

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Wiley Property (aka Ohio County Arsenic Site) - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #2
Phase 2 Removal Begins
Wiley Property (aka Ohio County Arsenic Site)
B45H
Hartford, KY
Latitude: 37.5123000 Longitude: -86.9653010

To: James Webster, USEPA R4 ERRB
Larry Hughes, KYDEP

From: Art Smith, On-Scene Coordinator

Date: 8/1/2016

Reporting Period: 10/15/2015 through 8/1/2016

1. Introduction

1.1 Background

Site Number:	B45H	Contract Number:	EP-S4-15-04
D.O. Number:	0007	Action Memo Date:	6/28/2016
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/13/2015	Start Date:	10/13/2015
Demob Date:		Completion Date:	
CERCLIS ID:	KYN000403430	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

CERCLA Incident Category: Abandoned Residential Property

1.1.2 Site Description

1.1.2.1 Location

The Wiley Property Site is located at 209 Shinkle Chapel Road in Hartford, Ohio County, Kentucky. The geographic coordinates of the Site are 37.5123000° North and 86.9653010° West. The Site consists of two parcels of land. The first residential tract is designated as Tax/Parcel ID 73-17-1 in the records for Ohio County, KY comprising 10.2 acres. This property is currently held by Wells Fargo Bank, following a foreclosure and Master Commissioner's sale in 2014. There are two improvements on Tax/Parcel ID 73-17-1: a single family home and an outbuilding.

The second tract making up the Site is designated as Tax/Parcel ID 73-17 in the records for Ohio County, KY. This parcel is privately owned and a portion of this property was subdivided to sell Parcel 73-17-1 in 2007. There are reports of an old barn on this property which was subsequently destroyed, thus suggesting that the past use of the property was for agricultural purposes.

The Site is bordered to the north by Shinkle Chapel Road, and by wooded, rural, and agricultural lands to the east, south, and west. There is an abandoned single family dwelling on the property, and there are 10 homes located within a half-mile radius of the Site.

1.1.2.2 Description of Threat

Direct contact with high concentrations of inorganic arsenic, a listed hazardous substance

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

In August 2014, the last known occupant of the residence at 209 Shinkle Chapel Road contacted the Kentucky Department for Environmental Protection (KDEP) with a concern about an unknown white powdery substance at the Site. KDEP reported that the former occupant bred dogs at the Site and that the females were found to be sterile while others suffered from tumors. The former occupant was concerned about potential exposure to her family members while they lived at the property.

In September 2014, KDEP performed an initial visual investigation at the Site. They confirmed an area where the white substance was located in an area devoid of vegetation and approximately 30 feet in diameter. Samples were collected in October 2014, and analysis of the samples collected from this area revealed total arsenic at levels up to 525,000 milligrams/kilogram (mg/kg). The Toxicity Characteristic Leaching Procedure (TCLP) was performed on the sample with the highest total arsenic level and the result came back as 618 milligrams/liter (mg/L) leachable arsenic. Additional investigation and sampling in October 2014 documented that the arsenic contamination had migrated downhill a distance of approximately 120 feet to the north and west of the source area.

On November 14, 2104, the KDEP Superfund Branch formally requested that the U.S. EPA conduct a Removal Site Evaluation (RSE) at the Site.

On March 24, 2015, the Region 4 Superfund Technical Assessment and Response Team (START) contractor mobilized to the Site to collect samples. The purpose was to confirm the 2014 KDEP findings and to explore the potential for additional migration pathways at the Site. Also, a subset of samples were run for arsenic speciation in an attempt to identify the specific arsenic compound at the Site. The sample collected from the source area was analyzed for total arsenic and the analysis revealed the concentration of arsenic to be 747,000 mg/kg. The arsenic speciation determined that the arsenic is an arsenite compound (As+3).

Based on this information, the On-Scene Coordinator (OSC) completed the RSE under 40 CFR Section 300.410, and concluded that the Site meets the National Contingency Plan (NCP) criteria for a time-critical removal action. (See the Documents tab of the website: www.epaosc.org/wileyproperty for the June 9, 2015 RSE Report)

On October 20 and 21, 2015, START's Tetra Tech and OTIE contractors conducted the following sampling activities at the Site:

- X-ray fluorescence (XRF) soil and sediment screening
- Vacuum sampling and air sampling from within the interior of the single family residence
- Surface and subsurface soil sampling at various locations on-site
- Surface sediment sampling from a dry creek bed located directly down-gradient of the source area

All samples collected from the inside of the residence were analyzed for the presence of arsenic and were found to be non-detect. However, arsenic was detected in sediments along the entire 1,800-foot segment of the dry creek bed that was surveyed in concentrations ranging from 130 mg/kg to 4,200 mg/kg. Approximately 700 feet of the dry creek leading to the confluence with Little No Creek remains uncharacterized due to access issues encountered during the October 2015 sampling investigation. (See the Documents tab of the website: www.epaosc.org/wileyproperty for the January 7, 2016 Final Removal Assessment Report).

In February 2016, the OSC directed the OTIE START contractor to collect samples of surface water runoff in the stream beds which drain the Site to the north and south. The surface water sample in the northern drainage feature was revealed to contain 0.507 milligrams per liter (mg/l) of arsenic. This exceeds the Water Quality Criteria (WQC) adopted by the Commonwealth of Kentucky of 0.340 mg/l, based on acute toxicity to aquatic species. The surface water feature in the southern drainage feature was discovered to be non-detect for arsenic.

On June 28, 2016, the EPA Region 4 Superfund Division Director signed an Action Memorandum for the Wiley Property Site, authorizing a project ceiling of \$1,850,000 for removal of arsenic contamination. The proposed activities are as follows:

1. Remove stockpiled waste materials and dispose of at an approved hazardous waste management facility.
2. Excavate soils on the residential property to an approximate depth of 1.5 feet BLS where arsenic concentrations at the surface are at 68 mg/kg or above and dispose of at a permitted off-site facility.
3. Excavate soils on the non-residential property to an approximate depth of 1.5 feet BLS where arsenic concentrations at the surface are at 420 mg/kg or above and dispose of at a permitted off-site facility.
4. Excavate sediments along an 800-foot segment of the dry creek bed draining the Site along its northern boundary. Excavation will be carried out along this segment until a residual arsenic concentration of 50 mg/kg and compliance with the WQC of 0.340 mg/l for acute toxicity is achieved.
5. Backfill excavated areas on the residential property with clean soil to re-establish vegetative cover and re-grade the areas to promote positive drainage
6. Re-establish vegetative cover on the non-residential property and re-grade the area to promote positive drainage.

(See the Documents tab of the website: www.epaosc.org/wileyproperty for the June 28, 2016 Action Memo).

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

On 7/5/2016, the Region 4 Emergency and Rapid Response Services (ERRS) Contractor CMC, Inc. mobilized to the Site to begin Phase 2 of the removal action. From 7/5/2016 through 7/29/2016, the activities consisted of site preparation tasks such as installation of temporary utility services, repair and

construction of roads, establishing the site command post, and construction of a decon shower facility..

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

All of the previous and current land owners have been designated as PRPs for this Site. However, none have been identified for purposes of conducting the removal action as there is no direct evidence that any of the land owners contributed to a release of hazardous substances during their period of ownership.

Wells Fargo N.A. is currently responsible for the Wiley property but is not considered a PRP because it acquired title to the property via a foreclosure proceeding and thus has no liability under CERCLA.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Beginning the first week of August 2016, removal work will begin in the hot zone. There is currently about 15 tons of source material with high arsenic concentrations which will be transferred into a rolloff box while disposal plans are finalized. Bids for transportation and disposal of characteristic hazardous waste are due on 8/4/2016. Full-scale excavation of arsenic contaminated soils is expected to begin during the first week of August 2016.

2.2.1.2 Next Steps

On 8/4/2016, the OSC and the ERRS Project Manager will meet with local emergency services representatives to brief them on site activities.

2.2.2 Issues None at this time.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$800,000.00	\$129,086.00	\$670,914.00	83.86%
TAT/START	\$99,700.00	\$4,800.00	\$94,900.00	95.19%
Intramural Costs				
Total Site Costs	\$899,700.00	\$133,886.00	\$765,814.00	85.12%

* 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

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.

POLREP #2 Last Updated 8/11/2016