INPECTION REPORT: GREENS CREEK MINE

Tongass National Forest Minerals Group
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Date of Inspection: Tuesday July 30, 2019
Date of Report: Thursday August 8, 2019
USDA Forest Service Inspector: Richard Dudek

Weather Conditions: Sunny. Temperature: Mid 60’s (°F).

**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 Matthew Reece (Tongass National Forest Minerals Program Manager).

The site inspection included: A and B-roads, 1350 area, 920 area, 860 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 the Sand Pit (1.4 mile A-road).

**ACTION ITEMS**

- No new action items to report.

**NOTEWORTHY ITEMS**

- The leaning jersey barrier (Photo 1) mentioned in a previous inspection report (IR #406) was restaged by Surface Operations on the weekend of August 3rd – 4th.
- On 7/31/2019, Environmental Operations removed the patch of noxious weeds (Canadian thistle) near the 3.4 mile B-road Bridge (Photo 2).
A/B ACCESS ROADS
On 7/30/2019, both A/B access roads were in good condition (Appendix 8 Road and Maintenance Operations Table 8-1; page 8-9).

1350 AREA
The pump for the trench is operating as intended (Photo 3). The influent water that is collected is routed to Pond-A. From there, the influent will be routed to the TDF water treatment plant for treatment and then discharged.

920 AREA
The recorded flow rate for Greens Creek (Photo 4) on 7/30/2019 was 22.4 cubic feet per second (cfs). The 920-area water withdrawal rate from Greens Creek was approximately 1.5-cfs.

All petroleum and chemicals were properly stored within secondary containment (Photo 5).

During the mine site visit, the 920 ore pad had multiple haul trucks depositing ore, and the bull dozer was blending the ore (Photo 6) prior to the milling process.

LOWER C POND (860 AREA)
The improvements are still being made to the lower C pond (Photo 7). The liner and caisson for the pond have been installed. The next stage of improvements will be installing the new discharge pipelines for the pond.

SITE 23
HGCMC continues to separately stockpile class 1 away from class 2/3 waste rock (Photo 8). This is due to the rock type’s geochemical classification (Appendix 1 Integrated Monitoring Plan § 3.1).

7.4-MILE B-ROAD BRIDGE (KILLER CREEK BRIDGE)
The bridge is being maintained by HGCMC Surface Operations (Photo 9). The splashguards are preventing splash over from vehicular traffic. In September of 2019, Surface Operations will be replacing the liner, and deck for all the B-road Bridges.

SITE E (4.7 MILE B-ROAD)
HGCMC personnel continue to remove waste rock from this location for disposal in the TDF. Approximately 23,015 cubic yards of waste rock (Photo 10) has been removed from this site.

3.4-MILE B-ROAD BRIDGE (FALLS CREEK BRIDGE)
The bridge is being maintained by HGCMC Surface Operations (Photo 11).

3.0-MILE B-ROAD BRIDGE (ZINC CREEK BRIDGE)
HGCMC Surface Operations are maintaining the bridge (Photo 12), and the structural BMPs located on the uphill side abutment are function as intended (Photo 13).

TAILINGS DISPOSAL FACILITY (TDF) AREA
Surface Operations continue to deposit tailings in the S3P1 expansion area (Photo 14).
On 7/30/2019 the water treatment plant was treating 1290-gpm and discharging 537-gallons per minute (gpm). Approximately 753-gpm of treated water was being recirculated back into Pond-7. Good housekeeping practices were observed inside the water treatment plant (Appendix 5 BMP Plan page 39).

Pond 7 (Photo 15) was collecting mine site water, and water from the TDF water treatment plant. Pond 10 (Photo 16) is collecting only direct precipitation.

The SAND PIT (1.4-Mile A-ROAD)
This site is currently inactive (Photo 17).

FOLLOW UP ITEMS
Inspect the 920 area.
Lower C Pond improvements.
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. Now restaged, the jersey barrier that was leaning along the edge of the 1350 access road.
Photo 2. A patch of Canadian thistle identified between 3.3 and 3.4 mile B-road.

Photo 3. The 1350 pump and trench for collecting contact water from remnant waste rock piles.

Photo 4. A view of Upper Greens Creek from the weir.
Photo 5. The storage containers were tidy and in order.

Photo 6. The 920 ore pad.

Photo 7. Lower C-pond.
Photo 8. Class 2/3 waste rock staging area.

Photo 9. 7.4 Mile B-Road Bridge (Killer Creek Bridge).

Photo 10. Site E (4.7 mile B-road).
Photo 11. 3.4 Mile B-road Bridge (Falls Creek Bridge).

Photo 12. The 3.0 mile B-road Bridge (Zinc Creek Bridge).

Photo 13. BMPs at Zinc Creek Bridge abutment.
Photo 14. S3P1 tailings disposal area.

Photo 15. Pond 7.

Photo 17. The sand pit is currently inactive.

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