

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LAHONTAN REGION

**RESOLUTION NO. R6T-2006- 0040**

**REQUEST FOR CLEANUP AND ABATEMENT ACCOUNT FUNDS FOR SPRING  
TREATMENT TO PREVENT STORAGE POND OVERFLOW AT LEVIATHAN MINE,  
ALPINE COUNTY**

Alpine County

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Whereas, the California Regional Water Quality Control Board, Lahontan Region (Lahontan Water Board), finds:

1. It is the responsibility of the Lahontan Water Board to regulate the activities and factors that affect or may affect the quality of waters of the region in order to achieve the highest water quality consistent with the maximum benefit to the people of the State;
2. The Water Quality Control Plan for the Lahontan Region (Basin Plan) was adopted in 1995. The Basin Plan identifies the need to protect the surface and ground waters of the Carson River Hydrologic Unit;
3. Leviathan Mine is an inactive sulfur mine that the State of California purchased in 1984 to pursue cleanup and abatement of water quality problems caused by historic mining. Jurisdiction over the mine rests with the State Water Resources Control Board (State Water Board), which, in turn, has delegated jurisdiction to the Lahontan Water Board. Leviathan Mine is located in Alpine County, approximately five miles east of Markleeville, California;
4. Degradation of water quality in Leviathan and Aspen Creeks occurs as a result of the discharge of acid mine drainage (AMD) from Leviathan Mine. AMD from Leviathan Mine can be characterized as a dilute sulfuric acid solution containing dissolved metals, including: iron, aluminum, arsenic, nickel, and copper;
5. In May 2000, the United States Environmental Protection Agency (USEPA) placed Leviathan Mine on the Comprehensive Environmental Response, Compensation, and Liability Act National Priorities List, thus making Leviathan Mine a federal Superfund site. Because the State of California is the present property owner, USEPA has identified the State as a Potentially Responsible Party. USEPA issued an Administrative Abatement Action to the State requiring implementation of certain pollution abatement and site characterization activities at Leviathan Mine;

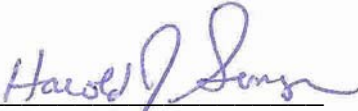
6. In 1985, on the State Water Board's behalf, the Lahontan Water Board completed construction of a pollution abatement system that included the construction of five lined evaporation ponds to capture and evaporate AMD emanating from the Adit and the Pit Under-Drain (PUD). Given the limited usable area at the mine site, the evaporation ponds could not be sized to provide 100 percent containment of influent flows (consisting of AMD from the Adit and PUD, and direct rain/snow onto the ponds); consequently, the ponds periodically overflowed and discharged to Leviathan Creek;
7. To prevent pond overflows, the Lahontan Water Board implemented a process to treat and discharge pond water during the summer months, as a means to increase pond holding capacity for the subsequent winter and spring months. Contractors for the Lahontan Water Board successfully operated the treatment system during the 1999 through 2006 field seasons;
8. The last two years of above average precipitation recharged the groundwater in the area of the Mine, which has resulted in increased Adit and PUD flows. Those increased flows are causing the ponds to fill more rapidly than in prior years, and are resulting in the need for additional treatment to prevent the discharge of untreated AMD in the ponds to Leviathan Creek. During the 2006 field season, the Lahontan Water Board's contractors were successful in treating all of the AMD contained in the pond system, with the exception of two springtime overflow events, each lasting approximately a day and a half. The 2006 field treatment season consisted of emergency treatment in the spring of approximately seven million gallons of AMD and summer treatment of approximately 12 million gallons of AMD;
9. Due to these conditions, Lahontan Water Board staff estimate that overflow of the pond system will occur in spring 2007, or possibly earlier if precipitation is above average during the upcoming 06-07 winter. If left unabated, AMD could overflow the pond system and enter Leviathan Creek;
10. The Lahontan Water Board's contractor cannot mobilize and operate the summer treatment system to treat the increased flows under winter conditions which typically persist onsite until late May;
11. To prevent the discharge of untreated AMD from the pond system, Lahontan Water Board staff proposes to secure a contract wherein a contractor will mobilize and operate a spring treatment system to mix lime with the AMD in one of the evaporation ponds. The lime will provide a source of alkalinity to the AMD in the pond and will raise the pH. As the pH increases, dissolved metals in the AMD will precipitate into a solid form. Treated AMD will then be discharged from the pond to Leviathan Creek. Solids generated from treatment will be characterized as to their hazardous or non-hazardous nature and shipped to an appropriate disposal facility;

12. Lahontan Water Board staff recommends implementation of spring treatment of waters contained in the storage ponds in order to prevent the overflow of AMD to Leviathan Creek. The cost of this type of spring treatment is dependent upon access conditions at the time of treatment and the volume and nature of the AMD needing treatment, but cost approximately \$500,000 during the spring 2006;
13. The Lahontan Water Board does not have contract funds available to conduct the spring treatment activities;
14. The Lahontan Water Board considered all comments received;
15. The action in this case is a project that is exempt from the California Environmental Quality Act (CEQA) under the "Emergency" exemption, Public Resources Code section 21081.4, subdivision (b)(4). Under this provision, an action is exempt from CEQA when it is necessary to prevent or mitigate an emergency. The action in this case is subject to Public Resources Code section 21080.4, subdivision (b)(4) because it is being taken to prevent an emergency.
16. The action in this case is an emergency pursuant to Public Resources Code section 21080.3 because the action is necessary to prevent a sudden, unexpected occurrence, involving a clear and imminent danger, demanding immediate action to prevent or mitigate loss of damage to health or property. In particular, the action is necessary to prevent AMD overflow to Leviathan Creek. AMD overflow is a clear and imminent danger demanding immediate action because of the high acidity and dissolved metals and arsenic content of the AMD that likely will kill aquatic organisms in Leviathan Creek and may pose a threat to human health and property. Treating the AMD is needed to prevent its overflow, and funds requested by this resolution are required to treat the AMD.

**THEREFORE BE IT RESOLVED:**

1. The Lahontan Water Board requests the State Water Board to allocate \$500,000 from the Cleanup and Abatement Account pursuant to Water Code section 13443 to implement spring pond water treatment to prevent the overflow of acid mine drainage to Leviathan Creek at Leviathan Mine.

I, Harold J. Singer, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Lahontan Region, on September 14, 2006.

  
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HAROLD J. SINGER  
EXECUTIVE OFFICER