

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF MINING, LAND AND WATER

DAM SAFETY AND CONSTRUCTION UNIT



Certificate of Approval to Operate a Dam

The **State of Alaska** under AS 46.17, and the regulations adopted under this statute, grants to:

Coeur Alaska, Inc.

The approval to operate the following structure at the **Kensington Mine** in accordance with the terms and conditions contained in this certificate:

Lower Slate Lake Tailings Dam (NID ID# AK00308)

The location of this project is: T35S, R62E, S26, Copper River Meridian

The holder of this certificate shall:

- Operate and maintain the Lower Slate Lake Tailings Dam and appurtenant works in accordance with accepted practice and the the document titled, "Operations and Maintenance Manual, Kensington Project Lower Slate Lake Tailings Dam (AK00308)" dated May 31, 2019.
- Except for claims or losses arising from the 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 that apply to the operation of this dam presented in Attachment A, attached hereto and made a part hereof.

CERTIFICATE OF APPROVAL TO OPERATE A DAM
Lower Slate Lake Tailings Dam

This *Certificate of Approval to Operate a Dam* supersedes any other *Certificate of Approval to Operate a Dam* for the Lower Slate Lake Tailings Dam and shall become invalid 90 days after the Periodic Safety Inspection due date specified under Attachment A. A new certificate may be issued with revised special conditions based on information contained in the subsequent Periodic Safety Inspection Report approved by the Department, and dam safety regulatory standards current at the time of the inspection.

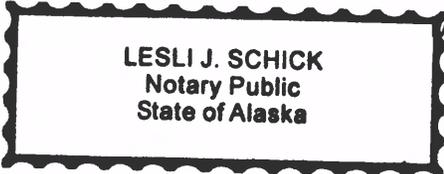
This *Certificate of Approval to Operate a Dam* is granted subject to the pertinent statutory provisions in AS 46.15 and AS 46.17 and administrative regulations in 11 AAC 93.

APPROVED BY: Charles F. Cobb, P. E.
TITLE: State Dam Safety Engineer
Division of Mining, Land and Water
SIGNATURE: *Charles F. Cobb*
DATE: *July 23, 2019*

State of Alaska)
) SS.
Third Judicial District)

This is to certify that on *July 23*, 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.

Lesli J. Schick
Notary Public in and for the State of Alaska



My commission expires: *with office*

CERTIFICATE OF APPROVAL TO OPERATE A DAM
Lower Slate Lake Tailings Dam

Attachment A – Special Conditions

1. The Lower Slate Lake Tailings Dam is approved to operate as a Class II (significant) hazard potential dam as defined in 11 AAC 93.157 at a nominal crest elevation of 740 feet for the Stage 3 configuration of the dam.
2. Operate, monitor, inspect and maintain the Lower Slate Lake Tailings Dam in accordance with best practices and the procedures described in the “Operations and Maintenance Manual, Kensington Project Lower Slate Lake Tailings Dam (AK00308)” dated May 31, 2019 (O&M Manual). Inspect the dam and appurtenant works after all significant seismic or precipitation events. Maintain records of all inspections, monitoring data, and routine maintenance.
3. Document any routine operations and maintenance procedures that deviate from or are not included in the current version of the O&M Manual. Review the O&M Manual concurrent with each Periodic Safety Inspection and revise as necessary.
4. If the water level in the reservoir rises to the invert elevation of the spillway prior to mine closure and begins to flow through the spillway, the Department shall be notified as required under Special Condition 7.
5. Perform a Periodic Safety Inspection (PSI) on the dam and appurtenant works as required by 11 AAC 93.159 by June 13, 2020. The frequency for the PSI shall be in accordance with 11 AAC 93.159(a). The PSI must be performed by an engineer qualified in accordance with 11 AAC 93.193(b). Approval of the engineer and the scope of the inspection must be obtained from the Department in advance of the inspection. Submit a draft PSI report to the Department for review within 30 days of the visual inspection of the dam.
6. An Emergency Action Plan (EAP) shall be maintained in accordance with the requirements of 11 AAC 93.164(a). The EAP may be included in the O&M Manual as provided under 11 AAC 93.164(e) for a Class II dam. The EAP shall be reviewed, exercised, and revised in accordance with the following schedule:

<u>DATE</u>	<u>ACTION</u>
Annually	Internal review
Annually	Orientation exercise with all responsible parties
Annually	Revise as needed and distribute updated pages
Biennially	Drill exercise (Internal responsible parties)
Triennially	Table top exercise with all responsible parties
Triennially	Revise and distribute to all responsible parties

The drill exercise is not required in the same year as the table top exercise. EAP exercises must include responsible parties listed in the plan as indicated in the schedule. Provide written notice to the Department within 7 days after all EAP exercises.

7. Notify the Department immediately if the EAP is activated, or within 24 hours for any significant problems that may develop which could affect the safety of the dam or for discharge through the spillway prior to mine closure. An incident report shall be completed and submitted to the Department in accordance with 11 AAC 93.177 within 14 days after the conclusion of the incident.

CERTIFICATE OF APPROVAL TO OPERATE A DAM Lower Slate Lake Tailings Dam

8. An annual performance report prepared by an engineer qualified in accordance with 11 AAC 93.193(b) shall be submitted to the Department by October 30 of each year during active mine operations. At a minimum, the report shall include:
- the findings of a visual inspection of the dam when it is clear of snow
 - photographs of key features of the dam and appurtenant works and other observations during the visual inspection
 - a review and evaluation of routine inspection and maintenance reports
 - a review and evaluation of monitoring data including instrumentation, seepage, and survey data
 - a description of the accumulated tailings and the remaining storage capacity of the tailings storage facility
 - an updated water balance graph based on actual data collected during the previous year that includes the historic and projected water levels in the TSF pond, and a comparison to the remaining stage of the dam and the current estimated construction schedule for that stage
 - other information pertinent to the operation and performance of the tailings storage facility and dam.

The report shall be in summary form and in a format approved in advance by the Department. This requirement is waived for the year that a PSI is conducted, but the PSI must include the above listed information in addition to meeting the other requirements of 11 AAC 93.159.

9. Routine seepage monitoring is required. If any unexpected increase in seepage is detected in the seepage monitoring system, the exposed portions of the liner system must be investigated prior to covering with tailings or other material.
10. The tailings deposition plan shall prioritize deposition to cover the Stage 2 geomembrane with tailings between minimum elevation 715 feet as shown on drawing number C021 of the drawing package approved in *Certificate of Approval to Modify a Dam* number FY2018-19-AK00308 for the Stage 3 modification, up to nominal elevation 723 feet as described in Section 2.2 and Table 3 of the O&M Manual. Notify the Department within 14 days when the tailings deposition in this area is complete.
11. By December 31, 2021 the financial assurance required by 11 AAC 93.171(f)(2)(C) and 11 AAC 93.172(a)(6)(C) must be provided for the following:
- Modification of the Lower Slate Lake Tailings Dam and appurtenant works to a final, post-closure operating configuration including consideration for premature closure
 - Post-closure monitoring, operation, maintenance, and inspection of the dam and appurtenant works for an indefinite time period.

CERTIFICATE OF APPROVAL TO OPERATE A DAM Lower Slate Lake Tailings Dam

The specific tasks and cost estimates may be included as discrete line items in the reclamation and closure plan required under 11 AAC 97.310. The methods of financial assurance, the proposed final, post-closure operating configuration, the post-closure monitoring, operation, maintenance and inspection requirements and the respective cost estimates are subject to approval by the Department. The Department's approval may be withdrawn, and additional financial assurance may be required, if the Department determines that circumstances at the mine or otherwise so require.

12. An application for a certificate of approval must be submitted to the Department for any modifications or major repairs that may affect the safety of the dam, or for removal or abandonment of the dam, or for transfer of ownership.
13. No less than twelve months prior to permanent closure of the Kensington Mine, submit to the Department an application to transfer the *Certificate of Approval to Operate a Dam* in accordance with 11 AAC 93.173(j) to the entity responsible for post-closure operation and maintenance of the Lower Slate Lake Tailings Dam, if the entity is different from Coeur Alaska, Inc. Transfer is subject to Department approval, and the Department may issue a new certificate of approval with any terms and conditions that the Department determines are necessary to ensure that the dam will be operated and maintained in a safe manner.
14. This *Certificate of Approval to Operate a Dam* incorporates all pertinent and applicable conditions of the *Certificate of Approval to Construct a Dam* number FY2006-7-AK00308 dated March 8, 2006 for the Lower Slate Lake Tailings Dam, and *Certificate of Approval to Modify a Dam* number FY2012-18-AK00308 for the Stage 2 modification, and *Certificate of Approval to Modify a Dam* number FY2018-19-AK00308 for the Stage 3 modification, in addition to the conditions contained or repeated herein for emphasis.
15. This *Certificate of Approval to Operate a Dam* expires on September 11, 2020.

End of Attachment A

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