

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 May 1, 2019 Date of Report: Thursday May 16, 2019 USDA Forest Service Inspector: Richard Dudek

Ranger District: Admiralty National Monument, Juneau Ranger District Weather Conditions: Partly cloudy with sun. Temperature: Low 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)), Shannon Kelly (Mining Engineer, Alaska Department of Natural Resources (ADNR)), and David Khan (Mining Engineer, Alaska Department of Environmental Conservation (ADEC)).

The site inspection included: B-road, 920 area, 860 area, Site 23, 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 the sand pit (1.4 mile A-Road).

ACTION ITEMS

- Multiple sediment sumps need mucking.
- Sediment control structures at all bridges need attention.

NOTE WORTHY ITEMS

 HGCMC has submitted two proposals to conduct geotechnical drilling at several mine site facilities and also in a couple of non-mine site locations north of the TDF this summer.





A/B ACCESS ROADS

At the time of the inspection, the B-road was in adequate condition. Surface Operations was clearing debris from the access road ditches.

920 AREA

The recorded flow rate for the Greens Creek (Photo 1) on the day of the inspection was 26.5 cubic feet per second (cfs). The 920-area water withdrawal rate from Greens Creek was approximately 0.9 cfs.

The bridge's splashguards are effectively preventing sediment splash over from vehicular traffic (Photo 2).

Good housekeeping practices were observed at the 920 warehouse (Appendix 05 BMP Plan 2015, pages 39-40). All chemical/petroleum products and compresses gases for welding were stored inside appropriate containers (Photo 3).

The ore pad hill's sediment sump requires mucking (Photos 4).

LOWER C POND (860 AREA)

This summer, HGCMC personnel will be making improvements Lower C-Pond (Photo 5). HGCMC Surface Operations will be installing a HDPE liner to prevent water from percolation through the berm. During this project, the caisson will be also moved several feet into the pond.

SITE 23

HGCMC continues to deposit class 1, 2, and 3 waste rock at this location (Photo 6). At the time of the inspection, it was observed that a parked haul truck (Photo 7) was leaking hydraulic fluids. The fluids were promptly cleaned up by Dave Landes from HGCMC Environmental Operations.

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

The bridge decking is being maintained by HGCMC Surface Operations (Photo 8). The splashguards are preventing sediment splash over from vehicular traffic. The bridge ends (Photos 9) require sediment removal. This summer, HGCMC will be replacing the wood decking and liner for all of the B-road bridges. The sediment sumps located at the downhill side of the bridge require mucking (Photo 10).

SITE E (4.7 MILE B-ROAD)

HGCMC personnel continue to remove waste rock from this site for co-disposal in the TDF (Photo 11).

In the fall 2018, the influent waterline for the pond was leaking. Due to the colder temperatures in the fall months, the pond's pump was turned off until warmer temperatures persist and the repairs could be made. To stop the leak, HGCMC personnel placed a pipe clamp over the damaged section (Photo 12).

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

The bridge decking is being properly maintained by HGCMC Surface Operations (Photo 13). Sediment cleanup/removal is needed at the bridge ends (Photo 14).

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

HGCMC Surface Operations are maintaining the bridge (Photo 15).





In the coming weeks, Surface Operations plan on repairing the damaged section of the splashguard (Photo 16).

TAILINGS DISPOSAL FACILITY (TDF) AREA

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

Influent water was flowing into Pond 7 (Photo 18), and Pond 10 (Photo 19) is collecting only direct precipitation.

On 5/1/2019 the water treatment plant was discharging 555 gallons per minute (gpm). Good housekeeping practices were observed inside the water treatment plant.

SAND PIT (1.4 MILE A-ROAD)

This site is currently inactive (Photo 20).

FOLLOW UP ITEMS
Inspect the 920 area.
Inspect the B-road bridges and
3.0 mile B-Road Bridge damaged splashguard is fixed.
Conduct a site inspection of the TDF and facilities.

PHOTOS (Images available upon request)







Photo 1. Greens Creek Weir.



Photo 2. The 920 Bridge.



Photo 3. Compressed gas cylinders were properly secured.







Photo 4. Sediment sump at the base of Ore Pad hill requires mucking.



Photo 5. The 860 area's lower C-pond.



Photo 6. A haul truck depositing class 2 and 3 waste rock at Site 23.







Photo 7. A haul truck with a couple of fluid leaks.



Photo 8. The 7.4 mile B-road Bridge (Killer Creek Bridge).



Photo 9. Sediment removal required at Killer Creek Bridge ends.







Photo 10. Sediment sump require mucking at the 7.4 mile B-road Bridge.



Photo 11. Waste rock at Site E.



Photo 12. At Site E, a steel clamp was placed over the leaking section of the pipe.





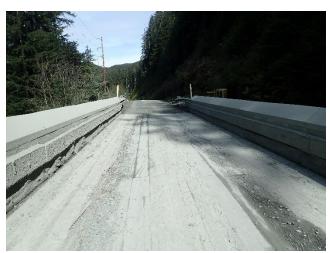


Photo 13. The 3.4 mile B-road Bridge (Falls Creek Bridge).



Photo 14. Sediment removal is required at the 3.4 mile B-road bridge ends.



Photo 15. The 3.0 mile B-road Bridge (Zinc Creek Bridge).







Photo 16. The damaged section splashguard requires repair/replacement.



Photo 17. The S3P1 tailings disposal area.



Photo 18. Pond 7.







Photo 19. Pond 10.



Photo 20. The sand pit (1.4 mile A-Road).

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

