

Audit Terms of Reference

Confined Spaces

November 2023

Context

Confined spaces are enclosed or partially enclosed spaces (other than underground workings) that are not designed or intended for continuous human occupancy. They have limited or restricted means of entry or exit but are large enough for a person to enter and perform work. Due to these characteristics, confined spaces in the workplace can pose a significant risk of injury and death.

Varying in number and potential risk, confined spaces may be present at all types of B.C. mines, including coal, metal, aggregate, placer, and all phases of mining, from exploration to closure.

In 2006, a tragic incident claimed four lives in a confined space at the decommissioned Sullivan Mine in Kimberley, B.C. This incident prompted revisions to the Health Safety and Reclamation Code for Mines in British Columbia (the Code) in 2008. These revisions updated all confined space sections (Code sections 3.4.1 to 3.4.6), updated the definition for a confined space and introduced a new section on mine dumps (Code section 6.10.2). These revisions have been in place for 15 years and, during this time, no fatal confined space incidents have occurred at B.C. mines.

Although no fatal incidents have been reported at B.C. mines since 2006, there is still potential for significant harm. Put differently, while the probability of an incident is potentially low given current controls, the consequences are likely to be very high. This risk is seen in the statistics of neighbouring jurisdictions, with WorkSafeBC reporting that 18 deaths have occurred over a 15-year period in confined spaces¹ and United States Mine Safety and Health Administration (U.S. MSHA) reporting 14 confined space related deaths since 2015.²

Objective

The objective of this audit is to determine whether the Ministry's regulatory program supports effective management of confined spaces.

¹ No date range given. Retrieved from:

<http://www.worksafebcmedia.com/media/WebBooks/confinedSpaces/index.html#/chapter/10/page/1/1>

² Retrieved from:

https://www.msha.gov/sites/default/files/Alerts%20and%20Hazards/Confined%20Space%20Safety%20Alert_1.pdf

Scope

In examining whether the Ministry's regulatory program supports effective management of confined spaces, the audit will consider:

- Regulatory requirements for confined spaces in the *Mines Act*, Regulations and the Code.
- Ministry compliance and enforcement data, policies and guidance regarding confined spaces.
- Internal engagements with Ministry inspectors.
- External engagements with interested parties, including but not limited to: First Nations Energy and Mining Council (FNEMC), labour unions, and WorkSafeBC.
- External health and safety regulator data and resources.

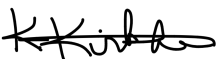
The audit will focus on the Ministry's current regulatory program. Historic requirements, policies or guidance materials, including the Sullivan Mine tragedy, may be reviewed for context but will not be evaluated as part of the audit.

Numerous hazards may be present in or around confined spaces at a mine. The audit will consider hazards and controls generally if their requirements relate directly to confined spaces (e.g., concentrations of atmospheric hazards and worker exposure limits; mechanical hazards and lock-out procedures). However, in most cases, the audit will not consider individual hazards and controls (e.g., carbon monoxide and an 8-hour exposure limit of 25 ppm; rotational equipment and specific requirements of a lock-out procedure such as how locks/tags are to be affixed and removed). Exceptions include where the Ministry's requirements explicitly refer to an individual hazard and limit (e.g., concentration of oxygen in a confined space is not less than 19.5%).

Timeframe and reporting

The audit examination is scheduled to begin in November 2023 and is expected to complete in spring of 2024. At the conclusion of examination, the audit team will engage with the Ministry, FNEMC and interested parties on the results prior to releasing a public report summarizing the audit findings, conclusion and recommendations.

Approved by:



Name
Chief Auditor

February 28, 2024

Date