



INSPECTION REPORT: GREENS CREEK MINE

Tongass National Forest Minerals Group
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Date of Inspection: Tuesday, January 13, 2015
Date of Report: Friday, January 23, 2015
USDA Forest Service Inspector: Curtis Caton

Ranger District: Admiralty National Monument, Juneau Ranger District
Weather Conditions: Rain and overcast. Temperatures in the 40's (°F).

Exploration in accordance with operating plan	Not Applicable
Timber removal following timber sale contract	Not Applicable
BMPs for erosion control	Satisfactory
Water Quality BMPs	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 De Havilland Beaver Float Plane provided transport.

Mitch Brooks (Environmental Engineer, Hecla Greens Creek Mining Company) accompanied David Wilfong (Engineer, Department of Natural Resources), Will Collingwood (Engineer, Department of Environmental Conservation), Carol Goularte (Staff Officer, US Forest Service), Matthew Reece (Minerals Program Manager, US Forest Service), and Curtis Caton (Geologist, US Forest Service) on this inspection.

The site inspection included the A and B access roads, Tailings Disposal Facility (TDF), 920 Area, Site 23, Zinc Creek Bridge, A Road Sandpit, A Road Pit 7, and Young Bay.

ACTION ITEMS

- **Minor housekeeping issues in 920-shop area (Photos 01-02).**

ACCESS ROADS

The A and B access roads are in good shape. Access Road BMP have been effective at reducing erosion by storm water run on and runoff. Appendix 8 (Road Maintenance), Section 3 of the General Plan of Operations discusses how HGCMC will maintain access roads in varying surface conditions.





TAILINGS DISPOSAL FACILITY

The team drove the perimeter of the TDF along the access roads and visited the three tracking photo points (Photos 03-06). Discoloration of the snow on the southwest slope of the TDF is evidence of fugitive dust. Fugitive dust mitigation at the TDF includes a sampling program, selective disposal of tailings, polymer use, wetting, and construction of multiple wind breaks.

Geo tech work for the TDF expansion has occurred. Drilling and trenching were conducting as follow up to the seismic survey for a suitability test of subsurface conditions (Photo 07).

920

The area surrounding the 920 Bridge and Portal are in good condition (Photo 08-10).

SITE 23

Waste rock from the 1350 area has been moved to site 23 for temporary storage and eventual disposal in the TDF. Waste rock from the 1350 is contained on a lined surface that is bermed to prevent comingling with other material. During this inspection, a frozen drain caused stormwater to overflow from the bermed and lined area. The contact water flowed into a system of lined ditches and was captured at the 23 Pond and piped to Pond 7 for treatment (Photos 11-16). Sediment from 23 Pond is disposed of in the TDF or used underground in backfill. Non-contact water is diverted around Site 23 and drains naturally through the vegetation into the watershed.

HGCMC responded to the overflow immediately and provided pictures on January 15 that the drain was thawed (Photos 17-18).

ZINC CREEK BRIDGE

HGCMC has enhanced BMP mitigation at Zinc Creek to comply with the APDES Permit. Although covered with snow during this inspection, the area had additional silt fencing and straw waddles emplaced.

Road sediment is visible beneath Zinc Creek Bridge. The sediment has seeped between the bridge planking and is contained up gradient from Zinc Creek by the emplaced BMP. No erosion was noted during this inspection (Photos 19-21)

SAND PIT

The Sand Pit is located on the A road between Young Bay and Hawk Inlet at mile marker 1.4. The area is an active quarry and stockpile for sand and gravel used at the mine (Photos 22-23).

YOUNG BAY

The Young Bay site includes a parking area for crew bus, and a docking facility for the crew ferry that transports personnel to and from the island daily. The Team briefly inspected and photo documented the area of the proposed barge ramp (Photos 24-25).

FOLLOW UP ITEMS

- **Inspect BMP of Hawk Inlet Facilities**



PHOTOS

(High-resolution version of all images available upon request)



Photo 01. Some loose garbage.



Photo 02. Containment basin should be cleaned of absorbent material and garbage.



Photo 03. Northern Tracking Point looking South-Southeast.



Photo 04. Eastern Tracking Point looking North.



Photo 05. Eastern Tracking Point looking West. Small rills and gullies developing.



Photo 06. Southern Tracking Point looking North. Fugitive dust discoloration.



Photo 07. TDF expansion area. Geotechnical work.



Photo 08. 920 Bridge.



Photo 09. Degrit Basin 01.



Photo 10. 920 Portal.



Photo 11. 1350 waste rock stored at site 23.



Photo 12. Contact water overflowing containment.



Photo 13. Contact water overflowing containment.



Photo 14. Contact water captured in series of lined ditches.



Photo 15. Contact water captured in series of lined ditches.



Photo 16. 23 Pond or degrit basin 03.



Photo 17. Photo showing repair courtesy of HGCMC.



Photo 18. Photo showing repair courtesy of HGCMC.



Photo 19. Sediment under Zinc Creek Bridge.



Photo 20. Sediment under Zinc Creek Bridge.



Photo 21. Enhanced BMP at Zinc Creek.



Photo 22. A Road Sand Pit.



Photo 23. A Road Sand Pit.



Photo 24. Young Bay.



Photo 25. Young Bay.



Photo 26. Young Bay.



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

