

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Red and Bonita Mine Discharge Relocation Site - Removal Polrep
Initial and Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #1
Initial and Final Pol Rep
Red and Bonita Mine Discharge Relocation Site
A8M5RV01
Silverton, CO
Latitude: 37.8931642 Longitude: -107.6699823

To:
From: Joe Payne, On-Scene Coordinator
Date: 8/30/2023
Reporting Period: August 4 to August 9

1. Introduction

1.1 Background

Site Number:	A8M5RV01	Contract Number:	
D.O. Number:		Action Memo Date:	6/22/2023
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	NPL	Operable Unit:	01
Mobilization Date:	8/4/2023	Start Date:	8/4/2023
Demob Date:	8/9/2023	Completion Date:	8/9/2023
CERCLIS ID:	CON000802497	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

This is a Time Critical Removal under CERCLA authority for Mine Impacted Water.

1.1.2 Site Description

1.1.2.1 Location

The Red & Bonita Mine is located in the Upper Cement Creek drainage near Silverton, Colorado in the San Juan Mountain Range. The coordinates are 37.896857, -107.644187. It is a rural mine site approximately 8 miles away from the main population of Silverton (650 people). The mine has three different owners, all of whom agreed to EPA access (access agreements provided in the Site File). Cement Creek drains into the Animas River water system which acts as a major water body for both drinking water and recreation.

Watersheds within the volcanic terrain of the San Juan Mountains were the focus of both large- and small-scale mining operations that flourished between 1871 and 1991. Historic mapping of the Red and Bonita Mine indicates that mining operations began prior to 1899 and lasted for only a short period.

Historically the Red & Bonita mine has drained metallic leachate and highly acidic Mine Impacted Water (MIW) into nearby Cement Creek. In 2015, the EPA removal team installed a large concrete plug called a "bulkhead" in the mine to flood the inner workings of the mine and prevent the creation of acids. The bulkhead prevents the creation of acid mine water by preventing the mixture of oxygen necessary to create acids.

Currently, the Remedial program is testing and studying the feasibility of permanently using this bulkhead. Meanwhile, the MIW drainage flows across and through an iron fen down gradient of the adit. The iron fen is a sensitive wetland ecosystem that requires specific pH levels.

1.1.2.2 Description of Threat

The flow of MIW into the fen threatens to both physically and chemically change the iron fen by adding heavy metals solids that can smother the sensitive vegetation.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Red and Bonita Mine falls within the greater Bonita Peaks Mining District Superfund Site and as such has been undergoing Remedial Assessment since the 1990's. Assessments show that the Mine Impacted Water contributes to the contamination of Cement Creek and poses a threat to the sensitive wetland ecosystem.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

In August 2023, the EPA Removal Team diverted the MIW outflow around the main section of the iron fen via an earthen channel. To accomplish this, the Removal Team moved the existing conveyance line that previously outflowed into the iron fen to a new culvert location underneath the road. The culvert now drains into an earthen channel and flows into a naturally existing channel at the bottom of the iron fen before entering Cement Creek.

2.1.1.1 Current Situation

Currently, the site is operating as designed per the end goal of the removal action. The water draining out of the mine is conveyed downstream through a flume and into an earthen channel that connects to the bottom of the fen where it moves into Cement Creek.

2.1.2 Response activities to date

In addition to the response activities described above, the Removal section assisted the Remedial section with the construction of the bulk head in 2014. As previously mentioned, this bulkhead is undergoing feasibility testing.

The state and local authorities have been involved in a consultation role

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

A separate Enforcement Addendum is available in the site file providing a confidential summary of current and potential future enforcement activities.

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

The Red and Bonita Mine remains in the Bonita Peaks Mining District Superfund Site, and therefore is subject to Remedial Activities going forward. Removal plans to assist Remedial as necessary for the future of this site and the others within the Superfund Site.

2.2.1.2 Next Steps

Removal plans to conduct some minor post removal site controls at the site, including vegetating and seeding the earthen channel as an erosion control measure. Aside from this, this action is concluded.

2.3 Logistics Section

This site's main logistical problem is the short working season. At nearly 11,000 feet above sea level, the site is only snow free in July, August, and September. Site activities have concluded without weather issue.

2.4 Finance Section

2.4.1 Narrative

The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$65,000.00	\$40,000.00	\$25,000.00	38.46%
TAT/START	\$50,000.00	\$3,000.00	\$47,000.00	94.00%
Intramural Costs				
Total Site Costs	\$115,000.00	\$43,000.00	\$72,000.00	62.61%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

4. Personnel On Site

The EPA Removal Team on site consisted of the following:

EPA Personnel- *OSC Joe Payne*

ERRS- *4 Laborers, 1 Manager*

START- *1 Field Scientist*

5. Definition of Terms

No information available at this time.

6. Additional sources of information

6.1 Internet location of additional information/report

https://response.epa.gov/site/site_profile.aspx?site_id=16033

6.2 Reporting Schedule

This is the first and final PolRep for this site.

7. Situational Reference Materials

For additional reference materials (maps, photos, etc.) please refer to

https://response.epa.gov/site/site_profile.aspx?site_id=16033 response.gov