

# STATE OF ALASKA

## DEPARTMENT OF NATURAL RESOURCES

*DIVISION OF MINING AND WATER MANAGEMENT*

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### INSPECTION REPORT POGO PROJECT

**Inspection Date:** May 19, 1999  
**Report Date:** May 24, 1999  
**Weather:** sunny, temperature in the 60's, wind 0-5 mph down river  
**Operator Contact:** Jason Morrison, Teck; Denise Herzog, Teck; Ed Grozik, EBA  
**Agency Personnel:** Steve McGroarty, DMWM  
**Inspection Objectives:** Inspect waste rock storage facility liner and over-liner material placement.

**Pogo Camp & Laydown Area:** It appeared to take longer than normal for the incinerator to achieve a clean exhaust plume. Teck indicated that the problem was caused by the malfunction of temperature sensors in the incinerator and that replacement sensors were being shipped to the site. Denise Herzog was pumping "ten well volumes" to develop monitoring well # 16. MW-16 was located approximately 500' to the southwest of the camp and 100' from the left limit of the Goodpaster River and was drilled to a depth of 31'. The water pump for the core drill that was used to establish MW-16 was set on a tarp with absorbent diapers to catch any potential oil or fuel leaks; no evidence of any leaks was observed.

**Fuel Storage Area:** The fuel hose for helicopter refueling was not stored within the fuel containment berm when not in use.

**Non-Mineralized Waste Rock Storage Facility:** Installation of the geotextile on top to the liner had been completed and 4' thick access road had been constructed with 2" minus over-liner material up the center of the non-mineralized waste rock storage facility. A haul truck was end-dumping additional 2" minus material along the edges of this roadway and this material was being spread with a Cat D-7 dozer (Figure 1 & 2). Jason Morrison removed several pieces of "root material" that was present in the 2" material coming from the gravel pit. I requested that Ed Grozik (EBA) ensure that no woody debris that could represent a threat to the integrity of the liner be incorporated into the over-liner material.



**Figure 1.** End dumping two-inch minus over-liner.



**Figure 2.** D-7 dozer spreading over-liner.

**Mineralized Waste Rock Storage Facility:** Liner installation was essentially complete with final seam work and vacuum testing of seams occurring in the ditch along the bottom the mineralized waste rock storage area (Figure 3 & 4).



**Figure 3.** Lystering liner seam in ditch.



**Figure 4.** Vacuum testing of welded liner seam in ditch.

**Portal Access Road:** Waste rock was being placed on the surface of the portal access road. Jason Morrison indicated that an attempt was made to "bar-down" the crest of the portal pad face with a track excavator, but was unsuccessful due to fractured bedrock being frozen in place. A berm to catch falling rocks and appropriate warning signs were reported to have been placed around the back of the portal pad and the crest of the face is being allowed to thaw and slough.

**Adit:** Jason Morrison indicated that the adit had advanced to the 220' mark (all locations in adit are relative to the portal) and that first diamond drill station had been driven to the left of the adit at approximately the 135' location. Advancement of the adit had been stopped while they worked on ground control of the ribs and back (roof) of the adit. Intersecting joint sets are causing ground support to be a challenge. It is reported that the adit has not been producing any water. The water treatment facility chamber is to be driven off to the right of the adit at approximately the 220' mark. The main adit will be driven past this location to obtain a better determination of the ground conditions anticipated in the water treatment chamber. On May 21, 1999, I spoke

with Karl Hanneman regarding the waste rock segregation that has occurred to date for the development of the first 220' of the adit. He indicated that to his knowledge there has not been any diamond drilling and associated assay of drill core ahead of the advancing adit face, assays done on grab samples from the individual adit blast rounds, or a formalized visual segregation of the waste rock on a round by round basis. I requested that Teck institute a development rock segregation plan as soon as possible. Mr. Hanneman faxed a development rock segregation procedure to the project site one hour after my conversation with him for immediate implementation until pilot drill hole assays are available. The procedure calls for each round blasted underground to be classified as non-mineralized or mineralized based on the visual observation of sulfides in the blasted material. Representative grab samples will be taken for every round and shipped for assay. The rounds will be placed in an appropriate temporary stockpile on the portal pad area. If possible, the segregated rock piles would remain on the portal pad pending returns of the assays. If the assays confirm the reliability of the visual segregation, then the temporary stockpiles would be placed on the appropriate waste rock pad in accordance with the visual segregation. If the assays did not confirm the general reliability of the visual observations, then the temporary stockpiles would be placed in accordance with the assays. If scheduling and space requirements dictate moving the temporary stockpiles prior to return of the assays, the rock would be placed on the mineralized pad.

**Action Items from This Inspection:** None.

**Action Items from Previous Inspections:** None.

Cc: Karl Hanneman, Teck, Fairbanks  
Denise Herzog, Teck, Fairbanks  
Jason Morrison, Teck, Fairbanks  
Derek Riehm, Teck, Vancouver  
Rick Zimmer, Teck, Vancouver  
Makoto Umedera, Sumitomo, Anchorage  
Bob Loeffler, ADNR, Anchorage  
Mitch Henning, DMWM, Anchorage  
Charlie Cobb, DMWM, Anchorage  
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Bob Craig, ADNR, Fairbanks  
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Sharmon Stambaugh, ADEC, Juneau  
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Dick Swainbank, DCED, Fairbanks  
Cindi Godsey, EPA, Anchorage  
Keith Mueller, USFWS, Fairbanks  
Leroy Phillips, COE, Fairbanks  
Amy Marsh, NAEC, Fairbanks  
Dave Chambers, CSP2, Bozeman  
Steve Borell, AMA, Anchorage  
Jim Movius, Goodpaster River Property Owners