



INSPECTION REPORT

Alaska Department of Environmental Conservation
 Division of Water
 410 Willoughby Ave, Juneau, AK 99811

ADEC Inspection Form
 Last updated (4/08)

Inspector:
 Kenwyn George
 907-465-5313

Section A: General Data

Inspection Date	Permit #	Borough	Receiving Waters	Weather	Facility Type
January 7, 2010	AK-005057	N/A	E. Fork Slate Creek	Current Conditions: Fine, temperature ~ 34F. Had been snow. Visit: light rain	Tailings Disposal Facility

Discharges to: Surface Water Ground Water

ANNOUNCED Inspection

Section B: Facility Data

Name and Location of Site/ Facility Inspected		Entry Time	Permit Effective Date												
Kensington Lower Slate Lake (LSL) Dam construction and Acid Rock Drainage area adjacent to LSL.		08:00	September 1, 2005												
		Exit Time 17:00	Permit Expiration Date August 31, 2010												
On-Site Representative Kevin Eppers (Env. Superintendent)		Additional Participants: Jennifer Saran, USFS Brock Tabor, ADEC nonpoint source program.													
Responsible Official(s): Clyde Gillespie, Surface Operations Manager, Kevin Eppers (Env. Superintendent) x Contacted LSL: Jen Stetz, Tetra Tech		<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Samples Taken?</td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>Photos Taken?</td> <td style="text-align: center;">X</td> <td></td> </tr> <tr> <td>Analytical Results?</td> <td></td> <td style="text-align: center;">X</td> </tr> </tbody> </table>			Yes	No	Samples Taken?	X		Photos Taken?	X		Analytical Results?		X
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Clyde: 523-3309 Kevin: 523-3328															

Section C: Findings/Comments

BACKGROUND

Coeur Alaska is constructing a dam to retain tailings to be placed in a Tailings Disposal Facility (TDF), previously Lower Slate Lake (LSL), now classified by ADEC as a Treatment Works. Adjacent to the dam downstream of the left abutment, material with an acid rock discharge (ARD) was encountered and has been covered by Coeur to minimize metals leaching. The purpose of regular DEC inspections is primarily to observe activities associated with the dam and ARD.

FIELD INSPECTION

Construction status:

The rock crusher was not removed from the site. The trench to the sump for the dam has been shotcreted and filled in and the dam constructed to within 30 feet of final grade for Phase I.

Construction activities in progress:

Trenches for piezometers were being excavated by ripping with a dozer. This was more difficult than expected since the rock had been well compacted. A ring density test, also called a water replacement test (<http://www.astm.org/Standards/D5030.htm>) was being conducted on the dam surface for the A1 material. This necessitates the excavation of a hole about 2 feet deep, measuring the amount of water required to fill this (polyethylene lined) hole, then determining the amount of rock by weight, and the percent of 3"-minus rock present. Three ring tests were conducted in the Zone A material and three in the Zone A1 material.

One area of graphitic phyllite on the west abutment was being prepared for shotcreting.

Proposed construction activities for the following 1-2 weeks:

Shotcrete the graphitic phyllite area on Tuesday 12th. Place the bulk fill from the 13th and complete the A1 fill for Phase 1 by approximately January 22nd.

Other:**Grout trench**

This trench, located at the toe of the upstream embankment, is scheduled to be installed in the spring. It may contain graphitic phyllite rock that needs to be taken to the graphitic phyllite storage pile in Pit 4.

Tailings Disposal Facility / Lower Slate Lake (Photos 1-4):

The lake was ice covered. No pumping is occurring at the lake at the present time.

Seep water treatment

The treatment plant was operating well. It operates in a batch-treatment mode; at the time of the visit there was no active discharge, however the effluent looked clear in the final clarifier.

A truck had been recently parked on a slope such that the bed was slanted. A slight oil sheen was noted running down the road to an area actively being graded and filled with rock to eliminate icing. A worker associated with the truck brought out oil absorbent pads carried on the truck to capture the sheen, and said that he would move the truck.

Graphitic Phyllite storage cell (Photo 6):

There is a total of 12,400 – 13,000CY of graphitic material on the pile. The more permanent temporary cover has not yet been placed on the pile; it presently has a lighter weight cover. No protection of the sump is yet provided in the event of a snowslide off the pile smothering the drainage water sump. The 20,000 gallon tank has been moved to a level location where it will collect water from the sump. This water will then be trucked to the Seep water treatment plant.

Storm water

Snow banks along the roadside kept water channeling down the road, rather than being diverted off the road. Coeur had a crew working on re-creating the drainage ways off to the side of the road.

SAMPLING ACTIVITIES – None conducted.

SUMMARY**Any issues requiring action by Coeur or the state agencies?**

1. Construct protection for the sump at the graphitic phyllite storage area to prevent it from being buried under snow from the pile.
2. Cover the graphitic phyllite pile with 60 mil HDPE. This may occur after the installation of the grout trench for the dam since 1500 CY of graphitic phyllite material from this trench may be placed on the pile at that time.

Section D: Compliance/Recommendations

ADMINISTRATIVE VIOLATIONS**POTENTIAL WATER QUALITY VIOLATIONS**

None.

Section E: Appendices

1: Photographic record.

Signature <i>Kennyn George</i> 01/14/10	Signature only acknowledges receipt of this report. Inspection report given to:
Inspector Division of Water Date	Company (if applicable): Date

PHOTO ADDENDUM – KENSINGTON TAILINGS DISPOSAL FACILITY –DECEMBER 10, 2009



PHOTO 1. DAM SITE



PHOTO 2. DAM FROM EAST EMBANKMENT



PHOTO 3. TRENCH FOR PIEZOMETER



PHOTO 4. RING DENSITY TEST



PHOTO 5. SUMP AT THE GRAPHITIC PHYLLITE SEEP



PHOTO 6. DAM AND IMMEDIATELY DOWNSTREAM OF THE DAM



PHOTO 7. SUMP BELOW THE DAM



PHOTO 6. VIEW OF THE TAILINGS DISPOSAL FACILITY