

# INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group 8510 Mendenhall Loop Rd Juneau, AK 99801 (907) 789-6275– office (907) 586-8808 – fax Date of Inspection: Wednesday October 18, 2017 Date of Report: Monday November 13, 2017 USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District Weather Conditions: Partly cloudy. Temperature: High 50's °F.

Exploration in accordance with operating plan	Not Applicable
Timber removal following timber sale contract	Not Applicable
BMPs for erosion control	Satisfactory
Water Quality BMPs	Satisfactory
Public safety & fire prevention	Satisfactory
Reclamation work adequate and timely	Satisfactory
Roads maintenance adequate and current	Satisfactory
Tails placement in accordance with plan	Satisfactory
Waste Rock placement in compliance	Satisfactory
Company supervision of operation	Satisfactory
Operating in a clean and orderly manner	Satisfactory

\*\*Any conditions noted as UNSATISFACTORY will require follow up action by the Mine Inspector and a written memorandum to the operator, outlining the necessary work.\*\*

### **NEW REMARKS**

Ward Air provided transportation (Cessna 185) to/from site.

Kevin Eppers (Environmental Manager, Coeur Alaska) accompanied Edward Gazzetti (Hydrogeologist, USFS) and Richard Dudek (Geologist, USFS).

This inspection included the Access roads, Comet Development Pile, Comet water treatment plant, Sherman Creek Outfall, Comet Beach Area, Kensington mill area, Pit 4, TTF area, and the Fuel Depot.

### **ACTION ITEMS:**

• No new actions items to report.

### **NOTEWORTHY ITEMS:**

• Coeur Alaska continues with the development of the Jualin adit.

### ACCESS ROADS

At the time of the inspection, sections of the access roads have developed erosional features and require maintenance (BMP Plan; (page C 8-9). The road grader was inoperable and the parts were on order for repair.

### COMET DEVELOPMENT PILE

Coeur Alaska continues to stockpile waste rock from the Kensington mine workings at the southern end of the development pile (Photos 1).





## COMET WATER TREATMENT PLANT (CWTP)

The day of the inspection, the CWTP was treating 1,638 gallons of water per minute (gpm), and the monthly average is 1,833 gpm. Pond-1 (Photo 2) was receiving mine site water and additional silt curtains were installed in the pond, which minimizes the sediment settling area. As a contingency for fuel spills, a hydrocarbon boom was installed near Pond 1's water transfer pump. Pond-2 (Photo 3) was inactive; Coeur Alaska personnel recently completed dredging of the pond, and were disassembling the dredger. Inside the CWTP, no white material was observed on the test rock (Photo 4) used for monitoring. Good housekeeping practices were observed at the CWTP (Photo 5).

## SHERMAN CREEK OUTFALL

At the time of this inspection, no white material was observed in Sherman Creek (Photo 6).

## **COMET BRIDGES/COMET BEACH AREA**

Both bridges (Photos 7-8) are being maintained by Surface operations, and the best management practices (BMPs) in place are in good condition and comply with Coeur Alaska's BMP plan Appendix 4; page C-11. In the summer of 2017, Coeur Alaska performed geotechnical drilling along the access road from the CWTP to Comet beach. The geotechnical drilling platforms and all ancillary equipment was removed, and the areas were reclaimed (Photos 9-11).

## JOHNSON CREEK BRIDGE'S

Both bridges are being maintained by Surface operations, and spill response kits are now staged near the bridge ends (Photos 12-13) as stated in Coeur Alaska's Plan of Operations (page 102). The previous response for mitigating spills near the bridges was to deploy the spill response trailer; Locating spill kits at the bridges is a better alternative of spill response.

## **KENSINGTON MILL AREA**

Contractors continue construction for the new powerhouse station that will contain four new 4-megawatt (MW) generators (Photo 14).

Good housekeeping practices were observed at the Assay laboratory, which complies with Appendix 4g BMP Plan Table 4-2.

The fire suppression water tank (Photo 16) is properly maintained. The powerhouse for the backup generator for the tanks pump was tidy and in order.

Incinerator that is used for combustible solid waste was locked (Photo 17) and being maintained by Coeur Alaska personnel.

## PIT-4

Approximately 50,000 tons of waste rock is staged at this location (Photo 18). During the site inspection, the Pug plant was not in operation (Photo 19). Coeur Alaska personnel continue to translocate pebble rock stockpiled from 4-mile to near the Pug plant.

## PIT 7

Coeur Alaska recently began replenishing a waste rock stockpile at this location using material from the Kensington development pile (Photo 20) in preparation for TTF dam construction. The stockpile's original size had been diminished when crews crushed and used the rock on access roads. The graphitic phyllite





(GP) (Photo 21) stockpiled at this location is currently being utilized at the Pug plant, when in operation, for GP/cement underground backfill. When the GP stockpile is not being utilized, the pile will be completely covered to minimize acid rock drainage (ARD) generation.

## TAILINGS TREATMENT FACILITY (TTF) AREA

During observation of the TTF, it was documented that a section of insulated steel pipe and several logs have floated to the south end of the TTF (Photos 22-24). Coeur Alaska's Environmental Manager Kevin Eppers also documented this and reported this to Surface operations for immediate corrective action. On October 19, 2017, Surface operations removed the logs and pipe.

The recorded water level for the TTF on 10/18/2017 was 701 feet (Photo 25). The water treatment plant (Photo 26) was treating 580 gpm and the monthly average is 662 gpm. The water treatment plant was tidy and in order.

Along the southeast abutment for the TTF dam, ARD (Photo 27) continued to flow into a containment sump. Coeur Alaska has contacted the contractor, who applied the original concrete layer over the abutment, to reapply concrete over the area to minimize the ARD. On November 1, 2017, concrete was reapplied to the outcrop.

### **FUEL DEPOT**

This site was tidy and in order (Photo 28).

FOLLOW UP ITEMS Ensure the logs were removed and the log barrier has been repaired. Inspection of the concrete applied on the TTF dam's southeast abutment. GP stockpiles are fully covered.

PHOTOS (Additional photos available upon request)







Photo 1. The Comet development pile.



Photo 2. The CWTP's Pond 1.



Photo 3. The CWTP's Pond 2.





Photo 4. The CWTP's test rock that is used for monitoring white material accumulation.



Photo 5. Inside the CWTP.



Photo 6. Sherman Creek Outfall 001.







Photo 7. The silt fencing staged along the abutments of the south fork Sherman Creek Bridge.



Photo 8. Silt fencing staged along the abutments of the upper Sherman Creek Bridge.



Photo 9. A reclaimed area where a geotechnical drilling pad was staged.







Photo 10. A reclaimed geotechnical drilling site.



Photo 11. A reclaimed or "plugged" borehole.



Photo 12. A portable spill kit staged near Bridge 2.







Photo 13. A portable spill kit staged near Bridge 1.



Photo 14. Contractors continue the construction of the new Powerhouse station.



Photo 15. The Assay Laboratory.





Photo 16. The firewater tank staged near the mill.



Photo 17. Coeur Alaska's solid waste incinerator.







Photo 18. Pit 4. Approximately 50,000 tons of waste is currently stockpiled in this location.



Photo 19. The Pug plant located at Pit 4.



Photo 20. Waste rock stockpiled at Pit 7.







Photo 21. GP material stockpiled at Pit 7.



Photo 22. A section of insulated steel pipe observed along the TTF dam.



Photo 23. Logs observed near the TTF's dam (southeast).







Photo 24. Logs near the southwest end of the TTF dam.



Photo 25. The tailings treatment facility (TTF).



Photo 26. The TTF water treatment plant.







Photo 27. Concrete will need to be reapplied to a section of a GP outcrop that is generating ARD.



Photo 28. The fuel depot.

Thanks to Kensington Mine for a safe visit. U.S. Forest Service Officer: /s/ Richard Dudek

