



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION 4  
ATLANTA FEDERAL CENTER  
61 FORSYTH STREET  
ATLANTA, GEORGIA 30303-8960

APR 16 2014

Mr. Phil Davis  
Alabama Department of Environmental Management  
P.O. Box 301463  
Montgomery, Alabama 36130-1460

Subject: VCC Mobile Site  
Prichard, Mobile County, Alabama

Dear Mr. Davis:

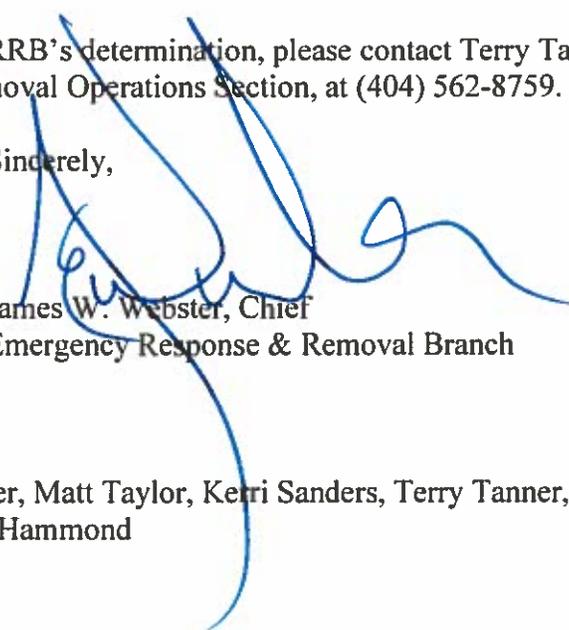
The U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) conducted a Removal Site Evaluation (RSE) at the above referenced site for potential removal action eligibility under the National Contingency Plan (NCP).

Based on the information collected during the RSE, the On-Scene Coordinator (OSC) recommends this **site be given priority** for removal eligibility contingent upon availability of approved funds under the EPA's Superfund Removal Program (see enclosed RSE memo). Concurrent with this recommendation, the EPA may also begin its enforcement activities to determine potentially responsible parties for this Site.

A final determination of removal eligibility will be made by the OSC assigned to the site. A decision to conduct a removal action will be documented in an Action Memorandum and a copy will be forwarded to the State. Should the OSC make a final determination that a removal action is not warranted you will be subsequently notified of this determination.

Should you have any questions concerning ERRB's determination, please contact Terry Tanner, OSC, at (404) 562-8797, or Matt Taylor, Chief of Removal Operations Section, at (404) 562-8759.

Sincerely,

  
James W. Webster, Chief  
Emergency Response & Removal Branch

Enclosure

cc: Dawn Taylor, Tony Moore, James Webster, Matt Taylor, Kerri Sanders, Terry Tanner, Greg Harper, Anita Davis, Ronald Saskowski, Richard Hammond

U.S. ENVIRONMENTAL PROTECTION AGENCY  
POLLUTION/SITUATION REPORT  
VCC Mobile Site  
Removal Site Evaluation POLREP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
Region IV

**Subject:** Removal Site Evaluation  
VCC Mobile Site  
901 North Kate Street  
Prichard, Mobile County, Alabama

**Latitude:** 30.7285° N  
**Longitude:** 88.0740 ° W

**To:** Matt Taylor, USEPA R4 ERRB  
**From:** Terry Tanner, On-Scene Coordinator  
**Thru:** Greg Harper, On-Scene Coordinator  
**Date:** 4/3/14  
**Reporting Period:** 8/1/13 – 4/3/14

## 1. Introduction

**Site Number:**  
**Response Authority:** CERCLA  
**Response Type:** Time-Critical  
**Response Lead:** PRP  
**Incident Category:** Removal Assessment  
**NPL Status:** Non NPL

### 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.

VCC acquired the Mobile fertilizer plant from Mobile Phosphate Company between 1895 and 1904 and operated the plant until declaring bankruptcy in 1924. VCC of Richmond, Virginia, emerged from the bankruptcy as a new company and continued to operate the fertilizer plant until 1961. VCC merged into Socony Mobil Oil Company, Inc., in 1963 and the company changed names in 1966 to Mobil Oil

Corporation. In 1999, Exxon Corporation merged with Mobil Oil Corporation. ExxonMobil Oil Corporation is 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.

The former VCC property is bounded to the southwest by the right-of-way (ROW) of the Illinois Central Railroad which in turn is adjacent to residential properties. The former VCC property is bounded to the east by undeveloped land (a portion of which is being used as a materials storage area) and land occupied by the City of Prichard Water Works Wastewater Treatment Plant (WWTP). The undeveloped property is presently overgrown with vegetation. The former VCC property is bounded to the north by North Kate Street which in turn is adjacent to residential properties.

## **1.3 Removal Site Evaluation**

In July 2000, the US Environmental Protection Agency (EPA) Region 4 began working with Exxon Mobil Corporation to resolve outstanding environmental issues associated with former operations of the former VCC fertilizer plants. A total of 40 former VCC facilities were identified and prioritized throughout the eight southeastern states that comprise EPA Region 4.

In May 2010, ExxonMobil's contractor (ARCADIS) conducted a Removal Site Evaluation (RSE) at the VCC Mobile Site. A total of 98 soil samples were collected from 32 soil boring locations across the Site. Samples were collected from 0.0 to 0.5 feet below ground surface (bgs), 0.5 to 2 feet bgs, and 2 to 4 feet bgs. Four surface water samples and four sediment samples were also collected from the drainage ditch that traverses the Site. All samples were analyzed for arsenic and lead and 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 bgs across the Site.

In 2012, ARCADIS returned to the Site and collected an additional 178 soil samples from 55 soil boring locations. The soil samples were collected from 0.0 to 0.5 feet bgs, 0.5 to 2 feet bgs, 2 to 4 feet bgs, and at 2 foot intervals thereafter until XRF screening results for arsenic and lead were below SSSLs. A total of 12 sediment samples and 6 groundwater samples were also collected.

Between the 2010 and 2012 investigations, a total of 276 soil samples from 87 soil borings have been collected from the Site and analyzed for arsenic and lead. A total of 39 soil samples exceeded the SSSL for arsenic and 9 soil samples exceeded the SSSL for lead. The maximum concentration for arsenic and lead in soil was 808 ppm and 18,800 ppm, respectively. Total arsenic concentrations above the groundwater MCL (10 ug/l) was detected in two of the groundwater samples. The concentration of lead

detected in the groundwater samples were all below the MCL (15 ug/l) for lead. Because the sediment samples were collected from a wet weather ditch, the results were compared against SSSL for arsenic and lead in soils. Analysis demonstrated that 10 of these samples exceeded the SSSL for arsenic and 5 samples exceeded the SSSL for lead.

### 3.0 Recommendation

Arsenic and lead are hazardous substances listed in the Title 40 of the Code of Federal Regulations (CFR) Section 302.4, as defined in Section 101 (14) of the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA), as amended. Arsenic and lead present in on-site surface and subsurface soils pose the following threats to public health or welfare as listed in Section 300.415 (b)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP).

***Section 300.415 (b)(2)(i) Actual or potential exposure to nearby human populations, or the food chain from hazardous substances pollutants or contaminants;*** Investigation of the Site has documented the presence of arsenic and lead contamination in surface and subsurface soil that exceeds EPA's Removal Management Level of 240 ppm arsenic and 800 ppm lead for industrial land use settings. The northern boundary of the Site which is adjacent to residential properties is unfenced and accessible to trespassing. Vehicle tracks/ruts were observed on unpaved portions of the Site indicating that people are accessing the Site and are at risk for exposure to arsenic and lead contaminated soil primarily through direct contact, ingestion, and inhalation.

***Section 300.415 (b)(2)(v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;*** The presence of arsenic and lead contaminated surface soils are subject to wind and rainfall, both of which could cause contaminated soils to migrate or be release from the Site.

***Section 300.415 (b)(2)(vii) The availability of other appropriate federal or state response mechanisms to respond to the release;*** There are no other federal agencies available to respond. The Alabama Department of Environmental Management has indicated that it lacks the resources necessary to deal with the threat.

The RSE has identified arsenic and lead concentrations exceeding the RML for industrial land use that pose a threat to human health and the environment. Based on the criteria listed above, the EPA Region 4 Emergency Response and Removal Branch has determined that a time-critical removal action at this Site is appropriate.

*Concur,*  
*Matt Taylor 4-16-2014*