

**U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
2015 Gold King Mine Blowout - Polrep/Sitrep  
Initial Polrep/Sitrep**



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region 8**



**Subject: SITREP #2  
Initial Situation Report  
Gold King Mine Blowout**

**San Juan County, Colorado  
Latitude: 37.8945 Longitude: -107.6384**

**To:**

**Thru:** David Ostrander, Regional Incident Coordinator

**From:** R8 IMT Situation Unit

**Date:** 08/07/2015

**Reporting Period:** 08/06/15 through 08/07/15

**All highlighted sections are unique to this document.**

## Executive Summary

On August 5, 2015, EPA was conducting an investigation of the Gold King Mine. The intent of the investigation was to create access to the mine, assess on-going water releases from the mine to treat mine water, and assess the feasibility of further mine remediation. The plan was to excavate the loose material that had collapsed into the cave entry back to the timbering. During the excavation, the loose material gave way, opening the adit (mine tunnel) and spilling the water stored behind the collapsed material into Cement Creek, a tributary of the Animas River.

Initial estimates are that the release contained approximately one million gallons of water (estimated from the dimensions of the mine adit) that was held behind unconsolidated debris. There were several workers at the site at the time of the breach, all were unharmed.

The large pulse of water dissipated in about an hour. Today the water in Cement Creek and the Animas River in Silverton is clearing. The adit is still discharging lower flows into Cement Creek.

We expect conditions will continue to improve in the coming hours and days. As of 10 am today, the leading edge of the plume was at 8 miles, as the crow flies (not river miles), from the New Mexico state line. We expect an update on that location later this afternoon.

## 1. Introduction

### 1.1 Background

|                                      |                                     |
|--------------------------------------|-------------------------------------|
| <b>Site Number:</b>                  | <b>Contract Number:</b>             |
| <b>D.O. Number:</b>                  | <b>Action Memo Date:</b>            |
| <b>Response Authority:</b> CERCLA    | <b>Response Type:</b> Emergency     |
| <b>Response Lead:</b> EPA            | <b>Incident Category:</b>           |
| <b>NPL Status:</b>                   | <b>Operable Unit:</b>               |
| <b>Mobilization Date:</b> 08/05/2015 | <b>Start Date:</b> 08/05/15         |
| <b>Demob Date:</b>                   | <b>Completion Date:</b>             |
| <b>CERCLIS ID:</b>                   | <b>RCRIS ID:</b>                    |
| <b>ERNS No.:</b>                     | <b>State Notification:</b> 08/05/15 |

#### 1.1.1 Incident Category

#### 1.1.2 Site Description.

##### 1.1.2.1 Location San Juan County, Colorado, and La Plata County, Colorado.

##### 1.1.2.2 Description of Threat

Approximately one million gallons of mine waste water was released into Cement Creek and the Animas River. The primary environmental concern is the pulse of contaminated water containing sediment and metals flowing as an orange-colored discharge downstream through Durango, Colorado, and into New Mexico and Utah. The City of Durango relies on the Animas River as one of its water sources - the Animas source is off-line, and they are continuing to provide clean drinking water to the City. The river is also used for recreational purposes, including fishing and rafting. At the confluence of the Animas River and the San Juan River in New Mexico, there is a designated critical habitat for the Colorado Pike Minnow fish and the Razorback Sucker fish.

The pulse of water passed through Durango, Colorado, in the late afternoon on Thursday, August 6,

2015, and as of August 7, 2015, is roughly half way between the City and the New Mexico border.

### **1.1.3 Preliminary Site Inspection Results**

Water sampling has occurred (analytical results are pending), and pH levels and other water quality parameters are being monitored.

## **1.2 Incident Objectives**

The incident overall objective is to protect the drinking water supply of the City of Durango, Colorado, and others who may be using the river for various purposes.

Divert adit discharge and begin water treatment.

## **1.3 Critical Resource Needs**

No information available at this time.

## **1.4 Strategic Considerations**

No information available at this time.

## **2. Current Activities**

### **2.1 Operations Section**

#### **2.1.1 Narrative**

Water quality sampling has occurred and results are pending. OCSs have been deployed to the area. EPA Region 8 staff are coordinating with relevant county/city/tribal officials.

#### **2.1.2 Response Actions to Date**

Water quality sampling by EPA Region 8 staff occurred yesterday, and START is taking more samples today. EPA Region 8's lab in Golden, Colorado, (ESAT) and a local lab in Durango, are being used to analyze the samples. Meetings were held with San Juan County, Colorado, officials, and La Plata County, Colorado, officials yesterday. ATSDR consulted San Juan County, Colorado, with them on personal safety issues for people potentially affected by the contaminated water.

The EPA Region 8 Regional Administrator and Removal Manager met with LaPlata County and City of Durango officials on August 7, 2015, and held a public meeting.

EPA Region 8 staff met with the Durango City Engineer to analyze and implement measures to protect the Durango drinking water supply.

ASPECT arrived in Santa Fe, New Mexico, last evening. They completed a preliminary overflight to determine how far downstream the release had travelled. On August 7, 2015, ASPECT flew over the river from the New Mexico border to the mine. They determined that the leading edge of the release was 8 miles from the New Mexico Border at 10a.m.

EPA Region 8 is coordinating on the incident with EPA Regions 6 and 9, the States of Colorado and New Mexico, and the Navajo Nation and Southern Ute Tribes.

A call was held with the Regional Response Team on Friday, August 7, 2015.

#### **2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)**

#### **2.1.4 Progress Metrics**

### **2.2 Planning Section**

#### **2.2.1 Anticipated Activities**

The Planning Section's Situation Unit stood up on 08/06/2015 in the EPA Region 8 REOC. SITREPS will continue to be prepared until it is determined that they are no longer necessary.

EPA's ASPECT flew this morning from the New Mexico border to the mine to take photographs. The flight crew will fly the river again this afternoon.

EPA is rebuilding settling ponds to treat these flows – the upper pond will be completed by early afternoon, and the lower pond by COB or early tomorrow. EPA will treat the mine water diverted to the ponds with caustic soda and flocculent once the ponds are built. The discharge flow rate from the mine will be confirmed.

The EPA Region 8 Regional Administrator flew to Durango this morning, and will be meeting OSCs and local officials, and will tour affected sections of the Animas River. He will also attend a public meeting on the incident in the afternoon.

Baseline water quality data from the past 17 years has been obtained, and will be compared with the new water quality data that will be available today.

We will continue to coordinate with local, state, tribal and federal officials.

EPA Region 8 is coordinating with ATSDR in response to public health concerns/questions associated with the mine waste plume. ATSDR has been in communication with local health officials at San Juan County Basin Health Department in Colorado. Public health questions/concerns should be directed to Chris Poulet, ATSDR/R8 at 303-312-7013.

EPA Region 8 has been coordinating with Region 6 and Region 9 and the states of Colorado, New Mexico, Utah and the Southern Ute Tribe. Region 6 is working closely with the New Mexico Environment Department (NMED) to evaluate possible impacts in New Mexico. Potentially impacted water systems have been notified, and precautions are in place to ensure drinking water in homes is protected. EPA and NMED are providing assistance to community water systems and closely monitoring the situation.

#### **2.2.1.2 Next Steps**

#### **2.2.2 Issues**

### **2.3 Logistics Section**

No information at this time.

## 2.4 Finance Section

### 2.4.1 Narrative

Stood up on August 7, 2015.

| Mission Number | Mission Assignment Description | Funding Amount (in thousands) | Status |
|----------------|--------------------------------|-------------------------------|--------|
|                |                                |                               |        |
|                |                                |                               |        |
|                |                                |                               |        |
|                |                                |                               |        |
|                |                                |                               |        |

## 2.5 Other Command Staff

### 2.5.1 Safety Officer

### 2.5.2 Liaison Officer

### 2.5.3 Information Officer

A press release was prepared, and a public meeting was held on August 7, 2015.

### 2.5.4 Weather Forecast

Weather forecast for Friday, August 7, 2015:

#### Today

Showers and thunderstorms likely, mainly after 2pm. Some of the storms could produce gusty winds and heavy rain. Cloudy, with a high near 84. South southwest wind 5 to 10 mph increasing to 10 to 15 mph in the afternoon. Chance of precipitation is 60%.

#### Tonight

Showers and thunderstorms likely, mainly before 10pm. Some of the storms could produce gusty winds and heavy rain. Cloudy, with a low around 54. Southwest wind 5 to 10 mph becoming light and variable. Chance of precipitation is 60%.

## 3. Participating Entities

### 3.1 Unified Command

### 3.2 Cooperating Agencies

The Colorado Fish and Wildlife Conservation Office is monitoring effects on wildlife and aquatic life in

the affected area.

The La Plata County Sheriff issued an order closing the Animas River to all watercraft from the north County line (San Juan County, Colorado) to the south County line (at the Colorado/New Mexico State line) until further notice. Furthermore, all such watercraft must be removed from the Animas River within the locations cited above. The decision was made after consultation with the EPA, CDPHE, the San Juan Basin Health Department, and representatives of the Southern Ute Indian Tribe. The Order will remain in effect until it is determined that the river is safe.

We've contacted the US Fish and Wildlife Service and the US Department of Interior about the incident.

#### 4. Personnel On Site

| Gold King Mine Blowout 2015 |                     |
|-----------------------------|---------------------|
|                             | 08/07/2015          |
| Group                       | Number              |
| EPA @ REOC                  | 13                  |
| Contractors @ REOC          | 2                   |
| EPA in Field (R8)           | 5                   |
| Contractors in Field        | Several (count TBD) |
| WERT Reg 8                  | 0                   |

#### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

No information available at this time.

#### 7. Situational Reference Materials

No information available at this time.