



INSPECTION REPORT: KENSINGTON GOLD MINE

Tongass National Forest Minerals Group
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Date of Inspection: Tuesday, March 1, 2016
Date of Report: Wednesday, March 10, 2016
USDA Forest Service Inspector: Richard Dudek

Ranger District: Juneau Ranger District
Weather Conditions: Sunny. Temperature: mid 30'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

A Ward Air floatplane provided transportation to/from site.

Kevin Eppers (Environmental Manager, Coeur Alaska) accompanied Matthew Reece (Minerals Supervisor, 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, Sherman Creek Outfall, Tailings Treatment Facility (TTF), Mud Dump, reject rock stockpile, and the graphitic phyllite (GP) seep water treatment facility.

ACTION ITEMS

- Helipad fuel tank not in secondary containment.
- A tear in a poly-liner containment for GP at the Mud Dump.





ACCESS ROADS

The Jualin, Comet and TTF access roads are adequately maintained and comply with the BMP plan for access road maintenance found in the **2012 BMP Appendix C page 55**.

TAILINGS TREATMENT FACILITY

The TTF had minor ice coverage and no tailings were visible in the TTF. During phase one and two TTF dam construction, GP was excavated and stockpiled at the northern section of the TTF. During the site inspection at the northern section of the TTF, acid rock drainage (ARD) was seeping through the base of the GP stockpile into a poly-lined catchment (Photo 1). The source of the ARD is oxidation of the GP in the stockpile. There are only minor amounts of GP remaining at the northern section of the TTF. The captured ARD is pumped to a series of holding tanks; a tanker truck then pumps the ARD from the largest holding tank and hauls it to the GP seep treatment plant. From there, the water is then piped to an infiltration gallery (Photo 2) near the TTF. The sludge waste material collected at the TTF water treatment plant will be disposed of as backfill in mine stopes (Photo 3).

During the inspection of the treatment plant's storage containers. A storage container used for storing treatment plant chemicals needs minor improvements for the secondary containment (Photo 4).

MUD DUMP

Some of the reject-reject rock from the x-ray sorter is stockpiled at the mud dump location. Once the Pug Plant is operating, the reject rock is hauled to the Pug Plant and mixed with GP and cement. The mixed material produced at the Pug Plant will become backfill in the mine stopes.

A storage container used for storing aviation fuel needs slight improvements for the secondary containment (Photo 5). Coeur Alaska's **2012 Plan of Operations** for fuel will be stored in a lined secondary containment (page 83). Also at this site, another USFS inspector observed was a large tear in the poly-liner covering for a GP stockpile (Photo 6).

COMET DEVELOPMENT PILE

The water treatment plant's byproduct materials (e.g. filter press cakes) are also stored into the development pile (Photo 7). This complies with **Section 4.2.4 of the 2012 BMP** plan for the treatment of waste disposal to assure against any discharge of contaminants flowing into navigable waters.



COMET WATER TREATMENT PLANT

Outside and inside the water treatment plant, good housekeeping practices comply with **Table 4-1 of the 2012 BMP** plan (Photo 8).

SHERMAN CREEK OUTFALL

The white material at the Sherman Creek outfall has persisted since September 2014 (Photos 9-10). Coeur Alaska has been placing clean rocks near the Outfall to monitor the white material overtime.

FOLLOW UP ITEMS

- Sherman Creek Outfall
- Repair the liner on GP stockpile located at the Mud Dump

PHOTOS (available upon request)



Photo 1. Northern TTF ARD catchment.



Photo 1. Infiltration gallery for effluent water pumped from the GP seep plant.



Photo 2. Covered sludge material from the GP seep treatment plant.



Photo 4. Slight improvements are needed secondary containment at the TTF WTP.



Photo 5. Fuel container's secondary containment front section needs slight improvements for capturing spills.



Photo 6. A tear in a GP poly-liner cover at the Mud Dump



Photo 7. Byproducts (filter press sediments) stored within the Comet development pile



Photo 3. Empty containers properly stored and out of the walkway at the Comet Water Treatment Plant.



Photo 4. Sherman Creek Outfall, white material covering rocks in the streambed.



Photo 5. White material coating to rocks in the streambed at Sherman Creek.



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

