

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
35th Avenue Site - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #1
Removal Site Evaluation POLREP
35th Avenue Site
B4M3
Birmingham, AL
Latitude: 33.5627531 Longitude: -86.7989565

To: Jim Webster, Chief, ERRB, EPA R4
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Date: 5/5/2011

Reporting Period: 3/14/11 - 4/12/11

1. Introduction

1.1 Background

Site Number:	B4M3	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Assessment
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:		Start Date:	
Demob Date:		Completion Date:	
CERCLIS ID:	ALN000410750	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Active Production Facility

1.1.2 Site Description

The Walter Coke Site (the "Site") is located in Birmingham, Jefferson County, Alabama. The Site includes the active Walter Coke, Inc. Property and three surrounding communities, Collegeville, Fairmont, and Harriman Park. The Site is centered at 33.5627531 latitude and -86.7989565 longitude and encompasses approximately 3.7 square miles.

The Walter Coke, Inc. manufactures foundry and furnace coke as well as coke by-products in its 122 coke ovens. A coke plant has been operating at the facility since 1919 on its 400 acre property. During the operation of the facility, there was a chemical sulfonation plant that operated from 1948 to 2002 when it was demolished; a blast furnace that operated from 1958 to 1979; a mineral wool plant that operated from 1949 to 2010; and the company is currently operating a biological treatment facility (BTF) that began operations in 1973.

Drainage from the Site flows north to a storm water retention pond and eventually into Five Mile Creek. Historically the drainage from the site flowed through open channels directly to Five Mile Creek. There is also a drainage pathway from the former chemical plant that eventually empties into Harriman Park Creek.

Region 4 Resource Conservation and Recovery Act (RCRA) Division/Restoration and Underground Storage Tank Branch (RUST) have been involved with the facility for some time, having a 3008(h) Order with the property since 1989. Current negotiations with Walter Coke involved the sampling and cleanup of surrounding properties to the facility. The primary contaminants of concern are benzo(a)pyrene (BaP) which is a polycyclic aromatic hydrocarbon (PAH) and arsenic (As), both of which have impacted the surrounding communities via air deposition.

On March 14, 2011 residential sampling data collected by Walter Coke was submitted via RUST to ERRB

for evaluation under the Removal Program. The data was summarized in a report dated December 2009 and evaluated contamination in limited areas surrounding the Walter Coke facility. The sampling methodology used by the facility was to grid off the surrounding communities and focus on targeted areas located near the Site including active children's play areas and vegetable gardens within each grid. In total, 78 properties, of approximately 200, were sampled for As and BaP equivalents.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

On March 17, 2011, ERRB asked the Region 4 Technical Services Section (TSS) to evaluate the results from the 2009 sampling event against Removal Action Levels (RALs). TSS summarized that 16 residential properties, two schools, a former school, and a right of way exceeded the RAL of 1.5 mg/kg for BaP Toxic Equivalents (TEQ) in residential surface soil.

After a review of the data generated from the December 2009 Report and the subsequent review by TSS confirming the presence of BaP in surface soils above RALs, ERRB has concluded that the Site meets the criteria set forth in 40 CFR 300.415 (b)(2) for a time critical removal action.

2.1.2 Response Actions to Date

There have been no response actions conducted by ERRB at this Site. RCRA has been involved with actions at the Site since 1989 and has the company under a 3008(h) Order. In addition, RCRA Restoration and Underground Storage Branch (RUST) are in the process of negotiating a new 3008(h) Order with Walter Coke to include additional sampling and clean up of offsite impacted areas. The two active School properties listed above are currently being voluntarily cleaned by Walter Coke.

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

PRPs have not been conclusively determined by ERRB. RUST is currently negotiating with Walter Coke for cleanup of offsite contamination through a RCRA 3008(h) Order.

2.2 Planning Section

BaP and As are hazardous substances, as listed in 40 CFR 302.4, and referred to in Section 101 (14) of CERCLA, as amended. BaP and As contaminated soil at the Site pose a significant threat to public health. The threat comes primarily from potential human exposure to this hazardous substance. Direct contact and ingestion of this hazardous substance is the primary pathway of exposure. Continued release of this hazardous substance may cause potential chronic health effects to persons living and working nearby.

BaP and As 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;

The sampling that has been conducted at the Site confirm that there are levels of BaP and As in surface soils that exceed EPA RALs for these materials. TSS in a report dated March 17, 2011, determined that a time-critical removal action is warranted to address potential human health risks in the communities surrounding the facility. BaP and As are classified as carcinogenic materials. The communities surrounding the facility are classified as an Environmental Justice (EJ) Community being low-income and minority. Aerial deposition of ash from stacks at the plant is a reoccurring event in the surrounding community. A full characterization of the extent of the BaP deposition needs to be conducted in the surrounding communities as the 2009 sampling only addressed a limited number of properties surrounding the facility.

Other concerns are the historical deposition of the materials that may have migrated offsite through storm channels and into Five-Mile Creek and Harriman Park Creek, both of which cut through residential areas. Coal tar has been found in Five-Mile Creek and As in Harriman Park Creek.

Section 300.415 (b)(2)(ii) Actual or potential contamination of drinking water supplies or sensitive ecosystems;

As stated earlier, the Site drains eventually into Five-Mile Creek and into Harriman Park Creek. Runoff from the Site, current and historical, may contribute to the detriment of ecosystems in the vicinity of the plant.

Section 300.415 (b)(2)(iv) High levels of hazardous substances or pollutants or contaminants in soils largely at or near the surface that may migrate;

Analytical results reveal that elevated BaP and As levels are present at or near the surface creating a potential for migration to off-site locations. A major source of the migration of the hazardous materials is via wind deposition. The surrounding community will continue to experience deposition from the plant unless controls are put in place. Jefferson County Department of Health is currently conducting air monitoring at the fence line of the facility and continue to detect As, benzene, and BaP in the 1E-4 to 1E-6 risk range in samples. EPA Air Toxics and Monitoring Branch in conjunction with Jefferson County will be placing air monitoring stations at schools in the area starting in late spring or early summer 2011.

Section 300.415 (b)(2)(v) Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;

As stated earlier, all stormwater from the Site historically empties into Five-Mile Creek and/or Harriman Park Creek. Migration of hazardous materials will continue to occur via wind and rain.

Section 300.415 (b)(2)(vii) The availability of other appropriate federal or state response mechanisms to respond to the release;

RUST referred the Site data to ERRB for consideration under the Removal Program. Alabama Department of Environmental Management (ADEM) is knowledgeable about the Site and is aware of the on-going enforcement efforts by RUST. No formal request from ADEM has been received by ERRB.

RUST has informed ERRB that they are working through their 3008(h) Order with Walter Coke to address the offsite and onsite contamination and to conduct necessary response actions to mitigate threats associated with the facility.

Due to the threat and/or future threat to human health from the hazardous substance, the Site achieves removal eligibility based on the removal criteria listed above; however, RUST will work through their Corrective Action Order to get the PRP to conduct a response necessary to protect the surrounding communities. In the event compliance is not achieved, ERRB will re-evaluate this removal eligibility criteria.

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.