

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, December 14, 2016 Date of Report: Thursday, January 5, 2017 USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District

Weather Conditions: Sunny and partly cloudy. Temperature: Low teens °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, US Forest Service), and Richard Dudek (Geologist, US Forest Service) on this inspection.

This inspection included access roads, Comet Development Pile, Comet Water Treatment Plant, Sherman Creek outfall, Comet access road Bridge (Upper Sherman Creek), TTF area, Pug plant, Fuel depot, and the Kensington Beach.

ACTION ITEMS:

- Sherman Creek outfall: White material observed at the outfall.
- Comet water treatment plant: A weekly accumulation rate should be documented for the barrel used for monitoring white material.

NOTE WORTHY ITEMS

Coeur Alaska recently moved the roadway that goes up to the portal to make the area up top more efficient and create room for vehicles.

Mine support vehicles are now carrying spill kits.

Coeur Alaska started transitioning to new spill kits underground. The new style has a twist off top that provides easier access.





ACCESS ROADS

The access roads are in adequate condition and comply with Coeur's 2016 BMP plan.

COMET DEVELOPMENT PILE

Haul trucks continue to deposit waste rock at the southern end of the pile (Photos 1).

COMET WATER TREATMENT PLANT

The Comet water treatment plant is currently treating 1,000 gallons of water per minute (gpm). Pond-1 (Photo 2) was receiving mine-site water, and Pond-2 (Photo 3) was inactive. To help monitor white material accumulation, Coeur Alaska uses a barrel (Photo 4-5) filled with treated mine-site water. This is a good approach for monitoring white material accumulation; however, an accumulation rate has not been defined. The Forest Service recommends weekly observations for the barrel's white material accumulation. This can give a timetable for underground activities such as mucking of sumps and white material reappearing. Coeur Alaska is still using a dewatering bag at the underground 445 level sump. This is an additional mitigation for capturing white material prior to the chemical treatment of mine-site water. The Comet water treatment plant was tidy and in order with all chemical products properly stored within secondary containment.

SHERMAN CREEK OUTFALL

White material was observed in Sherman Creek appeared to be decreasing. Coeur Alaska places a single clean rock (Photo 6) in the creek bed as a visual indicator for the presence of white material. Coeur Alaska continues to bench test different coagulants and flocculants for removing white material out of solution, during the water treatment process.

COMET ACCESS ROAD BRIDGES

Listed in the inspection report from 10/27/2016, sections of silt fencing at the Upper Sherman Creek Bridge was torn or pushed down. The sections of silt fencing have been replaced (Photo 7).

TTF AREA

On the day of the inspection, the TTF's water level was at 696.1 feet. Coeur Alaska recently moved their water reclaim barge (Photo 8) to the south end of the TTF, and is now depositing tailings to the north. This was due the most recent bathymetry survey conducted at the TTF. The data from the survey showed 40-foot depressions in northern sections of the TTF. The water agitator installed in the dam plunge pool was properly working (Photo 9) to prevent ice from jamming the water transfer pipe. The TTF's water treatment plant was tidy and in order (Photo 10). In the northern TTF, the Seep plant was inactive due to the freezing conditions and snow cover. Acid Rock Drainage (ARD) is not actively seeping out, and there is no need for treatment.

PUG PLANT

The Pug plant (Photo 11) is temporarily shut down for the winter months. In 2016, approximately 7,500 tons of Graphitic Phyllite (GP) was removed from Pit 4 for backfill material in the underground stopes. There is approximately 55,000 tons of GP material remaining at two mine-site locations (Pit 4 and Pit 7).

Fuel Depot

The first fuel (Photo 12) delivery is scheduled for mid-January 2017. The skiff was relocated from the Kensington Port to the Fuel Depot. In the event of a fuel spill during refueling, the fuel transfer line would block the skiff and cause a delay in the response time. The 18-foot skiff is for deploying an oil containment boom (Photo 13) in the event of a fuel spill (2016 (FRP).





Kensington Beach

The spill response kits required in the event of a fuel spill (2016 FRP) are stored in two sea vans and are staged at the Kensington Beach (Photo 14).

Photos (More images available upon request)



Photo 1. A haul truck depositing waste rock at the south end of the Comet Development pile.



Photo 2. Comet water treatment plant, Pond-1.







Photo 3. Comet water treatment plant, Pond-2.



Photo 4. The barrel used for white material monitoring.



Photo 5. The white material wiped off the side of the barrel, with no timetable as to when the white material started to adhere to the barrel.







Photo 6. In the highlighted area, is a reference rock used in Sherman Creek outfall for monitoring white material accumulation.



Photo 7. Silt fencing at the Upper Sherman Creek Bridge (Comet access roads).



Photo 8. TTF water reclaim barge







Photo 9. A water agitator was installed and is properly working in the TTF dam plunge pool.



Photo 10. Liquid and dry chemicals are staged for use at the TTF water treatment plant.



Photo 11. Pug plant at Pit 4.







Photo 12. Coeur Alaska's fuel depot.



Photo 13. 18-foot skiff is now staged at the fuel depot.



Photo 14. Kensington Beach sea vans containing spill response kits.





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

