

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:

Hecla Greens Creek Mining Company

The approval to operate the following dams and respective appurtenant works on **Admiralty Island** in accordance with the terms and conditions contained in this certificate:

Pond 7 Dam (NID ID#AK00307)
Pond 10 Dam (NID ID#AK00316)

The location of this project is: T43S, R65E, S26, Copper River Meridian


The holder of this certificate shall:

- Operate the Pond 7 Dam and Pond 10 Dams and respective appurtenant works in accordance with accepted practice and the documents titled *Pond 7/10 Dam System Operations, Maintenance and Surveillance Manual* dated January 11, 2023, and *2022 Periodic Dam Safety Inspection Pond 7 Dam (AK00307) and Pond 10 (AK00316)* dated December 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 these dams as found in Attachment A, attached hereto and made a part hereof.

**CERTIFICATE OF APPROVAL TO OPERATE A DAM
Pond 7/10 Dam System**

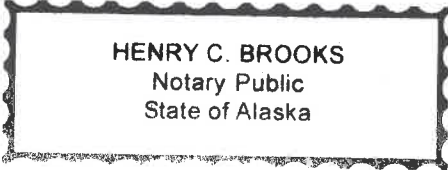
This *Certificate of Approval to Operate a Dam* supersedes any other *Certificate of Approval to Operate a Dam* for the Pond 7 Dam or the Pond 10 Dam and shall become invalid on the expiration date specified under Attachment A. A valid certificate shall be issued with revised special conditions based 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 and AS 46.17 and administrative regulations in 11 AAC 93.

APPROVED BY: Benjamin Wagner, P. E.
TITLE: State Dam Safety Engineer
Division of Mining, Land and Water
SIGNATURE: 
DATE: January 19, 2023

State of Alaska)
) SS.
Third Judicial District)

This is to certify that on January 19, 2023, before me appeared Benjamin Wagner, known by me to be the Director or 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
Pond 7/10 Dam System

Attachment A – Special Conditions

1. The Pond 7 Dam (AK00307) and the Pond 10 Dam (AK00316) are approved to operate as Class II (significant) hazard potential dams as defined in 11 AAC 93.157 at a nominal crest elevation of 144 feet (site datum) each. This approval also applies to the appurtenant works of the dams which divert, capture, contain, collect, and transfer water to Pond 7 and Pond 10 including all respective, integrated components at the tailing disposal facility (TDF), Site 920, Site 23, Hawk Inlet, and other areas of the site, as shown on Figure 4-2 in Appendix 4 of the OMS Manual referenced in Special Condition 2. These features and the Pond 7 Dam and Pond 10 Dam are herein referred to collectively as the Pond 7/10 Dam System.
2. Inspect the Pond 7/10 Dam System in accordance with the procedures outlined in the document *Pond 7/10 Dam System Operations, Maintenance and Surveillance Manual* dated January 11, 2023 (OMS Manual). Inspect the Pond 7/10 Dam System after all significant seismic or precipitation events. Maintain records of all inspections, including routine inspections listed in the OMS Manual.
3. An annual instrumentation report for Pond 7/10 Dam System shall be submitted to the Department which shall include, but not be limited to respective data from: piezometers, lysimeters, inclinometers, water levels, surface and pipeline flow, underdrain flow, underdrain water quality tests, leak detection system flow, survey monuments, and weather stations. The report shall be in summary form and in a format acceptable to the Department. The annual instrumentation report is due by October 31 of each calendar year.
4. An annual water management plan shall be submitted to the Department by April 30 of each year during active mine operations which shall include, but not be limited to:
 - a description of the accumulated tailings, the amount of water transferred from the TDF and respective underdrains to Pond 7 and Pond 10 in the preceding year, and the remaining storage capacity of the constructed TDF
 - an updated water balance forecast based on the most current actual data available that includes the historic and projected water quantities and flow rates collected and transferred from the TDF, Pond 23, Pond A, Pond C and Pond D and other collections points to Pond 7 and Pond 10, and the quantity and flow rates of water discharged from the water treatment plant
 - the current estimated construction schedule for remaining phases of the TDF
 - other information pertinent to the operation and performance of the Pond 7/10 Dam System
5. 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 31 of each year during active mine operations. At a minimum, the report shall include:
 - the findings of a visual inspection of the Pond 7/10 Dam System when clear of snow
 - photographs of key features of the Pond 7/10 Dam System and other observations during the visual inspection
 - a review and evaluation of routine inspection and maintenance reports
 - a review and evaluation of monitoring data included in the annual instrumentation report and any additional monitoring data available at the time of the site visit

**CERTIFICATE OF APPROVAL TO OPERATE A DAM
Pond 7/10 Dam System**

- other information pertinent to the operation and performance of the Pond 7/10 Dam System

The annual performance report shall be in summary form and in a format acceptable to the Department. This requirement will be waived for each year that a periodic safety inspection (PSI) required by 11 AAC 93.159 is conducted, but the PSI must include the above listed information in addition to meeting the other requirements of 11 AAC 93.159.

6. Perform the PSI as required by 11 AAC 93.159 on the Pond 7/10 Dam System no later than August 23, 2025. The frequency for subsequent PSIs shall be at three-year intervals as required by regulation for a Class II (significant) hazard potential dams and appurtenant works. The PSI must be performed by an engineer qualified in accordance with 11 AAC 93.193(b). The scope of inspection must be approved in advance by the Department.
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	Tabletop 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 tabletop 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 Pond 7/10 Dam System including discharge through the emergency spillway. An incident report shall be submitted to the Department in accordance with 11 AAC 93.177 within 14 days after the conclusion of the incident.
9. For any modifications or major repairs of the Pond 7/10 Dam System during routine operations, or for removal or abandonment, a separate certificate of approval must be obtained from the Department.
10. The requirements for operation, abandonment or removal of the Pond 7/10 Dam System must be included in each revision of the detailed mine reclamation plan. Sufficient funds for these requirements must be identified and included in the financial assurance required per:
AS 27.19.020-040; 11 AAC 97.200-450; 11 AAC 93.171(d); 11 AAC 93.171(f)(2)(C); 11 AAC 93.171(f)(4)(F); and 11 AAC 93.172(a)(6)(C); other applicable Alaska laws; and the Memorandum of Understanding between the Alaska Department of Natural Resources, Alaska Department of Environmental Conservation and the U.S. Department of Agriculture, Forest Service Concerning Reclamation/Closure/Post-Closure Bonding for the Greens Creek Mine (June 30, 2014), or any revisions thereof including Modification No. 1 signed in January 2015. Submit a copy of associated sections of the Reclamation Plan and financial assurance instrument to the Dam Safety and Construction Unit of the Department during each review and revision cycle.
11. This *Certificate of Approval to Operate a Dam* expires on October 22, 2025.

End of Attachment A