# U.S. ENVIRONMENTAL PROTECTION AGENCY POLLUTION/SITUATION REPORT Arsenic Mine (RV4) - Removal Polrep Initial Removal Polrep



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY Region II

Subject: POLREP #1

Beginning Interim Actions Arsenic Mine (RV4) NYD982531469 Kent, NY

Latitude: 41.4582450 Longitude: -73.7144580

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From: Sandra Richards, OSC

**Date:** 4/27/2019

**Reporting Period:** April 1, 2019 - April 26, 2019

## 1. Introduction

## 1.1 Background

Site Number: NYD982531469 Contract Number: EP-S2-15-01

D.O. Number: Action Memo Date:

 Response Authority: CERCLA
 Response Type:
 Emergency

 Response Lead:
 EPA
 Incident Category:
 Removal Action

NPL Status: Non NPL Operable Unit:

Mobilization Date: 4/8/2019 Start Date: 4/8/2019

Demob Date: Completion Date:

CERCLIS ID: NYD982531469 RCRIS ID:

ERNS No.: State Notification:
FPN#: Reimbursable Account #:

## 1.1.1 Incident Category

Due to the high health concerns from a release of arsenic, a CERCLA hazardous substance, a time-critical removal action is necessary to address certain threats associated with the conditions presented at the Site.

## 1.1.2 Site Description

The Arsenic Mine Site is the residential properties that adjoin an old arsenic mine or are topographically downgradient from the mine. Mining activities at the former arsenopyrite mine (at one time believed to be a silver mine) began back in the mid-1800's and ceased in approximately 1918. Historical information indicated ore concentrating activities took place on Site which has resulted in high levels of arsenic contaminated soil. Ore concentrating activities included crushing, rolling, and slicing the arsenic rich ore to reduce its physical size and to remove less rich overburden rock from the highest concentrations of arsenic found in the arsenopyrite vein.

#### 1.1.2.1 Location

The Site is located near the intersection of Gipsy Trail Road and Mt. Ninham Court (latitude 41.458245, longitude -73.714458) in the Town of Kent, Putnam County, New York, 10512. The Site consists of ten property parcels, containing seven residences on approximately 19 acres of land. The Site is bounded by additional mixed use (residential/agricultural) properties to the

north, Pine Pond Brook to the east, and Mt. Ninham Multi-Use Properties (New York State Forest Lands) to the west and south.

## 1.1.2.2 Description of Threat

Arsenic, a CERCLA hazardous substance, has been found in concentrations ranging from 2 to 56,000 milligrams per kilogram (mg/kg). New York State Department of Environmental Conservation (NYSDEC) soil cleanup objective for restricted residential use is 16 mg/kg, where as EPA's Risk Management Level (RML) is 35 mg/kg. Short-term health effects of arsenic include: nausea, vomiting, headaches, stomach cramps, diarrhea, chills, sore throat, nasal discharge, and facial swelling. Long-term health effects of arsenic include: cancer of the skin, lung, and bladder in humans. Additionally, long term exposure to high concentrations of arsenic may also cause skin hyperpigmentation and keratosis (darkening and thickening of the skin on the hands and feet).

## 1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In 2016, a property owner contacted EPA to inquire about problems with a water system that was placed on the property back in 1988. During the inspection of the issue, EPA found sedimentation in the bottom of four potable water holding tanks. These sediments were sent out for analysis and was determined to contain high levels of arsenic. Based upon the current configuration and construction, it was perceived that these sediments were actually soils from around the top of the tank lids. This initiated a removal assessment for soils. Soil sampling occurred between August 2017 and June 2018. Concentrations ranged from 2 to 56,000 mg/kg. Data collected from the soil sampling was given to the Agency for Toxic Substances and Disease Registry (ATSDR) and New York State Department of Health (NYSDOH) to determine if the concentration of arsenic in the soils located on-site arise to the level of a public health advisory due to the potential health related concerns.

#### 2. Current Activities

#### 2.1 Operations Section

#### 2.1.1 Narrative

An emergency response action (RV4) was initiated on April 8, 2019 to implement interim actions to reduce direct contact exposure for the residents to the on-site soils. The Emergency and Rapid Response Services (ERRS) contractor mobilized to the Site on April 8, 2019.

## 2.1.2 Response Actions to Date

EPA began implementing interim actions at residential properties by beginning to give residents indoor and outdoor door mats and boot brushes. These were to help reduce the migration of outdoor soils from entering the home.

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

Each property owner has been identified as a PRP. Other PRPs were identified including the previous mining companies, however, none of these are viable PRPs. Further enforcement activities are on-going.

## 2.1.4 Progress Metrics

This table will be populated when waste is handled.

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal

## 2.2 Planning Section

## 2.2.1 Anticipated Activities

## 2.2.1.1 Planned Response Activities

EPA plans to implement interim actions to reduce the direct contact threat presented by high levels of arsenic in soils. Interim actions vary from property to property but overall include: excavation (up to 1 foot) in dog pens, installation of ground covers in high use areas (stone, wood chips, or mulch), paving of driveways, replacement of indoor and outdoor door mats, and use of boot brushes. All of these actions will be coupled with continued education on ways to reduce exposures. EPA will also conduct quarterly drinking water assessment and education to reduce potential consumption of elevated arsenic in drinking water.

## 2.2.1.2 Next Steps

EPA will begin taking physical measures to install barriers on properties.

## 2.2.2 Issues

No current issues exist.

## 2.3 Logistics Section

All logistics associated with interim actions to occur on the Site will be handled by EPA and/or the ERRS contractor.

#### 2.4 Finance Section

#### 2 4 1 Narrative

On April 1, 2019, the On-Scene Coordinator (OSC) requested and was granted verbal authorization for RV-4 pursuant to CERCLA to initiate an emergency response action at this Site. Authorization was granted by the Acting ERRD Director. The verbal authorization granted was for a \$200,000 total project ceiling, of which \$150,000 is for mitigation contracting.

## **Estimated Costs \***

	Budgeted	Total To Date	Remaining	% Remaining				
Extramural Costs								
ERRS - Cleanup Contractor	\$150,000.00	\$0.00	\$150,000.00	100.00%				
TAT/START	\$50,000.00	\$2,549.91	\$47,450.09	94.90%				
Intramural Costs								
Total Site Costs	\$200,000.00	\$2,549.91	\$197,450.09	98.73%				

<sup>\*</sup> 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

The ERRS contractor prepared a site specific health and safety plan for their actions during the removal action. The RST contractor prepared their own site specific health and safety plan for the removal action.

#### 2.5.2 Liaison Officer

The EPA OSC is performing the activities of the Liaison Officer. The OSC maintains communication with the NYSDEC, NYSDOH, ATSDR, PCDOH, and the Supervisor of the Town of Kent.

## 2.5.3 Information Officer

Cecilia Echols is the Community Involvement Coordinator for the Site. Ms. Echols can be reached at 212-637-3678.

EPA has distributed up to three fact sheets to the residents within the site boundary. Fact sheet number one was distributed in the Summer/Fall 2017. Fact sheet number two was distributed in Fall/Winter 2017. Fact sheet number three was distributed in April 2019.

## 3. Participating Entities

## 3.1 Unified Command

Unified Command is currently not needed for this response.

## 3.2 Cooperating Agencies

**ATSDR** 

NYSDEC

NYSDOH

PCDOH

Town of Kent

## 4. Personnel On Site

ERRS personnel are currently engaged in subcontractor bids and site set-up; one RM was on-site during the reporting period. Up to 2 RST personnel were on-site during the reporting period.

## 5. Definition of Terms

ATSDR - Agency for Toxic Substances and Disease Registry

CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act

EPA - U.S. Environmental Protection Agency

ERRS - Emergency and Rapid Response Services

mg/kg - milligram per kilogram

NYSDEC - New York State Department of Environmental Conservation

NYSDOH - New York State Department of Health

PCDOH - Putnam County Department of Health

OSC - On-Scene Coordinator

PRP - Potentially Responsible Party

RML - Removal Management Level

RST - Removal Support Team

RV4 - Current Removal Action

## 6. Additional sources of information

## 6.1 Internet location of additional information/report

## 6.2 Reporting Schedule

Pollution Reports (POLREPS) will be generated on a needed basis, as operations progress.

## 7. Situational Reference Materials

