

INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group 8510 Mendenhall Loop Rd Juneau, AK 99801 (907) 789-6276– office (907) 586-8808 – fax Date of Inspection: Wednesday, November 16, 2022 Date of Report: December 15, 2022 USDA Forest Service Inspector: Pat Dryer

Ranger District: Juneau Ranger District Weather Conditions: Mostly Cloudy. Temperature: mid 50's °F.

Exploration in accordance with operating plan	Not Applicable
Timber removal following timber sale contract	Satisfactory
BMPs for erosion control	Satisfactory
Water Quality BMPs	Satisfactory
Public safety & fire prevention	Satisfactory
Reclamation work adequate and timely	Satisfactory
Road 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.

Any conditions noted as Requires Action will require attention from the operator and suggestions for necessary work are listed below

Transportation to and from the mine was provided by the Coeur Alaska crew boat.

Kevin Eppers (Coeur Environmental Manager) accompanied Pat Dryer (Hydrologist) of the USFS Tongass Minerals Group.

Sites visited during the inspection included: Access roads, Comet waste rock storage area, Comet Water Treatment Plant (CWTP), Sherman Creek Outfall 001, Wolf Ponds, Pit 4, Fuel Depot, Port Facility, Tailings Treatment Facility (TTF) and access road.

STATUS OF PENDING ACTION ITEMS FROM PREVIOUS INSPECTIONS:

ID	Action Item	Status
188-1	Kensington access road guard rails are damaged and need to be replaced.	Completed. Coeur has made the necessary repairs.
191-1	Staining on the TTF dam lower access road will be investigated to determine source and if additional mitigation measures are necessary.	Pending. Coeur has constructed catchment sumps and taken water quality samples. Preliminary results have been shared with the USFS, but further sampling is planned to determine the source.



NEW ACTION ITEMS:

NEW ACTION ITEM 194-1: Graphitic phyllite stockpiled at Pit 4 was not covered as required to prevent water infiltration into the stockpile (Photo 14).

NEW ACTION ITEM 194-2: Investigate source of surface discharge near abandoned borehole in Pit 4. Further investigation is necessary to determine if groundwater was intercepted during surface drilling operations and if borehole was properly abandoned (Photo 15).

NEW ACTION ITEM 194-3: Large woody debris was observed along the face of the TTF dam. Large woody debris should be removed from the face of the dam to prevent damage to the liner (Photo 18).

ACCESS ROADS

Access roads appeared in good condition with stormwater BMP's functioning and in good repair.

COMET DEVELOPMENT PILE

The slopes of the Comet waste rock storage area appeared stable (Photo 1). There has been no recent waste rock placement at this site.

Timber clearing and grubbing is complete for this season in the area adjacent to Pond 1. (Photos 2-3).

COMET WATER TREATMENT PLANT (CWTP)

The CWTP treatment rate was approximately 2466 gpm. A dredge was located in Pond 1 (Photo 4) and was not operating at the time of the inspection. Pond 2 was receiving waters pumped from Pond 1 (Photo 5).

White material was not observed on the test rocks used for monitoring in the CWTP (Photo 6).

SHERMAN CREEK OUTFALL

No white material was observed at Outfall 001, where treated water from the CWTP is discharged (Photo 7).

SHERMAN CREEK BRIDGE

Stream bank erosion has occurred during recent heavy rainfall and elevated stream discharge near the Sherman Creek Bridge abutments. Coeur Alaska submitted a request to remove the historic log stringer bridge that remains in the stream and is likely causing the erosion (Photos 8 and 9). This work was recently authorized by the USFS and subsequent inspection reports will document the removal.

WOLF PONDS

A fuel spill occurred on private lands prior to the inspection and was reported to ADEC. During the inspection we observed the cleanup efforts at the Wolf ponds. Absorbent pads, booms, and a vac trailer were being used to recover the spilled fuel (Photos 10-12). All recovered materials were being placed into isotainers or covered containment at Pit 4 (Photo 13) prior to being shipped offsite for disposal.

PIT 4/PUG PLANT

The Pug Plant has been decommissioned for the winter season.



NEW ACTION ITEM 194-1: Graphitic phyllite stockpiled at Pit 4 was not covered as required to prevent water infiltration into the stockpile (Photo 14).

Diamond core exploration drilling was conducted in the spring of 2022 near Pit 4. The borehole appeared to have intercepted groundwater which was discharging to the surface in previous inspection reports (Report 189). Action item 189-3 was to ensure Coeur reclaimed and plugged the bore hole in compliance with 18 AAC 80, and the "Alaska Best Management Practices, for Maintaining or Decommissioning Water Wells and Boreholes", which includes measures specific to holes that encounter artesian flow. This action item was marked as resolved in July 2022 after the borehole was decommissioning Water Wells and Boreholes. However, during this inspection a spring/surface discharge near the abandoned drill casing was observed (Photos 15-16).

NEW ACTION ITEM 194-2: Investigate source of surface discharge near abandoned borehole in Pit 4. Further investigation is necessary to determine if groundwater was intercepted during surface drilling operations and if borehole was properly abandoned.

PIT 7

Coeur has finished stockpiling material at Pit 7 for this season. Coeur intends to use this material as fill for POA1 Stage 4 back dam construction.

TAILINGS TREATMENT FACILITY (TTF)

The water level for the TTF (Photo 17) was 720.6 feet.

NEW ACTION ITEM 194-3: Large woody debris was observed along the face of the dam. Large woody debris should be removed from the face of the dam to prevent damage to the liner (Photo 18).

The TTF dam spillway appeared in good condition and there was no visual indication of ARD seepage reaching the spillway (Photo 19).

PENDING ACTION ITEM 191-1: Adjacent to and running across the lower TTF dam access road, reddish staining from a seepage is present. Due to the presence of ARD-generating graphitic phyllite, groundwater in this vicinity is captured in wells and transported to the ARD seepage treatment plant. Additionally, Coeur has constructed a containment sump (Photo 20) and collected water quality samples. Preliminary field sampling results indicated elevated metals and further sampling will be conducted. A hardline hose was placed from the ARD sump to this temporary sump to convey water collected for treatment until more sampling can be completed. This location will be monitored, and water quality testing results summarized, in a subsequent inspection report.

The graphitic phyllite test barrels were moved to higher ground to prevent being submerged (Photo 21).

Good housekeeping practices were observed inside the TTF water treatment plant (Photo 22, Appendix 4g BMP plan; Table 4-1). The TTF water treatment plant was treating 720 gpm, and the water discharged to Outfall 002 measured 7.13 pH and .707 NTU.

FUEL DEPOT

The fuel depot appeared in good condition with functional BMP's and no sheening observed inside containment (Photo 23).



PORT FACILITY

The port facility appeared in good condition with stormwater BMP's functioning and in good repair (Photo 24).

PHOTOS. All photos taken on day of inspection. Additional photos available upon request.



Photo 1. Comet waste rock storage area.





Photo 2. View of the area adjacent to Pond 1 that was cleared and grubbed.



Photo 3. View of the area adjacent to Pond 1 that was cleared and grubbed.





Photo 4. Comet Water Treatment Plant (CWTP) Pond 1.



Photo 5. CWTP Pond 2.





Photo 6. CWTP white material test rocks.



Photo 7. Sherman Creek Outfall 001.





Photo 8. Bank erosion near the Sherman Creek bridge abutment caused by a historic log stringer bridge in Sherman Creek. Coeur Alaska has requested to remove the bridge to prevent further erosion.



Photo 9. Additional stream bank erosion near the Sherman Creek bridge abutment caused by a historic log stringer bridge in Sherman Creek.





Photo 10. Absorbent pads placed in the Wolf ponds.



Photo 11. Absorbent pads placed in the Wolf ponds.





Photo 12. Absorbent pads and boom placed in the Wolf ponds.



Photo 13. Materials excavated from Wolf ponds that will be shipped offsite for treatment.





Photo 14. Graphitic phyllite stockpile at Pit 4 that requires cover.



Photo 15. Surface discharge near the abandoned drill casing in Pit 4.





Photo 16. Surface discharge near the abandoned drill casing in Pit 4.



Photo 17. TTF looking north





Photo 18. TTF dam face with large woody debris present.



Photo 19. TTF dam spillway.





Photo 20. Seepage near the TTF dam access road and constructed containment sump.



Photo 21. The graphitic phyllite test barrels were moved to higher ground to prevent from being submerged.





Photo 22. TTF water treatment plant interior.



Photo 24. Fuel Depot





Photo 23. Port facility stormwater pond.

Thanks to the Kensington Mine for a safe visit. U.S. Forest Service: /s/ Pat Dryer