

**Statement of Robert Quint, Director of Operations  
Bureau of Reclamation  
U.S. Department of the Interior  
Before the  
Committee on Natural Resources  
Subcommittee on Water and Power  
United States House of Representatives  
On  
H.R. 5511  
May 8, 2008**

Mr. Chairman and Members of the Subcommittee, I am Bob Quint, Director of Operations for the Bureau of Reclamation. I am pleased to be here today to present the Administration's views on H.R. 5511, the "Leadville Mine Drainage Tunnel Remediation Act of 2008." We recognize the intense public interest in the Leadville Mine Drainage Tunnel issues addressed by this bill, and support the goals of this bill of ensuring public safety and accomplishing the expeditious and efficient cleanup of the California Gulch Superfund site. The Administration cannot support H.R. 5511 at present because we have not yet determined what further actions are needed to provide a long-term solution.

That being said, I can report to the Subcommittee that Reclamation and EPA are aggressively taking action to address any immediate risk.

In view of the recent concerns of rising groundwater and mine pool levels, EPA and the Bureau of Reclamation, in coordination with the State of Colorado, are now conducting removal actions. This work commenced in February 2008 and includes two major activities. First, EPA installed a pumping system in the Gaw mine shaft and has been pumping at a rate of 450 gallons per minute since late February. This action may lower water levels in the mine pool. In addition, it appears to have diminished seeps and springs that had recently appeared in the lower California Gulch. Second, EPA is taking steps to drill a relief well into the LMDT to lower the level of water in the LMDT and mine pool. EPA plans to have the relief well, pump and pipe to the LMDT installed and ready to operate in Summer of 2008.

Both the Department of the Interior and the U.S. Environmental Protection Agency (EPA) have a long history in this area. The Leadville Mine Drainage Tunnel (LMDT) is located in central Colorado, and was originally constructed by the Bureau of Mines from 1943 to 1952. It was intended to de-water portions of the Leadville Mining District to facilitate the extraction of lead and zinc ore for the WWII and Korean War efforts. Reclamation acquired the LMDT in 1959 with the intention of using the tunnel as a source of water for the Fryingpan-Arkansas project, though water rights issues precluded using the tunnel effluent as a water source. Water that flows out of the tunnel is considered part of the natural flow of the river.

In 1975, EPA issued a National Pollutant Discharge Elimination System (NPDES) permit to Reclamation because the LMDT effluent contains heavy metals. In 1991 Reclamation completed construction of a water treatment facility at the LMDT portal – the plant treats the effluent flowing from the LMDT to the standards in the NPDES permit.

EPA listed the California Gulch Site on the National Priority List (NPL) in 1983. The 18-square-mile area was divided into 12 areas designated Operable Units (OU). The Leadville Mine Drainage Tunnel (LMDT) is located beneath OU6, which covers approximately 3.4 square miles in the northeastern quadrant of the Site. The Bureau of Reclamation owns the LMDT, which is hydrologically connected to OU6. Reclamation does not own or operate any sources of contamination on the surface of OU6 (i.e., waste rock or tailings) or any portion of the surface itself. The objective of OU6 is to control surface sources of contamination. Specifically, the objectives are to control erosion of mine waste rock and deposition into local water courses; control leaching and migration of metals from mine waste rock into surface water; control leaching of metals from mine waste rock into groundwater; and prevent direct unacceptable exposures to elevated concentrations of contaminants in the soil and waste rock. EPA is the lead agency to address hazardous substances at the California Gulch NPL Site, including OU6 in particular.

As part of the implementation of the OU6 remedy, EPA collects surface runoff from mine waste piles and discharges that surface runoff into the Marion Shaft, where it moves through the mine workings to the Leadville Mine Drainage Tunnel. This water is seasonal and totals approximately 3 to 5 million gallons a year. However, the volume of surface water diverted by EPA to the LMDT is less than 1% of the 550 million to 750 million gallons of water Reclamation treats annually. EPA pays Reclamation for the treatment of that water at the Reclamation Treatment Plant. The chemistry of the water draining from the LMDT to the Reclamation treatment plant is very different from the chemistry of the water found on the surface of OU6. It has proven to be possible, however, for the Reclamation plant to treat limited amounts of waters from OU6 under agreements with EPA.

Currently, groundwater levels have continued to fluctuate near the LMDT. Reclamation is working to assess the threat level to public safety through a detailed risk analysis. Reclamation has already increased the rate at which water from the LMDT is pumped, treated, and discharged into the Arkansas River. Since February 15, Reclamation has established capability to increase water treatment at the treatment facility by over 80% and today is able to process water at a rate of nearly 2,100 gallons per minute (gpm) from the LMDT (or 4.8 cubic feet per second). The natural rate of drainage from the tunnel is 1,487 gpm, or 3.4 cfs, which amounts to 2,500 acre feet annually.

Public safety dictates every action Reclamation takes at the LMDT, and Reclamation has had an Emergency Action Plan for the LMDT and water treatment facility since 2001. Water level indicators and other warning systems near the LMDT are tied into the water treatment plant's auto-dialer for employees, and an audible warning system was installed in 2002 to alert the Village at East Fork residents in the event of an emergency. The system plays an alert message in Spanish and English.

Reclamation is making every effort to make a science-based determination regarding whether there is an elevated public safety risk below the LMDT. Reclamation's ongoing risk assessment, begun in November 2007, is aimed at understanding how the complex geology and extensive subsurface mine passages affect the quantity and quality of drainage water inside. The results are expected in June of this year.

Interior and EPA, at the highest levels, are committed to the following:

- EPA will complete the removal action that is underway, including the construction of a relief well, the pump and pipeline to transport water to Reclamation's treatment plant.
- Reclamation will operate and maintain the treatment plant, relief wells, pump and pipeline, and if necessary based on the risk analysis, improve the treatment plant to handle increased flows of water as a result of the EPA removal action.

In addition to these actions, Reclamation and EPA are evaluating long-term solutions and will have a better understanding of long-term safety requirements once the risk analysis is completed. We are working to develop a permanent solution to any safety problem and we will submit proposed legislation if any legislative authority is needed to implement this solution on a long-term basis.

The Administration cannot support the specific language in H.R. 5511 at present because we do not yet know what additional specific safety measures and funding requirements may be needed. Once the EPA relief well is completed in June and water can be pumped from the LMDT, any immediate risk should be alleviated and more information about the needs for ensuring the safety of the tunnel and long-term water treatment options can be assessed. It is possible that the particular solution provided for in section 1(b)(2) of H.R. 5511, which requires implementation of the OU6 remedy selected by the Administrator of the Environmental Protection Agency in 2003, may turn out not to be necessary. Further, maintenance and/or repair of the LMDT as prescribed in section 1(b)(4) of the bill may be unnecessary because of other actions that could be taken to better ensure public safety. Reclamation is currently conducting a risk assessment that can be used to shed more light on what further mitigating actions may be advisable at the site. Reclamation and EPA look forward to working with the Congress and the State of Colorado to find the best long-term outcome for the citizens of Leadville.

This concludes my written remarks. We would be pleased to answer any questions from the Subcommittee.