

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 10, 2018 Date of Report: Tuesday January 30, 2018 USDA Forest Service Inspector: Richard Dudek

Ranger District: Admiralty National Monument, Juneau Ranger District

Weather Conditions: Cloudy with sun Temperature: 5 (°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.

Dave Landes (Environmental operations, (HGCMC)) accompanied Richard Dudek (Geologist, United States Forest Service (USFS)), Edward Gazzetti (Hydrogeologist, USFS), and Curtis Caton (Geologist, USFS).

The site inspection included the B road system, 920 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

 Install additional fugitive dust controls in the S3P1 containment area near the southern access road.

NOTE WORTHY ITEMS

The day of this inspection (01/10/2018), the mill was scheduled for a temporary shut down for routine maintenance.





ACCESS ROAD B

During the inspection, the B-road was in adequate condition. Surface operations were plowing the access road, and placing gravel down for traction (Appendix 8 Road Operations and Maintenance; Table 8.1).

920 AREA

The recorded discharge rate for Greens Creek weir (Photo 1) on 01/10/2018 was 29.65 cubic feet per second (cfs). Due to the mill being temporarily offline for scheduled maintenance, HGCMC was not withdrawing 1.5 cfs for the 920 water system from Greens Creek.

The 920 bridge (Photo 2) is being properly maintained by Surface operations. Snow is being plowed away from the bridge, and gravel is placed on the bridge decking for traction.

De-grit Basin 01 (DB-01) was in use during the site inspection (Photo 3). All melt water in DB-01 is routed to Pond-A, and the sediments collected in the basin are disposed of in the TDF.

Good housekeeping practices were observed at the warehouse (Photos 4-5) and in the storage containers. All chemicals and petroleum products were properly stored with secondary containment (Appendix 5 BMP plan; page 39).

SITE 23

Additional Class 2/3 waste rock has been recently stockpiled at this location (Photo 6).

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

Snow is being plowed from the decking, and gravel is placed for traction. The splashguards are effectively preventing sediment splash over from vehicular traffic (Photos 7-8).

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

Snow is being removed and gravel is being placed on the bridge's decking for traction (Photo 9). The splashguards are effectively preventing sediment splash over from vehicular traffic.

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

HGCMC personnel are removing snow and placing gravel for traction on the decking (Photo 10).

TDF AREA

Contractors continue with the construction of the new TDF wheel wash station (Photo 11).

HGCMC TDF personnel continue to deposit tailings in the S3P1 expansion area (Photo 12). Due to recent high winds, some fugitive dust was observed outside of the S3P1 containment area near the TDF's southern access road. During the winter months, HGCMC will use a number of dust mitigation controls such as minimizing tailings placement areas, portable and/or fixed windscreens, and water. Additional portable and/or fixed windscreens should be staged in the S3P1 expansion area for fugitive dust control. HGCMC is currently waiting for parts for the TDF water misting system, which should help minimize fugitive dust.

The recorded discharge rate on 1/10/2018 for the water treatment plant was 1,300 gallons per minute (gpm), with 580 gpm being discharged through Outfall 002. All water discharged through Outfall 002 is





limited and monitored per APDES permit requirements. Good housekeeping practices were observed inside the water treatment plant (Photo 13).

Due to rain events in December 2017, water from Pond 7 overflowed and entered Pond 10 (Photo 14). HGCMC did report this to the Alaska Department of Natural Resources, Dam Safety division (ADNR). During the site inspection on 1/10/2018, the water was frozen in Pond 10.

In mid-January, contractors will continue with geotechnical drilling in the wetlands near the northern TDF area. HGCMC has constructed temporary access roads out of log-cord and rig mats to access drill sites. Some trees will be cut, which the Forest Service approved tree removal for this project (Photos 15-16).

HAWK INLET FACILITES

HGCMC will be contacting the Forest Service to request the removal of several hazard trees (Photos 17-19) behind the housing facilities. These hazard trees could potentially cause damage to powerlines, equipment and/or injury to personnel.

FOLLOW UP ITEMS
Inspect the 920 area.
Inspect the B-road bridges.
Conduct a site inspection of the TDF area and facilities.
Ensure drill sites are reclaimed after geotechnical drilling has concluded.

PHOTOS (Images available upon request)



Photo 1. The 920 Greens Creek weir.







Photo 2. The 920 Bridge.



Photo 3. The 920 area de-grit basin 01 (DB-01).



Photo 4. The 920 warehouse storage area.







Photo 5. A storage container at the 920 warehouse with secondary containment.



Photo 6. Site 23



Photo 7. The 7.4-mile B-road Bridge (Killer Creek Bridge).







Photo 8. No sediments were observed on the pipeline.



Photo 9. 3.4 mile B-road Bridge (Falls Creek Bridge).



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







Photo 11. Contractors continue with the construction of the new wheel wash station.



Photo 12. HGCMC continues placing tailings in the S3P1 expansion area.

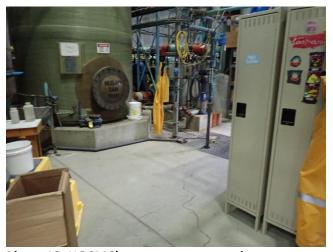


Photo 13. HGCMC's water treatment plant.







Photo 14. Pond 10.



Photo 15. The vicinity in the TDF area where geotechnical drilling will take place.



Photo 16. An additional location where geotechnical drilling will be conducted.







Photo 17. Hazard trees near the housing facility.



Photo 18. An additional image of hazard trees located behind the housing facility.



Photo 19. Additional hazard trees were observed along the perimeter of a storage area behind the housing facilities.





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

