STATE OF ALASKA

DEPARTMENT OF ENVIRONMENTAL CONSERVATION

DIVISION OF WATER

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FIELD INSPECTION REPORT
COEUR ALASKA/KENSINGTON MINE

Inspection Date: July 11, 2013, 07:30 – 10:30
Report Date: July 18, 2013
Weather: Calm, overcast, temperature ~ 60-70F

Coeur Personnel: Kevin Eppers, Environmental Manager

Agency Personnel: Kenwyn George, Tim Pilon, Doug Buteyn, ADEC; Kyle Moselle, Dave Wilfong, Brent Martellaro, Scott Pexton, David Schade, ADNR; Gordon Willson-Naranjo, Ben Brewster, ADF&G; Ruth Hamilton-Heese, ADOL; David Schmerge, USFS; Teri Camery, CBJ.

Purpose of visit: This was the tour provided by Coeur Alaska for those attending the annual meeting presentations.

The visit comprised a tour of the mill, facilities on the Kensington/Comet side of the mountain, including the mine drainage water treatment plant and discharge to Sherman Creek, the underground paste plant and the Tailings Disposal Facility at Lower Slate Lake.

The mill processes 1700 tons/day of ore and generates a concentrate of 16-20 oz. gold per 2-ton sack.

The mine water treatment plants remove sediment with the aid of flocculants and coagulants aiding their capture in multi-media filters of garnet, sand and anthracite. The older treatment plant and new treatment plant have a combined treatment capacity of 3000 gpm. Sediment loading at the plant has been reduced by the construction of underground sumps to capture the majority of the sediment. The sediment from these sumps is currently deposited in the Comet waste rock pile, but within about 2 months a pipeline will convey the sediments, or some of the sediments, to the paste plant for disposal underground. In 2012 the plant experienced elevated ammonia levels from blasting within the mine. The ammonia levels were reduced within the mine by the use of sodium hypochlorite. In order to ensure there is no residual chlorine in the effluent sodium thiosulfate is used to eliminate the chlorine.

The underground paste plant was operating at the time of the visit.

At the Lower Slate Lake Tailings Disposal Facility a visit was made to the north end where acid generating graphitic material had been deposited. This material generated orange-colored seeps and is being removed and placed underground. At the time of the visit 4,000 cy had been removed and an estimated additional 3,000 cy were still to be removed, which was estimated to take until early August.

The lake had experienced a turnover event within the previous 2-3 weeks. The lake level is presently dropping which will be helpful when the fall rains commence.

Photo 1 – Mill

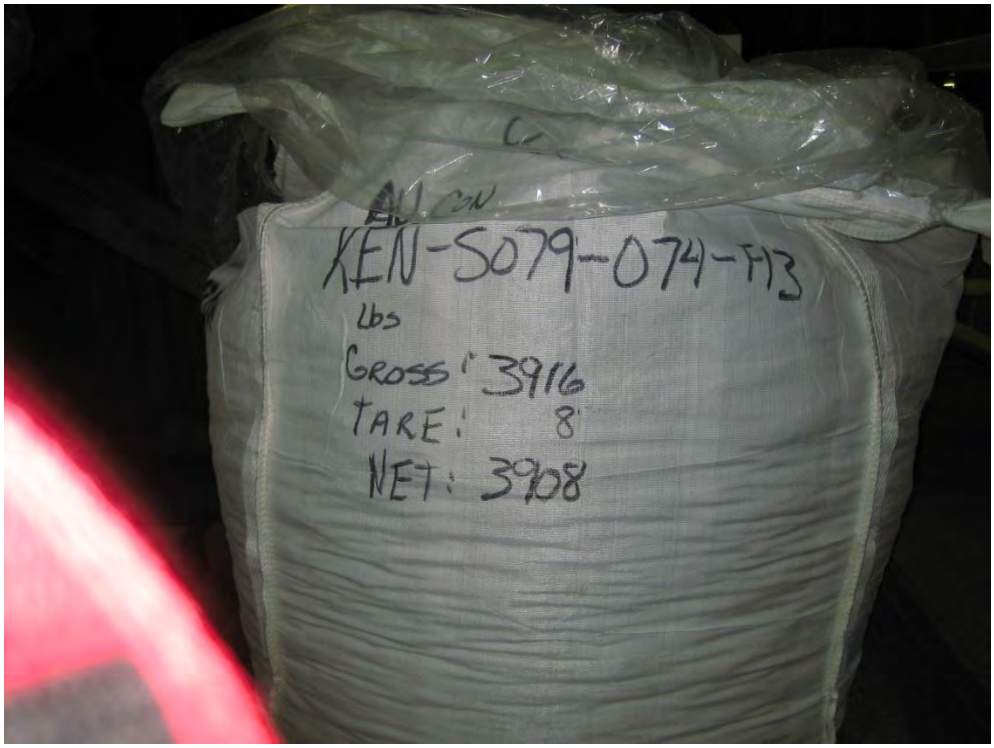

Photo 2 – Concentrate sack

Photo 3 – Paste plant vacuum dewatering

Photo 4 – Removal of graphitic phyllite / steam rising from the rock pile

Photo 5 – Seepage water collection pond

Photo 6 – Tailing Disposal Facility Treatment Plant