



INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group
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Date of Inspection: Wednesday, August 24, 2022
Date of Report: September 7, 2022
USDA Forest Service Inspector: Casey Loofbourrow

Ranger District: Juneau Ranger District
Weather Conditions: Sunny. Temperature: mid 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
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 the mine was provided by Alaska Seaplanes, and the return travel was on the Coeur Alaska crew boat.

Pete Strow (Coeur Senior Environmental Coordinator) accompanied Casey Loofbourrow (Geologist) 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, Pit 4, Pit 7, the Mud Dump, and the 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.	Pending. Coeur is awaiting materials to make the repairs.

NEW ACTION ITEMS:

NEW ACTION ITEM 191-1: Staining on the TTF dam lower access road will be investigated to determine source and if additional mitigation measures are necessary.

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.

The Plan of Operations Amendment 1 (POA1) Comet waste rock expansion area was recently inventoried by USFS timber specialists to develop the timber sale contract which must be settled before clearing may begin.

COMET WATER TREATMENT PLANT (CWTP)

The CWTP treatment rate was approximately 2600 gpm. A dredge was located in Pond 1 (Photo 2), and Pond 2 had been largely emptied of water to assess the sediment quantity and the potential need for additional dredging (Photo 3).

White material was not observed on the test rocks used for monitoring in the CWTP (Photo 4).

SHERMAN CREEK OUTFALL

No white material was observed at Outfall 001, where treated water from the CWTP is discharged (Photo 5).

COMET BEACH

The core storage area at the Comet Beach was in orderly condition (Photo 6).

A disused water intake structure present within the stream channel of an unnamed fish-bearing creek by the historic cabin near the south extent of the Comet Beach facilities was documented (Photos 7-9). This structure has been recommended for removal by USFS aquatics staff to improve fish passage. Mr. Strow estimates the structure is no more than 30 years old. A USFS archaeologist will determine whether the structure may be removed.

MUD DUMP

The surface equipment shop has been relocated from Pit 4 to the north end of the Mud Dump (Photo 10).

PIT 4/PUG PLANT

The Pug Plant was operational and processing graphitic phyllite stockpiled in Pit 4 (Photo 11) for underground backfill.

PIT 7

Coeur continues to transport and store waste rock at Pit 7 (Photo 12). Coeur intends to use this material as fill for POA1 Stage 4 dam construction.

STORMWATER RETENTION PONDS (CLASS III DAMS)

A recent inspection by consulting engineers recommended removal of trees within the slopes of stormwater retention ponds classified as class III dams by the State of Alaska Dam Safety Program, to ensure the stability of these facilities. These include the Camp Ponds, Wolf Ponds, and the Mud Dump Ponds (Photos 13-15). These trees are within permitted disturbance boundaries, so their removal is allowable as a regular maintenance activity.



TAILINGS TREATMENT FACILITY (TTF)

The water level for the TTF (Photo 16) was 715.4 feet.

The TTF dam spillway appeared in good condition and there was no visual indication of ARD seepage reaching the spillway (Photo 17). The face of the dam was free of debris (Photo 18).

NEW ACTION ITEM 191-1: Adjacent to and running across the lower TTF dam access road, reddish staining from a seepage is present. The source appears to be the area above the Upper Slate Lake diversion outlet (Photo 19). 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. On September 7, 2022, Coeur provided a photograph of containment they have constructed to capture this seep (Photo 20), from which surface water is routed to the seepage treatment plant. Additionally, Coeur has collected water quality samples for which results have not yet been received. Preliminary field sampling indicates the seep may not be ARD, as the pH is above 7.0. This location will be monitored, and water quality testing results summarized, in a subsequent inspection report.

The site of a previously documented ARD seep along the east TTF dam abutment appears to have been suitably addressed by covering with shotcrete (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 815 gpm, and the water discharged to Outfall 002 measured 7.44 pH and .239 NTU.

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



Photo 1. Comet waste rock storage area.



Photo 2. Comet Water Treatment Plant (CWTP) Pond 1.



Photo 3. CWTP Pond 2.



Photo 4. CWTP white material test rocks.



Photo 5. Sherman Creek Outfall 001.



Photo 6. Comet Beach core storage area.



Photo 7. Disused water intake structure on unnamed stream near Comet Beach.



Photo 8. Disused water intake structure on unnamed stream near Comet Beach.



Photo 9. Disused water intake structure on unnamed stream near Comet Beach.



Photo 10. Surface equipment shop relocated from Pit 4 to the Mud Dump.



Photo 11. Graphitic phyllite stockpile at Pit 4.



Photo 12. Looking from top of waste rock stockpiled at Pit 7 down to the TTF access road.



Photo 13. Trees to be removed from Class III dam stormwater retention ponds.



Photo 14. Trees to be removed from Class III dam stormwater retention ponds.

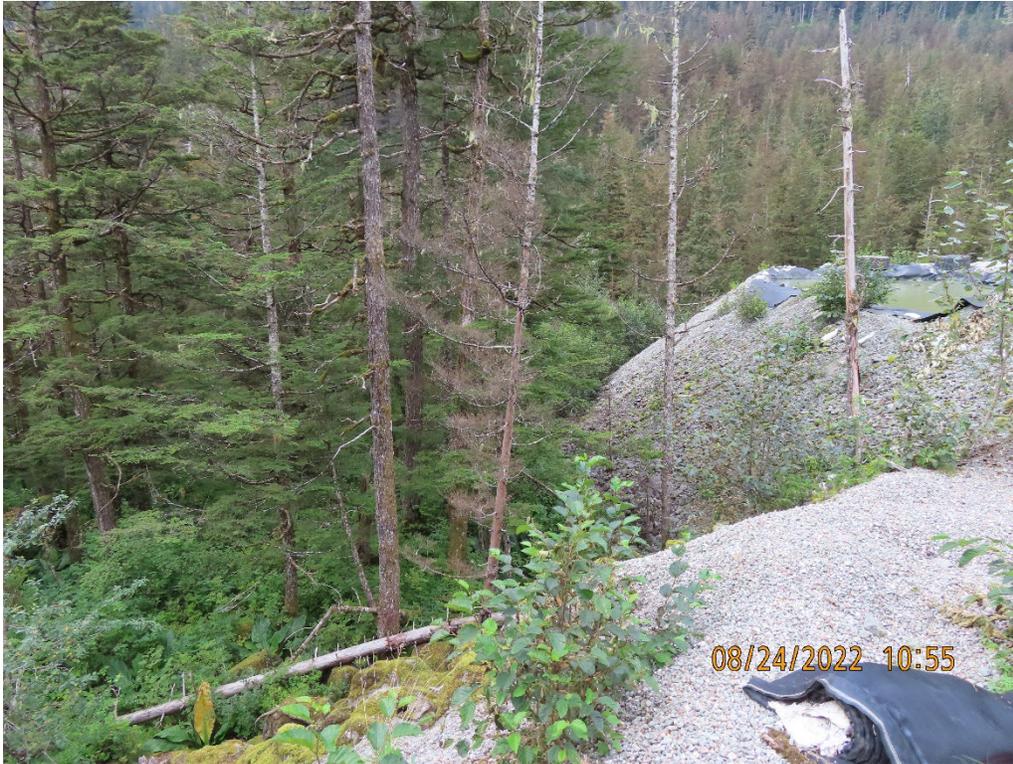


Photo 15. Trees to be removed from Class III dam stormwater retention ponds.



Photo 16. TTF looking from north laydown area towards dam.



Photo 17. TTF dam spillway.



Photo 18. TTF dam face.



Photo 19. Seepage staining adjacent to lower TTF dam access road.



Photo 20. Seepage collection sump constructed by Coeur following the inspection (photo courtesy of Coeur, provided September 7, 2022).



Photo 21. Shotcrete covering previously observed ARD seep by east TTF dam abutment.

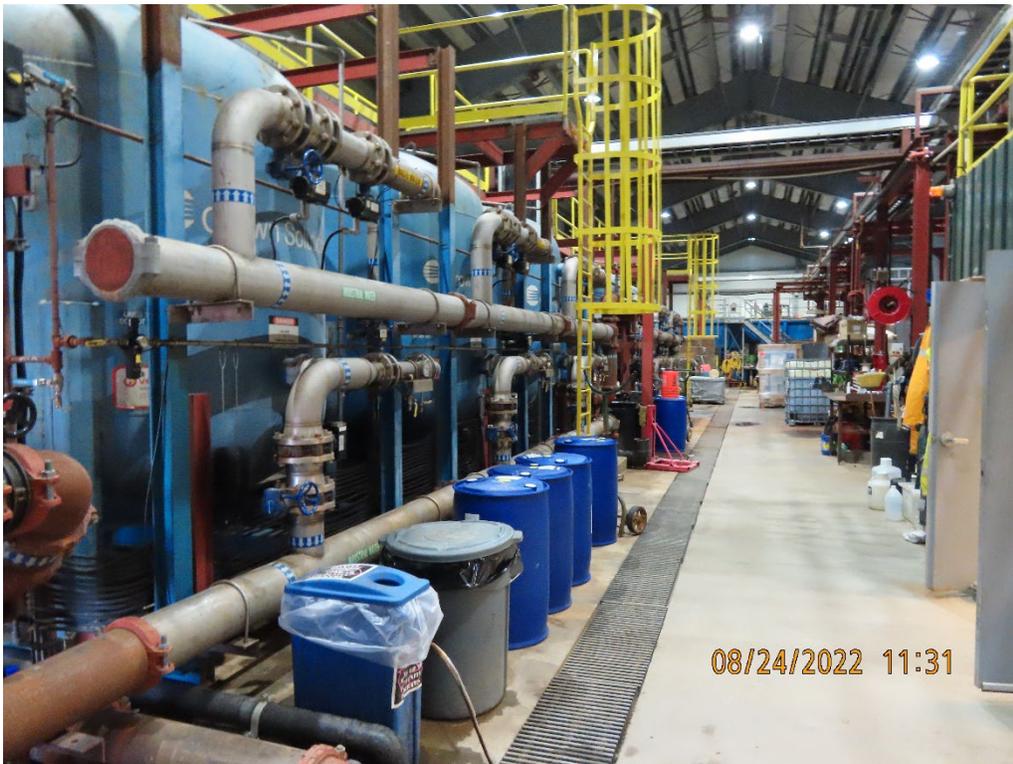


Photo 22. TTF water treatment plant interior.



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