

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

DIVISION OF MINING AND WATER MANAGEMENT

DAM SAFETY AND CONSTRUCTION UNIT



### Certificate of Approval to Construct a Dam

The **State of Alaska** under AS 46.17, and the regulations adopted under this statute, grants to:

**Teck-Pogo, Inc.**

The approval to construct the following structure on **Liese Creek** in accordance with the terms and conditions contained in this certificate:

**Pogo RTP Dam (NID ID#AK00304)**

The location of this project is: T5S, R14E, S23, Fairbanks Meridian

The holder of this certificate shall:

- ☐ Construct the dam and appurtenance works in accordance with the plans and specifications approved by the Department concurrent with this certificate and listed in Attachment A.
- ☐ Except for the 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 construction of this dam as found in Attachment B, attached hereto and made a part hereof.

**CERTIFICATE OF APPROVAL TO CONSTRUCT A DAM**  
**Pogo RTP Dam**

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This *Certificate of Approval to Construct a Dam* is granted subject to the pertinent statutory provisions in AS 46.17 and the Administrative Regulations in 11 AAC 93.


APPROVED: 

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

State of Alaska            )  
                                      ) SS.  
Third Judicial District )

This is to certify that on October 7, 2004, before me appeared Charles F. Cobb, known by me to be the Director or Authorized Representative of the Dam Safety and Construction Unit 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: March 5, 2008

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**Attachment A – List of Drawings and Specifications**

**DRAWINGS**

Document Number	Revision	Title	Date
D-141198-40-C-0001	1	Overall Site Layout	2/6/2004
D-141198-43-C-0051	2	Diversion Ditch RTP & Dry Stack Area General Arrangement Plan	9/27/2004
D-141198-43-C-0052	2	South Diversion Ditch Plan & Profile - 00+00 to 19+00	9/27/2004
D-141198-43-C-0053	1	South Diversion Ditch Plan & Profile - 19+00 to 38+00	9/27/2004
D-141198-43-C-0054	1	South Diversion Ditch Plan & Profile - 3+400 to 4+500 (should read 45+00)	9/27/2004
D-141198-43-C-0055	1	RTP & Dry Stack North Diversion Ditch Plan & Profile - 00+00 to 20+00	9/27/2004
D-141198-43-C-0056	1	North Diversion Ditch Plan & Profile - 20+00 to 39+00	9/27/2004
D-141198-43-C-0057	1	North Diversion Ditch Plan & Profile - 39+00 to 58+00	9/27/2004
D-141198-43-C-0058	1	North Diversion Ditch Plan & Profile - 58+00 to 69+92	9/27/2004
D-141198-43-C-0061	1	Diversion Ditch Basin Sections & Details	9/29/2004
D-141198-43-C-0062	1	Diversion Ditch Typical Sections & Details	9/29/2004
D-141198-51-C-0001	2	RTP Excavation Plan	9/27/2004
D-141198-51-C-0002	1	RTP Excavation - Sections A-A & B-B	9/27/2004
D-141198-51-C-0011	2	RTP Rockfill Layout Plan	9/27/2004
D-141198-51-C-0012	1	RTP Rockfill Sections & Details	9/27/2004
D-141198-51-C-0021	2	RTP Final Layout Plan, Sections & Details	9/27/2004
D-141198-51-C-0022	0	RTP Dam Liner Tie-In Plan, Section & Details	9/27/2004
D-141198-51-C-0031	2	RTP Spillway Facilities Layout Plan	9/29/2004
D-141198-51-C-0032	2	RTP Spillway - Plan & Profile	9/29/2004
D-141198-51-C-0033	2	RTP Spillway Inlet & Outlet Works Plan, Sections & Details	9/29/2004
D-141198-51-C-0034	1	RTP Flume #1 Plan & Profile	9/29/2004
D-141198-51-C-0035	1	RTP Flume #1 Sections & Details	9/29/2004
D-141198-51-C-0036	2	RTP Flume #2 Plan & Profile	9/29/2004
D-141198-51-C-0037	2	RTP Flume #2 Plan, Section & Details	9/29/2004
D-141198-51-C-0041	2	RTP Material Specifications & Construction Notes	9/27/2004
D-141198-51-S-0100	0	RTP Flume #1 Spillway Inlet Structure Plan, Sections & Details	9/30/2004
D-141198-51-S-0101	0	RTP Flume #1 Spillway Inlet Structure Sections & Details	9/30/2004
D-141198-51-S-0102	0	RTP Flume #2 Inlet Headwall Plan & Sections	9/30/2004
D-141198-51-S-0500	0	RTP Flume #2 Inlet Side Wall Frame Plan, Sections & Details	9/30/2004
D-141198-52-C-0001	1	Drystack Facility Start-Up Layout Plan	9/27/2004
D-141198-52-C-0002	0	Drystack Facility Start-Up Sections & Details	9/27/2004
D-141198-52-C-0011	1	Drystack Facility Material Specs & Construction Notes	9/27/2004

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**SPECIFICATIONS**

Document Number	Revision	Title	Date
141198-SP-C-501	0	Clearing & Grubbing Construction Specification	1/21/2004
141198-SP-C-502	0	Earthworks Construction Specification	1/27/2004
141198-SP-C-511	1	RTP Earthworks ANS Appurtenant Structures	9/29/2004
141198-SP-C-512	0	Dry Stack Starter Facilities Construction Specification	2/9/2004
141198-SP-C-513	0	Soil Slope Stabilization Construction Specification	2/9/2004
141198-SP-C-514	0	Rock Slope Stabilization Construction Specification	2/9/2004
141198-SP-C-516	1	Shotcrete Construction Specification	4/16/2004
141198-SP-C-518	B	Liner on Upstream Face of RTP Dam	9/29/2004
141198-SP-C-519	B	Grout Curtain at Upstream Toe of RTP Dam	9/29/2004
141198-SP-S-501	0	Concrete & Reinforcing Construction Specification	6/21/2004

**End of Attachment A**

**CERTIFICATE OF APPROVAL TO CONSTRUCT A DAM**  
**Pogo RTP Dam**

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**Attachment B – Special Conditions**

1. This certificate approves the construction of the Pogo RTP Dam to a final crest elevation of approximately 2091 feet as indicated in the design drawings listed in Attachment A, to be operated as a Class II (significant) hazard potential classification dam as defined in 11 AAC 93.157.
2. All work associated with the dam and appurtenances must be observed by monitors or engineers with experience in the construction of dams, for compliance with the approved plans and specifications and for developing the construction completion report required under Condition 8.
3. Monitoring must occur continuously (full time) during placement of soil cover and rip rap over the geosynthetic liner material on the upstream face of the dam.
4. The bedrock contact area exposed under the dam foundation and abutments shall be inspected and mapped by a qualified professional geologist or geological engineer after the overburden is removed, and prior to the placement of any fill or geosynthetic materials.
5. If any conditions are encountered which require substantial deviations or change in the design from the approved drawings and specifications, the deviation or change must be approved by the design engineer and the Department before implementing the deviation or change.
6. Prior to construction of the dam, the following additional submittals must be made to the Department:
  - ☐ a water diversion plan
  - ☐ a construction schedule.
7. Erosion, sediment and pollution control must be conducted during construction in accordance with the Construction Storm Water Pollution Prevention Plan dated March 8, 2004.
8. Submit the following post-construction documentation, within approximately 30 days of substantial completion of the project:
  - ☐ Construction completion report including the geologic map required under Condition 4, progressive construction photographs, field and laboratory test results, unexpected conditions, design changes, and record drawings certified by the inspection engineer.

**CERTIFICATE OF APPROVAL TO CONSTRUCT A DAM**  
**Pogo RTP Dam**

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- ☐ An operation and maintenance manual that includes the following:
  - Site specific visual inspection checklist
  - Schedule for routine inspection
  - Schedule for instrumentation monitoring and reporting
  - Schedule for routine maintenance
  - Unusual conditions and emergency action procedures.
- 9. A *Certificate of Approval to Operate a Dam* is required after construction is complete. A *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 the previous condition.
- 10. Commence construction by the first day of June of the second calendar year after the date of this certificate. If construction does not begin by this date, an updated application must be submitted for review and approval by the Department, including application fees required under 11 AAC 05.010.
- 11. Notify the Department of the date of substantial completion within one week after that date occurs.

**End of Attachment B**

D/F:daminfo/projects/pogo/COACON 2005-1-AK00304.doc