

#### 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 November 15, 2018 Date of Report: Wednesday November 28, 2018 USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District

Weather Conditions: Cloudy with some rain. Temperature: Mid 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

<sup>\*\*</sup>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 a Cessna 180 floatplane to and a Cessna 206 from site.

Kevin Eppers (Sr. Environmental Engineer, Coeur Alaska) accompanied Richard Dudek (Geologist, USFS) Wesley Sherlock (Geologist, USFS).

This inspection included the Access roads, Comet Development Pile, Comet Water Treatment Plant, Sherman Creek Outfall, Kensington mill area, Pit 4, and the TTF area.

#### **ACTION ITEMS:**

 A stainless steel tank containing used oil should be relocated to a safer location within the TTF laydown yard (Photo 1).

NOTEWORTHY ITEMS: Due to the silt curtains ineffectiveness for sediment control, Coeur Alaska will no longer use them inside the Comet settling ponds.

### **ACCESS ROADS**

The access roads were in good condition (2016 BMP Plan; Table 4-4). During the inspection, Coeur Alaska Surface Operations were grading the access roads.

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#### **COMET DEVELOPMENT PILE**

Currently, waste rock from the Raven drift is deposited at this location (Photos 2).

## **COMET WATER TREATMENT PLANT (CWTP)**

On 11/15/2018, the CWTP was treating 1400 gallons per minute (gpm). Pond-1 (Photo 3) was receiving mine site water along with recirculation water from Pond-2. Pond-2 (Photo 4) was receiving backwash from the CWTP.

No white material was observed on the test rocks used for monitoring the formation of white material from treated mine site water (Photo 5).

### **SHERMAN CREEK OUTFALL**

No white material was observed in Sherman Creek Outfall 001 (Photo 6). Two faulty air actuated valves from the water treatment plant caused red garnets to escape the filters and deposit in the creek bed. (Photo 7). The valves have been fixed to prevent garnets from flowing out and depositing into the creek bed.

### **KENSINGTON MILL AREA**

Coeur Alaska plans to bring the new generators (Photo 8) online in January 2019. The old generator site will serve as the new location for the pug plant (Photo 9).

Good housekeeping practices were observed inside the assay laboratory (Photo 10) (Appendix 4g BMP Plan; Table 4-1).

# PIT 4

To date, a private construction company has shipped approximately 73,000 tons of waste rock off site.

The Pug plant (Photo 11) was in operation at the time of the inspection. Coeur Alaska recently added heat traces to the water and concrete lines for the pug plant. Coeur Alaska plans to operate the pug plant until weather related driving conditions require haul trucks to have tire chains. When not in use, the graphitic phyllite (GP) feedstock pile should remain covered to reduce the oxidation potential for acid generation (Photo 12).

# **TAILINGS TREATMENT FACILITY (TTF) AREA**

The TTF's recorded water level on 11/15/2018 was 705 feet (Photo 13).

Contractors were in the final stages of the stage 3 dam construction liner installation (Photo 14). Once the liner installation is completed, contractors will cover the liner with bedding material.

The second 28 inch diversion pipeline is not fully connected (Photo 15). Coeur Alaska plans to have the pipeline fully connected this spring.

In the spring of 2019, contractors plan to install the valve for the dam's stage 3 low-level outlet. The valve is currently on order from the manufacturer.

The TTF water treatment plant was treating 610-gpm including 210-gpm from the reverse osmosis system. At the time of the inspection, the water treatment plant was tidy and in order (Photo 16).

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In the northern TTF staging area, the GP material has been mostly removed (Photo 17). The material is hauled over to Pit 4's pug plant, where it is processed for underground disposal along with material from other GP stockpiles.

## **FOLLOW UP ITEMS**

Inspect the access roads.
Inspect the Comet water treatment plant and settling ponds.
Inspect for white material in Sherman Creek.
Inspect the TTF dam and ancillary equipment.

**PHOTOS** (Additional photos available upon request)



Photo 1. Steel container for used oil.



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Photo 2. Comet Development pile.



Photo 3. Pond-1.



Photo 4. Pond-2.

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Photo 5. CWTP test rock.



Photo 6. Sherman Creek (Outfall 001)



Photo 7. Red garnets in the creek bed (Sherman Creek).

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Photo 8. One of four new 4.0-megawatt generators.



Photo 9. The old generator/new pug plant site.



Photo 10. Assay laboratory.

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Photo 11. Pug Plant.



Photo 12. Pug plant's GP feedstock pile.

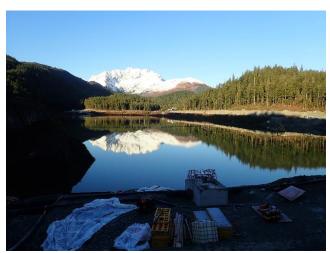


Photo 13. Tailings treatment facility (TTF).

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Photo 14. Stage 3 dam liner installation.



Photo 15. Upper Slate Lake diversion pipeline will have two 28-inch pipes.

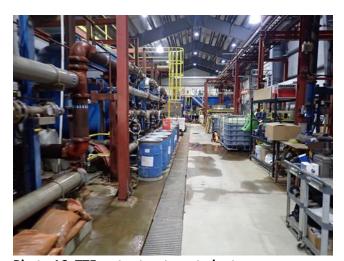


Photo 16. TTF water treatment plant.

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Photo 17. GP material staged in the northern TTF area.

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

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