

**STATE WATER RESOURCES CONTROL BOARD
BOARD MEETING SESSION – DIVISION OF FINANCIAL ASSISTANCE
OCTOBER 25, 2006**

ITEM 6

SUBJECT

CONSIDERATION OF AUTHORIZATION TO ALLOCATE \$500,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO THE LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD FOR SPRING POND WATER TREATMENT AT LEVIATHAN MINE

DISCUSSION

Leviathan Mine (Mine) is an inactive sulfur mine located in Alpine County. The State acquired the Mine in 1984 to clean up water quality problems caused by historic mining practices. Those practices resulted in the generation of acidic mine drainage (AMD). Responsibility for the Mine rests with the State Water Resources Control Board (State Water Board), which, in turn, has delegated cleanup work oversight to the Lahontan Regional Water Quality Control Board (Lahontan Water Board). In 1985, the Lahontan Water Board completed a pollution abatement system at the Mine, which resulted in dramatic improvements in water quality. However, that system did not address all pollution problems at the Mine, so contamination, primarily AMD, continues to threaten Leviathan and Aspen Creeks, especially during periods of high runoff.

In May 2000, the United States Environmental Protection Agency (USEPA) designated Leviathan Mine a federal Superfund site and the State of California a potential responsible party. The State is, therefore, required to provide funding for cleanup and remediation of the Mine under the federal Comprehensive Environmental Response, Compensation, and Liability Act. Cleanup actions are further mandated by USEPA's annual issuance of Administrative Abatement Actions until an ultimate remedy is identified for implementation. The required cleanup actions include preventing pond overflow.

During the winter, AMD is collected in a series of ponds at the Mine. The AMD is a dilute sulfuric acid solution containing high concentrations of metals and arsenic. In the summer, that AMD, along with direct precipitation that falls on the ponds, is treated and discharged to Leviathan Creek. The treated discharges meet USEPA requirements. As a result, aquatic life in Leviathan Creek and downstream has improved.

The last two year's heavy precipitation recharged groundwater in the Mine area, and, as a result, AMD flows to the ponds are greater than in years past. Despite having treated all of the 13.2 million gallons of AMD contained in the ponds during the summer 2006, it is anticipated that, given the current flow rates, the ponds will overflow in spring 2007 if no actions are taken. Untreated and uncontrolled discharge from the ponds will harm aquatic life in Leviathan Creek and waters downstream and may render the water a hazard to human health. Such a discharge will also violate USEPA's mandate and may result in increased liability to the State as part of the Natural Resources Damage Assessment that is underway.

In the spring of 2006, the Lahontan Water Board received \$400,000 in emergency funding from the Cleanup and Abatement Account to conduct spring treatment to prevent the overflow of untreated AMD to Leviathan Creek. The contractor hired by the Lahontan Water Board treated approximately seven million gallons of AMD that would have otherwise flowed to Leviathan Creek. During this spring's activities, Mine access conditions improved at the initiation of treatment such that the

contractor was able to treat significantly more AMD than anticipated, considering the funding available. Additional funding was sought subsequent to treatment to remove sludge generated during the treatment process.

The Lahontan Water Board plans to contract for spring 2007 pond water treatment to prevent pond overflow. The exact costs to perform the emergency treatment depend on the access conditions and the amount and character of the water being treated. Due the location of the site, at 7,000 feet elevation in a remote part of Alpine County, access to the site is difficult in all times except the summer and early fall. It is anticipated that equipment, treatment supplies, and personnel will need to be transported to the site over the snow using snowcats and snowmobiles. The estimated cost for treatment activities is \$500,000.

POLICY ISSUES

Should the SWRCB approve \$500,000 for emergency pond water treatment at Leviathan Mine?

FISCAL IMPACT

As of October 11, 2006 the uncommitted balance is \$3.2 million. Approval for funding for the Spring Pond Water Treatment Project will reduce the CAA balance by \$500,000.

REGIONAL BOARD IMPACT:

This item has the support of the Lahontan Water Board.

STAFF RECOMMENDATION

The Division of Financial Assistance recommends that the State Water Board approve the Lahontan Water Board request for \$500,000 from the CAA for the Spring Pond Water Treatment Project at the Mine.

**STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 2006 -**

CONSIDERATION OF AUTHORIZATION TO ALLOCATE \$500,000 FROM THE CLEANUP AND ABATEMENT ACCOUNT (CAA) TO THE LAHONTAN REGIONAL WATER QUALITY CONTROL BOARD (LAHONTAN WATER BOARD) FOR THE SPRING POND WATER TREATMENT PROJECT AT LEVIATHAN MINE (MINE)

WHEREAS:

1. The Mine is an abandoned sulfur mine on property owned by the State of California;
2. Historic mining activities have caused pollution problems, primarily from acid mine drainage (AMD) generated at the site, causing adverse water quality impacts in the Mine watershed;
3. Administrative Abatement Orders issued by the United States Environmental Protection Agency require the Lahontan Water Board to prevent pond water containing AMD to overflow at the Mine;
4. Since 1987, the CAA has paid for various activities at the Mine to reduce or eliminate pollution;
5. Increased AMD flows and winter precipitation will cause the ponds at the Mine to overflow in spring 2007 if no action is taken;
6. Untreated and uncontrolled discharge from the ponds will harm aquatic life and create a human health hazard in Leviathan Creek and waters downstream;
7. The Lahontan Water Board proposes to conduct spring pond water treatment to prevent pond overflow;
8. Spring treatment cost estimates indicate up to \$500,000 may be needed to access the site over snow and treat enough pond water to prevent overflow; and
9. The Lahontan Water Board does not have budgeted funds to conduct the needed treatment.

THEREFORE BE IT RESOLVED THAT:

The State Water Resources Control Board approves \$500,000 from the CAA for the Spring Pond Water Treatment Project at Leviathan Mine.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on October 25, 2006.

Song Her
Clerk to the Board