

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 Alaska Statute Title 46 and the regulations adopted under this statute, grants to :

Fairbanks Gold Mining, Inc.

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

Walter Creek Heap Leach Pad Dam (NID ID#AK00310)

The location of this project is: T2N, R2N, S9 Fairbanks Meridian

The holder of this certificate shall:

- ☐ Operate and maintain the Walter Creek Heap Leach Pad Dam and appurtenant works in accordance with accepted practice and the document titled "Walter Creek Valley Fill, Heap Leach Pad, Operations & Maintenance Manual, Revision 15" (O&M Manual) dated March 2019.
- ☐ 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 that apply to the operation of this dam as found in Attachment A, attached hereto and made a part hereof.

CERTIFICATE OF APPROVAL TO OPERATE A DAM
Walter Creek Heap Leach Pad Dam

This *Certificate of Approval to Operate a Dam* supersedes any other *Certificate of Approval to Operate a Dam* for the Walter Creek Heap Leach Pad Dam and shall become invalid as specified under Attachment A. A valid certificate shall be issued with revised special conditions based on information contained in a current 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, AS 46.17 and the administrative regulations in 11 AAC 93.

APPROVED BY: Charles F. Cobb, PE.

TITLE: State Dam Safety Engineer
Division of Mining, Land and Water

SIGNATURE: 

DATE: April 10, 2019

State of Alaska)
) SS.
Third Judicial District)

This is to certify that on April 10th, 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.


Notary Public in and for the State of Alaska

My Commission expires: With Office



CERTIFICATE OF APPROVAL TO OPERATE A DAM
Walter Creek Heap Leach Pad Dam

Attachment A – Special Conditions

1. The Walter Creek Heap Leach Pad (HLP) Dam (AK00310) is approved to operate as a Class III (low) hazard potential dam as defined in 11 AAC 93.157 at a nominal crest elevation of 1653 feet, under the condition that the operating limits of the reservoir for the Fort Knox Tailings Storage Facility Dam (AK00212) are maintained to provide auxiliary storage capacity for the volume of the in-heap pond prior to modification or closure of the tailings storage facility (TSF). If the entire volume of the in-heap pond including draindown cannot be contained in the TSF, the hazard potential classification of the Walter Creek HLP Dam must be reevaluated.
2. This certificate approves placement and leaching of ore within all previously approved areas of the heap leach pad and Stage 9 and 10 described in the construction completion report by Alaska Testlab dated November 2018. The ore must be loaded on the heap such that the outside slope of the heap above the Walter Creek HLP Dam does not exceed an overall slope of 3 Horizontal:1 Vertical during operations for Stage 9 and 10, or closure. The maximum elevation of the ore loaded on to the heap is limited to elevation 2650 feet (site datum) under this certificate of approval.
3. This *Certificate of Approval to Operate a Dam* incorporates all pertinent and applicable conditions of the *Certificate of Approval to Construct a Dam* number FY2008-1-AK00310 dated July 3, 2007, *Certificate of Approval to Modify a Dam* number FY2016-19-AK00310 dated June 3, 2016, and *Certificate of Approval to Modify a Dam* number FY2018-5-AK00310 dated November 8, 2017, in addition to the conditions contained or repeated herein for emphasis.
4. Operate, monitor, inspect and maintain the Walter Creek HLP Dam in accordance with best practices and the procedures described in the "Walter Creek Valley Fill, Heap Leach Pad, Operations & Maintenance Manual, Revision 15" (O&M manual) dated March 2019. Inspect the dam and appurtenant works after all significant seismic or precipitation events. Maintain records of the inspections, monitoring data, and routine maintenance.
5. 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 annually and revise as necessary. Submit a copy of any revised O&M Manual to the Department within 7 days of the revision.
6. Perform a Periodic Dam Safety Inspection (PSI) on the Walter Creek HLP Dam and appurtenant works as required by 11 AAC 93.159 by June 4, 2023. 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 for the Walter Creek HLP Dam similar to the requirements of 11 AAC 93.164(e). 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)

CERTIFICATE OF APPROVAL TO OPERATE A DAM
Walter Creek Heap Leach Pad Dam

Triennially
Triennially

Table top exercise with all responsible parties
Revise and distribute to all responsible parties

The drill exercise is not required in the same year as the table top exercise. EAP exercises should 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. If the EAP is activated, or for any significant problems that may develop with the dam or appurtenant works which could affect the safety of the dam, notify the Department within 24 hours. 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 instrumentation report shall be submitted to the Department, at a frequency no less than annually, which shall include, but not be limited to, thermistor, piezometer, inclinometer, water level, seepage pumpback, and survey data. The report shall be in summary form and in a format acceptable to the Department.
10. During mine operations, an annual performance report prepared by an engineer qualified in accordance with 11 AAC 93.193(b) shall be submitted to the Department by December 31 of each year. At a minimum, the report shall include:
 - the findings of a visual inspection of the dam and the heap 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 heap configuration and the remaining capacity of the pad; and
 - other information pertinent to the operation and performance of the HLP 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 is conducted, but the PSI must include the above listed information in addition to meeting the other requirements of 11 AAC 93.159.

11. 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, for removal or abandonment of the dam, or for transfer of ownership during mine operations.
12. This *Certificate of Approval to Operate a Dam* expires August 3, 2023, and may be renewed pending submittal and approval of the 2023 periodic safety inspection report.

End of Attachment A

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