

Number 15

Mines Health, Safety and Enforcement Division: [Mine.Safety@gov.bc.ca](mailto:Mine.Safety@gov.bc.ca)

June 2024

## Mining Safely During Periods of Drought

The current drought conditions facing British Columbia (BC) are a cause for concern. Sustained warm conditions, reduced snowpacks, and low rainfall over the past year have resulted in drought conditions in various parts of the province, with the potential to affect water usage for urban, recreational, agricultural, and industrial activities. Accordingly, it is prudent to consider water usage and conservancy strategies.

Water plays a critical role in many stages and aspects of mining. As mining operations move into summer, it will be important to consider local drought conditions and the potential for impacts on water availability. Limited or restricted access to water may impact your operation, including potential impacts on the health and safety of mine workers, the public, and the environment. By proactively assessing your operation's water usage and identifying potential impacts, contingency plans can be developed to prepare for these new, challenging operating conditions. Depending on the scope and size of your mine, implications may vary, but could include challenges in maintaining compliance with regulatory requirements in legislation, regulations, permits or licences.



### Considerations:

- Is your site at risk of local water use restrictions or the loss of access to freshwater altogether?
- Have you taken measures to identify alternate available sources of freshwater?
- Does your site have access to sufficient water to sustain regular mine operations?
- Do you have contingencies in place if limited or restricted water affects your ability to comply with regulatory environmental requirements, including permit conditions, such as maintaining required water covers over mine tailings or maintaining downstream flow needs?
- Have you considered how limited water could impact safety, such as dust management/silica control, access to potable water for drinking, washing and washrooms, eyewash/deluge stations, fire suppression, etc.?

### Recommendations:

- Develop and implement conservation strategies, such as recycling water in a closed-loop process, treating and reusing wastewater and recapturing water from seepage, leaks or rain to maintain a reserve of usable water.
- Develop and seek approval from appropriate regulatory authorities for any contingency measures that may need to be implemented during drought conditions.
- Review your management practices, conduct a water usage audit, and implement water-saving policies, procedures, and technologies to reduce water dependence and usage.
- Conduct an overall climate-impact assessment to determine your site's susceptibility to climate-related changes.

### Helpful Resource:

- Visit the [BC Drought Information Portal \(gov.bc.ca\)](https://www.gov.bc.ca/drought) for up-to-date information on BC's drought conditions, provincial drought map, and other useful information, such as local water restrictions and bulletins.