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
May 5, 2011	AK-005057	N/A	Sherman Creek E. Fork Slate Creek	Low cloud, light rain ~ 40F.	Mine

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

Section B: Facility Data

Name and Location of Site/ Facility Inspected		**Entry Time**	**Permit Effective Date**
Comet (WTP) and Jualin (TTF) facilities	**Loc:** Lat: 58d 49' 58"N Long: 134d 57' 58"W **Source: NPDES permit**	08:45	September 1, 2005
		Exit Time	**Permit Expiration Date**
		13:00	August 31, 2010

On-Site Representative

Kevin Eppers, Env. Superintendent, Dave Jensen, WTP supervisor

Additional Participants:

Chad Hood, USFS
Honor Carpenter, ADEC enforcement

Responsible Official(s):

Kevin Eppers, Environmental Superintendent x Contacted	
Kevin: 523-3328	

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

Section C: Findings/Comments

FIELD INSPECTION

Transport to the site via USFS chartered Ward Air plane. Departed Juneau at 9:00 AM, arrived at the site at 9:30 AM. Departed Kensington 14:30 PM.

Man camp: Erecting temporary camp for ~ 60 people to be utilized during the construction of the underground paste plant facilities.

Dave Jensen, mill and water treatment plant superintendent accompanied us to the Comet treatment plant.

Mine

The paste plan is scheduled to be operational January 2012. There will be sufficient space for the ARD rock in 2013-2014 at the 600' elevation, which will be below the ultimate water level, away from workings, and encapsulated in paste backfill.

Comet WTP – operator Todd Thurber

The flow through the plant was at a rate of approximately 1000 gpm. A drill hole in the mine is making 300 gpm; this is to be plugged soon and the flow through the plant will be reduced.

Secondary containment at a transformer was full of water. Coeur will remove the water and look at ways to prevent this re-occurring, possibly by installing a cover to prevent rainfall from entering the containment.

Pond 1 – a new sediment dredge (Dino Six) was being commissioned by Emerald Environmental (Photo 1). This has an 8' 6" wide auger that cuts into the sediment and pumps it up to a sediment bag (Photo 2). Sediments are trapped in the bag and water flows out of the fabric (420 µm. mesh openings size) (Photo 3). To aid capture of the very fine "glacial flour" size sediment SpinPro 75 anionic floc is to be used (Photos 4 & 5). A larger bag, or more bags, will be installed in the

containment (Photo 6) later. The bags will fill during the day, then be left to gravity settle at night, then filling will re-commence the next day. This will continue for a few days until the bag is full. It is thought the pond will be cleaned of sediment within approximately 1 month. Once dewatered to around 25% moisture (no free moisture once down to 15%), it will be taken underground or incorporated into the production rock pile for final disposal.

Sediment from the road adjacent to Pond 1 was seen to have run down into the wetlands and wooded area to the east side of Pond 1. It was thought the sediment had come from snow piled beside the pond. It may also have been loss of sediment during pond cleaning operations. It was decided to leave the material in place since more harm than good would occur by trying to retrieve it. Additional BMP's were suggested to prevent this reoccurring.

Tailings Treatment Facility

Some ice was still on the pond. Logs will be removed from in front of the dam (Photo7) when the ice has melted and a floating log barrier installed to protect the membrane on the dam face. The ARD plant has been operating at about 7 to 15 gpm. The TTF treatment plant has been operating at just under 1100 gpm.

The polyethylene underlayment at the outlet of the diversion pipe (Photo 8) was ripped. This has occurred before, indicating this may be a regular reoccurrence. The polyethylene is to ensure fish do not impact rocks as they a leave the diversion pipe. The requirement for the polyethylene will be discussed with ADF&G.

Storm water. No issues. Very little rainfall so far this year. Ponds appear in good working order. Some silt fence to be e-established after the winter snow damage.

SAMPLING ACTIVITIES – None conducted.

SUMMARY

Any issues requiring action by Coeur or the state agencies?

1. BMP's required to prevent storm water filling secondary containment at the transformer and aerosol puncture drum.
2. BMP's required to contain sediment from the road area adjacent to Pond 1 at the Comet treatment plant.
3. Modifications are to be made with the polyethylene sheet at the TTF diversion pipe outfall. ADF&G discussing this with Coeur.

Section D: Compliance/Recommendations

ADMINISTRATIVE VIOLATIONS

None

POTENTIAL WATER QUALITY VIOLATIONS

None.

Section E: Appendices

1: Photographic record.

Signature	Signature only acknowledges receipt of this report. Inspection report given to:
Kenwyn George 5/19/11	
Inspector Division of Water — Date	Company (if applicable): — Date

PHOTO ADDENDUM – KENSINGTON MINE – MAY 5, 2011

PHOTO 1. POND 1 SEDIMENT DREDGE

PHOTO 2. SEDIMENT BAG

PHOTO 3. SEDIMENT BAG 420 µM OPENING

PHOTO 4. ANIONIC FLOC TEST FOR SEDIMENT CAPTURE

Photo 5. Floc formed by sediment

Photo 6. Sediment bag containment area

Photo 7. Dam at the Tailings Treatment Facility

Photo 8. Damaged polyethylene sheet at the TTF diversion pipe outfall.