

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Bullion Canyon - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VIII

Subject: POLREP #1
Initial Removal Report
Bullion Canyon
A8K8
Marysvale, UT
Latitude: 38.4137856 Longitude: -112.3273627

To: David Ostrander, EPA Region 8
Laura Williams, EPA Region 8

From: Martin McComb, On Scene Coordinator

Date: 5/16/2016

Reporting Period: May 16, 2008

1. Introduction

1.1 Background

Site Number:	A8K8	Contract Number:	n/a
D.O. Number:	n/a	Action Memo Date:	5/13/2016
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	n/a
Mobilization Date:	5/16/2016	Start Date:	5/16/2016
Demob Date:		Completion Date:	
CERCLIS ID:	UT0012605880	RCRIS ID:	n/a
ERNS No.:	n/a	State Notification:	Yes
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Historic Mining District

1.1.2 Site Description

Gold was discovered in 1865 at the base of what is now known as Bullion Canyon near Marysvale, Utah. These placer deposits were traced to their origins in Bullion Canyon, and the Ohio Mining District was formed. By 1869, the camps of Bullion City, Webster City and Virginia City were established and the first of several mills was constructed in the canyon. Mining continued in the canyon until approximately 1938, and the remnants of these historic mining activities, including deposits of contaminated soil, are still evident.

1.1.2.1 Location

The Site consists of two campgrounds west of Marysvale along Bullion Canyon Road in Piute County, Utah. The first is Fireman's Park (3.5 miles from town) and the second is near the historic Bully Boy Mill (6.2 miles from town).

1.1.2.2 Description of Threat

In 2004, the Utah Department of Environmental Quality (UDEQ) conducted an assessment of a former mining district west of Marysvale, Utah, and determined that elevated levels of lead exist in two areas that are frequently used for camping and associated recreational activities:

1. Bully Boy Camping Area – an informal camping area near the former Bully Boy Mill that is frequently used by local residents.
2. Fireman's Park – a formal group campground and day use area near the former Bullion Mill that is managed by the Town of Marysvale.

The area did not qualify for listing as a Superfund Site and was referred to the EPA's Emergency Response Unit in 2015 due to exposure concerns and the potential for human health impacts.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

Bully Boy Camping Area

There appear to have been at least two historic tailing impoundments down gradient of the Bully Boy Mill. These tailing impoundments no longer hold water and semi-permanent camps have developed on top of the remnant deposits. These camps have been used by locals each summer season for decades.

UDEQ collected five samples from the first six inches of surface soil in this area, and the laboratory results for lead in mg/kg were: 3780, 7750, 7760, 12,700 and 19,600. EPA's Residential Screening Level (RSL) for lead in soil is 400 mg/kg. The samples were also tested for mercury, but those results were all below EPA's RSL.

Fireman's Park

EPA collected surface (0") and subsurface (0-6") soil samples from Fireman's Park on October 27, 2015. These samples were collected from each individual campsite as well as the common areas in the campground. Laboratory results from these samples indicated that the three campsites to the east have concentrations of both lead and mercury in the surface and subsurface samples that exceed EPA's RSLs. There are also slightly elevated levels of both lead and mercury in subsurface samples from the common areas. These sample results are summarized in the following table:

ID	Description	Lead (mg/kg)			Mercury (mg/kg)		
		RSL	Surface	Subsurface	RSL	Surface	Subsurface
5	Campsite	400	5330	6910	11	149	228
6	Campsite		1070	2210		29	57
7	Campsite		2700	7620		100	312
8	Common Areas		137	528		1	14

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Bully Boy Camp

The area will be closed to camping and off-road vehicle use. The soils in and near the Bully Boy Camping Area as roughly depicted in Figure 12 will be re-graded and/or capped with at least 12 inches of non-contaminated material. Trees and other large vegetation will be protected to the extent practical. Proper drainage and erosion control features will be constructed once the cap is installed. All areas in the removal zone will be restored, re-vegetated and large boulders or other terrain features will be installed to prevent vehicular access.

Fireman's Park

Fireman's Park will be temporarily closed to facilitate construction activities. The soil in the eastern end of the park as roughly depicted in Figure 11 will be capped with at least 12 inches of non-contaminated material. Some material will be excavated before the cap is installed to remove hot spots and achieve the appropriate drainage at the Site. All excavated material will be transported to the Bully Boy Camping Area and added to the material that will be capped in that location. Any excavated area will be filled with non-contaminated fill material and the cap will be constructed with appropriate topsoil to support re-vegetation. Proper drainage and erosion control features will be constructed. All areas in the removal zone will be restored and re-vegetated to support future camping and day use activities. It is anticipated that part of the campground may remain closed until the spring of 2017 to help establish the new vegetation.

2.1.2 Response Actions to Date

Access has been restricted to both campgrounds and all resources have mobilized to the site. Approximately 50 cubic yards of material from the most contaminated areas in Fireman's Park have been excavated and trucked to the Bully Boy Camping Area. A good portion of the cap at Fireman's Park has been constructed. Grading has begun at the Bully Boy Camping Area.

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

Crown Mines LLC and the Town of Marysville, consistent with an Administrative Order on Consent (AOC)

with EPA, are performing the removal action.

2.1.4 Progress Metrics

0 of 2 campgrounds have been capped.

0 of 2 campgrounds have been restored.

2.2 Planning Section

2.2.1 Anticipated Activities

The Bully Boy Camping Area (the informal campground) and the contaminated portions of Fireman's Park will be closed to the public in April 2016 before the camping season begins. Construction activities in both campgrounds will occur in May 16-27, 2016. Restoration activities at both campgrounds will be completed by September 2016. Restoration of the formerly contaminated campsites in Fireman's Park will occur over the summer of 2016 and those areas should reopen to the public in the spring of 2017.

2.2.1.1 Planned Response Activities

Sitewide

Lead	Task Description
EPA	Provide project oversight.
	Coordinate with stakeholders.
	Maintain a website to distribute project data and information.
EPA and Marysvale	Contact residents and stakeholders.
	Develop information materials (signs, fact sheets).
UDEQ	Develop Quality Assurance Project Plan.
	Develop Trip Report.
Crown Mines	Develop a Work Plan for both campgrounds that includes restoration designs, estimates for the volume of restoration materials (rock, road base, top soil, etc) that will be required and associated spatial data files.
	Develop a Health and Safety Plan that includes provisions to support the efforts of the Town of Marysvale.
	Develop a Final Report.

Fireman's Park

Lead	Task Description
Marysvale	Restrict access to the removal area.
Crown Mines	Excavate soil to remove hot spots, insure proper drainage and support installation of the cap.
	Transport excavated waste to the Bully Boy Camp for on-site disposal.
	Demarcate the bottom of the excavation pit with hurricane fencing and backfill the pit.
	Cap the removal area with non-contaminated soil. This cap shall be at least 12 inches thick and include at least 6 inches of topsoil at the surface of the cap as appropriate to support the Town of Marysvale's revegetation effort.
	Construct erosion control features.
UDEQ	Document the cap's thickness, extent and soil quality as well as erosion control features.
Marysvale	Revegetate all disturbed areas.
	Reopen the campground to full use once the vegetation has suitably regenerated.

Bully Boy Camp

Lead	Task Description
Crown Mines	Restrict vehicular access to the removal area.
	Grade the removal area to insure proper drainage.
	Cap the removal area with non-contaminated soil. This cap shall be at least 12 inches thick and support revegetation.
	Construct erosion control features.
UDEQ	Document the cap's thickness, extent and soil quality as well as erosion control features.
Crown Mines	Revegetate all disturbed areas

2.2.1.2 Next Steps

Removal activities will continue in both campgrounds.

2.2.2 Issues

Road construction is about to begin in Bullion Canyon. The Town of Marysville is helping to control the flow of construction traffic in the canyon.

2.3 Logistics Section

Not applicable.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
START Data Management	\$10,000.00	\$0.00	\$10,000.00	100.00%
UDEQ Field Support	\$20,000.00	\$0.00	\$20,000.00	100.00%
Intramural Costs				
Total Site Costs	\$30,000.00	\$0.00	\$30,000.00	100.00%

* 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

2.5.1 Safety Officer

Not applicable.

2.5.2 Liaison Officer

Not applicable.

2.5.3 Information Officer

Not applicable.

3. Participating Entities

3.1 Unified Command

Not applicable.

3.2 Cooperating Agencies

EPA is cooperating closely with the Town of Marysville, UDEQ, and Crown Mines LLC. The United States

Forest Service has authorized periodic road closures in Bullion Canyon to support the effort and Piute County is also providing support.

4. Personnel On Site

1 OSC

2 UDEQ Field Personnel

6 Crown Field Personnel (contracted)

Town of Marysville staff as needed

5. Definition of Terms

START Superfund Technical Assistance and Response Team

UDEQ: Utah Department of Environmental Quality

6. Additional sources of information

6.1 Internet location of additional information/report

www.epaosc.org/BullionCanyon

6.2 Reporting Schedule

An update will be provided on May 24, 2016.

7. Situational Reference Materials

Not applicable.

POLREP #1 Last Updated 5/25/2016