

INSPECTION REPORT: GREENS CREEK MINE

Tongass National Forest Minerals Group 8510 Mendenhall Loop Rd Juneau, AK 99801 Office (907) 789-6273

Fax (907) 586-8808

Date Of Inspection: Thursday, July 18, 2013 USDA FS Inspector: Jessica Lopez Pearce Ranger Districts: Admiralty National Monument

Juneau Ranger District
Weather Conditions: overcast, temperatures in the 50s

1. Exploration in accordance with operating plan	Not Checked
2. Timber removal following timber sale contract	Not Applicable
3. BMPs for erosion control	ОК
4. Water Quality BMPs	ОК
5. Public safety & fire prevention	ОК
6. Reclamation work adequate and timely	ОК
7. Roads maintenance is adequate and current	ОК
8. Tails placement in accordance with plan	ОК
9. Waste Rock placement in compliance	ОК
10. Company supervision of operation	ОК
11. Operating in a clean and orderly manner	OK

^{**}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

Mitch Brooks (HGCMC) accompanied Jessica Lopez Pearce (USFS, Tongass Mineral Group) and David Wilfong (State of Alaska, Department of Natural Resources, Mining Section) on an inspection of the Greens Creek Mine. The site visit included stops at 0.9-Mile A Road Stockpile, 1.4-Mile A Road Pit, Pit 7, Young Bay Dock, the Tailings Disposal Facility, Pit 174, Pit 6, Pit 405, Site E, the 860 helipad, Site 23, the 920 area, and the 1350 area.

0.9-MILE A ROAD STOCKPILE

Participants began the inspection with a drive down the A Road to the 0.9-Mile A Road stockpile. One of the agenda items for this inspection was to evaluate the volumes of stockpiled reclamation growth media as reported in the SRCE model. This site holds a soil stockpile with a vegetated cover of trees and grasses.

1.4-MILE A ROAD PIT

The pit contained multiple stockpiles of non-local road construction mineral material. The screen plant was not present. Mitch said it had been moved to the Tailings Disposal Facility for use in re-constructing the dirty road over the top of the tailings pile. The plant will be hand-scrubbed before it is returned to this pit.

PIT 7

Pit 7 was inspected to confirm the presence of stockpiled reclamation growth media. According to the 2012 Inactive Production Rock Sites and Quarries Annual Report, Pit 7 was initially developed in 1987 for use as road construction material. The pit has been partially backfilled with peat and gravel material from the Tailings area, and tree stumps and reclamation material derived during expansion of the tailings pile and development of the sand pit at 1.4-Mile A Road

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Pit. Mitch said that HGCMC employees had recently pulled approximately 8 large yard waste bags of invasive thistle. Another day of pulling thistle was being planned in the near future. Salamanders were again observed swimming in the shallow wetland pond on the north side of the Pit 7 entrance road (Photos 1a, 1b, and 1c).

Reddish-brown staining was observed in water along the edges of the pit and across the access road near the explosives storage. Upon the use of a field test strip, the pH was determined to be approximately 7.

YOUNGS BAY DOCK

Good housekeeping practices are in place at this site.

The A Road received maintenance in the spring and is still in good shape. Culverts were clear and the road had no ruts. About a dozen deer were observed along the road. Road maintenance along the B Road has been ongoing since my last inspection in May. The ditches and culverts along the B Road were being cleared and hydroseeding of the roadsides was occurring.

TAILINGS DISPOSAL FACILITY

Waste rock was being placed along the northeastern sides of the TDF for slope armoring. Active tailings placement was occurring central in the facility. Photos were taken at all of the three tracking points established in February 2013: the northern high point looking south (Photo 2), directly adjacent to the water treatment plant, looking northeast (Photo 3), and from milepost 1 on the B Road looking west (Photo 4).

During the inspection, there was activity around the TDF Water Treatment Plant. Pond 7 was in the process of being drained and dredged. Two containers with filters and a press were in operation in the TDF. The resulting sediments from the press and filters were being placed on the southwest side of the tailings pile. Mitch said that this is the first time than Pond 7 has been dredged since its construction (Photo 5).

PIT 174

This pit, located at 3.3 mile on the B Road, is in use as a runaway truck ramp and soil stockpile. The material that was removed from the pit was used for road construction in 1987. The runaway truck ramp was installed in 2006 following a haul truck incident. The pit was subsequently hydroseeded with a seed mix containing clover and many clover plants were observed in the area. The material available for reclamation was contoured up against the highwall. Dave Wilfong and I were concerned about the exposure of additional highwall upon the removal of the reclamation material.

PIT 6

Pit 6 is located at 4.6 mile on the B Road and originally was a source for road construction material in 1987. It contained a variety of materials varying from cobble-sized sand and gravel mix, to a fine sediment soil mixture.

PIT 405

Pit 405 is located at 7.6 mile on the B Road and was used for road and mine infrastructure construction material. According to the SRCE model, Pit 405 contains both growth media/topsoil and potentially acid generating material. The 2012 Inactive Production Rock Sites and Quarries Annual Report, the foundation of the pit is fractured, pyritic, chloritic rock. A standpipe was developed from a hole originally drilled in 2005 and water quality data is available.

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SITE E

There has been no change within the Site E waste rock pile. The Site E caisson and Pond E has been pumped and has a lower water level since my last visit.

860 HELIPAD

Equipment for the surface exploration drilling program was being stored here. Buckets of drilling materials were stored in pallets along the edges of the site, as were drill string and casing (Photo 6).

SITE 23

The Site 23 redesign is underway and the removal of the central pile of Class 2/3 waste rock to underground continues. The new Class 2/3 waste rock pile is now on the south side of the site, having been moved from its previous location on the east side. The sign for this class waste rock was present and upright. The Class 1 waste rock is still located on the north side of the site. Its sign was present, but had been knocked down.

A small temporary pond was present on the northeast side of the site. This basin was being used for washing out the trucks that were supplying concrete materials for the 920 Area construction (Photo 7).

920 AREA

A new concrete working area was being constructed around the new administration building and vehicle detours were in effect.

The warehouse area continues to have multiple secondary containment issues. Several shipping containers stored antifreeze, lubricant, grease, and promoter (3418) without secondary containment (Photos 8a, 8b, 8c, 8d). This is a recurring issue from past inspections. During a post-inspection phone conversation, Chris Wallace said HGCMC expected to have additional secondary containment structures for warehouse items by the fall of 2013.

The bridge across Greens Creek was being cleaned with a high pressure hose and scaffolding was under construction on the eastern outside edge in preparation for upcoming bridge maintenance and reconstruction.

Pond A was in the process of being cleaned and was empty of water (Photo 9).

1350 AREA

The 1350 access was free of snow and we drove up the road to look at the site. The material on the north side of the site has already been removed and this part of the site has been reclaimed. Mitch stated that the materials around the 1350 portal and on the west side of the site still need to be removed and taken to the reconstructed Site 23 (Photo 10).

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



Photo 1a. Reddish-stained water emanating from the waste rock pile with ph of appox 7.



Photo 1b. Small patch of invasive thistle.



Photo 1c. Salamander swimming in pond on east side of the pit, in the wetlands on north of the access road (additional photos of salamander available). Photos 1a, 1b, and 1c. Several observations within Pit 7.

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Photo 2. Tailings Disposal Facility taken from the northern photopoint.



Photo 3. Tailings Disposal Facility taken from the Water Treatment Plant photopoint.



Photo 4. Tailings Disposal Facility taken from the eastern photopoint.



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Photo 5. Pond 7 in the process of being dredged.



Photo 6. Surface exploration drilling program staging at the 860 Helipad.



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Photo 7. A temporary basin constructed at Site 23 to collect runoff from concrete truck washouts.



Photo 8a. Antifreeze containers



Photo 8b. Barrels of lubricant





Photo 8c. Gear oil containers Photo 8d. Barrels of promoter (3418) Photos 8a, 8b, 8c. 8d. Multiple secondary containment issues at the 920 Warehouse.



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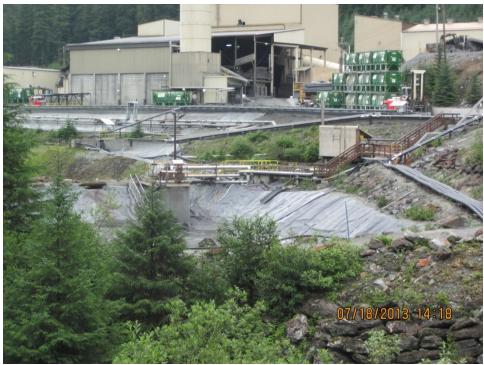


Photo 9. Pond A empty of water in preparation for cleaning.



Photo 10. Stockpiles of material at the 1350 level to be moved to Site 23.

Thank you very much to HGCMC for a safe and thorough visit!

/s/ Jessica Lopez Pearce, Minerals Administrator

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