

# **INSPECTION REPORT: GREENS CREEK MINE**

Tongass National Forest Minerals Group 8510 Mendenhall Loop Rd Juneau, AK 99801 (907) 789-6273 – office (907) 586-8808 – fax Date of Inspection: Tuesday, April 01, 2014 Date of Report: Monday, April 14, 2014 USDA Forest Service Inspector: Curtis Caton

Ranger District: Admiralty National Monument, Juneau Ranger District Weather Conditions: partly cloudy. Temperatures in the upper 30s to low 40s.

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 Cessna Float Plane provided transportation to and from site.

Mitch Brooks (Environmental Engineer, Hecla Greens Creek Mining Company) accompanied Cody MacCabe (Forest Service) and Curtis Caton (Geologist, US Forest Service) on this inspection. The emphasis of this inspection was to visit the proposed projects in HGCMC surface operation 2014 work plan. The inspection included the A and B access roads, Tailings Disposal Facility (TDF), TDF Water Treatment Plant and Pond 7, Greens Creek Fish Pass, 920 Ditch, Pond A, 920 Warehouse, Mill area, Cannery Creek Weir, Shale pit, and Young Bay. The seasonal access road leading to the 1350 area was not passable during this inspection.

## ACCESS ROADS

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





# TDF

Pictures were taken from all three TDF tracking points (Photos 01-03). The access roads around the TDF are in good condition and show no signs of erosion. Mitch stated that HGCMC began deposition of tailings into the TDF East Ridge expansion within the last month (Photo 3).

## POND 7

The access road around Pond 7 was in good shape. The area around the TDF Water Treatment Plant was neat and orderly. Some minor debris has accumulated where contact waters converge at the intake of Pond 7.

## **FISH PASS**

A thick layer of ice and snow covers the fish pass area. Mitch stated that an onsite HGCMC contractor had recently visited the fish pass in preparation for the upcoming repair project (Photos 04-09).

## 920 DITCH

The 920 ditch is a gravity controlled, lined ditch that leads to a concrete settling basin (degrit basin) then to a lined retention pond. The ditch is located along the improved edge of the 920 footprint and runs from the administration building to Pond A. Surface runoff at the mine/mill site from all process areas, including areas where chemicals are stored, drain across concrete surfaces to the lined 920 ditch (Appendix 5, section 4.3.1 and in Appendix 6, section 5.2). The 920 ditch serves as secondary containment barrier by reporting all liquid draining from the improved surface to Pond A (Photos 10-14).

HGCMC surface operations 2014 work plan proposes a reconstruction of the 920 ditch. The project is to reconstruct the upper 600 feet of the ditch to prevent the accumulation of sediment, and frequency of required maintenance. A waste line will be relocated to allow better access to the ditch.

## POND A

Pond A is lined with a synthetic liner and serves as a secondary settling basin and equalizing storage basin to eliminate release of collected storm water that may have come into contact with ore, concentrate, or other site materials.

HGCMC surface operations 2014 work plan calls for a stabilization project for the outer berm of Pond A. Greens Creek is undercutting the riprap, which is causing instability to the stream bank. HGCMC plans to repair the riprap within the existing Pond A footprint (Photos 15-20).

## 920 WAREHOUSE

HGCMC is waiting for the ground to thaw to install two new secondary containment sea vans at the 920 warehouse. A 55-gallon drum of transmission fluid was improperly stored as required by the BMP plan (Appendix 5) (Photo 21). Section 4.3.1 of the BMP plan states that all process areas where chemicals are stored drain across concrete surfaces to the lined containment ditch, which flows to Pond A.





### **MILL AREA**

The barrels of crushed oil filters noted in previous inspections have been removed from site.

HGCMC surface operations 2014 work plan proposes more surface improvement (concrete overlayment) between the 920 shop and the 920 powerhouse.

### SITE 23

Waste rock brought to Site 23 by underground haul trucks is being sorted according to the Waste Rock Management Plan, section 3.3. Signs designating where the three classes of waste rock are to be placed are visible (Photos 22-23).

### **CANNERY CREEK WEIR**

HGCMC surface operations 2014 work plan proposes the replacement of the screen intake for the Hawk Inlet potable water plant (Photo 24). The water level behind the weir will be dropped to allow for access to the intake.

### YOUNG BAY

HGCMC surface operations 2014 work plan proposes the addition of permanent lighting along the A road form Young Bay to the shale pit parking area. The permanent lighting would replace a generator powered portable light (Photo 25-27).

#### PHOTOS

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



Photo 01. TDF tracking point one. Looking southeast from the northern end of the TDF.







Photo 02. TDF tracking point two. Looking north from the Water Treatment Plant.



Photo 03. TDF tracking point three. View (west) across the East Ridge expansion.







Photo 04. View down slope towards the fish pass.



Photo 05. View upstream at fish pass.







Photo 06. Fish pass.



Photo 07. Fish pass.





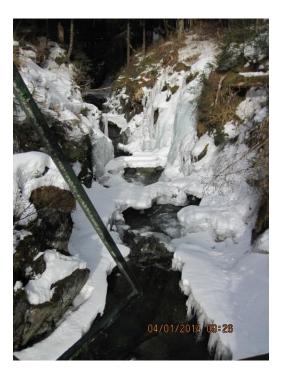


Photo 08. Downstream of fish pass.



Photo 09. Downstream of fish pass.







Photo 10. 920 ditch.



Photo 11. 920 ditch.







Photo 12. 920 ditch.



Photo 13. 920 ditch.







Photo 14. 920 ditch.



Photo 15. Pond A.







Photo 16. Bridge across Greens Creek. Rip rap near pond A.



Photo 17. Rip rap between Pond A and Greens Creek Bridge.







Photo 18. Riprap at Pond A undercut by Greens Creek.

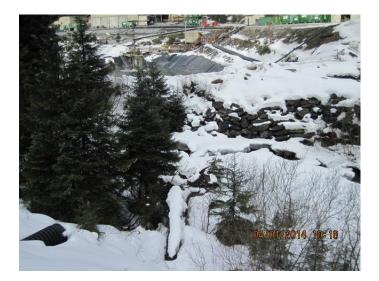


Photo 19. Riprap at Pond A undercut by Greens Creek.







Photo 20. Riprap at Pond A undercut by Greens Creek.



Photo 21. 55-gallon container of transmission fluid and other petroleum products.







Photo 22. Class one material at Site 23.



Photo 23. Class two and three material at Site 23.







Photo 24. Cannery Creek Weir.



Photo 25. Lighting project area near Young Bay.







Photo 26. Temporary light.



Photo 27. Shale pit.

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

