

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region II

**Subject:** **POLREP #8**  
**Completion of Artificial Turf Installation**  
**Arsenic Mine (RV4)**  
**NYD982531469**  
**Kent, NY**  
**Latitude: 41.4582450 Longitude: -73.7144580**

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**From:** Sandra Richards, OSC  
**Date:** 8/25/2021  
**Reporting Period:** 09/22/2020 - 10/16/2020

**1. Introduction**

**1.1 Background**

<b>Site Number:</b>	NYD982531469	<b>Contract Number:</b>	EP-S2-15-01
<b>D.O. Number:</b>		<b>Action Memo Date:</b>	8/15/2019
<b>Response Authority:</b>	CERCLA	<b>Response Type:</b>	Emergency
<b>Response Lead:</b>	EPA	<b>Incident Category:</b>	Removal Action
<b>NPL Status:</b>	Non NPL	<b>Operable Unit:</b>	
<b>Mobilization Date:</b>	4/8/2019	<b>Start Date:</b>	4/8/2019
<b>Demob Date:</b>	10/1/2020	<b>Completion Date:</b>	10/1/2020
<b>CERCLIS ID:</b>	NYD982531469	<b>RCRIS ID:</b>	
<b>ERNS No.:</b>		<b>State Notification:</b>	

### 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 includes 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.

On April 30, 2019, the New York State Department of Health (NYSDOH) in collaboration with the Agency for Toxic Substance and Disease Registry (ATSDR) released a Public Health Consultation and a Public Health Advisory. These documents indicated that the short-term ingestion exposure to children of arsenic in surface soils at the highest levels of arsenic on residential properties at the Site pose an immediate and significant threat to human health. Additionally, long-term ingestion and dermal exposure of children and adults to arsenic in surface soils at the highest levels of arsenic on residential properties at the Site pose a significant threat to human health. These documents can be found at: <https://www.atsdr.cdc.gov/sites/arsenicmine/index.html>.

On June 3, 2019, EPA proposed the Arsenic Mine Site to be included on the National Priorities List (NPL). The Site was finalized on the NPL on November 8, 2019. A proposed plan was released on April 8, 2020 allowing for public comment on three options for addressing OU1. OU1 is a full site remedy to dissociate residents from the exposure to arsenic. A remedy was selected on June 29, 2020. The selected remedy chosen was to relocate residents. Concurrently, a remedial investigation (RI) for OU2 has started. OU2 will determine the nature and extent of the contamination at the Site and identify and evaluate remedial alternatives to address it. Actions included in this removal action will not impede any potential remedial actions.

#### 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 ATSDR and 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

Verbal authorization of funding was given on April 1, 2019 for this emergency response action (RV4). The RV4 action 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.

The action memorandum for the RV4 action which included a ceiling increase and a 12-month exemption was signed on August 15, 2019. The Site was listed in the NPL on November 8, 2019. This action memorandum was to reduce the direct contact threat presented by high levels of arsenic in soils which varied from property to property, but overall, included: 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 were coupled with continued education on ways to reduce exposures. EPA also conducted quarterly drinking water assessment and education to reduce potential consumption of elevated arsenic in drinking water.

**POLREP #8 (09/22/2020-10/16/2020)**

**POLREP #7 (08/29/2020-09/21/2020)**

**POLREP #6 (11/26/2019-08/28/2020)**

**POLREP #5 (09/26/2019-11/25/2019)**

**POLREP #4 (06/27/2019-09/26/2019)**

**POLREP #3 (05/25/2019-06/26/2019)**

**POLREP #2 (04/27/2019 - 05/24/2019)**

**POLREP#1 (04/01/2019 - 04/26/2019)**

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

### 2.1.4 Progress Metrics

<b>Waste Stream</b>	<b>Medium</b>	<b>Quantity</b>	<b>Manifest #</b>	<b>Treatment</b>	<b>Disposal</b>
Non-regulated arsenic containing soil	Soil	20 CM	019875833 JJK	None	Modern Landfill - York, PA

## 2.2 Planning Section

### 2.2.1 Anticipated Activities

#### 2.2.1.1 Planned Response Activities

Removal has no additional planned response activities.

#### 2.2.1.2 Next Steps

USEPA Remedial Project Manager (RPM) has indicated that a subcontract award has been made through US Army Corp of Engineers (USACE) to make any required repairs to the ground covers installed during this removal action as indicated in the Operational Unit (OU)1 Record of Decision (ROD).

### 2.2.2 Issues

There are no current issues, however, delay of materials or unavailability of supplies were constant issues experienced due to the COVID-19 pandemic.

## 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 (now SEMD) Director. The verbal authorization granted was for a \$200,000 total project ceiling, of which \$150,000 is for mitigation contracting. Previously approved was a \$300,000 project ceilings for RV1, RV2, and RV3 activities for which \$220,220 was for mitigation contracting.

On August 15, 2019, the OSC requested and was granted authorization through an action memorandum for an increase in ceiling and a 12-month exemption for the RV4 action. The memorandum authorized a \$400,000 total project ceiling of which \$258,000 is for mitigation contracting.

As of September 1, 2020, \$30,000 funding from the August 15, 2019 action memo contingency was transferred to the START ceiling.

As of September 9, 2020, \$20,000 funding from the August 15, 2019 action memo contingency was transferred to the START ceiling.

Costs below are for the RV4 action.

### Estimated Costs \*

	<b>Budgeted</b>	<b>Total To Date</b>	<b>Remaining</b>	<b>% Remaining</b>
<b>Extramural Costs</b>				
ERRS - Cleanup Contractor	\$408,000.00	\$312,901.55	\$95,098.45	23.31%
TAT/START	\$125,000.00	\$112,788.39	\$12,211.61	9.77%
<b>Intramural Costs</b>				
<b>Total Site Costs</b>	<b>\$533,000.00</b>	<b>\$425,689.94</b>	<b>\$107,310.06</b>	<b>20.13%</b>

\* 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/START contractor prepared their own site specific health and safety plan for the removal action. All health and safety plans have been updated to include additional safety measures based on the

COVID-19 pandemic.

#### **2.5.2 Liaison Officer**

The EPA OSC performed the activities of the Liaison Officer. The RPM has assumed the role in current actions at the Site and maintains communication with the NYSDEC, NYSDOH, ATSDR, PCDOH, and the Supervisor of the Town of Kent.

#### **2.5.3 Information Officer**

Pat Seppi is the Community Involvement Coordinator for the Site. Ms. Seppi can be reached at 212-637-3679.

### **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**

Up to 5 ERRS personnel, 1 START personnel, and 2 OSCs 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  
RM - Response Manager  
RML - Removal Management Level  
RPM - Remedial Project Manager  
RST - Removal Support Team  
RV4 - Current Removal Action  
START - Superfund Technical Assessment and Response Team  
TL - Task Lead

### **6. Additional sources of information**

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

<https://cumulis.epa.gov/supercpad/cursites/csinfo.cfm?id=0202816>  
<https://www.epa.gov/ny/cleanup-arsenic-mine-site-town-kent-putnam-county-new-york>

#### **6.2 Reporting Schedule**

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

### **7. Situational Reference Materials**

<https://www.epa.gov>