INSPECTION REPORT: GREENS CREEK MINE

Tongass National Forest Minerals Group
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Date Of Inspection: Thursday, August 22, 2013
USDA FS Inspector: Jessica Lopez Pearce
Ranger Districts: Admiralty National Monument
Juneau Ranger District
Weather Conditions: partly sunny, 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	OK
4. Water Quality BMPs	OK
5. Public safety & fire prevention	OK
6. Reclamation work adequate and timely	OK
7. Roads maintenance is adequate and current	OK
8. Tails placement in accordance with plan	OK
9. Waste Rock placement in compliance	OK
10. Company supervision of operation	OK
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 Pete Schneider (USFS, TNF Fisheries Biologist) on an inspection of the Greens Creek Mine. The site visit included stops at 1.4-Mile A Road Pit, Pit 7, numerous culverts along the A Road, Young Bay Dock, the Tailings Disposal Facility, Site E, Site 23, and the 920 area.

1.4-MILE A ROAD PIT

We began the inspection with a drive down the A Road to the 1.4-Mile A Road Pit. The pit contained three stockpiles of non-local mineral materials and two stockpiles of local materials previously purchased and excavated from the pit. These materials will be used in road maintenance activities. The screen plant was still absent, having been relocated to the Tailings Disposal Facility earlier in the summer. We discussed future plans to use material from the pit upon implementation of the TDF expansion project.

PIT 7

Pete Schneider inspected the culvert under the access road to Pit 7. He stated that this drainage was fish habitat. Please refer to his supplemental report for detailed findings.

Mitch stated that he and another HGCMC employee had recently pulled approximately 4 large yard waste bags of invasive Canadian thistle; this is in addition to the 8 bags pulled in July. Pete found two additional types of invasive weeds in the vicinity of the thistle. We discussed weed eradication techniques including tarping and pesticide.

No salamanders were observed swimming in the wetland pond on the north side of the Pit 7 access road during this visit.

CULVERTS ALONG THE A ROAD

At milepost 2.2, we inspected a culvert with water flowing west to east in the Fowler Creek drainage. An old beaver dam was located downstream of the culvert and had caused flooding and backfilling behind it. The culvert was jammed with woody debris (Photo 1). It was recommended that the culverts under the A Road be checked for obstructions and cleaned if necessary. Wide mesh screen enclosures were also suggested in order to keep out debris from beaver activity.

At milepost 2.5, a culvert under the road was clear and water was flowing through it (Photo 2). Pete remarked that this culvert may be undersized for the size of the upstream watershed.

Contractors from Chatham Electric were clearing brush along the powerline corridor at milepost 2.9.

A culvert at milepost 3.3 had a low volume of water flowing through it.

There was stockpiled gravel along both sides of the A Road at milepost 3.9. Mitch stated that he thought the gravel was for road maintenance.

At milepost 4.8, a large culvert under the road drained water to Youngs Bay, which was approximately 200 feet downstream. Upstream of the culvert was an old and large beaver pond.

Since the A Road was last maintained in the spring of 2013, the road has again become rutted and road material has migrated to the shoulders (Photo 3). Mitch said the A Road would be graded again in the fall of 2013, if not before.

YOUNGS BAY DOCK

This site was clean and reflected good housekeeping practices.

TAILINGS DISPOSAL FACILITY

Active tailings placement was occurring in the central part of the facility. Grass from hydroseeding projects on several flanks of the TDF slopes appeared thick and lush. Photos were taken at all of the three tracking points established in February 2013: the northern high point looking south (Photo 4), directly adjacent to the water treatment plant, looking northeast (Photo 5), and from milepost 1 on the B Road looking west (Photo 6). The newly fabricated wind screens were present in the TDF but not in use due to calm conditions.

The dredging and cleaning of Pond 7 was completed earlier in the week and refilling was underway (Photo 7). The resulting sediments from the filter press were placed on the southwest side of the tailings pile and graded to the existing surface. Pond 7's liner was deemed to be in good condition and not replaced.

The exterior and interior of the TDF Water Treatment Plant was clean and orderly.

SITE E

There has been no change with the Site E waste rock pile. The water level in the pond at Site E was low. We met several HGCMC Environmental Department employees attempting to collect a sample from monitoring site 708; however, the well was dry.

Mitch and Pete discussed the Fish Pass. Its repair has been tentatively scheduled for spring 2014.

SITE 23
The access road to Site 23 was in poor condition, with deep ruts and thick mud. The Site 23 redesign and reconstruction continues. A new liner was installed on the northeast side of the site and material from 1.4-Mile A Road pit was being placed on top of the liner (Photo 8). The existing Class 1 waste rock pile is still located on the northern side and the Class 2/3 waste rock pile is on the southwest side of the site. The Class 2/3 pile was a smaller volume than it was during my last visit. Neither classification signs were present.

The small temporary pond that was noted during the July inspection was still present on the far northeast edge of the site. This basin was used for washing out the concrete trucks that were supplying materials for the 920 area construction (Photo 9). Mitch said HGCMC plans to use this temporary washout pit until the 920 construction is complete, then the remaining material will be codisposed with the rest of the materials at Site 23.

A helicopter landed at the 860 helipad during our visit. The 2013 surface exploration plan of operations has concluded drilling operations and site reclamation is underway. The temporary communication site has also been moved. I requested that Mitch send me photos of the reclaimed sites.

920 AREA
The new concrete pad around the 920 working area was still under construction and nearing completion. The maintenance and repair of the Greens Creek Bridge was complete (Photos 10a and 10b). The bridge roadbed now consists of poured concrete and all conduit is secured in pipeline under the bridge. Directly upstream from the Greens Creek Bridge, we observed a Dolly Varden Char attempting to jump above the fish barrier. The southern side of the creek had boulders placed along the bank and slopes were vegetated (Photo 11).

The Pond A cleaning project was still in progress; the pond was empty and sediment was being removed (Photo 12). While Pond A is undergoing cleaning, waters from the portal and mill area temporarily report to Pond 23.

The warehouse contained multiple secondary containment issues. Several shipping containers stored ferric chloride, gear oil, transmission fluid, grease, and promoter (3418) without secondary containment (Photos 13a, 13b, 13c, 13d). This continues to be a recurring issue from past inspections. Mitch said that secondary containment structures for warehouse items will be installed in the fall of 2013.

On the drive back to the Hawk Inlet camp, we noticed that B Road maintenance is progressing. Currently, crews are performing ditch-cleaning activities at milepost 7.3. Mitch said they could be done by next week.

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

Photo 1. The culvert at A Road milepost 2.2 was clogged with debris.

Photo 2. The culvert at milepost 2.5 was draining freely.

Photo 3. The A Road will require maintenance soon.

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

Photo 5. Tailings Disposal Facility taken from the Water Treatment Plant photopoint.

Photo 6. Tailings Disposal Facility taken from the eastern photopoint.

Photo 7. Pond 7 was recently cleaned for the first time.

Photo 8. The new liner has been installed at Site 23.

Photo 9. Concrete truck washout pit at Site 23.

Photo 10a.

Photo 10b.
Photos 10a and 10b. The Greens Creek Bridge was recently repaired.

Photo 11. The southern bank of Greens Creek directly upstream from the portal.

Photo 12. Pond A cleaning in progress.

Photo 13a.

Photo 13b.

Photo 13c.

Photo 13d.

Photos 13a, b, c, d. Multiple secondary containment issues at the Warehouse.

Thanks to HGCMC for an efficient and safe visit.

/s/ Jessica Lopez Pearce, Minerals Administrator