

HOLDEN MINE REMEDIATION PROJECT

Holden Mine Remediation construction update for July 2014

July was a productive month at the Holden Mine Remediation site. As the photos display below, significant progress was made on the grading of the tailings piles and the start of barrier wall construction. Additionally, work was completed at the Lower Meander of Railroad Creek and development of the barrier wall platform along the toe of Tailings Pile 3 on the lower reach of Railroad Creek was also started.

Grading of Tailings Piles 1 and 2 from over-steepened slopes to 3 to 1 slopes along Railroad Creek is a significant accomplishment this month. There are three main tailings piles onsite, containing approximately 8.5 million tons of tailings and covering an area of roughly 75 acres. Portions of the tailings piles rose in heights of up to 120 feet above Railroad Creek. These steep slopes have now been re-graded and, following jet grouting of the Tailings Piles 2 and 3 next year, will be stable under seismic conditions. Pulling the tailings back and proving riprap along the toe will prevent the erosion of tailings into Railroad Creek. Once the full grading of both the tops and sides of the tailings piles is completed, the area will be capped with a soil cover and planted with native vegetation.

Another main component of the remedy is the barrier wall between the tailings and Railroad Creek. The barrier wall is being constructed underground to collect ground water that currently seeps through the tailings/waste rock piles and into Railroad Creek. Once completed, the barrier wall will collect water, which will then be transported to a water treatment plant to remove heavy metals before releasing the water back into Railroad Creek. The underground barrier wall averages three feet wide and can range from 40 to over 90 feet deep. The low permeability barrier wall is made of a slag cement-bentonite slurry mixture.



Riprap along Railroad Creek protects the barrier wall being constructed along Tailings Pile 1. Barrier wall slurry batch plant is located at the top of the pile.



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Holden Mine Remediation July 1-3, 2014



Stockpiled slag cement on Tailings Pile 1 to use in the barrier wall construction.



Barrier wall excavation at the northeast portion of Tailings Pile 1.



Aeration and consolidation of tailings from Tailing Pile 2 on southwest corner of Tailings Pile 3.

Holden Mine Remediation July 17-18, 2014



Looking east at Tailings Pile 2 grading. The 3:1 north slopes taking shape; topsoil pile (brown colored borrow pile) stands out. Topsoil will be utilized in revegetation of the tailings pile.



Further development of the borrow site south of Tailings Pile 3. This material will be utilized for cover of the graded tailings piles.



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Once the cement slag and bentonite slurry are piped into the trench to construct the barrier wall, the panel must cure. This is a view of the barrier wall panels curing at Copper Creek.



The cement-bentonite batch plant, needed for the barrier wall construction, inspected during a site visit by Forest Service officials and a Rio Tinto-led press tour.

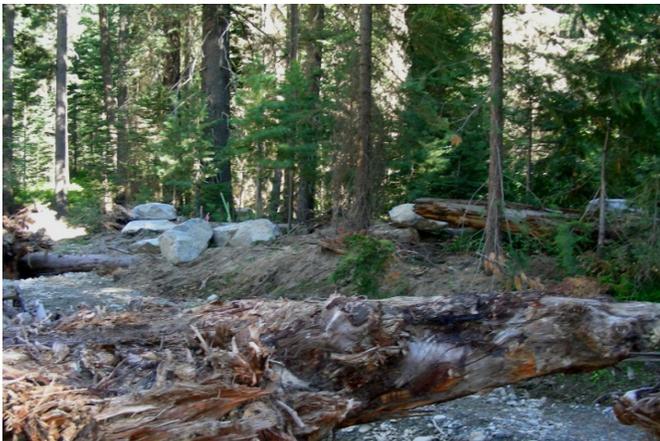
Holden Mine Remediation July 28-31, 2014



Barrier wall construction continues near Copper Creek.



Grading of Tailings Pile 2 along the north slope is near completion as it approaches the elevation of Railroad Creek.



Large woody debris and ballast placed between trees at the 'Lower Meander' of Railroad Creek.



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