

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 appurtenance works in accordance with accepted practice and the document titled "Coeur Alaska Inc. Kensington Project, Operations and Maintenance Manual, Lower Slate Lake Tailings Dam Revision 2" dated December 7, 2012, approved by the Department concurrent with this certificate.	
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 be this certificate at all times determined necessary by the Commissioner.	
Follow special conditions that apply to the operation of this dam as found in Attachment A, attached hereto and made a part hereof.	

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 that may have been issued by the Department, and shall become invalid 60 days after the Periodic Safety Inspection due date as indicated in Attachment A. A valid certificate shall be issued with revised special conditions as appropriate, based on current dam safety regulatory standards.

This *Certificate of Approval to Operate a Dam* is granted subject to the pertinent statutory provisions in AS 46.17 and administrative regulations in Article 3 of 11 AAC 93.

	APPROVED BY:	Charles F. Cobb, P. E.	
	TITLE:	State Dam Safety Engineer Division of Mining, Land and Water	
	SIGNATURE:	che deff	
	DATE:	May 6, 2013	
State of Alaska)) SS.			
Third	Judicial District)		
This is to certify that on <u>Mour</u> φ^{+h} , 2013 before me appeared <u>Charles F. Cobb</u> , 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.			
Christina Ballard			
Notary Public in and for the State of Alaska			

OFFICIAL SEAL
Christine Ballard
Notary Public - State of Alaska
My Commission Expires with Office

My Commission expires: With Office

ORIGINATION May 6, 2013

<u>Attachment A – Special Conditions</u>

- 1. The Lower Slate Lake Tailings Dam (AK00308) 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 approximately 715 feet for the Stage 2 configuration of the dam.
- 2. Inspect and monitor the Lower Slate Lake Tailings Dam in accordance with the procedures and schedule outlined in the document titled "Coeur Alaska Inc. Kensington Project, Operations and Maintenance Manual, Lower Slate Lake Tailings Dam Revision 2", dated December 7, 2012 (O&M Manual). Inspect the dam after all significant seismic or precipitation events. Maintain records of the inspections, monitoring data, and routine maintenance.
- 3. 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 15.
- 4. Provide measures to protect the geomembrane liner from floating debris or other potential damage sources. For any measures that involve cover materials in direct contact with the geomembrane liner, other than the design geotextile and tailings, submit a detailed design to the Department for approval in advance of conducting the work.
- 5. Document any routine operations and maintenance procedures that deviate from or are not included in the current version of the O&M Manual. Any significant changes to the approved operations and maintenance procedures require review by the Department prior to implementation.
- 6. 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.
- 7. 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.
- 8. Perform a Periodic Safety Inspection (PSI) as required by 11 AAC 93.159 on the Lower Slate Lake Tailings Dam and appurtenance works by June 28, 2014. The Periodic Safety Inspection must be performed by an Alaska registered, professional engineer qualified in accordance with 11 AAC 93.193(b). Prior approval of the engineer and the scope of the inspection must be agreed upon in advance with the Department. The PSI report must include annual performance data, described in Special Condition 10, if the annual performance report requirement is waived.

9. During mine operations, an Emergency Action Plan (EAP) shall be maintained for the Lower Slate Lake Tailings Dam in accordance with the requirements of 11 AAC 93.164. The EAP may be included in the O & M Manual as provided under 11 AAC 93.164(e). The EAP shall be reviewed, exercised, and revised in accordance with the following schedule:

DATE ACTION

Annually Internal review (distribute updated pages)
Annually Orientation exercise (All responsible parties)

Annually Drill Exercise (Internal to mine)

Every third year Table top exercise (All responsible parties)

As needed or every three years Revise and redistribute

EAP exercises should include responsible parties listed in the plan as indicated. Provide written notice to the Department within 7 days after all EAP exercises.

- 10. During mine operations, an annual performance report prepared by a qualified engineer as described in 11 AAC 93.193 shall be submitted to the Department by October 30th of each year. At a minimum, the report shall include:
 - a visual inspection of the dam when it is clear of snow
 - 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 volume
 - an updated water balance model showing historic and projected water levels in the pond, and a comparison to the remaining stages of the dam and the current estimated construction schedule for those stages
 - other information pertinent to the operation and performance of the tailings treatment 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 each year that a PSI required under 11 AAC 93.159 is conducted.

- 11. No later than 90 days after the Department issues an approval of the 2013 mine reclamation and closure plan, the financial assurance required by 11 AAC 93.171 and 11 AAC 93.172 must be provided for the following expenses:
 - Modification of the Lower Slate Lake Dam and appurtenant works in the Stage 2 configuration to a final, post-mine closure operating configuration
 - Post-mine closure operation, maintenance, and inspection of the dam in perpetuity The method of financial assurance, the proposed final, post-mine closure operating configuration, the post-mine closure operating, maintenance and inspection requirements and the respective cost estimates are subject to approval by the Department.
- 12. An application for a *Certificate of Approval to Modify a Dam* is required prior to construction of Stage 3 and any raises beyond 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 or other raises must include provisions for additional subsurface investigation in both abutments along the grout curtain alignment.

- 13. Prior to submitting the application for the Stage 3 modification referred to under Special Condition 12, the financial assurance for the long term operation, maintenance and inspection of the dam after mine closure must be established in a trust fund for the designated purposes. The details of the trust, the proposed final, post-mine closure operating configuration, the post-mine closure operating, maintenance and inspection requirements and the respective cost estimates are subject to approval by the Department, in accordance with the requirements of 11 AAC 93.171 and 11 AAC 93.172.
- 14. A revised Certificate of Approval to Operate a Dam is required after construction of each stage of the dam is complete. A revised Certificate of Approval to Operate a Dam, including any pertinent terms and conditions, will be issued by the Department upon review and approval of the submittals required under this attachment and the post construction documentation for each stage, as required in the Certificate of Approval to Construct a Dam, referenced herein. No additional water or tailings in excess of the currently approved stage may be impounded behind the modified dam until a revised Certificate of Approval to Operate a Dam is issued.
- 15. Any significant problems that may develop with the dam or appurtenant works which could affect the safety of the dam shall be reported to the Department within 24 hours, and 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.
- 16. For any modifications, major repairs, removal, or abandonment of the dam, a separate certificate of approval must be obtained from the Department.
- 17. 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.
- 18. 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.

End of Attachment A

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