

STATE OF ALASKA

SARAH PALIN, GOVERNOR

DEPT. OF ENVIRONMENTAL CONSERVATION DIVISION OF SPILL PREVENTION AND RESPONSE CONTAMINATED SITES PROGRAM

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File: 1538.38.001

January 10, 2008

Mr. David Stone, President
AJT Mining Properties
5601 Tongard Court
Juneau, AK 99801

Re: Environmental Status
Treadwell Mine Complex
Reckey 1988110934716

Dear Mr. Stone:

The Alaska Department of Environmental Conservation, Contaminated Sites Program, (ADEC) reviewed the *Treadwell Mine Cyanide Tailings Investigation and the Treadwell Mine Cyanide Tailings Stabilization Cap* reports pertaining to the Treadwell Mine Complex located on Douglas Island in the City and Borough of Juneau (CBJ). Based on information provided to date, ADEC has determined that hazardous substance contamination remains on site (above the most stringent ADEC cleanup levels) but it does not pose an unacceptable risk to human health or the environment. As a result of this determination, the site shall be conditionally closed in accordance with the terms and conditions outlined in this letter.

Please note the following information that was evaluated in determining the environmental status of this property.

Background

The Treadwell Mine Complex consists of four mines located on the southeastern portion of Douglas Island. A 34-acre portion (the eastern part) of the 153-acre complex was developed recently as a recreational area operated by Alaska Canopy Adventures. The area is heavily vegetated with mature trees; undergrowth; creeks; steep slopes; and mining-related pits.

The mine produced waste rock called tailings that, in addition to the high metal concentrations that are naturally occurring, there were chemicals used in the mining process that may pose a risk to the environment. There were two tailings disposal areas located at the Treadwell Mine Complex. The upper and lower tailings disposal sites were originally started in the early 1900s. They lack plant growth in an otherwise heavily vegetated temperate rain forest and the soil and water samples identified elevated concentrations of lead, zinc, arsenic, mercury and cyanide.

The upper tailings pile was covered in the 1980s with organic soil to promote re-vegetation and also re-contoured to divert surface drainage to the east. These remedial efforts were intended to

minimize the infiltration of moisture and/or oxygen into the tailings and avoid leachate drainage. The lower tailings area was covered in 2007 in a similar manner as the upper one. In addition, a long term tailings stabilization cap inspection and maintenance plan was developed and approved by ADEC. A site inspection of the upper and lower tailings sites in October 2007 demonstrated that the site remedy has been effectively completed and ADEC considers the soil cap and drainage plan to be an effective site control remedy.

Contaminants of Concern

Mercury, arsenic, lead and zinc

Pathway Evaluation

The pathways evaluated at this site include the human health exposure pathways of inhalation, direct contact, and ingestion. The soil contamination remaining on site does not exceed the 18 AAC 75 health based levels established for these pathways. Furthermore, the impacted soil is buried beneath the soil cover which prevents an exposure pathway. There is no unacceptable risk posed to human health provided the conditions established by this decision document are complied with.

The migration to groundwater pathway is complete but was not evaluated at the site. The area is served by the CBJ Public Drinking Water System.

The migration to surface water was also considered but the remedial measures serve to minimize any leachate from the tailings piles and, therefore, prevent migration into surface water.

Cleanup Levels

The soil cleanup level established for this site are the 18 AAC 75.341, Tables B1 and B2 (over 40-inch Zone) migration to groundwater pathway.

The groundwater cleanup levels established for the site are the 18 AAC 75.345 Table C levels.

ADEC Decision

There is residual soil contamination remaining at depth beneath the soil cover at the upper and lower tailings piles on the Treadwell Mine Complex. ADEC determined it does not pose an unacceptable risk to human health or the environment, subject to the following conditions. This determination will require no further cleanup actions subject to compliance with these conditions:

- 1 A Notice of Environmental Contamination will be recorded on the ADEC database to document that there is residual contamination remaining on site above the most stringent cleanup levels.
- 2 Any proposal to excavate the contaminated soil shall be reported to ADEC and a work plan describing how the soil will be managed and/or disposed must be submitted for review and approval prior to excavation.
- 3 Any proposal to transport soil and/or groundwater off site requires ADEC approval in accordance with 18 AAC 75.325(i).

The Treadwell Mine Complex shall be managed in accordance with the approved inspection and maintenance plan (prepared by Nortech and dated November 2007). Site inspections of the soil cap

areas shall be conducted two times per year to ensure that site conditions remain stable. In the event the tailings pile areas are damaged or disturbed, ADEC shall be notified and a corrective action plan submitted for review and approval.

This determination is in accordance with 18 AAC 75.380(d)(2) and does not preclude ADEC from requiring additional assessment and/or cleanup action if future information indicates that this site may pose an unacceptable risk to human health or the environment.

Site Closure (without conditions) can be achieved when soil sampling confirms that all soil meets the most stringent 18 AAC 75.341 Migration to Groundwater, Over 40 Inch cleanup levels and ground water meets 18 AAC 75.345 Table C levels.

Appeal

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195 - .340 or an informal review by the Division Director in accordance with 18 AAC 15.185. Informal review requests must be delivered to the Division Director, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, Alaska 99801-1800, within 15 days after receiving the department's decision reviewable under this section. Adjudicatory hearing requests must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800; Juneau, Alaska 99801-1800, within 30 days after the date of issuance of this letter, or within 30 days after the department issues a final decision under 18 AAC 15.185. If a hearing is not requested within 30 days, the right to appeal is waived.

If you have questions about this closure decision, please contact Bruce Wanstall at 907-465-5210 or email at bruce.wanstall@alaska.gov,

Sincerely,



Jim Frechione
Program Manager
State & Private Sites Cleanup Program

cc: Jason Ginter, Nortech, via email