

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #4
Final POLREP
VCC Memphis

Memphis, TN
Latitude: 35.1392000 Longitude: -89.9720000

To:
From: Terry Tanner, On Scene Coordinator
Date: 3/16/2015
Reporting Period:

1. Introduction

1.1 Background

Site Number:	B42X	Contract Number:	
D.O. Number:		Action Memo Date:	6/5/2014
Response Authority:	CERCLA	Response Type:	PRP Oversight
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	10/27/2014	Start Date:	
Demob Date:	1/23/2015	Completion Date:	3/16/2015
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

1.1.2 Site Description

The site is the location of a former fertilizer production plant operated by the Virginia-Carolina Chemical Company (VCC). Fertilizer manufacturing began at the Site prior to 1907 and continued until the mid 1980s. VCC eventually became ExxonMobile. Exxon Mobil Corporation has come forth as the corporate successor of this and other VCC sites throughout Region 4.

1.1.2.1 Location

The site is located in Memphis, Shelby County, Tennessee, near the intersection of Poplar Avenue and Collins Street. The nearest street address where the site was formerly located is 152 Collins Street. The site originally consisted of approximately 27 acres of land formerly owned by the Virginia-Carolina Chemical Company and was located in an industrial area in downtown Memphis, northeast of the intersection of Collins Street and Poplar Avenue. The northern portion of the site (17.5 acres) currently contains the Acee Business Center, while a self-storage center (CubeSmart) is located on the southernmost parcel. The southernmost parcel occupies 9.34 acres.

The majority of the former VCC Memphis site is currently paved as a parking lot or covered by buildings that comprise the Acee Business Center. The former site is bordered to the north by the City of Memphis Department of Public Works and to the east by railroad tracks associated with the Union Pacific Railway. The site is bordered to the south by Poplar Avenue (U.S. Route 72) which contains commercial and industrial development, and to the west by Collins Street which contains residential and recreational development.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On October 27, 2014, AECOM and Envirocon, contractors for Exxon Mobil, mobilized to the site to perform the removal action. The primary objective was the removal of arsenic and lead contaminated soils. Site-Specific Action Levels were established for arsenic and lead at 27 ppm and 800 ppm, respectively.

After staging the equipment and performing utility locating, the crew began soil excavation using a vac truck and shovels to perform soft excavation around suspected utilities. Following soft excavation work, the

remainder of the excavation work was performed using a trackhoe. The majority of the excavation areas were excavated to a depth of two feet below grade. XRF readings were taken following excavation to determine if protective barriers needed to be put in place prior to backfilling. The protective barriers were used as markers to alert future workers to the potential presence of arsenic and lead contaminated soils.

A total of 5,415 cubic yards of soil was excavated and sent to the Republic Shelby Landfill in Millington, Tn. Approximately 401 cubic yards of excavated soil was stabilized with MAECTITE to achieve the 5 mg/kg TCLP criteria and sent to the Republic landfill. The frequency of compliance sampling was set at a minimum of one sample per every 600 cubic yards of soil. During excavation a buried gas cylinder with no markings and of unknown content was uncovered. This cylinder was placed in an overpack container by Cylinder Recyclers Inc. and shipped to SET Environmental Inc., in Houston, Texas, for disposal.

Air monitoring was performed for dust particulates, arsenic and lead at the perimeter of the site for the first ten days of soil excavation. The action levels were set at 0.150 mg/m3, 0.005 mg/m3, and 0.03 mg/m3, respectively. Following ten days of readings below the action levels, the sampling frequency was reduced to once every week. All air monitoring results indicated that dust particulates, arsenic, and lead did not exceed the action levels.

Following excavation the areas were backfilled with clean soil and the areas were either hydroseeded or covered with mulch and replanted with shrubs and/or trees. The excavation area designated as Zone A 1 was covered with cement in accordance with an agreement between ExxonMobil and the property owner.

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

On May 16, 2014, ExxonMobil entered into an Administrative Order on Consent for performing the removal action. All costs associated with this removal action were paid for by ExxonMobil.

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>
Arsenic & Lead	Soil	5,415 cubic yards			Republic Shelby Landfill
Arsenic & Lead	Soil	401 cubic yards		Maectite	Republic Shelby Landfill
Compressed Gas	Cylinder	1			SET Environmental

2.2 Planning Section

2.2.1 Anticipated Activities

ExxonMobil will implement institutional controls associated with this removal action including deed restrictions. This site will be transitioned to EPA's Region IV Remedial Branch for groundwater monitoring. No additional field activities associated with this soil removal action are anticipated at this time.

2.2.1.1 Planned Response Activities

2.2.1.2 Next Steps

2.2.2 Issues

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.