# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Red Arrow Mill - Removal Polrep Initial and Final Removal Polrep



# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region VIII

Subject: POLREP #1

Initial/Final POLREP - Red Arrow Mill - Colorado DRMS stabilizing action

Red Arrow Mill

A8B2

Mancos, CO

Latitude: 37.3450987 Longitude: -108.3052290

To: Eugene Lee, EPA Headquarters

David Ostrander, EPA Region 8 Laura Williams, US EPA Region 8

From: Craig Myers, OSC

Date: 11/20/2013

Reporting Period: October 2013

#### 1. Introduction

#### 1.1 Background

Site Number: A8B2 Contract Number:

D.O. Number: Action Memo Date: 10/16/2013

Response Authority: CERCLA Response Type: Time-Critical

Response Lead: PRP Incident Category: Removal Action

NPL Status: Operable Unit:

 Mobilization Date:
 10/21/2013
 Start Date:
 10/21/2013

 Demob Date:
 10/25/2013
 Completion Date:
 11/1/2013

CERCLIS ID: RCRIS ID:

**ERNS No.:** State Notification: Colorado DRMS performed the work.

FPN#: Reimbursable Account #:

#### 1.1.1 Incident Category

Time Critical Removal Action

#### 1.1.2 Site Description

Through its investigations, the Colorado Department of Reclamation and Mine Safety (DRMS) determined that unpermitted mining operations in the town of Mancos have created an urgent concern at the Red Arrow operation that resulted in an immediate and undue risk of serious harm to persons, property, or the environment and in violation of Section 34-32-109 of the Colorado Mined Land Reclamation Act (the Act). To allow DRMS time to further inspect the site, evaluate the risk, and evaluate a reclamation plan, DRMS ordered Red Arrow Gold Corporation, its associates, and its receiver to immediately cease and desist all mining, prospecting, milling, exploration, and other mining operations at both facilities near Mancos, Colorado.

Based on evidence gleaned from a site inspection, DRMS believed that precious metals beneficiation using mercury amalgamation processes had occurred at the unpermitted mill facility. Approximately 50 to 75 cubic yards of partially-covered mill tailings and a container labeled "21.5 pounds Mercury" were present at the site. Milling practices and other details of the former operation at this location are still somewhat unknown. Approximately 10 cubic yards of suspected mill tailings are located at the mine. The origin of these tailings is unknown, but is assumed to be derived from Red Arrow milling operations. Milling processes, particularly those that occurred at the unpermitted mill facility, utilized dangerous chemicals. Those chemicals, or their residues, were present at the facility and contained within the tailings materials.

#### 1.1.2.1 Location

1000 West Grand Ave, Mancos, CO, 81328.

The facility is located on the edge of the town of Mancos, Colorado, but is legally in unincorporated Mesa County.

#### 1.1.2.2 Description of Threat

Off-site migration of arsenic and mercury laced mill tailings.

#### 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The preliminary removal assessment and removal site inspection for this action was performed by Walter Environmental under contract with DRMS. Detailed results of this activity are available in the Administrative Record for the site in the report entitled "Evaluation Summary Report Red Arrow Mine, Mancos, CO" dated August 1st, 2013.

The report identified numerous small piles of apparent mill tailings with varying levels of arsenic, one pile contaminated with mercury, and an amalgamation building with ubiquitous mercury contamination inside. It also identified two arsenic laced waste piles that had been moved off of the facility onto neighboring land unassociated with the milling operaiton. It also identified a mercury laden tailings pile on the permitted mine site. The pile on the mine site and the inside of the amalgamation building are outside the scope of this action and are still being investigated.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

#### 2.1.2 Response Actions to Date

Given the uncertain milling process, unknown mineralization state of the arsenic and the rapidly approaching winter, DRMS and the EPA Federal On-Scene Coordinator decided the most prudent measure was to consolidate the piles of mill tailings from the two offsite properties and the tailings present on the unpermitted mill site. It was decided to temporarily cap the tailings for the winter on the mill site using geotextile fabric and welded PVC liners, ensuring that moisture would not cause further contaminant migration while the site is being fully characterized over the coming winter and spring months.

Approximately 200 cubic yards of material were consolidated with a PVC liner to prevent precipitation runoff from causing material to migrate over the winter.

Liquids in various open top tanks on site were also consolidated in temporary closed-top tanks to secure them for the winter.

This action was considered a stabilizing removal action to consolidate waste and temporarily isolate the waste material from the elements, preventing further releases while a more permanent solution is developed for the site.

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

A PRP search is underway. Enforcement options are still being considered by EPA. Results will be contained in an Enforcement Addendum to the Action Memorandum for a followup removal, if one is conducted at the site.

# 2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

# 2.2 Planning Section

#### 2.2.1 Anticipated Activities

#### 2.2.1.1 Planned Response Activities

None under this action.

#### 2.2.1.2 Next Steps

Additional investigation is underway to determine required treatment and disposal of the consolidated material, as well as to determine what actions are necessary for the amalgamation building.

#### **2.2.2 Issues**

None.

#### 2.3 Logistics Section

Not applicable to this action.

#### 2.4 Finance Section

No information available at this time.

#### 2.5 Other Command Staff

# 2.5.1 Safety Officer

Not applicable to this action.

# 2.5.2 Liaison Officer

Not applicable to this action.

#### 2.5.3 Information Officer

Not applicable to this action.

# 3. Participating Entities

# 3.1 Unified Command

Not applicable to this action.

### 3.2 Cooperating Agencies

Colorado Department of Reclamation and Mining Safety

U.S. Environmental Protection Agency

#### 4. Personnel On Site

All personnel have demobilized at this time.

#### 5. Definition of Terms

No information available at this time.

#### 6. Additional sources of information

#### 6.1 Internet location of additional information/report

www.epaosc.org/redarrowmill

# 6.2 Reporting Schedule

This is the final report for the stabilizing action. A new Initial POLREP will be issued at such time that either a) a second removal has started on the site, or b) that no further action is required.

#### 7. Situational Reference Materials

additional information is available at www.epaosc.org/redarrowmill.