

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
WASTEWATER DISCHARGE AUTHORIZATION PROGRAM

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INSPECTION FORM – KENSINGTON LSL DAM CONSTRUCTION

Inspector: Kenwyn George

Date: September 24, 2009

Time arrived at site: 7:00 AM

Time left the site: 4:00 PM

Weather: Overcast. Winds to around 15 knots, no rain, temp mid 50's.

Weather/rainfall if known during the prior 7 days: Rain. 1.43" 9/23.

Other agency personnel present: Sarah Samuelson, Chad Hood (USFS); Kate Kanous (ADF&G).

Coeur personnel present: Tom Henderson (VP/GM), Clyde Gillespie (Surface Ops Mgr), Kevin Eppers (Env. Superintendent), at LSL: Nick Llewellyn (Construction Project Manager).

Other Coeur personnel met or spoken to: Rick Saulnier, WTP operator (Kensington side / mine dewatering water).

Construction status:

Construction of the cofferdam has been completed (photo 1).

Pumping down LSL (three floats and an unscreened suction 2-5 feet underwater (photo 2). Depth of water at the intake estimated around 20 feet. Discharge is to a large bag placed at the head of East Fork Slate Creek (photo 3) to capture solids. The water level had dropped 3-4 feet; however with the heavy rains the day before, the water level had risen 1 foot. Pumping is at a rate of 6000 gpm.

Bypass of Upper Slate lake water operational with a discharge to the head of East Fork Slate Creek (photos 4 & 5).

The hole excavated for the dam foundation (the Big Hole) had been dewatered (photo 6).

Diorite production rock from the mill area (30,000 yd³) hauled to two temporary storage areas adjacent to the Tailings Storage Facility (TSF) road, one for rock to be crushed, the other not (photos 7 & 8).

Tailings pipeline from the mill. Work had commenced on construction of the access road where the pipeline will meet the TSF road (photo 9).

Construction activities in progress:

Hauling diorite rock from the mill site to the two temporary storage sites.

Drilling / working on creating an access/USL diversion pipe route around the east abutment of the dam (photo 10).

Placing unsuitable material to the east of the TSF.

Proposed construction activities for the following 1-2 weeks:

Plunge pool to be constructed at the head of E. Fork Slate Creek in the general vicinity of the dewatering sediment collection bag. A geologist will check to make sure it is not in an area where graphitic phyllite would be excavated. The bypass pipe and dewatering sediment bag will have to be relocated to enable the plunge pool to be constructed.

The remaining 10,000 yd³ of diorite will be hauled from the mill site to the two storage areas.

Pumping down the lake will continue.

Any changes to the proposed schedule? No

Other:

Acid generating rock on the east bank of East Fork Slate Creek: The seep water treatment plant was operating satisfactorily. The prior day the flow had been the maximum design flow of 60 gpm due to the high rainfall event that day. At the time of the visit it was operating at 55 gpm. Plant effluent is discharged to the "Big Hole" which is then pumped into the TSF.

Graphitic phyllite in the "Big Hole" (photo 6). Approximately 500-1000 yd³ of graphitic phyllite material was pushed into the Big Hole to prevent further oxidation of the pyrite and the release of metals. This material needs to be removed promptly in order to prepare the dam foundation. Coeur proposes to excavate this material for temporary storage on a lined pad in Pit 4 that was previously used for soil remediation (photo 11); this material would be covered with a polyethylene liner while stored; all contact water would drain to lined sump

(photo 12), removed and transported to the seep Water Treatment Plant. A teleconference between Gillespie, George and McGee took place in the afternoon regarding Coeur's proposal.

Storm water catchment and sediment ponds: Because of the heavy rains the water in the ponds contained fine sediments and appeared cloudy, however the BMP's, such as the hanging fabric curtains, aided in retaining fine sediment (photo 13). At the time of the visit, when there was no rainfall, there was no visible discharge from the ponds (photo 14). Ditches alongside the storage site for unsuitable/reclamation materials had considerable amounts of sediment that had built up from recent rain events. A 5-man crew was working on maintaining storm water BMP's (photos 15 & 16).

Kensington WTP: Mine dewatering water (approximately 1100 gpm) goes to a sediment pond. Sediment has built up within the pond (photo 17) and is to be removed with a vacuum truck.

Old Kensington camp site: All buildings have been removed except a couple of buildings including a workshop. Grass seed was spread and grew well on a rocky soil with little organics (photo 18).

Any issues requiring action by Coeur or the state agencies?

Storm water ditches: Sediment to be removed behind the straw bales.

Graphitic Phyllite: Coeur and ADEC to agree on the next steps to enable temporary storage of the materials from the "Big Hole".

Seep water treatment plant: ADEC to inform Coeur of actions to be taken regarding the disposal of this water.



Photo 1 – Cofferdam and dam site



Photo 2 – dewatering intake and dam west abutment



Photo 3 – TSF construction dewatering pump outlet / sediment bag



Photo 4 – Upper Slate Lake bypass intake structure



Photo 5 – Upper Slate Lake bypass discharge



Photo 6 – dewatered “Big Hole” and graphitic phyllite (near - red/gray)



Photo 7 – diorite to be crushed



Photo 8 – diorite that will not be crushed



Photo 9 – tailings pipe access road under construction



Photo 10 – construction of diversion pipe route on west abutment



Photo 11 – lined soil remediation area in Pit 4

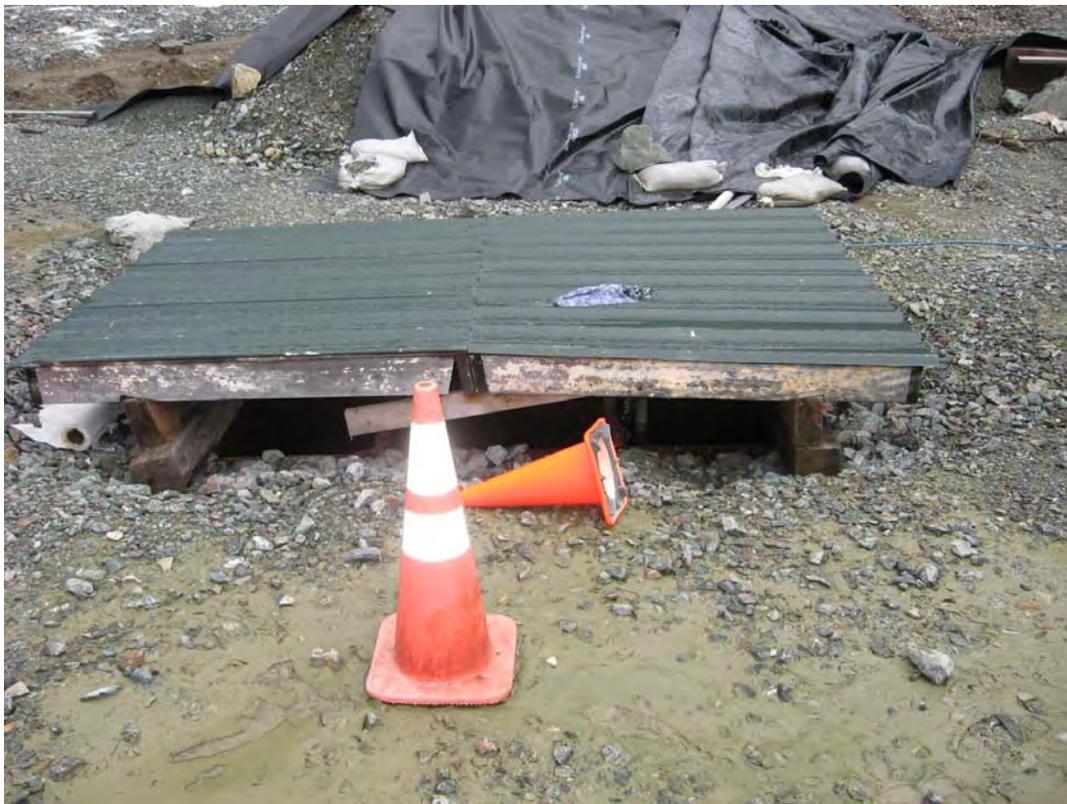


Photo 12 – lined sump for the soil remediation area in Pit 4



Photo 13 – storm water sediment pond with silt curtains



Photo 14 – outlet to storm water sediment pond – sock to catch fines

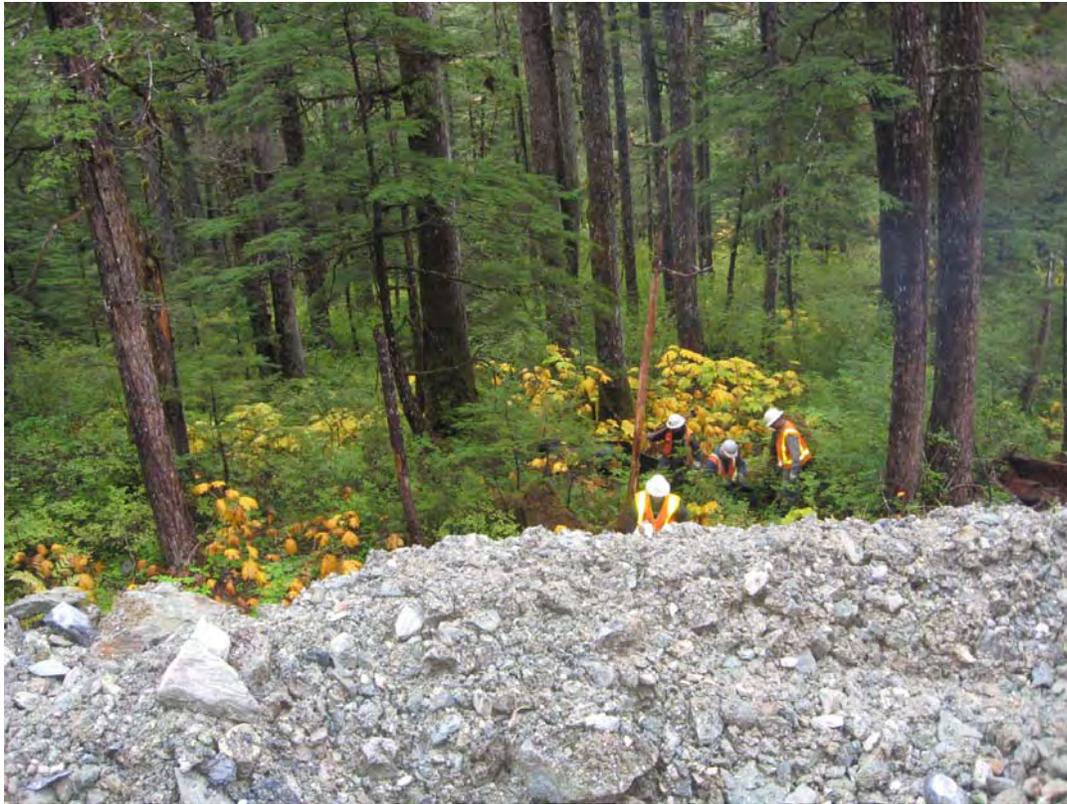


Photo 15 – storm water BMP crew working on a silt fence



Photo 16 – storm water BMP crew working on a catchment/diversion



Photo 17 – sediment in mine dewatering WTP pond



Photo 18 – seeded “old Kensington camp” area