



## INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group  
8510 Mendenhall Loop Rd  
Juneau, AK 99801  
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Date of Inspection: Thursday, January 07, 2016  
Date of Report: Thursday, January 14, 2016  
USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District  
Weather Conditions: Sunny. Temperature: Mid 20'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

Transportation to/from site was by Ward Air De Havilland Float Plane.

Kevin Eppers (Environmental Manager, Coeur Alaska) accompanied Matthew Reece (Minerals Supervisor, US Forest Service), Eddie Gazzetti (Hydrogeologist, US Forest Service), Curtis Caton (Geologist, US Forest Service), and Richard Dudek (Geologist, US Forest Service) on this inspection.

This inspection included access roads, Comet Development Pile, Comet Water Treatment Plant, Sherman Creek Outfall, Pit 4, and the Tailings Treatment Facility (TTF).

### ACTION ITEMS

- No immediate action items were found during this inspection.

### ACCESS ROADS

The Jualin, Comet and TTF access roads are in good condition and in compliance with the BMP.





## **COMET DEVELOPMENT PILE**

The Comet Development Pile silt fence is designed for trapping sediments from depositing into Ophir Creek. During the site inspection, sections of the silt fence appeared overburdened with snow and debris build up (Photo #1). The Comet Development Pile also showed additional waste rock added prior to this inspection (Photo #2).

## **COMET WATER TREATMENT PLANT**

All underground mine drainage is redirected to the Comet Water Treatment Plant (Photo #3). After the water has gone through the treatment process. The treated water is then discharged into Sherman Creek. Maintenance is currently underway for new and more durable pumps for transferring water at the Comet Water Treatment Plant (Photo #4). During a walkthrough of the Comet Water Treatment plant, there was some white material found on the floor below a water quality instrument (Photo #5). Other traces of the white material found was in a floor drain (Photo #6) and around the bottom of a barrel (Photo #7). Possible source for the white material may have resulted from the removal of sediments from the underground 445 level sediment sump. Personnel at the Comet Water Treatment Plant continue to monitor for residual white material from the 445 level sediment sump.

## **SHERMAN CREEK**

Sherman Creek flows west from Lions Head Mountain to Lynn Canal. The white material in Sherman Creek was again visible during this inspection. Ten days prior to this inspection, Coeur Alaska documented the re-occurrence of the white material at the Sherman Creek Outfall. Personnel at Coeur Alaska continue to monitor for white material that may enter Sherman Creek (Photo #8-10).

## **TAILINGS TREATMENT FACILITY**

The TTF was mostly frozen over and no tailings were visible above the water line in the TTF.

A bathymetry survey was conducted for a basin analysis at the TTF location. The purpose for this study was for finding underwater depths at the TTF for future tailings storage. This is important for locating the tailings barge and depositing tailings into the TTF to ensure the deposited tailings remain underwater. Also for preventative measures, a sediment curtain was installed to prevent tailings from entering the section designated for reclaim water that is sent back to the mill.

## **TTF-SEEPAGE PLANT**

With ongoing operations for treating naturally occurring acid rock drainage (ARD) from graphitic phyllite outcrops. A new graphitic phyllite Seepage Water Treatment Plant is under construction with operations coming online in March. In addition, a new sump system is now in place and will be used for the spillway plunge pool. (Photo #11). During the site inspection, the water discharge from the Water Treatment Plant





and Upper Slate Lake was entering into the outfall. (Photo #12). The majority of the Phase 2 Dam spillway plunge pool (Photo #13) was covered in snow and frozen over.

To prevent water lines from rupturing during the winter months, electrical heating coils and insulation mats are being used. A small generator used for power was on site. (Photo #14-15).

#### **Pit 4**

The Pug Plant located at Pit 4 is still in the building process. The primary use for the Pug Plant will be for mixing graphitic phyllite material with concrete and later reject rock mixed with concrete for underground backfill storage in the stopes (Photo #16).

#### **FOLLOW UP ITEMS**

- **Sherman Creek Outfall**
- **Comet Water Treatment Plant**
- **TTF Seepage Plant**
- **Pit 4**

**PHOTOS (available upon request)**





Photo #1. Comet Development Pile silt fence.



Photo #2. Comet Development Pile.



Photo #3. Comet Water Treatment Plant.



Photo #4. New pump installation at Comet Water Treatment Plant.



Photo #5. White substance residue found on floor.



Photo #6. White substance found in floor drain.



Photo #7. Dried white substance on bottom of barrel.



Photo #8. White substance found on rocks in Sherman Creek.



Photo #9. Water discharging into Sherman Creek.



Photo #10. White substance coating on streambed rocks.



Photo #11. New sump system for spillway plunge pool.



Photo #12. Lower Slate Lake outfall.



Photo #13. Dam spillway plunge pool.



Photo #14. Insulation mats to protect exposed water lines.



Photo #15. Generator used powering heating coils wrapped around water lines.



Photo #16. Pug Plant located at pit 4.

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