Testimony

"EPA Animas Spill"

U.S. House of Representatives Committee on Natural Resources

U.S. House of Representatives Committee on Oversight and Government Reform

Thursday, September 17, 2015

by

Larry Wolk, MD MSPH

Executive Director and Chief Medical Officer

Colorado Department of Public Health and Environment

Chairman Bishop, Ranking Member Grijalva, Chairman Chaffetz, Ranking Member Cummings and members of the Committees, good morning. My name is Dr. Larry Wolk, I am the Executive Director and Chief Medical Officer for the Colorado Department of Public Health and Environment. I appreciate the opportunity to share with you my testimony on behalf of the department regarding the water quality impacts from the recent Gold King mine spill into Cement Creek and the Animas River near Silverton, Colorado.

The Upper Animas River basin has a long and storied mining history, and as with many watersheds in Colorado, legacy mining in the basin has resulted in significant water quality impacts. For years drainage from the numerous mining areas above Silverton has contributed heavy metal loads into Cement Creek which eventually flows into the Animas River. The Water Quality Control Division within my department has routinely, but

somewhat infrequently, sampled the water quality in Cement Creek and the Animas River as part of our water quality program. These samples have consistently shown that the quality of the water in Cement Creek and the Animas River is, and has been for years, impacted by the mine waste coming from the legacy mines.

The Gold King Mine is a historic gold mine located at approximately 11,300 feet above sea level in the southwest mountains of Colorado near the town of Silverton. On August 5, 2015, an estimated volume of up to three million gallons of mine waste water containing dissolved metals and sediment was unexpectedly released from the Gold King mine adit into Cement Creek. Water quality division staff from my department almost immediately traveled to Silverton and the mine site to respond to and evaluate the water quality impacts from this release. Water quality staff took several surface water samples the week after the mine release throughout the river basin from upstream of Silverton and down river from Durango to the New Mexico border over a period of 11 days to determine the extent of the impact of the release.

In total, the water quality staff took 63 samples of surface water. Initially monitoring indicated levels of copper, lead, manganese and zinc were higher than when previously monitored in June 2015 prior to the release. By August 11, however, the levels of monitored metals in the Animas River had returned to pre-release levels. In Cement Creek, cadmium, copper and zinc continue to be above the historic range for these metals. Throughout 2016, we will continue to monitor the level of metals in Cement Creek and the Animas River. At this time we do not anticipate adverse health effects from

exposure to the metals detected in the river water samples from skin contact or incidental and unintentional ingestion.

The department's water quality staff also worked with the Division of Parks and Wildlife of the Colorado Department of Natural Resources to monitor the effects from the spill on aquatic life and wildlife. Assessments will continue, but at this point there appears to be no obvious impacts: there were no fish kills along the Animas River during the plume event and there were no effects observed on terrestrial animals such as ducks or mammals.

The Division of Parks and Wildlife placed fingerling rainbow trout in cages in three separate locations in the Animas River in Durango before the mine spill plume reached the city. Of the 108 fish placed in these cages only one died, and the others remained healthy during the passing of the plume and after the plume passed through the city. The one fish that died was not due to water quality.

Long-term impacts from the effect of metals deposited in sediments will also continue to be monitored. These sediments may pose a risk, especially to aquatic life and fish during high-water events. We also understand there is concern about the risks to recreational users on the river. Sediment is just one indicator of a healthy river. There is some level of contamination in most Colorado rivers because of past mining activities and the geology of the state. We do not anticipate adverse health effects from exposure to contaminants detected in the water and sediment during typical recreational activities.

We also understand that based upon current information, the Colorado Department of Agriculture believes that the Animas River may be used for crop irrigation and livestock watering.

We can't be sure of the long-term impacts, but the spill at the Gold King mine does not appear to have significantly affected or changed the water quality of Cement Creek or the Animas River. We are fortunate that the Gold King spill did not result in an immediate environmental disaster; however, this does not mean that Cement Creek and the Animas River have not already been impacted by prior drainage from the legacy mines.

The Gold King spill only serves to underscore the issues faced by many states, particularly in the west, where thousands of legacy mines affect the quality of our rivers and streams. High levels of acid-mine drainage can have a detrimental impact on aquatic life: the Colorado Division of Parks and Wildlife has reported a noticeable decline in the number of trout in the Animas River over the last 10 years. Cement Creek and the Animas River are only two of many water bodies in Colorado that receive historic mine drainage.

Spills or blowouts, although typically not as large or dramatic as the Gold King spill, are not uncommon events in mining districts throughout the west. In Colorado millions of gallons of contaminated water are discharged from abandoned mines on a daily basis. Tackling the issues created by these legacy mines requires significant resources and raises liability issues.

My agency is very familiar with the technical, financial and liability challenges of addressing environmental impacts from historic mining. In addition to our Water Quality Control Division, the Hazardous Materials and Waste Management Division, in my agency, actively partners with the Environmental Protection Agency to address such sites in Colorado. Unfortunately, the existing programs, regulations and funding are limited and do not provide us with the means we need to adequately address abandoned mine contamination in Colorado. None-the-less, we will continue to work with the local communities affected by the Gold King mine spill and with the EPA and others to identify potential next steps in addressing the legacy mine issues in the Upper Animas River basin and elsewhere in Colorado.

Chairman Bishop, Chairman Chaffetz and Members of the Committees, I hope that my testimony today sheds light on the water quality impacts from the Gold King mine spill and on the need for additional attention to legacy mining issues throughout the west. I look forward to any questions you may have. Thank you.