

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, January 30, 2019 Date of Report: Wednesday, February 13, 2019 USDA Forest Service Inspector: Richard Dudek

Ranger District: Admiralty National Monument, Juneau Ranger District Weather Conditions: Cloudy with low fog Temperature: High 30'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 185 floatplane to and from site.

David Landes (Environmental Engineer, (HGCMC)) accompanied Richard Dudek (Geologist, United States Forest Service (USFS)), Shannon Kelly (Mining Engineer, Alaska Department of Natural Resources (ADNR)).

The site inspection included the A-road (0.8 mile marker), B-road, 920 area, 860 area, Site 23, 7.4 mile B-road Bridge (Killer Creek Bridge), 3.4 mile B-road Bridge (Falls Creek Bridge), 3.0 mile B-road Bridge (Zinc Creek Bridge), and the Tailings Disposal Facility (TDF).

ACTION ITEMS

• No new action items to report.

NOTE WORTHY ITEMS

- HGCMC personnel continue to work on the installation of the currently non-operational TDF water misting system (Photo 1).
- To improve sediment management, HGCMC Surface Operations will be attaching wood boards to all of the B-Road Bridge ends (Photo 2).





A/B ACCESS ROADS

At the time of the inspection, the B-road was in adequate condition. Surface Operations continue with routine winter road maintenance, and are placing clean 3/8" crushed gravel down for better vehicle traction.

Once the survey/inspection of the failed portion of the A-road (.8 mile marker) was completed by a contractor, their results were submitted to HGCMC. As a result, Surface Operations cleaned several nearby culverts in order to improve drainage (Photo 3).

920 AREA

The recorded flow rate for the Greens Creek weir (Photo 4) on 01/30/2019 was 23.24 cubic feet per second (cfs). The 920-area water withdrawal rate from Greens Creek was 1.5 cfs.

The 920 Bridge is being properly maintained and the splashguards are effective in preventing sediment splash over from vehicular traffic (Photo 5). During the site visit, David Landes from the HGCMC Environmental Department hand dug a small trench to help route pooling water from the road to DB-01.

The 920 warehouse was tidy and in order (Photo 6). All petroleum and chemical products were properly stored within secondary containment (Photo 7).

SITE 23

HGCMC continues to stock pile class 1, and class 2/3 waste rock (Photos 8-9) at this location (Appendix 1 Integrated Monitoring Plan; page 3-1).

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

The bridge's decking is being adequately maintained by HGCMC Surface Operations (Photo 10). The bridges splashguards are effective in preventing sediment splash over from vehicular traffic (Photo 11).

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

The bridge's decking is being properly maintained by HGCMC Surface Operations (Photo 12). The bridges splashguards are effectively working to prevent sediment splash over from vehicular traffic (Photo 13).

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

HGCMC Surface Operations are maintaining the bridge, and the BMPs at the abutment are covered in snow and ice (Photos 14-15).

HGCMC Surface Operations plan on repairing a section of the bridges splashguard that was damaged during routine snow plowing (Photo 16).

TAILINGS DISPOSAL FACILITY (TDF) AREA

The 2018 year to date tailings placement for the S3P1 area was 315,000 tons.

Surface Operations continue to deposit tailings in the S3P1 expansion area (Photo 17).

As a fugitive dust mitigation, HGCMC personnel continue to use portable wind screens (Photo 18) in active tailings placement areas.

Pond 7 (Photo 19) was receiving contact water, and Pond 10 (Photo 20) is collecting direct precipitation.





On 01/30/2019 the water treatment plant was treating 1,300 gallons per minute (gpm). Good housekeeping practices were observed inside the water treatment plant (Photo 21).

FOLLOW UP ITEMS
Inspect the 920 area.
Inspect the B-road bridges.
Conduct a site inspection of the TDF and facilities.

PHOTOS (Images available upon request)



Photo 1. The TDF water misting system.



Photo 2. Wooden boards used as sediment barriers are attached at the bridge ends. This barrier highlighted in yellow is covered in snow mixed with sediments.







Photo 3. The section of the A-road (0.8 mile marker) where the shoulder failed.



Photo 4. Greens Creek weir.



Photo 5. The 920 Bridge.







Photo 6. 920 warehouse area.



Photo 7. A storage container for petroleum products.



Photo 8. Class 1 waste rock is staged along the perimeter of site 23.







Photo 9. Class 2/3 waste rock.



Photo 10. 7.4 Mile B-Road Bridge (Killer Creek Bridge).



Photo 11. A section of splashguard for Killer Creek Bridge.







Photo 12. 3.4 Mile B-Road Bridge (Falls Creek Bridge).



Photo 13. A view of the splashguards effectively working to prevent sediment splash over.



Photo 14. 3.0 Mile B-Road Bridge (Zinc Creek Bridge).







Photo 15. Structural BMPs covered in snow.



Photo 16. The damaged section of splashguard at the Zinc Creek Bridge.



Photo 17. Tailings recently deposited in the S3P1 TDF area.







Photo 18. Portable windscreens are used to help mitigate fugitive dust dispersal.



Photo 19. Pond 10.



Photo 20. Pond 7.







Photo 21. The TDF water treatment plant.

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

