

INSPECTION REPORT: GREENS CREEK MINE

Tongass National Forest Minerals Group
8510 Mendenhall Loop Rd
Juneau, AK 99801
(907) 789-6276 – office
(907) 586-8808 – fax

Date of Inspection: Thursday, January 20, 2022
Date of Report: 02/03/2022
USDA Forest Service Inspector: Casey Loofbourrow

Ranger District: Admiralty National Monument, Juneau Ranger District
Weather Conditions: Overcast Temperature: Mid 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
Road 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.

Any conditions noted as Requires Action will require attention from the operator and suggestions for necessary work are listed below

Transportation to and from the site was with a Cessna 206 aircraft provided by Alaska Seaplanes.

Mitch Brooks (HGCMC Environmental Technician) accompanied Casey Loofbourrow (Geologist, USFS), and Pat Dryer (Hydrologist, USFS).

The site inspection included: The A and B access roads, 920 area, Site 23 waste rock storage facility, 3.0 mile B-Road bridge (Zinc Creek Bridge), Site E, and the Tailings Disposal Facility (TDF).

STATUS OF ACTION ITEMS FROM PREVIOUS INSPECTIONS:

Date/Item No.	Item Description	Status
5/12/2021; 414-1	Perform maintenance on the Killer Creek Bridge downhill side abutment sedimentation BMPs	Pending. Deep snow prevented access to abutments.
5/12/2021; 414-3	Monitor aluminum precipitate accumulating from abutment drain at Zinc Creek Bridge.	Pending. Deep snow prevented access to the abutment drain.
11/11/2021; 417-1	Bridge abutment sediment BMPs are not functioning optimally at the Falls Creek Bridge. Sediment BMPs should be repaired or installed to prevent sediment from entering Falls Creek.	Pending. Deep snow prevented access to abutments.

11/11/2021; 417-2	Monitor conditions on the newly resurfaced Zinc Creek Bridge to ensure sediment control BMPs including splash guards are operating effectively.	Pending. Conditions at the time of inspection were deep compacted snow. No issues were observed at this time.
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NEW ACTION ITEMS

418-1: Dust fencing along the southern perimeter of the TDF is damaged and requires repair (Photo 12).

Access Roads

The A and B access roads appeared in good condition. Deep snow is present along both roads, and the road surfaces were free of ponding or meltwater.

920 AREA

The recorded discharge for Greens Creek (Photos 1-2) was 9.5 cubic feet per second (cfs) at the weir. The 920-area water withdrawal rate from Greens Creek was approximately 1.5 cfs.

The Greens Creek Bridge splash guards are working as designed to prevent sediment splash over from vehicular traffic (Photo 3).

Good housekeeping practices were observed at the 920 warehouse (Appendix 5 BMP Plan page 39). All petroleum/chemicals observed were properly stored within secondary containment (Photo 4).

SITE 23

Class 1 and 2/3 waste rock continues to be placed at this location (Photo 5). Pond 23 was in good condition with adequate capacity (Photo 6).

SITE E

Site E is currently being used as a storage and distribution point for sand and gravel used for road maintenance and traction on snow covered roads (Photo 7).

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

HGCMC performed major maintenance and construction activities on this bridge including replacing the decking. This work was completed November 4, 2021.

PENDING ACTION ITEM 417-2: Conditions at the time of inspection were compacted snow and ice on the driving surface (Photo 8). No ponding or drainage issues were observed. The new surface of the bridge will be monitored to determine effectiveness of drainage and splash guards under different conditions.

PENDING ACTION ITEM 414-3: During the previous inspection, aluminum precipitate continued to be observed below the abutment drainpipe. The location was not observed during this inspection due to deep snow. During reconstruction of the Zinc Creek Bridge, HGCMC excavated and replaced material that is suspected of being the source of the aluminum precipitate. This site will be monitored in future inspections to determine whether this measure was successful.

TAILINGS DISPOSAL FACILITY (TDF) AREA

The current active tailings deposition location is the northern S3P1 expansion area, adjacent to 1.0 mile B-Road (Photo 9).

At the time of the inspection, Pond 7 (Photo 10) was collecting contact and process water, and Pond 10 (Photo 11) was not receiving water. The water treatment plant was discharging 672 gpm to Outfall 002.

NEW ACTION ITEM 418-1: The fugitive dust fencing along the southern S3P1 area was damaged by wind and requires maintenance (Photo 12).

PHOTOS (Image files available upon request)



Photo 1. Greens Creek looking upstream from the weir at the 920 Area.



Photo 2 Greens Creek looking downstream from the weir at the 920 Area.



Photo 3. Greens Creek Mine portal and 920 bridge, showing functioning splash guards.



Photo 4. Chemicals in appropriate secondary containment at the 920 area warehouse.



Photo 5. Site 23 waste rock active placement area.



Photo 6. Pond 23 receiving contact water.



Photo 7. Site E, where sand and gravel is actively being stored and distributed for road maintenance.



Photo 8. Zinc Creek Bridge surface.



Photo 9. Active tailings deposition area within the TDF.



Photo 10. Pond 7 receiving mill process water and site contact water.



Photo 11. Pond 10, currently not being used.



Photo 12. Damaged fugitive dust fencing along southern edge of the TDF.

Thanks to HGCMC for a safe visit.

/s/ Casey Loofbourrow