INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group
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Date of Inspection: Thursday May 6, 2021
Date of Report: Friday, May 14, 2021
USDA Forest Service Inspector: Casey Loofbourrow

Ranger District: Juneau Ranger District
Weather Conditions: Cloudy with occasional light rain. Temperature: Mid 40'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.

Coeur Alaska provided their crew boat for transportation to and from the mine.

Kevin Eppers (Environmental Manager, Coeur Alaska) accompanied Casey Loofbourrow (geologist), Pat Dryer (hydrologist), and Richard Dudek (geologist) of the USFS Tongass Minerals Group.

Sites visited this inspection included the access roads, Comet Development Pile, Comet Water Treatment Plant (CWTP), Sherman Creek Outfall 001, Underground Paste Plant, Assay Lab, Mill, Pit 4 Slate Cove Marine Terminal, the Fuel Depot, Pit 1, and the Tailings Treatment Facility (TTF) area.

ACTION ITEMS:

- **A culvert at the port facility stormwater collection ditch requires cleaning.**
- **A blocked drainage ditch on the spur road should be monitored for functionality once snow has melted.**

ACCESS ROADS

During the inspection, the access roads were in adequate condition (2016 BMP Plan; Table 4-4). Approximately 0.75 miles north of the TTF a contact water collection ditch along the uphill side of the road was obstructed by deep snow which allowed the discharge of turbid water into a small area of undisturbed ground adjacent to the ditch (Photo 1). The water appeared to be contained within a natural depression and was not mobile to other areas. This is expected to resolve as snow continues to melt but should be monitored to ensure the structure functions as intended during normal flows.

COMET DEVELOPMENT PILE

This site was inactive during the winter months. The slopes appear stable (Photos 2-3). A landslide occurred during heavy rain on December 2, 2020 which impacted the Comet Road (Photos 4-5, courtesy of Coeur Alaska). The road has been cleared of debris and the landslide scarp is visible above the site (Photo 6).

COMET WATER TREATMENT PLANT (CWTP)
On 05/06/2021, the CWTP was treating 1,743 gallons per minute (gpm). Ponds 1 and 2 were in good condition and functioning as designed. Water being discharged to the Sherman Creek Outfall measured 8.16 pH, 9.1 degrees Celsius (Photo 7), and .446 nephelometric turbidity units (NTU) (Photo 8). The mobile water treatment plant is still on site but is not yet operational from winter cessation (Photo 9).

White material was observed on the test rocks used for monitoring its accumulation in the CWTP (Photo 10).

SHERMAN CREEK OUTFALL
White material was observed on the substrate in Sherman Creek in close proximity to the hoses actively discharging treated water (Photos 11-12). In the underground workings Z-Clear 129 was observed being added to seepage water at the lowermost sump (Photo 13). This coagulant is used in an attempt to remove flocculants and polymers used as underground drill additives that Coeur suspects contribute to the white material observed at the Sherman Creek Outfall.

PASTE PLANT AND MILL
These sites were visited for informational purposes but are located on private lands and outside the scope of this inspection report.

ASSAY LABORATORY
Laboratory was neat and orderly. USFS personnel were given a tour of the facility and its processes by the lab manager.

PIT 4 AND PUG PLANT
The pug plant is not currently operational and is being de-winterized (Photo 14). When functional, the pug plant is used to mix ARD-generating graphitic phyllite with concrete in preparation for underground backfill and storage to prevent impacts to surface resources.

Graphitic phyllite is stored at this location and is covered and lined underneath to manage contact water (Photo 15). The waste rock stockpile at this location appeared stable (Photo 16).

MARINE PORT FACILITY AND FUEL DEPOT
On April 18, 2021 a diesel spill at the port facility during a fuel transfer by Petro Marine Services resulted in approximately 50 gallons of diesel unintentionally released into the environment including approximately 2 gallons that entered the ocean in Slate Cove. Fuel spilled into in the water was contained and removed with absorbent fuel booms. The contaminated soil has been removed and stockpiled in Pit 1 (Photo 17). Coeur Alaska is currently awaiting test results to determine whether additional soil must be removed. Coeur Alaska requested additional containers to dispose of the excavated materials and some of the excavated soil is temporally stockpiled at Pit 1 (Photo 18). This material will be loaded into containers for disposal when containers arrive onsite. This spill was previously reported to regulatory agencies by Coeur Alaska.

An action item from the previous inspection on February 26, 2020 was to fix a problem with the settling ponds at the port facility that was allowing turbid water to enter the ocean. This action item has been resolved and clear water was observed flowing in the lower settling pond system (Photo 19). However, a small culvert is nearly blocked with accumulated sediment and should be cleaned out (Photo 20).

TAILINGS TREATMENT FACILITY (TTF) AREA
The TTF is partially frozen over (Photo 21). The TTF's recorded water level on 5/6/2021 was 716.2 feet. Tailings placement was occurring in the northwest area of the TTF.

The TTF dam spillway was functioning as intended and free of debris (Photo 22). The acid rock drainage (ARD) diversion sill appeared to be allowing only minor seepage of ARD into the dam spillway (Photos 23-24).

The water treatment plant was discharging approximately 909 gpm to the effluent spillway. This water measured 7.73 pH and .273 NTU (incoming water measured 6.5 NTU). The ARD treatment facility effluent measured 6.56 pH. The discharge from the Upper Slate Lake (USL) bypass was 5687 gpm.

Good housekeeping practices were observed at the TTF water treatment plant (Appendix 4g BMP plan; Table 4-1)).

FOLLOW UP ITEMS:
Inspect the access road bridges and abutments.
Inspect growth media stockpile.
Inspect access road settling ponds after snow has melted.

PHOTOS All photos taken May 6, 2021 unless otherwise indicated. Additional photos available upon request.

Photo 1. Overflow on TTF Spur Road.

Photo 2. Comet Development Pile looking south.

Photo 3. Comet Development Pile looking north.

Photo 4. Landslide scarp above Comet Road on December 2, 2020. Image courtesy of Coeur Alaska.

Photo 5. Landslide covering Comet Road on December 2, 2020. Image courtesy of Coeur Alaska.

Photo 6. Landslide scarp above Comet Road.

Photo 7. Measured temperature and pH of water being discharged to Sherman Creek.

Photo 8. Measured turbidity of water being discharged to Sherman Creek.

Photo 9. Mobile wastewater treatment plant.

Photo 1. White material test apparatus.

Photo 2. Sherman Creek Outfall and white material.

Photo 3. Sherman Creek Outfall and white material.

Photo 4. Z-Clear 129 being added to mine water at sump.

Photo 5. The pug plant.

Photo 6. Graphitic Phyllite stored at Pit 4.

Photo 7. Pit 4 waste rock stockpile.

Photo 17. Excavated soil at site of fuel spill.

Photo 18. Stockpiled fuel-contaminated soil.

Photo 19. Settling pond system with clear running water.

Photo 20. Nearly blocked culvert at port facility settling ponds.

Photo 21. TTF looking north from dam.

Photo 22. TTF dam spillway.

Photo 23. ARD seepage into spillway.

Photo 24. ARD seepage into spillway.

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