

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, "Coeur Alaska, Kensington Project, Operations and Maintenance Manual, Lower Slate Lake Tailings Dam, Revision 3" dated January 29, 2015.
- 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.

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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 715 feet for the Stage 2 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 "Coeur Alaska, Kensington Project, Operations and Maintenance Manual, Lower Slate Lake Tailings Dam, Revision 3" dated January 29, 2015 (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. With each raise of the dam, a supplement or addendum to the O&M Manual is required that describes the O&M procedures necessary during the construction of that raise. A temporary *Certificate of Approval to Operate a Dam* may be issued for the construction period, if determined necessary by the Department.
5. If the water level in the reservoir rises to the invert elevation of the emergency spillway and begins to flow through the spillway, daily visual monitoring of the spillway, discharge channel, and plunge pool shall occur until water is no longer flowing through the spillway. If spilling occurs, the Department shall be notified as required under Special Condition 87.
6. Perform a Periodic Safety Inspection (PSI) on the dam and appurtenant works as required by 11 AAC 93.159 by June 23, 2017. 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.
7. 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

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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.

8. 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 including discharge through the emergency spillway. 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.
9. 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.

10. 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.
11. By August 1, 2018 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.

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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. An application for a *Certificate of Approval to Modify a Dam* is required prior to construction of Stage 3 up to the ultimate design height of the dam as shown in the "Lower Slate Lake Tailings Dam, Detailed Design Report, Revision 5" dated June 25, 2012. The application for Stage 3 must include provisions for additional subsurface investigation in both abutments along the grout curtain alignment. The Stage 3 configuration must include the detailed design and construction of the final, closure spillway as shown in concept in the most current reclamation and closure plan approved by the Department.
14. 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.
15. 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, in addition to the conditions contained or repeated herein for emphasis.
16. This *Certificate of Approval to Operate a Dam* expires on September 21, 2017.

End of Attachment A

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