

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:

Fairbanks Gold Mining, Inc

Approval to operate the following structure on **Barnes Creek** in accordance with the terms and conditions contained in this certificate:

Barnes Creek Heap Leach Pad Dam (NID ID#AK00315)

The location of this project is: Township 02 North, Range 02 East, Sections 8, 9, 16 & 17 Fairbanks Meridian

The holder of this certificate shall:

- ☐ Operate, monitor, inspect and maintain the Barnes Creek Heap Leach Pad Dam and appurtenant works in accordance with the activities described in Attachment A and the document titled *Barnes Creek Heap Leach Pad Operations & Maintenance Manual* Revision 3 dated July 2022.
- ☐ 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
Barnes Creek Heap Leach Pad Dam

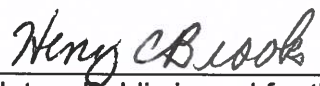
This *Certificate of Approval to Operate a Dam* supersedes any other *Certificate of Approval to Operate a Dam* for the Barnes Creek Heap Leach Pad Dam, and shall become invalid 60 days after the next Periodic Safety Inspection due date specified in Attachment A. A valid certificate may be issued with 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 46.17 and administrative regulations in Article 3 of 11 AAC 93.

APPROVED BY: Benjamin Wagner, P. E.
TITLE: State Dam Safety Engineer
Division of Mining, Land and Water
SIGNATURE: 
DATE: November 15, 2023

State of Alaska)
) SS.
Third Judicial District)

This is to certify that on November 15, 2023, before me appeared Benjamin Wagner, 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

HENRY C. BROOKS
Notary Public
State of Alaska

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

Attachment A – Special Conditions

1. The Barnes Creek Heap Leach Pad Dam (AK00315) 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 1545 feet.
2. Placement and leaching of ore is approved up to an elevation of 1990 feet within Stage 1, Stage 2, Stage 3, Stage 4, and Stage 5 as shown on the diagrams included in attachment B, and shown in the document prepared by Alaska Test Lab titled: *Barnes Creek Heap Leach 2023, Stage 5, Letter of Substantial Completion Stations 110+00 – 126+00 & Stations 0+00 – 20+33* dated October 2023. Maintain a minimum of 20 foot setbacks between the ore stack and the haul road as shown on section PP-B on sheet BCHLF-XD-01-05 of the Issued For Construction plan set approved under *Certificate of Approval to Modify a Dam* number FY2023-1-AK00315, or other temporary incomplete construction boundaries.
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 FY2018-1-AK00315 dated July 19, 2017 and *Certificate of Approval to Modify a Dam* number FY2023-1-AK00315 dated July 12, 2022, in addition to the conditions contained or repeated herein for emphasis.
4. Operate, monitor, inspect, and maintain the Barnes Creek Heap Leach Pad Dam in accordance with best practices and the procedures described in the *Barnes Creek Heap Leach Pad Operations & Maintenance Manual Revision 3* (O&M manual) dated July, 2022. 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 such as the stacking limitations described in Special Condition 2. 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 Safety Inspection (PSI) on the dam and appurtenant works as required by 11 AAC 93.159. The visual inspection for the next PSI is due by September 29, 2026. Subsequent PSIs shall be performed every five years as required by 11 AAC 93.159. 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 PSI must be obtained from the Department in advance of the PSI. Submit a draft PSI report to the Department for review within 30 days of the visual inspection of the dam.
7. 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.
8. During heap leach pad 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

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Barnes Creek Heap Leach Pad Dam

- other information pertinent to the operation and performance of the heap leach pad 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.

9. An application for a certificate of approval must be submitted to the Department for any modifications, including raising the dam and mine closure 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 during mine operations.
10. Financial assurance required by 11 AAC 93.171(f)(4)(F) must be demonstrated to the satisfaction of the Department in the next reclamation plan approval after the date of this certificate, as required under AS 27.19.
11. This *Certificate of Approval to Operate a Dam* expires November 28, 2026, and may be renewed pending submittal and approval of the periodic safety inspection report required under Special Condition 6 in this attachment or the requirements of Special Condition 9 from *Certificate of Approval to Modify a Dam* number FY2023-1-AK00315 are met.

End of Attachment A

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

Attachment B – Stage 5 Ore Placement Areas

