



- Shannon Litz / R-C File Photo

## Emergency treatment prevents toxic discharge into Leviathan Creek

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STAFF REPORTS

Emergency treatment of acid mine drainage stored in ponds at the Leviathan Mine Superfund site in Alpine County has prevented discharge of about 3 million gallons of untreated toxic water to Leviathan Creek, a tributary of the East Fork of the Carson River.

As a result of the highest amount of rain and snowfall since 1995, acid mine drainage from ponds at Leviathan Mine threatened to overflow in April. Through May 15, precipitation near the site was at 155 percent of average, or 11 inches above normal, the Lahontan Regional Water Quality Control Board reported Monday.

The Water Board's contractor began operating an emergency treatment system on April 5. The treatment system neutralizes the acid drainage stored in the ponds by mixing the contaminated water with lime. Toxic metals are captured as sludge on the pond bottom, and treated water is discharged to Leviathan Creek. The discharged water meets water quality criteria established by the U.S. Environmental Protection Agency, which has jurisdiction over operations at the Superfund site.

"The Water Board is committed to preventing untreated discharges from its ponds at the Leviathan Mine site," said Harold Singer, the board's executive officer. "Acidic discharges to the creek harm aquatic life and threaten public health. As caretaker of the site for the State, we are doing what is needed make sure those discharges don't occur."

Leviathan Mine is an abandoned sulfur mine five miles east of Markleeville and six miles west of Topaz Lake. The State of California acquired the mine in 1984 to clean up water quality problems caused by historical mining. The Water Board completed a pollution abatement project at the mine in 1985, and since 1999 has continued to actively treat waters discharged from the mine site.

Acid mine drainage is low pH (high acid) water containing dissolved toxic metals such as aluminum, arsenic, copper, nickel and zinc. The drainage is collected over the winter and spring and stored in five lined evaporation ponds at the site.

Normally, the ponds at Leviathan Mine have capacity to store drainage and precipitation generated during average winters until summer when pond water treatment is initiated. However, the huge winter and spring snowfall at the site had caused the ponds to completely fill. Without the emergency treatment, approximately 3 million gallons of untreated toxic discharge from the ponds would have occurred.

Emergency treatment will continue until the Water Board is confident that the ponds will not overflow, estimated to be around the first of June.

The Lahontan Water Board protects and restores water quality in California east of the Cascade and Sierra Nevada crests from the Oregon border through the Mojave Desert.