



## Inspection Report: Kensington Gold Mine

Tongass National Forest, Minerals Group  
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Date of Inspection: Wednesday, August 21, 2013  
Date of Report: Tuesday, August 27, 2013  
USDA Forest Service Inspector: David Schmerge

Ranger District: Juneau Ranger District  
Weather Conditions: Cloudy. 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	Satisfactory
Roads maintenance adequate and current	Satisfactory
Tails placement in accordance with plan	Satisfactory
Waste Rock placement in compliance	Not Checked
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

Kevin Eppers (Environmental Manager, Coeur Alaska) accompanied David Schmerge (Hydrologist, U.S. Forest Service) on this inspection. The primary purpose of this trip was to review the surface exploration operation; we were joined by Pete Schneider (Fisheries Biologist, U.S. Forest Service), Will Robinson (Coeur Alaska), Scott Kelso (Timberline Drilling Inc.) and Jason Verdi (Timberline Drilling Inc.). Kevin and I also inspected the reclamation test plots at Snowslide Gulch, the acid rock drainage (ARD) remediation at the Tailings Treatment Facility (TTF), the graphitic phyllite field test cells, the TTF Water Treatment Plant, and Pit 7.

### SURFACE EXPLORATION

The surface exploration drill rig was in a cleared area about a quarter mile northeast of Pit 4 (photo 01). It was near a small valley that contains a mapped Class III stream. The stream was about 100 feet away. We did not hike down to inspect the stream, but we did not hear flowing water, so we assumed it was probably intermittent. The 2013 Surface Exploration Annual Work Plan (Plan) requires the drill contractor to complete an environmental pre-shift checklist; the checklist states that if drill water is within 200 feet of running water, this must be fixed before drilling resumes. At the beginning of each shift, the drill contractor should be certain that there is no flowing water in this stream. If flowing water is present, then drilling should stop until the flow stops.

A sump below the drill platform was capturing the drill water and cuttings (photo 02). The Plan





states that the sumps will be dug into the ground or constructed using cut timber, and lined with geo-fabric; it also states that upon termination of drilling, all non-native materials will be removed and drill cuttings will remain within the constructed sumps. The sump is lined with plastic instead of geo-fabric, so it needs to be removed upon termination of drilling. Before removing the liner, the drill water and cuttings will need to be disposed. Scott said they could be pumped into the drill hole.

The drilling fluids stored on the platform were not in a secondary container. If a spill on the platform occurs, it might be contained in the sump, but I expressed concern that any liquid stored at the edge of the platform could spill over the side and be outside of containment. Scott said that he would see to it that all liquids are stored in secondary containers.

#### RECLAMATION TEST PLOTS

Grass is germinating in each of the three reclamation test plots at Snowslide Gulch (photo 03). Kevin stated that the qualitative and quantitative monitoring has started, and is being done once per week. The Reclamation Test Plot Plan requires reference site(s) for the monitoring, and Coeur is to consult with the Forest Service during reference site selection. Coeur has not yet consulted with the Forest Service to select the reference sites. Ellen Anderson (Botanist, U.S. Forest Service) should be consulted as soon as possible.

#### ARD REMEDIATION AT THE TAILINGS TREATMENT FACILITY

Most of the graphitic phyllite (GP) has been excavated at the Tailings Treatment Facility (TTF) (photo 04). There may be a little more GP to be excavated because some ARD is still visible (photo 05), but the pH at the sump (photo 06) has improved to 5 (It was 3 on July 29, and 4.5 on August 6). At the north end of Lower Slate Lake (photo 07), the pH was about 6, and at the northwest pond (photo 08) it was about 5.5.

#### GRAPHITIC PHYLLITE FIELD TEST CELLS

The GP field test cells have been prepared (photo 09), and Kevin told me that the testing started on August 20. The area has not yet been secured with a fence. The Scope of Work for Construction and Operation of Field Test Cells report states that the site should be in a secure area with limited access that can be fenced off.

#### TTF WATER TREATMENT PLANT

There were several secondary containment violations at the TTF. The inadequate secondary containment of a conex container that I previously reported had not yet been fixed (photo 10). The secondary containment requirement is to store 110% of the largest container (363 gallons). With a level and a tape measure, I measured the slope of the container, and then calculated the capacity to be less than 100 gallons. It is essential to fix the inadequate secondary containment of this conex container. I also found several buckets containing liquids that were outside of secondary containment (photos 11 and 12); Coeur personnel immediately moved the buckets inside the building where there is secondary containment.

#### PIT 7

The containment cells for the temporary storage of GP are full and covered (photo 13). According to the approved ARD remediation plan, all of the GP in the temporary containment cells are scheduled to be disposed underground by encapsulation within paste tailings by the end of the third quarter of this year. Kevin stated that Coeur may miss this deadline by several weeks. He gave three reasons for the possible delay. First, the haul trucks that are to be used to move the GP underground need to be modified before they can operate underground. Second, there is presently not enough space available underground for permanent disposal of all the GP. Third, Coeur wants to temporarily store some of the GP underground, but they don't want to do this before they have the necessary approval. On August 26, DEC gave Coeur approval to temporarily store the GP underground.



#### ACTION ITEMS

1. Before each shift, the drill contractor should check the intermittent stream. If water is flowing, then drilling should not resume until the flow stops.
2. Upon completion of drilling, the drill water and cuttings should be pumped into the drill hole, and the plastic sump liner should be removed.
3. Before drill sites are cleared or otherwise disturbed, field personnel should be certain that the site will comply with the requirement that the drill water is not to be within 200 feet of running water. It is appropriate to move the site several hundred feet from the proposed location if necessary in order to comply with this requirement.
4. For the Reclamation Test Plot Plan, consult with Ellen Anderson to select the reference site(s) as soon as possible.
5. Secure the field test cells with a fence as soon as possible.
6. At the TTF Water Treatment Plant, it is essential to store all liquid chemicals and wastes within effective secondary containers.



Photo 01. The drill rig is located about a quarter mile northeast of Pit 4. An intermittent stream is about 100 feet away.



Photo 02. The sump under the platform is effectively capturing the drill water and cuttings.



Photo 03. The three reclamation test plots are germinating. Kevin stated that Plot 3 (the far plot) contains the biopolymer; I previously reported that the biopolymer was in Plot 2.



Photo 04. Most of the Graphitic Phyllite at the north end of the TTF has been excavated.



Photo 05. There is still some visible ARD seepage.



Photo 06. The pH at the sump was 5.



Photo 07. The pH at the north end of Lower Slate Lake was about 6.



Photo 08. The pH at the northwest pond was about 5.5.



Photo 09. The field cell tests started on August 20, but the area needs to be enclosed by a fence.



Photo 10. The secondary secondary containment of the middle conex container is inadequate. Because it is on a significant slope, its capacity is less than 100 gallons, but it is required to hold 363 gallons.



Photo 11. Four 5 gallon buckets of floor sealer were stored outside of secondary containment.



Photo 12. This liquid waste was not in secondary containment, and the bucket did not have a label.



Photo 13. The graphitic phyllite temporarily stored at Pit 7 is now covered.

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