

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: Thursday August 24, 2017 Date of Report: Thursday September 7, 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	Satisfactory
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), Richard Dudek (Geologist, USFS), and David Wilfong (Alaska Department of Natural Resources (ADNR)).

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

ACTION ITEMS:

• No new action items were observed during this inspection.

NOTEWORTHY ITEMS:

- Coeur Alaska continues conducting geotechnical drilling.
- Four new 4-MegaWatt generators are now staged.

ACCESS ROADS

The access roads are in good condition and comply with Coeur Alaska's BMP Plan for Road Maintenance (BMP Plan; Table 4-4).





COMET DEVELOPMENT PILE

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

COMET WATER TREATMENT PLANT (CWTP)

At the time of the inspection, the CWTP was treating 1300 gallons of water per minute (gpm).

Coeur Alaska personnel recently installed two silt curtains in Pond 1 (Photo 2). The two silt curtains will help minimize the sediment deposition area for the pond. At Pond 2, the dredger was staged and not in operation during the site inspection (Photo 3). The dredging of one settling pond takes three to four weeks.

The test barrel for white material accumulation in treated mine site water appeared to have small amounts of a clay like substance around the edge (Photo 4). Although this did not appear to be the "filmy" white material observed during previous inspections. The test barrel should remain in place for temporal monitoring of white material in the discharge of treated mine site water.

The CWTP was tidy and in order (Appendix 4g BMP Plan; Table 4-1).

SHERMAN CREEK OUTFALL

During the site visit, no white material was observed in Sherman Creek (Outfall 001) (Photos 5-6).

COMET BRIDGES/COMET AREA

During the previous inspection on 7/27/2017, silt fencing along the bridge abutments required improvements. Since the previous inspection, Coeur Alaska Surface operations have made the necessary improvements to the silt fencing (Photos 7-8). These improvements meet the BMP requirements for slit fencing as stated in Appendix 4g BMP Plan, pages C 10-12.

Geo-technical drill pads have been constructed at this location (Photos 9-10).

KENSINGTON MILL AREA

The four new 4-megawatt (MW) generators are now staged, and construction continues for the powerhouse, 30,000-gallon day tank cover, and the refueling pad (Photo 11). These generators will supply power to the mine site.

KENSINGTON ADMINISTRATION CAMP AREA

The concrete foundation for the carpenters shop is completed (Photo 12), and contractors continue the construction for the new shop.

MUD DUMP

Coeur Alaska Surface operations installed a drain to remove water that collected underneath the edge of a graphitic phyllite (GP) stockpile's HDPE liner (Photo 13). Coeur personnel will continue to monitor the area, and if no more water reports to the edge, more than likely a hole was the cause of the water accumulation.





PIT-4

The Pug plant (Photo 14) is currently offline and in need of repairs. Once the repairs are made, Coeur Alaska will continue using the facility for making GP/cement underground backfill. Some of the GP material that is currently staged (Photo 15) near the pug plant is from Pit 7, and is located in the same place the "temporary" GP stockpile was located at Pit 4.

Approximately 30,579 tons of pebble rock has run through the x-ray sorter (Photo 16), with approximately 3,631 tons of pebble rock reclaimed and sent back to the mill.

Coeur personnel continue to relocate/stockpile x-ray reject pebble rock near the pug plant (Photos 17). Some of the reject pebble rock will be utilized as an aggregate for the GP cement mix.

PIT 7

Coeur Alaska is currently utilizing the GP material (Photo 18) from this location for GP/cement underground backfill. It is recommended that the stockpile is fully covered went not is use.

TAILINGS TREATMENT FACILITY (TTF) AREA

At the time of the inspection, the TTF's water level was 696.85 feet (Photo 19), and the water treatment plant (Photo 20) was discharging at 750 gpm.

A concrete cover was recently applied to a GP outcrop located at the east abutment of the dam (Photo 21-22). During this inspection, ARD was observed flowing from an exposed section of the outcrop and downgradient into an ARD drainage ditch. The ARD that is collected is routed to the TTF back pump, and then back into the TTF. Additional site investigations will need to made in order to determine if additional mitigations need to be implemented. Coeur Alaska Environmental operations are aware of the ARD seepage and contacted Surface operations for implementing additional mitigations at this site.

Located in the northern TTF area, the geo-technical drilling borehole "BH-006" was reclaimed or "plugged", (Photo 23) and only unusable drill pad timbers remain which will be eventually removed from this location. The borehole plugging is a concurrent reclamation requirement that is stated in the 2017 Surface Exploration Annual Work Plan's Decision Memorandum.

FUEL DEPOT

This location was tidy and in order (Photo 24).

FOLLOW UP ITEMS Sherman Creek Outfall white material. Mud Dump ARD seepage at the TTF dam's east abutment.

PHOTOS (Additional photos available upon request)







Photo 1. The Comet Development Pile.



Photo 2. The two silt curtains installed in Pond 1, and the trash screen was moved to the second inlet pipe.



Photo 3. The dredge staged in Pond 2.







Photo 4. The CWTP's test barrel used for monitoring white material accumulation in discharge/treated mine site water.



Photo 5. Sherman Creek Outfall 001 (Image 1 of 2).



Photo 6. Sherman Creek Outfall 001 (Image 2 of 2).







Photo 7. Silt fencing replacement and maintenance conducted at the abutments for the South Fork Sherman Creek Bridge (Image 1 of 2).



Photo 8. The South Fork Sherman Creek Bridge abutments silt fencing.



Photo 9. One of two constructed geotechnical drill pad located in the vicinity of Comet Beach (Image 1 or 2).







Photo 10. The second constructed geotechnical drill pad in the Comet area (Image 2 of 2).



Photo 11. The four new 4-MW generators staged at the mill area.



Photo 12. The new carpenter shop.







Photo 13. The drain installed for the Mud Dump's HDPE liner.



Photo 14. The Pug plant at Pit 4.



Photo 15. GP material from Pit 7 is stockpiled at Pit 4.







Photo 16. The x-ray sorter.



Photo 17. A pebble rock stockpile at Pit 4. This stockpile will be utilized as an aggregate for GP/cement mix.



Photo 18. The GP stockpile at Pit 7.







Photo 19. The TTF.



Photo 20. The TTF water treatment plant.



Photo 21. ARD seepage at the east abutment of the TTF dam.







Photo 22. The ARD seepage is diverted into a drainage ditch.



Photo 23. Geotechnical borehole "BH-006" reclaimed or "plugged".



Photo 24. The fuel depot.





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

