



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, July 12, 2017
Date of Report: Thursday, July 20, 2017
USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District
Weather Conditions: Sunny. Temperature: Low 60'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 Matthew Reece (Minerals Program Manager, Forest Service), and Richard Dudek (Geologist, Forest Service).

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

NOTEWORTHY ITEMS:

Coeur Alaska will be begin their geotechnical drilling in the TTF area starting the 3rd week of July.

ACTION ITEMS:

No new action items were observed during this inspection.

ACCESS ROADS

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

COMET DEVELOPMENT PILE

Coeur Alaska continues to stockpile waste rock from the Raven drift at the southwest end of the development pile (Photos 1-2).





COMET WATER TREATMENT PLANT (CWTP)

The CWTP was treating 1450 gallons of water per minute.

The water treatment personnel recently installed a trash screen (Photo 3) at the inlet for Pond 1. The cage will capture underground foreign material that could enter the pond and potentially block the water pump. Pond 2 (Photo 4) was receiving backwash from the treatment plant. Coeur Alaska will begin dredging Pond 2 in the next couple of weeks. The dredging for settling ponds 1 and 2 typically takes three to four weeks.

Below the discharge turbidity meter for treated mine site water, a small amount of white material was observed on the test rock (Photo 5). Coeur Alaska has submitted a proposal to the Alaska Department of Environmental Conservation (ADEC) to use Calcium Chloride (CaCl_2) as a coagulant to help remove the white material out of solution.

SHERMAN CREEK OUTFALL

White material was not observed in Sherman Creek during this inspection (Photo 6).

KENSINGTON MILL AREA

On July 8 2017, fifty-five gallons of diesel fuel leaked inside the housing unit for generator number seven (Photos 7-8) with approximately five gallons of diesel fuel reporting to land. The leak was caused by a faulty fuel filter's gasket, which failed and allowed fuel to be leaked inside the housing unit. Coeur Alaska personnel heard an alarm due to generator seven not receiving any fuel. Coeur Alaska personnel observed fuel flowing from the filter, and immediately placed hydrocarbon containment booms and absorbent pads on the concrete pad inside and outside of the generator. Contaminated gravels and soils (Photo 8) were removed and shipped off site to Clean Harbors for disposal. The spill was reported to ADEC due to the quantity of fifty-five gallons spilled inside the housing unit and five gallons reporting to land (2016 Coeur Alaska Plan of Operations pages 104-105). As a precaution, absorbent pads and hydrocarbon containment booms remain in place until the area can be thoroughly inspected for any residual fuel.

Contractors have begun excavation for the four new generator's concrete foundation pad (Photo 9). The current seven generators are near the end of their ten-year operating life.

MUD DUMP

During the previous inspection on 6/8/2017, reddish water was observed on the surface near the edge of an HDPE liner used to contain a Graphitic Phyllite (GP) stockpile. During this inspection, no leaks were observed in the liner. However, there is water under the liner, which should be pumped out. A minor spill may have occurred during the last pumping of water from the liner, which may be why reddish water was observed on the ground (Photo 10). The HDPE liner for the GP stockpile has two water collection drains that collect water above and below the liner.

The 8,000 yd^3 of reclamation soil stockpiled at this location was hand seeded and grass is germinating (Photo 11).





PIT-4

The Pug plant (Photo 12) is currently offline due to mechanical problems. The parts have been ordered and once the repairs are made, the Pug plant and all other ancillary equipment will resume operations for the remainder of the summer season.

To prevent rocks greater than 5 inches in diameter from getting stuck in the Pug plant’s grizzly, Coeur Alaska is using a screen-deck shaker plant (Photo 13) to separate large rocks (greater than 5 inches in diameter) from smaller rocks (five inches in diameter or less). The smaller rocks are loaded into the Pug plants hopper with the larger rocks being stockpiled next to the rock shaker and later incorporated directly into the trucks of cement paste for disposal underground. Since the last inspection on 6/8/2017, the volume for a GP stockpile (Photo 14), located behind the Pug plant, has been reduced. The GP material is being encapsulated in cement at the Pug plant. When the GP material is not being utilized as an aggregate for cement backfill, the temporary liner should completely cover the remaining material to prevent oxidation/acid generation.

TAILINGS TREATMENT FACILITY (TTF) AREA

The water level for the TTF on 7/12/2017 was 697.9 feet. The TTF water treatment plant was treating 1370 gallons of water per minute. The water treatment plant was tidy and in order (Photo 15).

Coeur Alaska will begin geotechnical drilling (Photos 16-18) in the TTF area beginning in mid-July.

PIT-7

The GP stockpile is fully covered, which will prevent oxidation due to exposure with the atmosphere.

The gravel that is being loaded into a haul truck in Photo 19 will be utilized as the subbase for the construction of the four new generator’s concrete foundation pad.

FUEL DEPOT

The fuel depot was well kept and orderly (Photos 20-21).

FOLLOW UP ITEMS

- Generator seven**
- Pug plant**
- Sherman Creek Outfall**
- Geo-tech drilling pads**
- Mud dump**

PHOTOS (Additional photos available upon request).





Photo 1 Comet Development Pile.



Photo 2. Comet Development Pile's southwest toe.



Photo 3. Comet Water Treatment Plant's Pond 1.



Photo 4. Comet Water Treatment Plant's Pond 2.



Photo 5. The test rock and metal screen used for white material accumulation.



Photo 6. Sherman Creek Outfall.



Photo 7. Generator 7 is where 5 gallons of diesel fuel leaked out onto the ground (Image 1 of 2).



Photo 8. The area circled in red is where the 5 gallons of fuel reported to land.



Photo 9. Contractors have begun construction of the foundation pad for the four generators at the mill.



Photo 10. The reddish-stained ground may be a result of ARD water spillage.



Photo 11. 8,000 yd³ of reclamation soil was hand seeded at the Mud dump.



Photo 12. Pug plant at Pit 4.



Photo 13. The rock shaker at Pit 4.



Photo 14. The GP stockpile that is currently being used for aggregate at the Pug plant.



Photo 15. TTF water treatment plant.



Photo 16. A generator for a geotechnical drilling pad is staged in the southern TTF area.



Photo 17. Water hoses for the geo-tech drilling pad located in the southern TTF area.



Photo 18. Staged lumber for a geotechnical drilling pad in the northern TTF area.



Photo 19. Gravel from Pit 7 is being utilized as a subbase for construction at the Mill.



Photo 20. Fuel depot (Image 1 of 2).



Photo 21. Fuel depot (Image 2 of 2).



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

