CENTRAL VALLEY REGIONAL WATER QUALITY CONTROL BOARD

INSPECTION REPORT

23 October 2007

DISCHARGER: **Walker Mine**

LOCATION & COUNTY: Walker Mine, Plumas County

CONTACT(S): **None**

INSPECTION DATE: 10 October 2007

INSPECTED BY: Wendy Wyels, Steve Rosenbaum, and Jeff Huggins

ACCOMPANIED BY: NA

OBSERVATIONS AND COMMENTS:

On 31 October 2000, Board staff performed the annual fall inspection of the Walker Mine in Plumas County as specified in the Walker Mine Operations and Maintenance Procedures (June 1997). The weather was cloudy and cool (about 35°F). A light snow had fallen the night before the inspection in the higher elevations and a slight rain fell during part of the inspection. A photo log of the inspection is attached.

WALKER MINE TAILINGS SITE

Board staff arrived on site at 10:00am and went first to the Walker Mine tailings site to meet with the representatives of the United States Department of Agriculture Forest Service (USFS), and inspect the progress of the Dolly Creek diversion work being carried out as required by Order No R5-00-028. The tailings site represents a significant source of water pollution into both Dolly Creek and Little Grizzly Creek. Diversion of Dolly Creek off of the tailings is expected to reduce heavy metals contamination in Little Grizzly Creek.

Construction of the diversion channel infrastructure was nearly complete as shown in Photos #2-11. However, the USFS project engineer (George Butler, Plumas National Forest) indicated that a significant amount of subsurface drainage from hillsides surrounding the tailings site is making its way into the tailing site, surfacing in the old Dolly Creek channel, and discharging at the USFS dam location as shown in photos #12-13. This was not entirely anticipated by the USFS and will need to be further assessed in order to reduce metals discharged into Little Grizzly Creek.

PORTAL AREA

Board staff next went to the Walker Mine Portal area. The portal door at the mine entrance was securely locked. However, there was some evidence of minor vandalism to the portal door, making it hard to open.

Board staff entered the mine access tunnel and downloaded pressure data from the Telog data recorder during the inspection. At the time of the inspection, a current measurement of 7.08 mAmps (133 feet of pressure head) was recorded. The maximum pressure head has continued to fall since the last inspection (11-12 June 2007). At that time a pressure head of

154 feet was recorded above the mine seal due to water and snowmelt recharging the mine workings.

The old batteries that power the Druck pressure sensor recorder were removed and replaced with recharged batteries during this inspection. All four of the heavy-duty locks on the portal doors were securely locked upon leaving the mine portal.

WATER QUALITY MONITORING

Surface water samples were taken from 11 of the 25 sampling locations, located in the upper Walker Mine watershed area. Most of the sample locations had sufficient surface water to sample, however water flow in general was low. Laboratory results are pending.

SUBSIDENCE AREAS

Staff inspected the diversion channel structures in the area of the Piute orebody workings. There was no water flowing in the diversion channels at the time of the inspection and it appeared that water flow has been minimal for some time.

SUMMARY:

A semi annual inspection was made of the Walker Mine site. The Dolly Creek diversion work at the Walker Mine tailings site being performed by the USFS was nearly completed. If significant subsurface water infiltration of the tailings continues, further work may need to be performed to address this problem. Some surface water monitoring of the upper Walker Mine watershed was performed and water pressure measurements on the mine seal were obtained. New batteries were installed for the data logger. Staff will revisit the site in the spring to replace the batteries, inspect the seal, collect water samples from all monitoring points, and further assess runoff into the subsidence areas.

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JEFF HUGGINS
Water Resources Control Engineer

#1. Walker Mine, Plumas County October 2007.

#4. Drop structure above the tailings impoundment.

#2. USFS Dolly Creek diversion work. Inlet structure located above the tailings impoundment.

#5. Stilling basin located at the base of the drop structure.

#3. Dolly Creek temporary diversion.

6. Dolly Creek upper diversion channel looking downgradient towards the tailings impoundment.

#7. Dolly Creek lower diversion channel looking upgradient towards Walker Mine.

#10. Little Grizzly Creek looking upstream from the confluence with Dolly Creek.

#8. New tailings impoundment outfall structure from Dolly Creek to Little Grizzly Creek looking upgradient.

#11. Little Grizzly Creek looking downstream from the confluence with Dolly Creek.

#9. New tailings impoundment outfall structure from Dolly Creek to Little Grizzly Creek.

#12. Existing USFS tailings impoundment dam on Dolly Creek.

#13. Looking upgradient at Dolly Creek near the USFS dam.

#14. Walker Mine tailings impoundment near the USFS dam.