

STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER

**SEAN PARNELL,
GOVERNOR**

410 WILLOUGHBY AVE., SUITE 303
POB 111800

JUNEAU, ALASKA 99811-1800

PHONE: (907) 465-5313 - Water

Fax: (907) 465-5274

FIELD INSPECTION REPORT COEUR ALASKA/KENSINGTON MINE

Inspection Date: June 18, 2013, 07:30 – 10:30
Report Date: June 19, 2013
Weather: Calm, overcast at first, then clear, temperature ~ 60-70F
Coeur Personnel: Kevin Eppers, Environmental Manager
Agency Personnel: ADEC: Kenwyn George, Jill Weitz (Compliance)

Purpose of visit: Inspect the work done to mitigate ARD surface seeps at the north end of the Tailings Treatment Facility

Access to site was by Coeur boat at 5 AM and from the site was by DEC chartered Ward Air plane.

See photographs after the text below for clarification of the items discussed.

Coeur had completed tasks from their June 10, 2013 remediation plan which included creating an access road to the seeps, the construction of a lined ditch containing diorite rock and a concrete sump within the ditch to aid pumping collected water to the storage pond, and to keep the water level low within the trench, installation of an infiltration trench for land application of residual seepage water, construction of a temporary storage pond for pumped seepage water (the water is taken to the graphitic phyllite treatment plant) and the construction of a lined temporary ARD rock storage pad (the rock is to be taken underground at the earliest convenience).

In addition to the remediation plan tasks Coeur had spread diorite rock over the floor of the small valley to neutralize any seepage waters that had spread out over the valley floor. They had pumped water out of the seep “pools” in most areas and were still in the process of pumping down the remaining orange-colored seep water pool in the NW corner of the valley area. Once this water is pumped down diorite rock will be placed in this area.

Other seeps not formerly noted were tested by Kevin Eppers after our visit and he found the pH values to be near neutral. He took samples for metals analyses on these seep waters (email from

Eppers after the site visit). One of the seeps will report to the neutralizing graphitic phyllite land application diorite filled trench.

Kevin stated that removal of graphitic phyllite and other rock in the suspected location of the acid producing rock was to commence the day after our site visit (i.e. June 19th). To date items on the remediation plan have been executed ahead of schedule or are very close to that schedule(e.g. commencement of rock removal may be a day behind schedule).

Because the valley floor has a clay-like consistency DEC requested that the land application infiltration trench be extended further down the valley, despite the fact that seepage rates are likely to be small and the pollutants in the seeps greatly attenuated once the graphitic phyllite rock has been removed. Extending the trench is more easily done while there is good access to the site, and is more likely to prevent re-surfacing of the seep waters out of the trench.

Action items:

1. Commence removal of the waste rock.
2. Extend the infiltration trench along the side of the valley below the waste rock pile.
3. After pumping water from the pool in the NW corner, cover this area with diorite rock.
4. Provide photographs showing progress of the trench extension and rock removal.



Photo 1 – Valley floor mid section



Photo 2 – Valley floor North area

Infiltration trench

Lined collection ditch



Photo 3 - Valley floor South area



Photo 4 - Valley floor at TTF



Photo 5 – Seepage water collection pond



Photo 6 – Temporary GP rock pad



Photo 7 – Temporary GP rock pad



Photo 8 – diorite-filled collection ditch



Photo 9 –Trench, sump and infiltration ditch.



Photo 10 – Sump in collection ditch