipated to occur in quarter 2 of fiscal year 2023/24.
6	EMLI 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 B.C.	b. EMLI will complete a Role of the Technical Reviewer Policy.	March 31, 2022	Complete	The Ministry has developed and is implementing a policy that outlines the role of the technical reviewer.
7	EMLI 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	a. EMLI will continue implementation of IT training and support, including regular training sessions, and helpdesk functions.	On-going	Complete	<p>The EMLI Mines Digital Service team provides on-going training and support including monthly office hours, recurring database training sessions (approximately once a month), and internal feature demonstrations and instructional videos.</p> <p>This work by MDS is part of the team's on-going core work. As such, EMLI has assessed this on-going action as completed for audit progress reporting.</p>

Code requirements for tailings storage facilities, 2021

Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
7	verification and enforcement of regulatory requirements for TSFs at mines in B.C.	b. EMLI will continue quality assurance checks to confirm appropriate system usage and inform ongoing staff training.	On-going	Complete	<p>Current quality assurance/quality control (QA/QC) work includes support for writing and reviews of <i>Mines Act</i> orders under sections 35, 15(4.1), 15(5), and 15(4). This QA/QC work will be used to identify and implement training opportunities related to writing orders for the inspectorate.</p> <p>The QA/QC work is a core component of EMLI's on-going continuous improvement program for compliance and enforcement at mines sites and related data quality. As such, EMLI has assessed this on-going action as completed for audit progress reporting.</p>

Audit: Worker protection in mobile equipment near water, 2022

Worker protection in mobile equipment near water, 2022					
Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
1	<p>The Ministry should explore opportunities to strengthen current regulatory requirements to support the protection of workers operating mobile equipment near water, including:</p> <ul style="list-style-type: none"> • Reviewing existing regulatory requirements in consideration of clarity and common elements in other Canadian jurisdictions • Revising the requirements, as necessary • Supporting the consistent interpretation and application of these requirements 	<p>a. The Ministry has formally requested the CRC undertake a review to revise necessary code provisions highlighted in the Audit with respect to operating mobile equipment near water.</p>	On-going	In Progress	<p>The CRC accepted the Ministry's request. A working group (smaller review team and is generally shorter in term than a Sub-committee) has been formed to conduct the review, which will be scoped to include any equipment used around water. The Mobile Equipment Operating Near Water Task Group was formed in early 2023/24 and has started reviewing the Code for potential revisions.</p> <p>EMLI will continue to track this action and report on progress until the CRC completes this work and makes recommendations on possible revisions.</p>

Worker protection in mobile equipment near water, 2022

Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
1		b. The OCIM will publish a Chief Inspector's Interim Directive stating the Chief Inspector's interpretation of relevant existing Code provisions and additional safety measures industry should undertake to mitigate risk and respond to potential emergencies while workers are operating mobile equipment near water. The Ministry will publish the Interim Directive online	June 30, 2022	Complete	The Guidance – Workers in Mobile Equipment on or Near Water ³ was released publicly on the Ministry website in early 2023. This document increases awareness and provides information on issues related to compliance for workers operating mobile equipment on or near water until the CRC completes its review (Action 1a).

³ Guidance – Workers in Mobile Equipment on or Near Water can be found at https://www2.gov.bc.ca/assets/gov/farming-natural-resources-and-industry/mineral-exploration-mining/documents/health-and-safety/guidance_-_workers_in_mobile_equipment_on_or_near_water.pdf

Worker protection in mobile equipment near water, 2022

Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
2	The Ministry should review its current systems and processes to determine whether they are resulting in the effective management of incident data and take action to address any noted challenges.	To support continuous improvement of DO oversight at mines in B.C., the Ministry will conduct a scheduled review of the process for managing incident reporting. The process for managing incident reporting will be updated, as necessary, based on any opportunities for improvement that are identified by this review.	June 30, 2022	Complete	<p>The OCIM made improvements to the internal process for overseeing incident response on mine sites to increase consistency in gathering information and improve data quality related to incident reporting.</p> <p>The Ministry also updated its digital tool for tracking incidents to improve the ability of staff to have real-time knowledge of incidents and understand trends to guide future improvements to processes and safety initiatives.</p> <p>Additionally, the CRC updated requirements to reporting incidents in 2023.⁴ The revisions included updates to the types of reportable incidents; reporting timelines; and investigation report requirements and submission timeline. This work was initiated prior to the release of the Mobile Equipment Audit; however, the requirements will contribute to the Ministry's ability to effectively manage incident data.</p>

⁴ Information about the Reportable Incidents revisions to the Code and other revisions can be found at <https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/health-safety/health-safety-and-reclamation-code-for-mines-in-british-columbia>

Worker protection in mobile equipment near water, 2022

Rec #	Chief Auditor Recommendation	Action Planned	Target Date	Assessment of Progress	Action Taken
3	The Ministry should develop a clear, consistent approach to using and distributing its outreach and education tools and ensure all communications are aligned with the Code.	The Ministry will clarify the purpose and use of each of the main outreach and education tools (i.e., Hazard Alerts, Safety Notices, Chief Inspector Directives and Weekly Dangerous Occurrence Summary Reports). The Ministry will publish this information online.	June 30, 2022	Complete	<p>The OCIM developed business rules that outline the purpose and use of the main outreach tools: Hazard Alerts, Safety Notices, Chief Inspector Directives and Weekly Incident Summary Reports⁵. High-level information about the purpose and use of outreach tools can be found on the specific landing page for each tool:</p> <ul style="list-style-type: none"> Hazard Alerts and Safety Notices: Incident Reporting and Information - Province of British Columbia (gov.bc.ca) Directives: https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/further-information/directives-alerts-incident-information/chief-inspector-directives Weekly Incident Summary Reports: https://www2.gov.bc.ca/gov/content/industry/mineral-exploration-mining/health-safety/incident-information/dangerous-occurrence-reporting

⁵ Previously referred to as Weekly Dangerous Occurrence Summary Reports.

Appendix A: Actions completed for currently reported audits prior to FY 2022/23

Code requirements for tailings storage facilities, 2021				
Rec #	Chief Auditor Recommendation	Action Planned	Completion Year	Action Taken
2	EMLI 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.	EMLI will establish a Review and Update Policy for the Regulatory Framework for TSFs.	FY 2021/22	EMLI completed a preliminary version of a Policy Management Framework. This policy establishes timelines and triggers for reviewing operational policies, guidance, templates and procedures. EMLI will continually review this policy and update as necessary for the first year to ensure that it is meeting the needs of the program areas and the intended outcome of the Chief Auditor's recommendation. Following the first year, this policy will be reviewed and updated as necessary on regularly scheduled intervals.
3	EMLI 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.	EMLI has asked the standing Code Review Committee (CRC) to establish a sub-committee to review the audit findings and recommendations and propose changes to tailings related parts of the Code. The CRC has confirmed that they will take this work on.	FY 2021/22	The CRC accepted EMLI's formal request to review the Code in consideration of the audit findings and recommendations. Subsequently, the CRC struck a sub-committee to review and propose revisions as necessary to Part 10 of the Code. Part 10 includes reference to TSFs with respect to Permitting, Reclamation and Closure. The sub-committee is reviewing the audit findings and recommendations and will make revision recommendations in due course.

Code requirements for tailings storage facilities, 2021

Rec #	Chief Auditor Recommendation	Action Planned	Completion Year	Action Taken
4	EMLI should revise the Code Guidance Document to be consistent with the Code, to supply EMLI's interpretation of ambiguous Code requirements and to reference the most current sources of external guidance that EMLI considers significant.	The standing CRC has confirmed to EMLI they will include a review of the Code Guidance Document in the work of the tailings sub-committee, outlined in Action 3.	FY 2021/22	As noted for Action 3, the CRC struck a sub-committee to review and recommend revisions to Part 10 of the Code. The guidance document will be revised in conjunction with these revisions.
6a	EMLI 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 B.C.	EMLI will continue implementation of the Risk-based Inspection Planning Tool to the technical disciplines.	FY 2021/22	The Risked-based Inspection Planning Tool has been developed to outline the process for identifying and targeting the highest risk sites for regular inspections. It is currently being implemented for geotechnical inspection planning. The Risk-based Inspection Planning Tool will be updated on a minimum of an annual basis.