## 12/1/2009

12/1/2009	Inspection Report Permit # P						IT# AK-005057			
Alaska	INSPECTION REPORT						ADEC Inspection Form Last updated (4/08)			
	Alaska Department of Environmental Conservation						Inspector:			
S V A	Division of Water									
	410 Will	oughby		Allan Nakanishi 907-269-4028						
Section A: General Data										
Inspection Date	Permit #	Borough Receiving Waters Weather Facility Type					Facility Type			
October 22, 2009	AK-005057	N/A E. Fork Slate Creek			Current ( Temp:	Conditions: 40's.			Tailings Disposal	
			Light rainfall.				Facility			
Discharges to: Surface Water Ground Water ANNOUNCED Inspection										
Section B: Facility Data										
Name and Locati	nspected	spected Loc: Lat: 58d 49' 58"N			Entry Time		Permit Eff	ective Date		
Kensington Lower Slate Lake (LSL)			LOC: Lat. 560 49 56 N			08:00 Septen		Septemb	per 1, 2005	
Dam construction and Acid Rock Drainage Long: 134d 57' 58"W										
Area adjacent to L	Area adjacent to LSL.								piration Date	
On Site Deprese	ntativa		Sour	urce: NPDES permit		12:00		August 31, 2010		
						Additional Participants: Chad Hood, USFS				
Responsible Official(s):										
Clyde Gillespie							Yes No			
							mples Taken? X			
							Photos Taken? X Analytical Results? X			
Ciyde. 525-5509 Kevi	11. 525-5526		Section	n C: Findings/Comments		Analytic		530113 :	Λ	
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 lake is being dewatered to enable dam construction. The purpose of regular DEC inspections is primarily to observe activities associated with the construction of the dam and ARD seepage collection system and water treatment plant.										
Regulatory Status/ Compliance History										
Coeur received an NOV on August 26, 2008 to resolve issues with seeps and discharges from the ARD material to LSL.										
FIELD INSPECTION										
Construction stat	us:									
Excavation of the Phase 1 dam construction is nearly completed with much of the bedrock exposed for the Phase 1 foundation of the dam. Graphitic phyllite (ARD material) had been removed from the "Big Hole" and transported to the temporary storage pad. Other unsuitable material (soils) had been removed from the dam foundation area and transported to the head of the lake. A crusher was actively crushing rock for the dam construction.										
Tailings Disposal Facility / Lower Slate Lake:										
The water in the lake remains brown and turbid. The sediment bags had been newly replaced during the inspection and water was not being pumped from the lake at the time of this inspection. Prior to the sediment bag replacement, pumping had been reduced to approximately 1000 gpm to reduce turbidity impacts to East Fork Slate Creek.										

**SAMPLING ACTIVITIES** – None conducted.

**<u>RECORDS REVIEW</u>**- None conducted.

## SUMMARY

Any issues requiring action by Coeur or the state agencies?

1. Preventing and ensuring no additional treated seep water flows directly to East Fork Slate Creek.

2. Submittal by Coeur of a plan for the disposal of treated ARD seep water to the land around and adjacent to the TDF.

Section D: Compliance/Recommendations									
ADMINISTRATIVE VIOLATIONS									
None observed during this inspection.									
POTENTIAL WATER QUALITY VIOLATIONS									
None observed during this inspection.									
Section E: Appendices									
1: Photographic record.									
Signature	Signature only acknowledges receipt of this report. Inspection report given to:								
Inspector Date	Company (if applicable): Date								
Division of Water									



Photograph 1. Snow Slide Gulch. Note: silt fence (barely visible in photo) was partially damaged from a small material slide. Fence was ordered to be repaired the same day as the inspection.



Photograph 2. Snow Slide Gulch Road - Road construction - drilling and blasting.



Photograph 4. Lower Slate Lake looking towards Upper Slate Lake.



Photograph 6. TDF dam excavation, looking towards LSL.



Photograph 8. ARD seepage collection system. Seepage is piped into a storage tank and is treated in the WTP.



Photograph 9. Second seepage collection system below the WTP. Collected seepage is pumped into the primary seepage collection system (shown in photo 8).



Photograph 11. WTP, treated water storage tank. Water is pumped from this tank to supply road watering trucks.



Photograph 13. Bypass outfall at headwater of East Fork Slate Creek.



Photograph 14. Bypass outfall at headwater of East Fork Slate Creek. Rip rap used for energy dissipation prior to entering East Fork Slate Creek.



Photograph 15. Shoreline above LSL. Possible location for temporary land application.



Photograph 16. Coffer dam at LSL and dewatering pumps. Note the reduction of water level in LSL. Turbidity in LSL believed to be caused by runoff of exposed lake sediments.



Photograph 17. Upper portion of LSL.



Photograph 18. Graphitic Phyllite temporary storage area at Site 3. Note sump in foreground.