

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
VCC Mobile - Removal Polrep
Final Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #3
Final Polrep
VCC Mobile
B4C1
Prichard, AL
Latitude: 30.7297070 Longitude: -88.0736217

To: Matt Taylor, EPA

From: Terry Tanner, On Scene Coordinator

Date: 6/6/2016

Reporting Period: 3/24/15 through 6/6/16

1. Introduction

1.1 Background

Site Number:	B4C1	Contract Number:	
D.O. Number:		Action Memo Date:	6/9/2014
Response Authority:	CERCLA	Response Type:	PRP Oversight
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/3/2014	Start Date:	11/3/2014
Demob Date:	1/23/2016	Completion Date:	6/6/2016
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Site Description

The Virginia-Carolina Chemical Company Mobile Site (the Site) is located in Prichard, Mobile County, Alabama. The Site is a former fertilizer production plant which occupied approximately 24 acres and was operated by the Virginia-Carolina Chemical (VCC) Company. Fertilizer manufacturing began at the Site prior to 1895 and continued until 1961. Through a series of buyouts and corporate mergers the ExxonMobil Oil Corporation became the corporate successor to this VCC site.

1.2 Site Location

Most of the former VCC property was located within the current I-165 corridor and the original plant structures no longer exist. The I-165 corridor consists of an elevated six-lane freeway deck with frontage roads on both the northeast and southwest sides of the interstate. Structures associated with the former plant include a fertilizer mixing and storing area, acid chambers with associated burners/furnaces, a sulfur heap, a bag house, a boiler room, an oil house, a potash storage building, an ammonia tank house, and several electrical transformers.

1.1.2.2 Description of Threat

Former phosphate production plants have historically produced waste products containing arsenic and lead. In May 2010, ExxonMobil's contractor (ARCADIS) conducted a Removal Site Evaluation (RSE) at the VCC Mobile Site to assess the environmental impact associated with this former VCC plant. A total of 106 samples were collected and analyzed for arsenic and lead. The results compared to Site Specific Screening Levels (SSSL) for arsenic (27 ppm) and lead (800 ppm). The SSSLs have been used as remediation endpoints at other former VCC fertilizer sites and meet EPA's Removal Management Levels for arsenic (240 ppm) and lead (800 ppm) for an industrial exposure scenario. Analytical results demonstrated that 15 of the soil samples exceeded the SSSL for arsenic (27 ppm) and that 5 of the soil samples exceeded the SSSL for lead (800 ppm). The maximum arsenic and lead concentrations detected in the soil samples were 294 ppm and 8,350 ppm, respectively. The depth of impacted soil varied from 0.0 to 4 feet below ground surface across the Site.

2. Current Activities

2.1 Operations Section

2.1.1 Response Actions to Date

Initial soil excavations for properties east of the I-165 corridor began on November 2, 2014, using a soft dig

technique via air knife and vac truck. This soft dig technique was performed in areas surrounding utilities and subsurface anomalies identified by ground penetrating radar. Once these soft digs were completed the soil excavation commenced via excavator. Excavated soil was staged onsite and sampled for TCLP values prior to transportation and disposal at the Chastang Landfill in Mt Vernon, Al. Approximately 21,976 cubic yards (33,996 tons) of soil were excavated, stockpiled and sampled for arsenic and lead using TCPL analysis. After confirming that the TCLP levels for arsenic and lead were below 5 mg/l for each constituent the soil was transported to the landfill for disposal. These removal activities were performed by AECOM and are documented in their Removal Action Completion report dated February 23, 2016.

Activities associated with removing the impacted soils west of the I-165 corridor began on November 7, 2015, and were performed by Arcadis. The initial activities included a lane closure along Hall Street, utility markings, the installation of erosion and sedimentation control measures, and grubbing and clearing operations. Prior to the excavation activities the soils were characterized for TCLP values for arsenic and lead so that the soils could be directly loaded on to trucks for disposal thereby avoiding stockpiling and storage issues. The TCLP values revealed that the soils targeted for excavation were below the TCLP values for arsenic and lead. Approximately 628 tons of soil and debris was excavated, loaded directly onto trucks, and transported to the Chastang Landfill for disposal. Following the soil removal activities the lane along Hall Street was reopened, a section of North Kate Street was repaved, and the temporary check dam along the drainage ditch was removed. The work crew demobilized on January 23, 2016. These removal activities were performed by Arcadis and are documented in their Supplemental Removal Action Completion report dated March 14, 2016.

Air monitoring was performed for dust, arsenic and lead during the removal action. The air monitoring strategy consisted of monitoring three locations surrounding the periphery of the excavation area. Action levels for air were set at 0.150 mg/m³ (dust), 0.005 mg/m³ (arsenic), and 0.03 mg/m³ (lead) and have been monitored since the beginning of the soil excavation activities. Air monitoring results demonstrated that arsenic and lead levels in the air remained below the action levels of 0.005 mg/m³ and 0.030 mg/m³, respectively, since the beginning of the soil excavation activities. Particulate (dust) levels did exceed the action level of 0.150 mg/m³ on December 4, 2014, and December 18, 2015. Corrective measures including the application of water by water truck reduced the dust particulates below the action levels. Work resumed after these two incidences with no further dust problems.

A Public meeting was held on Sept 22, 2014, prior to the start of the removal action. The first fact sheet was distributed by mail to residents prior to this public meeting. A second fact sheet was mailed on February 2015 to update the residents about the status of the removal action. Additional public relation activities included a site visit from the Mayor of Prichard on February 25, 2015.

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

ExxonMobil has entered into an Administrative Order on Consent on May 16, 2014, for performing this removal action.

2.1.3 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Arsenic/lead	Soil	34,624 tons			Chastang Landfill

2.2 Planning Section

2.2.1 Next Steps

ExxonMobil is working with the current property owners to establish institutional controls (deed restrictions and covenants addressing future soil disturbance activities). ExxonMobil will also perform annual inspections of the properties associated with this removal action to assess the long term stability of the soils and drainage features associated with this removal action.

2.2.2 Issues

No additional issues are anticipated at this time.

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

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 #3 Last Updated 6/7/2016