Inspection Report: Kensington Gold Mine

Tongass National Forest, Minerals Group
8510 Mendenhall Loop Road
Juneau, Alaska 99801
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Date of Inspection: Tuesday, July 16, 2013
Date of Report: Friday, July 26, 2013
USDA Forest Service Inspector: David Schmerge

Ranger District: Juneau Ranger District
Weather Conditions: Clear. Temperature in the 60s.

Exploration in accordance with operating plan	Satisfactory
Timber removal following timber sale contract	Not Applicable
BMPs for erosion control	Satisfactory
Water Quality BMPs	Satisfactory
Public safety and fire	Satisfactory
Reclamation work adequate and timely	Unsatisfactory
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 letter to the operator, outlining the necessary work.

NEW REMARKS AND SUGGESTIONS

Peter Strow (Environmental Coordinator, Coeur Alaska) and Cassandra Joos (Senior Environmental Coordinator, Coeur Alaska) accompanied David Schmerge (Hydrologist, U.S. Forest Service), Pete Schneider (Fisheries Biologist, U.S. Forest Service), and Dave Wilfong (ADNR) on this inspection. We inspected the progress of the acid rock drainage (ARD) remediation at the Tailings Treatment Facility (TTF), pit 7, the preparation of the graphitic phyllite field test cells, a surface exploration site, the progress of the reclamation test plots at Snowslide Gulch, and Johnson Creek in the vicinity of Bridge #2.

ARD MITIGATION AT THE TAILINGS TREATMENT FACILITY
Progress has been made on the excavation of the acid generating graphitic phyllite, but it was apparent that there is still some graphitic phyllite present (photo 01). Bob Chernikoff (Surface Operations Supervisor, Coeur Alaska) stated that Clint Degenhart (Geologist, Coeur Alaska) would be inspecting the site soon to assess how much more needs to be excavated. The temporary containment cell at the TTF was full (photo 02). No excavating or hauling was in progress during our visit; there was 1 haul truck on site but it was not in use (photo 02), and there were no excavators on site. Kevin Eppers (Environmental Manager, Coeur Alaska) reported that there was no excavating or hauling for several days prior to our inspection, but the operators were busy with ancillary duties building the secondary containment structure during that time-frame.

I measured the water quality at the site at multiple points with pH test strips. The pH at the sump (photo 03) was about 3. The pH of the water in the pond to the northwest of the graphitic phyllite (photo 04) was about 5, and the pH at the north end of Lower Slate Lake (photo 05) was about 6. Peter stated that Coeur had recently collected more water quality samples.

PIT 7

A containment cell for temporary storage of the graphitic phyllite was recently constructed at Pit 7, and it has been filled with graphitic phyllite (photo 06). A second temporary containment cell was partially constructed (photo 07), and Bob stated that it would be able to hold 4000 tons of graphitic phyllite. There were 2 excavators and 1 haul truck at the site, but were not in use (photos 07, 08, and 09). Kevin stated that the operators were unavailable to run the equipment because they were conducting ancillary tasks associated with constructing the containment cell.

GRAPHITIC PHYLLITE FIELD TEST CELLS

The preparation of the graphitic phyllite field test cells was underway (photo 10). There was a lot of fine grained material in the four graphitic phyllite samples (photos 11 and 12). I discussed with Peter the necessity of large grained material without the fines.

SURFACE EXPLORATION

We inspected a surface exploration site on Snowslide Gulch. The drill rig platform is partially blocking the road, and it will have to be removed before the reclamation test plot construction can begin (photo 13). A second drill rig platform that was recently abandoned will also have to be removed (photo 14). Pete will prepare a separate and complete surface exploration report.

RECLAMATION TEST PLOTS

Work on the reclamation test plots at Snowslide Gulch has not yet started (photo 15). The deadline for seeding the test plots was July 15. On July 2, Coeur sent a letter to the Forest Service requesting an extension of the deadline to August 15. The letter stated, “Current resources that were planned for the construction of the proposed test plots have been diverted to remediation of Acid Rock Drainage (ARD) at the Tailings Treatment Facility. Due to this unexpected remediation effort and urgency of completing the remediation of the ARD, Coeur is requesting that this window for seeding be extended to August 15th.” The Forest Service has not approved the extension.

JOHNSON CREEK NEAR BRIDGE #2

Several water quality standard exceedances for aluminum, iron, and manganese occurred at JS5 in 2012. The Freshwater Monitoring Plan is a joint requirement of the Forest Service and DEC. It requires monitoring at JS5; and potential causes and actions implemented to address water quality standard exceedances are required to be identied. JS5 is located on Johnson Creek approximately 600 feet below bridge number 2 near the Jualin administration and laydown areas. Coeur has previously hypothesized that the source of exceedances at JS5 is Snowslide Gulch, but Snowslide Gulch enters Johnson Creek about 0.4 miles below bridge number 2. I discussed this with Peter, and he agreed that Snowslide Gulch is not a plausible source of the exceedances. Cassandra, Pete, Dave and I walked around a sediment pond located just downstream of bridge number 2. A drainage pipe below the sediment pond has a cap that is leaking (photo 16). This leaking pipe is only 1 possible source of the water quality exceedances. More work will need to be done to determine the source(s) of the exceedances. This drainage pipe and JS5 are on patented claim land. Therefore, I am forwarding this information to DEC, and they will take the lead on this issue.

ACTION ITEMS

1. Update the "Proposed Corrective Actions and Timeline" table found in the ARD Remediation Plan and provide it to the Forest Service.
2. Provide Clint Degenhart's estimate of the amount of graphitic phyllite still to be excavated to

the Forest Service as soon as it is available.
3. Submit all available ARD water quality results to the Forest Service as they become available.
4. As soon as the drill rig is removed from its current location, remove the platform so that the reclamation test plot construction can begin. The abandoned drill rig platform on Snowslide Gulch also needs to be removed.
5. On day(s) in which one or more of the haul trucks are not being utilized for the ARD remediation, they should be utilized to haul soil to Snowslide Gulch.
6. If there is a several day period in which one or more of the excavators are not being utilized for the ARD remediation, they should be utilized to spread the topsoil for the reclamation test plots.

Photo 01. The graphitic phyllite excavation has progressed, but the excavator was not on site during our visit. The black material in the center of the photo is graphitic phyllite.

Photo 02. The temporary containment cell at the TTF is full. The haul truck is not in use.

Photo 03. The ARD seepage is being collected in this sump and sent to the graphitic phyllite water treatment plant.

Photo 04. Water from the pond at the northwest corner of the graphitic phyllite is being pumped to the constructed pond where it is temporarily stored before it is sent to the graphitic phyllite water treatment plant.

Photo 05. The pH of the water at the north end of Lower Slate Lake was about 6.

Photo 06. A recently constructed containment cell at Pit 7 is temporarily storing graphitic phyllite.

Photo 07. A second containment cell at pit 7 is partially constructed. The Volvo excavator in the foreground was not being used on the day of our inspection.

Photo 08. This Cat excavator at pit 7 was not being used during the day of our inspection.

Photo 09. This haul truck at pit 7 was not being used during the day of our inspection.

Photo 10. The barrels for the graphitic phyllite field test cells are on site and the trench is being dug for the placement and securement of the sample containers.

Photo 11. Graphitic phyllite samples are being collected and sorted for the field test cells. There is a lot of fine grained material in the samples.

Photo 12. Graphitic phyllite samples are being collected and sorted for the field test cells. There is a lot of fine grained material in the samples.

Photo 13. This drill rig and platform will have to be removed before a haul truck can deliver the soil to Snowslide Gulch for the reclamation test plots.

Photo 14. This recently abandoned drill rig platform needs to be removed before the reclamation test plots can be constructed.

Photo 15. The reclamation test plots have not yet been constructed on Snowslide Gulch.

Photo 16. This pipe has a cap that is leaking. It is presently unknown if this could be a source of the water quality exceedances at JS5.

U.S. Forest Service Officer: /s/: David Schmerge