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
August 25, 2010	AK-005057	N/A	E. Fork Slate Creek Sherman Creek	Current Conditions: Fine, some light rain - Temp. in 60's.	Gold mine

Discharges to: Surface Water ☒ Ground Water ☐ | **ANNOUNCED** Inspection

Section B: Facility Data

Name and Location of Site/ Facility Inspected

General tour of the Comet and Jualin sides of the mine with DNR, EPA and the COE. The main emphasis was on wetlands.

Loc: Lat: 58d 49' 58"N

Long: 134d 57' 58"W

Source: **NPDES permit**

Entry Time	**Permit Effective Date**
12:30	September 1, 2005
Exit Time	**Permit Expiration Date**
17:00	August 31, 2010 (Administratively extended)

On-Site Representative

Clyde Gillespie, Surface Operations Manager, Kevin Eppers, Environmental Superintendent, Luke Russell, VP Env. Services

Additional Participants:

ADNR - Jack DiMarchi
EPA – Patty McGrath, Brian Frazer, Stacy Craddock.
COE – Glen Justis, Randy Bigil

Responsible Official(s):

Clyde Gillespie, Surface Operations Manager
x Contacted

Phone: **523-3309**

	Yes	No
Samples Taken?		X
Photos Taken?	X	
Analytical Results?		X

Section C: Findings/Comments

Status of the mine

The mill was operating and producing concentrate. Tailings are being discharged to the TTF. The TTF water treatment plant was undergoing commissioning.

Mine

The main mine drift is 14,000 ft. from the Jualin to Comet portals. There is an underground paste plant under construction. This will be operational by the second quarter of 2011. The paste will have around 4% cement and will achieve strengths from 1000-4000 psi. 40% of tails will be backfilled into the mine. The present mine life is permitted at 10.5 years. Mine drainage presently varies from 500 gpm (Jan-Mar) to 2000 gpm. The life-of-mine flow is expected to be 2500 gpm with peak flows up to 3000 gpm.

Tailings Treatment Facility (TTF)

Tailings were being discharged to the TTF. If there is a difference in flow greater than 50 gpm between the mill and the TTF, then the tailings pumps are automatically shut down. There are also leakage detectors that detect leaks into the annular space of the double-walled pipe.

Dam: Phase 1 construction is complete.

Seepage collection: Baseline average flow of seepage in the seepage collection system is 20 gpm. To complete the construction per the design tailings are being pumped into the space between the cofferdam and main dam to secure the

base of the geomembrane on the main dam face. When the water level rose to 655' the flow into the sump increased to 90-100 gpm. At the time of the visit tailings were not being pumped into this space.

TTF water level: The water level had been drawn down below the original lake water elevation. Because of the available storage volume and the requirement by the City & borough of Juneau to keep 9' of water over the tailings, no water must be discharged from the facility for several months. Tailings are discharged to the surface and appear to settle rapidly. Water is being recycled from the TTF to the mill.

Water Treatment Plant: This was being commissioned. An additional booster pump had been installed at the lake to see if they could boost the flow to accommodate testing the water treatment plant at the design flow of 1500 gpm. At the time of the site visit they had not been able to achieve this flow rate. As noted above, discharge from the plant may not be required for several months. This is precipitation dependent and is being monitored through the site water balance maintained by Coeur.

ARD treatment plant: The plant is being operated on an as needed basis; it does not operate well at flows of less than 6 gpm. There was not a lot of flow to the facility at the time of the site visit. Also the ARD storage pad at Pit 4 has now had a heavier duty cover placed on it and this has been sealed to the bottom liner, so the additional volume of water to be treated from this source is minimal.

Bypass pipe: This was operating at 1400 gpm.

Tailings pipeline

The road from the gulch in Snowslide Gulch to the extent of the avalanche area has been reclaimed to enable snow to pass over the road in the event of an avalanche in this area and to stablize the slopes in this section of the pipeline corridor.

Comet (mine drainage) treatment plant:

Construction has resumed on the expansion of this plant (from 1500 to 3000 gpm). At the time of the inspection the floor slab had been poured.

Other:

Graphitic Phyllite storage cell:

This now has a more substantial cover that has been welded to the liner to eliminate ingress and egress of water and to keep oxygen out of the pile. This facility was not visited in this inspection.

SAMPLING ACTIVITIES – None conducted.

SUMMARY

Any issues requiring action by Coeur or the state agencies?

1. Remove sediments from Pond 1 at the Comet water treatment plant to enable this pond to work as intended in the design for the plant.
2. Maintain the waterbar on the road above the upper camp to prevent storm water from running down the road.

Section D: Compliance/Recommendations

ADMINISTRATIVE VIOLATIONS

POTENTIAL WATER QUALITY VIOLATIONS

None.

Section E: Appendices

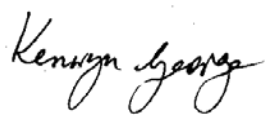
1: Photographic record.	
Signature  09/02/10 Inspector Date Division of Water	Signature only acknowledges receipt of this report. Inspection report given to: Company (if applicable): Date

PHOTO ADDENDUM – KENSINGTON TAILINGS DISPOSAL FACILITY –JANUARY 7, 2010

PHOTO 1. **TTF WTP MULTI-MEDIA AND CARBON FILTERS**

PHOTO 2. **TTF – TAILINGS DISCHARGE**

PHOTO 3. **TTF BYPASS PIPE/FLUME @ 1400 GPM**

PHOTO 4. **DAM AND SPILLWAY**

PHOTO 5. DAM WITH WATER/TAILS AGAINST FACE

PHOTO 6. TTF WATER LEVEL

PHOTO 7. PIPELINE ROAD RECLAIMED IN AVALANCHE AREA

PHOTO 8. COMET TREATMENT PLANT

PHOTO 9. SEDIMENT IN POND 1 AT THE COMET PLANT

PHOTO 10. TOUR PARTICIPANTS