

## Recommendations from the Auditor General’s Report on Mining

Auditor General Recommendations	Status
<p><b>Recommendation 1.0 – Overall Recommendation</b>                      We recommend that the Government of British Columbia create an integrated and independent compliance and enforcement unit for mining activities, with a mandate to ensure the protection of the environment.                      Given that the Ministry of Energy and Mines is at high risk of <b>regulatory capture</b>, primarily because MEM’s mandate includes a responsibility to both promote and regulate mining, our expectation is that this new unit would not reside within this ministry.</p>	<p>The mandate letter of the Minister of Energy, Mines and Petroleum Resources reflects government’s commitment to establishing an independent oversight unit for mines. Work is underway to develop options for implementing this commitment.</p> <p>Government has established the <a href="#">Deputy Ministers Mining C&amp;E Board</a> (Board) comprised of Environment, Energy and Mines and Environmental Assessment. The Board’s <a href="#">terms of reference</a> and the <a href="#">minutes and action items</a> are available online.</p> <p>In undertaking a review of other regulators organizational structures, EMPR has found that organizations separate permitting and C&amp;E functions within the same agency. EMPR is now working to develop options for establishing an independent oversight unit along with appropriate controls to ensure any promotional role of the Ministry is separate and distinct from the regulatory role</p>
<p><b>Recommendation 1.1 – Strategic Planning</b>                      We recommend that government develop a strategic plan that would detail the activities of an integrated and coordinated regulatory approach, and the necessary capacity, tools, training and expertise required to achieve its goals and objectives.</p>	<p>The <a href="#">Mining C&amp;E Strategic Plan</a> is published and outlines the common vision for EAO, EMPR and ENV guiding the oversight of mining in BC: “Achieving enhanced protection of the environment, human health and public safety through an integrated risk-based approach to mining oversight.”</p> <p>The 2017/18 <a href="#">Mining C&amp;E Operational Plan</a> outlines the actions needed to achieve the objectives outlined in the Strategic Plan.</p> <p>Both EMPR and ENV have received new resources for C&amp;E. The Deputy Chief Inspector of Mines, Compliance and Enforcement position was created and filled.</p>

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<p><b>Recommendation 1.2 – Permit Language</b>                      We recommend that government ensure both historical and current permit requirements are written with enforceable language.</p>	<p>ENV has worked with the Ministry of Justice to develop enforcement language for permits that it has adopted for all new mining permits. EMPR is reviewing the advice specific to the Environmental Management Act as well as the <a href="#">Environmental Assessment Certificate Policy: Drafting Conventions for Certificates, Amendments, and Exemption Orders</a> and will develop guidance for Mines Act decision makers. Each agency is reviewing historic permits as resources allow.</p>
<p><b>Recommendation 1.3 – Security – Adequate Coverage</b>                      We recommend that government safeguard taxpayers by ensuring the reclamation liability estimate is accurate and that the security held by government is sufficient to cover potential costs.</p>	<p>EMPR commissioned Stantec Consulting Ltd. to examine how jurisdictions in Canada and abroad deal with the issue. The Stantec report is available <a href="#">here</a>. EMPR and the Ministry of Finance commissioned Ernst &amp; Young (EY) to undertake an in-depth examination of reclamation securities practices. The EY report is available <a href="#">here</a>.</p> <p>EMPR will use the findings from these reports, along with input from stakeholders and the <a href="#">Practice Guide to Auditing Mining Revenues and Financial Assurances for Site Remediation</a>, to develop an updated reclamation security policy. EMPR and ENV will also update the process for coordination on securities based on the new policy.</p> <p>Review of bonding is ongoing and the estimated liability and the amount held for each mine is now published in the Chief Inspector of Mines Annual Report each year.</p>

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<p><b>Recommendation 1.4 – Security – Catastrophic Events</b> We recommend that government review its security mechanisms to ensure taxpayers are safeguarded from the costs of an environmental disaster.</p>	<p>BC has a greater ability to prepare for, respond to, and recover from environmental emergencies with the strengthening of the Environmental Management Act. In the context of mining, the amendments strengthened the ability to recover costs of environmental clean-up, clarified requirements for restoration, and added new penalties for incomplete restoration.</p> <p>ENV will soon be initiating planning and development of a subsequent phase of spills regulations.</p> <p>In the context of Mount Polley, the company has upheld its responsibilities with respect to restoration off the mine site and reportedly spent over 70 million dollars.</p>
<p><b>Recommendation 1.5 – Environmental Management Act Waste Discharge Fees</b> We recommend that government review its fees under the <i>Environmental Management Act</i> and ensure that the fees are effective in reducing pollution at mine sites.</p>	<p>ENV has reviewed fee structures under the Environmental Management Act related to discharges and inspections against the polluter pay principle and has put forward recommendations.</p>
<p><b>Recommendation 1.6 – Cost Recovery</b> We recommend that government adopt a cost recovery model for permitting and compliance verification activities that is consistent across all ministries in the natural resources sector.</p>	<p>ENV has reviewed cost recovery models for permitting and compliance verification activities and has put forward a recommendation.</p> <p>EMPR has reviewed the performance of the permit fees introduced in 2015 and is putting forward recommended changes to better reflect the cost recovery model and ensure fairness of application.</p>
<p><b>Recommendation 1.7 – Decision Making – Use of section 137 of the Environmental Management Act</b> We recommend that government publically disclose its rationale for granting a permit under section 137 of the <i>Environmental Management Act</i>. Specifically, information should include how factors such as economic, environmental, and social attributes were considered in the determination of public interest.</p>	<p>Action is outside of the purview of the Ministries. Recognizing that Cabinet confidences are not subject to disclosure and the Ministries have no authority to require Cabinet to disclose those discussions when making decisions under section 137 of the <i>Environmental Management Act</i>, unless Cabinet is to change their disclosure practices, there is no further action that the Ministries are able to take.</p>

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<p><b>Recommendation 1.8 – Reclamation Guidance</b> We recommend that government develop clear and comprehensive reclamation guidance for industry.</p>	<p>ENV and EMPR established <a href="#">Joint Application Requirements</a> for permitting including for reclamation. EMPR has initiated the process to secure a contractor to develop clear and comprehensive reclamation standards and guidance for industry.</p>
<p><b>Recommendation 1.9 – Incentives</b> We recommend that government create effective incentives to promote environmentally responsible behavior by industry.</p>	<p>The ministries are reviewing options to incent best practice and good behaviours. For instance, ENV is currently considering options for incentives related to waste discharge fees and associated compliance inspection fees.</p> <p>The ministries have collaborated on increased transparency as detailed in response 1.16, including through the <a href="#">BC Mine Information Website</a>. The site makes mine-related information from all three agencies available online in one place for the first time including inspection reports, orders and other C&amp;E actions.</p>
<p><b>Recommendation 1.10 – Risk-Based Approach</b> We recommend that government develop a risk-based approach to compliance verification activities, where frequency of inspections are based on risks such as industry's non-compliance record, industry's financial state, and industry's activities (e.g., expansion), as well as risks related to seasonal variations.</p>	<p>As outlined in the Mining C&amp;E Strategic Plan, ENV, EMPR and EAO are developing an integrated risk-based approach for mining in BC. This work includes establishing a common risk management framework. Inter-agency risk workshops were held in December 2016 and throughout summer and fall 2017.</p> <p>The Major Projects Coordination Committee was established and is working to collaboratively develop risk-based Compliance Management Plans with lead staff from across Natural Resource agencies.</p>

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<p><b>Recommendation 1.11 – Systematic Compliance Verification</b> We recommend that government systematically monitor and record compliance with high-risk mine permit requirements.</p>	<p>The Major Projects Coordination Committee has been established and is working to collaboratively develop risk-based Compliance Management Plans with lead staff from across Natural Resource agencies. Additionally,</p> <ul style="list-style-type: none"> <li>• EMPR is developing compliance tracking for all major mine permit conditions to ensure compliance status is used to inform inspection planning</li> <li>• The Manager, Tailings Storage Facilities position, was created and filled in March 2017 and is responsible for tracking compliance with regulatory requirements associated with tailings storage facilities</li> <li>• ENV has ranked all their mine related permits as high risk and inspects all high risk permits a minimum of once per year.</li> </ul>
<p><b>Recommendation 1.12 – Qualified Professionals</b> We recommend that government establish policies and procedures for the use and oversight of qualified professionals (QP) across the natural resources sector. These policies and procedures should have the following:</p> <ul style="list-style-type: none"> <li>• guidance for staff that outlines the specific nature and amount of oversight expected of a QP's work</li> <li>• guidance for staff as to expected timeframe for review and response to QP reports</li> <li>• updated guidance for staff for recognizing and responding to misconduct by a QP</li> <li>• controls in place to ensure that there is no undue influence on the QPs by industry</li> <li>• controls in place to ensure that recommendations by QPs are adhered to</li> </ul>	<p>The mandate letter of the Minister of Environment and Climate Change Strategy reflects government's commitment to reviewing the professional reliance model.</p> <p>Government is leading a review of the Province's professional reliance model to ensure the highest professional, technical and ethical standards are being applied to resource management in BC. ENV is leading this review, and will assess the current legislation governing qualified professionals (QPs) in the natural resource sector, and the role their professional associations play in upholding the public interest.</p> <p>In addition, the Health, Safety and Reclamation Code under the Mines Act was changed to ensure clarity of roles and responsibilities for engineers with respect to Tailings Facilities, including:</p> <ul style="list-style-type: none"> <li>• Requirements for the mine to designate an Engineer of Record who is a professional engineer.</li> <li>• Defined roles and responsibilities for the Engineer of Record including a duty to report safety concerns to the Chief Inspector of Mines.</li> </ul>

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<p><b>Recommendation 1.13 – Mine Design</b>            We recommend that government adopt appropriate standards, review mine designs to ensure that they meet these standards, and ensure that mines, as constructed, reflect the approved design and standards.</p>	<p>EMPR has created and filled the position of Manager, Tailings Storage Facilities (TSF). This position is dedicated to the coordinated regulatory oversight of tailings dams in the Province and will have a role in relation to ongoing policy development, technical review, and inspection capacity as it relates to tailings impoundments.</p> <p>Government enhanced and clarified mine design standards in relation to TSFs. The Health, Safety and Reclamation Code for Mines in BC now includes design standards for TSFs including:</p> <ul style="list-style-type: none"> <li>• TSF design requirements for the steepness of downstream slopes.</li> <li>• A minimum static factor of safety.</li> <li>• New seismic and flood design criteria.</li> </ul> <p>EMPR supported the Engineers and Geoscientists BC in its development of the Professional Practice Guidelines – <a href="#">Site Characterization for Dam Foundations in BC</a>. This standard of practice provides a framework for adequate site characterization for dam foundations, to improve dam safety</p>

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<p><b>Recommendation 1.14 – Policies, Procedures and Tools</b>                      We recommend that government develop policies, procedures and enforcement tools for responding to non-compliances when industry does not meet government’s specified timeline.</p>	<p>Administrative Monetary Penalties (for both the Environmental Management Act and Mines Act) are operational. Two administrative monetary penalties under the Environmental Management Act were issued in 2017 to two different mines. The penalties are in the \$70K range.</p> <p>EMPR has established a dedicated investigative unit to undertake prosecutorial investigations. To date, the unit has provided reports to crown counsel resulting in 11 charges being laid for two separate mines investigations.</p> <p>EMPR is developing a C&amp;E policy that will provide consistent guidance on the use of escalating enforcement actions. In 2017, ENV developed and rolled out an Orders manual that outlines how each specific condition is time bound, clearly stating what industry must do to ensure compliance within a specified time frame. In addition, annual planned inspections are based on follow up to previous non-compliances.</p>
<p><b>Recommendation 1.15 – Evaluation and Adjustment</b>                      We recommend government regularly evaluate the effectiveness of its compliance promotion, compliance verification, and enforcement activities and tools, and make changes as needed to ensure continuous improvement.</p>	<p>The ministries produced a joint C&amp;E operational plan highlighting operational objectives, targets and key milestones. The ministries will report on C&amp;E annually. Over time, the focus of the plan and reporting will shift from development and implementation to evaluation and adjustment.</p> <p>ENV is preparing to release its second annual Compliance Inspections Report (<i>Environmental Management Act</i>) on 2016 results. This first report on 2015 results, released in November 2016, provided an overview of the Ministry’s inspection verification activities, with an overview on results from the mining sector. The 2016 Report includes an update on the mining overview, providing the public with information on the mining sector’s performance year after year.</p>

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<p><b>Recommendation 1.16 – Public Reporting</b>                      We recommend that government report publicly the:</p> <ul style="list-style-type: none"> <li>• results and trends of all mining compliance and enforcement activities</li> <li>• effectiveness of compliance and enforcement activities in reducing risks and protecting the environment</li> <li>• estimated liability and the security held for each mine.</li> </ul>	<p>A number of reporting and transparency initiatives are underway:</p> <ul style="list-style-type: none"> <li>• The development of the joint EAO, EMPR, ENV <a href="#">BC Mine Information Website</a> including authorizations, inspection reports, dam safety inspections, emergency response plans and related documents.</li> <li>• In November 2016, ENV publicly released its first ever <a href="#">Compliance Inspections Report</a> on EMA which included reporting on the performance of the mining industry, number and types of inspections completed in 2015, rates of non-compliance and corresponding enforcement actions. The report detailing results from 2016 is expected to be released soon.</li> <li>• EMPR has begun and will continue to publish estimated liability and the security held for metal and coal mines in the Chief Inspector of Mines' <a href="#">Annual Reports</a>.</li> <li>• The Deputy Ministers Mining C&amp;E Board <a href="#">terms of reference</a> and <a href="#">action items</a> from meetings are available online.</li> <li>• Under the <a href="#">Mining C&amp;E Strategic Plan</a>, the ministries will publish an <a href="#">annual operating plan</a> and annual report on progress.</li> </ul>