

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF MINING, LAND AND WATER
DAM SAFETY AND CONSTRUCTION UNIT



Certificate of Approval to Modify a Dam

The **State of Alaska** under Alaska Statute Title 46 and the regulations adopted under this statute, grants to:

Teck Alaska Incorporated

The approval to modify the following structure at the **Red Dog Mine** in accordance with the terms and conditions contained in this certificate:

Red Dog Tailings Main Dam (NID ID# AK00201)

The location of this project is: S31, T31N, R18W, Kateel River Meridian

The holder of this certificate shall:

- Modify the dam and appurtenant works in accordance with the construction documents listed in Attachment A.
- Except for claims or losses arising from negligence of the State, defend and indemnify the State against, and hold it harmless from any and all claims, demands, legal actions, loss, liability and expense for injury or death of persons, and damages to or loss of property, arising out of or connected with the exercise of the approval granted by this certificate.
- Comply with all applicable laws, regulations and conditions.
- Allow representatives of the Department to inspect the work and records covered by this certificate at all times determined necessary by the Commissioner.
- Follow special conditions listed in Attachment A, attached hereto and made a part hereof.

**CERTIFICATE OF APPROVAL TO MODIFY A DAM
Red Dog Tailings Main Dam**

This *Certificate of Approval to Modify a Dam* is granted subject to the pertinent statutory provisions in AS 46.15 and AS 46.17 and the Administrative Regulations in 11 AAC 93. This certificate is valid only for the time period indicated in Attachment A.

APPROVED BY: Charles F. Cobb, P.E.
TITLE: State Dam Safety Engineer
Division of Mining, Land and Water
SIGNATURE: *Charles F. Cobb*
DATE: *October 1, 2019*

State of Alaska)
) SS.
Third Judicial District)

This is to certify that on *October 1st*, 2019, before me appeared Charles F. Cobb, known by me to be the Authorized Representative of the Division of Mining, Land and Water, Alaska Department of Natural Resources, and acknowledged to me that this Certificate of Approval was voluntarily executed on behalf of the State of Alaska.

Christine Ballard
Notary Public in and for the State of Alaska

My Commission expires: *With Office*



**CERTIFICATE OF APPROVAL TO MODIFY A DAM
Red Dog Tailings Main Dam**

Attachment A – Special Conditions

1. The modification of the Red Dog Tailings Main Dam authorized by this certificate is described in the letter from Golder Associates dated August 21, 2019 on the subject “Update to Addendum 1, Tailings-Discharge Pipe Bench Construction, Revision 2, Operations and Maintenance Manual, Revision 12 Tailing Main Dam, Red Dog Mine, Alaska” and the letter from Teck August 22, 2019 on the subject “Red Dog Main Tailings Dam (NID ID#AK00210) Operations and Maintenance Manual Addendum Request to Modify Certificate of Approval to Operate FY2018-12-AK00201 SC2”.
2. This modification only applies to the Red Dog Tailings Main Dam in an operating configuration.
3. Any existing instrumentation potentially affected by this modification must be preserved and remain operational, or be replaced, unless specifically approved for removal or abandonment by the engineer of record and the Department.
4. If any conditions are encountered which require substantial clarification, deviation or change from the indicated addendum, the clarification, deviation or change must be approved in writing by the qualified engineer and submitted to the Department. Any clarification, deviation or change that could affect the safety of the dam must be approved in writing by the Department before continuing that aspect of the investigation or repair. The engineer of record shall maintain a sequentially numbered record of all clarifications, deviations and changes in the work plan.
5. Notify the Department within 7 days after the date of substantial completion of the approved modification or the end of the construction season if incomplete. Submit a construction summary including photographs within approximately 30 days of substantial completion or the end of the construction season for the work approved under this certificate.
6. This certificate of approval expires on December 31, 2020.

End of Attachment A

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