

## Information Sheet #2 – Regulating Mining in the Elk Valley

In British Columbia, waste discharged into the environment from mining must comply with the Environmental Management Act (EMA). Mine-related waste discharges are normally authorized through site-specific permits issued by Ministry statutory decision makers in the Ministry of Environment and Parks. Permits set legally binding terms and conditions surrounding the discharge of waste into the environment.

In the Elk Valley in southeastern B.C., an area based management plan (ABMP) has also been developed. This plan is enabled under the EMA, and it serves as a ministry policy to guide water quality improvements over time.

Ministry statutory decision makers must consider the approved Elk Valley ABMP in addition to other relevant factors, when making decisions about permits.

### Area Based Management

Area based management plans can be developed under the EMA for the purposes of environmental management in a specific area.

The 2014 Elk Valley Water Quality Plan (2014 EVWQP) was approved in 2014 as the ABMP for the Elk Valley. The Elk Valley is the only area in B.C. with an ABMP, making this plan unique in the province. The ABMP has been used to manage historic and current waste from multiple mines in the Elk River watershed.

The ABMP addresses water quality concentrations of selenium, nitrate, sulphate and cadmium, and the accumulation of calcite. These five substances are associated with mining-related sources and were present or predicted to be present at elevated levels when the ABMP was developed in 2014. These substances have the potential to affect aquatic ecosystems and other uses of the water.

The ABMP sets water quality targets for selenium, nitrate, sulphate, cadmium and calcite. Ministry statutory decision makers consider the targets when establishing permit requirements including discharge limits.

While ABMP targets are not enforceable on their own, any discharge limits derived from targets are legally binding when included in authorizations.

### Waste Discharge Authorizations

Waste discharge authorizations such as permits contain a comprehensive set of terms and conditions. Dischargers must meet these terms and conditions to legally release waste such as effluent into the environment.

In 2014, the Ministry of Environment used key commitments and concepts from the 2014 EVWQP to issue a valley-wide waste discharge permit under the EMA (EMA Permit 107517). The permit is the first of its kind in British Columbia because it applies to five mines. It includes conditions that align with the ABMP and support its implementation. It establishes acceptable limits for water quality in the Elk Valley. Permit requirements based on the ABMP include:

- Effluent discharge limits
- Water quality planning
- Water quality modelling
- Environmental monitoring
- Adaptive management
- Reporting
- Research and development

Requirements in authorizations are legally enforceable. The ministry has a robust compliance and enforcement program, which includes regular inspections and assessing compliance with permit requirements. When non-compliances are found, enforcement actions are taken.

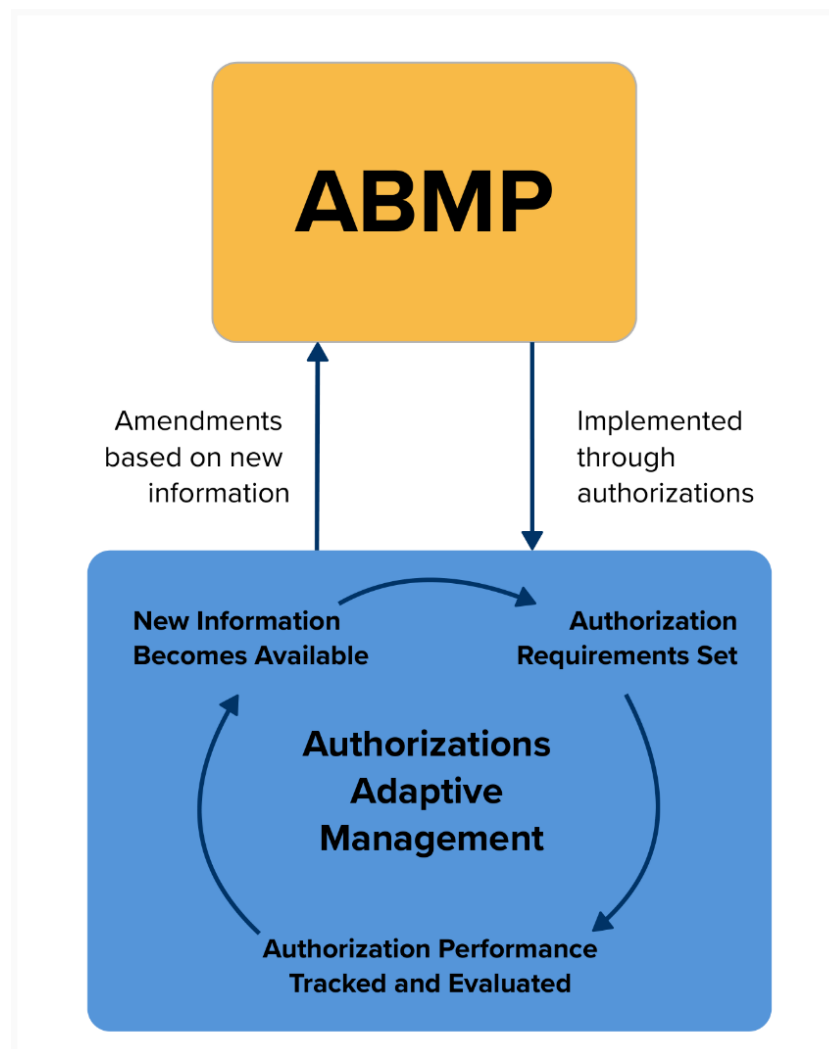
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## How the ABMP and Authorizations Work Together

Together, the ABMP and authorizations create a comprehensive and adaptive framework to manage water quality in the Elk Valley.

The ABMP is a policy framework with regional goals and management strategies that inform decision-making under the EMA. Authorizations issued under the EMA are informed by guidance provided in the ABMP.

When authorizations are administered, new information may inform authorization amendments. Thus, authorizations are adaptively managed. New information may also inform changes to the ABMP; however, changes to the ABMP are generally less frequent. Figure 1 outlines how the two work together to manage and improve water quality in the Elk Valley. Figure 2 compares some aspects of the ABMP with authorizations.



**Figure 1: Adaptive management of the ABMP and authorizations under the EMA**

Learn more about how mining is regulated in BC: ([Regulating mining in B.C. – Elk Valley Water Quality Hub](#))

Learn more about the unique area based management approach for water quality in the Elk Valley: ([Area based management – Elk Valley Water Quality Hub](#))

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ABMP	EMA Authorizations
 <p>Higher-level policy document describing regional management goals and strategies</p>	<p>Legally binding terms and conditions, subject to compliance and enforcement</p> 
<p>Amended through an inclusive and structured process in accordance with a ministerial order</p> 	 <p>Amended by staff trained and acting as statutory decision makers</p>
 <p>Amended less frequently based on valley wide considerations</p>	<p>Amended often, in response to new information and changing site conditions</p> 
<p>Amendments in consultation with First Nations</p> 	 <p>Amendments in consultation with First Nations</p>
 <p>Amendments adhere to Terms of Reference approved by Minister</p>	<p>Amendments incorporate flexibility and discretion as needed to protect the environment</p> 
<p>Establishes regional targets to protect watershed wide goals and inform site-specific limits and requirements</p> 	 <p>Regulates specific discharges and holds industry accountable for environmental protection</p>
 <p>Provides guidance for ministry decision makers and other parties</p>	<p>Requirements are limited to the permittee on the site for which they operate.</p> 

Figure 2: How the ABMP and EMA authorizations work together