

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 February 8, 2017 Date of Report: Thursday February 23, 2017 USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District Weather Conditions: Sunny partly cloudy. Temperature: low 20'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 (De Havilland Beaver floatplane) to/from site.

Kevin Eppers (Environmental Manager, Coeur Alaska) accompanied Dave Wilfong (Alaska Department of Natural Resources (ADNR), Edward Gazzetti (Hydrogeologist, Forest Service), Richard Dudek (Geologist, Forest Service).

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

NOTEWORTHY ITEMS:

The Jualin adit is approximately 4700 feet from the portal.

ACTION ITEMS:

Sherman Creek Outfall: white material continues to precipitate in the creek. Place an oil containment boom in the TTF's water clarifier outlet.





ACCESS ROADS

The access roads are in adequate condition during this inspection. During the winter months, Coeur Alaska's Surface Operations will plow snow and place gravel on the access roads to provide safe driving conditions (Coeur Alaska's 2016 BMP plan).

KENSINGTON MILL

Coeur Alaska has submitted plans to the Forest Service, and other State of Alaska agencies, to replace their old generators with 4 new turbine generators. The current 7 generators used for suppling power to the mine, are near their 10-year operating life. The 4 new turbine generators will be located near the Mill (Photo 1). Additional structures will also be relocated near the 4 new generators.

Coeur Alaska continues to deposit waste rock at the Kensington development pile (Photo 2).

A fuel truck was refueling the 30,000 gallon "day tank" (Photo 3). The fuel depot now supplies the fuel for the mine.

Coeur Alaska personnel continue to frequently monitor the oil/water separator (Photo 4) for frozen water.

KENSINGTON WAREHOUSE

Contractors are currently constructing a cold storage warehouse for chemicals used in the water treatment plant (Photo 5). During the site inspection, the concrete floor in the storage facility was being poured.

COMET DEVELOPMENT PILE

During this inspection, this site was inactive and no haul trucks were depositing waste rock (Photo 6).

COMET WATER TREATMENT PLANT

Pond-1 (Photo 7) was receiving mine site water, and Pond-2 was mostly frozen over. The water treatment plant was treating 900 gallons of water per minute (gpm). Coeur Alaska has started weekly monitoring of the test barrel used to measure the white material in the treated mine site water (Photo 8). Coeur Alaska continues to bench test different coagulants and flocculants that will remove white material out of solution. The water treatment plant was tidy and in order (Photo 9).

A dewatering bag is torn (Photo 10) and will be replaced once dredging operations begin.

SHERMAN CREEK OUTFALL

White material continues to precipitate in the creek (Photos 11-12). Coeur Alaska is still using a dewatering bag, near the underground 445 level sump, to help remove white material prior to it entering the Comet water treatment plant. Coeur Alaska personnel are still using a clean rock to monitor white material accumulation in the creek bed.

TAILINGS TREATMENT FACILITY (TTF) AREA

The water level for the TTF was 697 feet and was mostly frozen over (Photos 13-14). The water treatment plant was treating 600 gallons of water per minute (gpm).

On December 22, 2016, a fuel spill occurred at the Mill's 30,000-gallon "day tank" and diesel fuel was observed in the tailings thickener tank. There is a possibility that fuel made its way from the mill and





into the TTF. The water reclaim barge located in the TTF, routes water back to the mill and to the water treatment plant. When diesel fuel was observed at the mill, personnel at the water treatment plant placed an oil containment boom in the outlet of the water clarifier (Photo 15). A containment boom was put in place because the plant is unable to treat water for hydrocarbons. Coeur Alaska personnel should keep an oil containment boom in the outlet until the ice cover thaws in the TTF, and the surface is thoroughly inspected for fuel.

The Seep plant was in active due to the snow and ice covering the acid rock drainage (ARD) catchments (Photos 16-17).

FUEL DEPOT

The fuel depot is online; a refueling truck was filling up to transfer fuel (Photos 18-19). Two isotainers will remain on site for the next several weeks as Coeur Alaska transitions away from using isotainers as fuel storage.

KENSINGTON PORT

The fuel header at the port (Photo 20) had no indications of a fuel spill during fuel transfer. The sump for stormwater runoff was mostly frozen over (Photos 21-22).

FOLLOW UP ITEMS

Sherman Creek Outfall white material accumulation in the creek bed. Dewatering bag replaced once dredging begins at Comet. Oil containment boom is placed in the TTF's water treatment plant's clarifier outlet.

PHOTOS (Additional photos available upon request).





Photo 1. Near the mill is the location for the new turbine generators.



Photo 2. Kensington Development pile.



Photo 3. Refueling at the 30,000 gallon Day Tank.







Photo 4. Oil/water separator located near the 30,000-gallon day tank.



Photo 5 . Kensington warehouse area construction for a cold storage facility for chemicals.



Photo 6. Comet Development pile.







Photo 7. Comet water treatment plant Pond-1.



Photo 8. A rock is suspended above the barrel for monitoring white material accumulation.



Photo 9. Comet water treatment plant.







Photo 10. Dewatering bag is torn and will be replaced when dredging begins at Comet.



Photo 11. White material in Sherman Creek image 1 of 2.



Photo 12. White material in Sherman Creek image 2 of 2.







Photo 13. TTF tailings barge.



Photo 14. TTF water reclaim barge.



Photo 15. TTF water treatment plant's clarifier outlet.







Photo 16 .TTF dam plunge pool. The ARD is routed to the Seep Plant.



Photo 17. Northern TTF ARD catchment.



Photo 18. Fuel Depot refueling truck pad.





Photo 19. Fuel transfer truck receiving fuel from the depot.



Photo 20. Kensington port marine header.



Photo 21. Stormwater runoff in the drainage ditch is mostly frozen over image 1 of 2.







Photo 22. Stormwater runoff drainage ditch image 2 of 2.

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

