

INSPECTION REPORT: GREENS CREEK MINE

Tongass National Forest Minerals Group 8510 Mendenhall Loop Rd Juneau, AK 99801 (907) 789-6275 – office (907) 586-8808 – fax Date of Inspection: Wednesday September 11, 2019 Date of Report: Tuesday October 1, 2019

USDA Forest Service Inspector: Richard Dudek

Ranger District: Admiralty National Monument, Juneau Ranger District Weather Conditions: Sunny. Temperature: High 50's (°F).

Exploration in accordance with operating plan	Not Applicable
Timber removal following timber sale contract	Not Applicable
BMP for erosion control	Satisfactory
Water Quality BMP	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

Ward Air provided a Cessna 206 floatplane to and from site.

David Landes (Environmental Engineer, (HGCMC)) accompanied Richard Dudek (Geologist, United States Forest Service (USFS) and Shannon Kelly (ADNR).

The site inspection included: the B-road, 1350 area, 920 area, 7.4 mile B-road Bridge (Killer Creek Bridge), Site E (4.7 B-road), 3.4 mile B-road Bridge (Falls Creek Bridge), 3.0 mile B-road Bridge (Zinc Creek Bridge), the Tailings Disposal Facility (TDF), and Tributary Creek site 1432.

ACTION ITEMS

The 7.4 Mile B road Bridge downhill side BMPs for sediment controls require mucking (Photo
1).

NOTEWORTHY ITEMS

- HGCMC Surface Operations are currently adding additional road gravel to both A/B access roads.
- The new electrical switch gear is operational and is in use.





A/B ACCESS ROADS

On 9/11/2019, The B road was in adequate condition (Appendix 8 Road and Maintenance Operations Table 8-1; page 8-9).

1350 AREA

The pump and trench are operating as intended (Photo 2). The decommissioned underground fans that were staged at this location have been removed and will be shipped off site (Photo 3).

920 AREA

The recorded flow rate for Greens Creek (Photo 4) on 9/11/2019 was 10.8 cubic feet per second (cfs). The 920-area water withdrawal rate from Greens Creek was approximately 1.4-cfs.

All petroleum/chemicals were properly stored within the appropriate secondary containment (Photo 5).

7.4-MILE B-ROAD BRIDGE (KILLER CREEK BRIDGE)

The bridge is being maintained by HGCMC Surface Operations (Photo 6). Surface Operations recently redecked and installed a new liner for the bridge (Photo 7).

SITE E (4.7 MILE B-ROAD)

HGCMC personnel continue to remove waste rock from this location for disposal in the TDF (Photo 8).

3.4-MILE B-ROAD BRIDGE (FALLS CREEK BRIDGE)

The bridge is being maintained by HGCMC Surface Operations (Photo 9). Surface Operations plan on redecking and installing a new liner for the bridge by mid-October.

3.0-MILE B-ROAD BRIDGE (ZINC CREEK BRIDGE)

HGCMC Surface Operations are maintaining the bridge (Photo 10), and the structural BMPs located on the uphill side abutment are functioning as intended (Photo 11). Surface Operations will be installing a new liner and re-decking the bridge in the coming weeks.

TAILINGS DISPOSAL FACILITY (TDF) AREA

Surface Operations continue depositing tailings in the eastern section of the S3P1 expansion area (Photo 12). To help prevent fugitive dust over winter, HGCMC personnel recently applied hydroseed on tailings in the south-west section of the S3P1 area (Photo 13).

On 9/11/2019 the water treatment plant was treating 1300-gpm and discharging 537-gallons per minute (gpm). Good housekeeping practices were observed inside the water treatment plant (Appendix 5 BMP Plan page 39).

Pond 7 (Photo 14) was collecting mine site water, and recirculated water from the TDF water treatment plant. Pond 10 (Photo 15) is collecting only direct precipitation.

TRIBUTARY CREEK (SITE 1432)

The water quality sampling site 1432 (Photos 16-17) was installed in 2011 by a consultant hired to conduct a hydrological investigation for the S3P1 tailings expansion area. Since 2015, HGCMC began sampling this site twice a year in the spring and fall to supplement data collected from FWMP site 9.





FOLLOW UP ITEMS

Inspect the 920 area.

Inspect the B-road Bridges and their associated BMPS.

Conduct a site inspection of the TDF and facilities.

PHOTOS (Images available upon request)



Photo 1. 7.4 Mile B road Bridge sediment sumps are at maximum capacity.



Photo 2. The 1350 trench and pump.







Photo 3. The 1350 area where the decommissioned fans were staged prior to being shipped off site.



Photo 4. The Greens Creek weir.



Photo 5. Petroleum products staged with secondary containment.







Photo 6. 7.4 Mile B road Bridge (Falls Creek Bridge).



Photo 7. The sides of the new liner were tacked to the bridge.



Photo 8. Site E (4.7 Mile B road)







Photo 9. 3.4 Mile B road Bridge (Falls Creek Bridge).



Photo 10. 3.0 Mile B road Bridge (Zinc Creek Bridge).



Photo 11. The BMPs for the Zinc Creek Bridge abutment.







Photo 12. The eastern section of the S3P1 area.



Photo 13. Hydroseed was applied to tailings in the south-west section of the S3P1 area.



Photo 14. Pond 7.







Photo 15.Pond 10.



Photo 16. Wetland/ Headwaters for Tributary Creek.







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

