

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Southeastern Wood Preserving - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #21
Residential excavation along Barfield Street near complete
Southeastern Wood Preserving
041L
Canton, MS
Latitude: 32.6181000 Longitude: -90.0161000

To: Matt Taylor, USEPA R4 ERRB
Richard Ball, MS DEQ
Shelby Johnston, EPA

From: Subash Patel, On-Scene Coordinator

Date: 2/28/2014

Reporting Period: February 4, 2014 to February 28, 2014

1. Introduction

1.1 Background

Site Number:	041L	Contract Number:	EP-S4-07-03
D.O. Number:	0042	Action Memo Date:	9/25/2013
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:		Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	11/4/2013	Start Date:	8/31/2009
Demob Date:		Completion Date:	
CERCLIS ID:	MSD000828558	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:	C10G03	Reimbursable Account #:	

1.1.1 Incident Category

Fund-Lead Time Critical Removal Action

1.1.2 Site Description

The Southeastern Wood Preserving Site is an abandoned wood preservation plant which operated from 1928 until it filed for bankruptcy in early 1979. The Site covers approximately twenty acres and is located in a predominantly commercial/residential area just east of downtown Canton, Madison County, Mississippi.

Multiple investigations and actions have been taken by the State of Mississippi and the EPA throughout the years, including an EPA initiated an emergency response action in 1986 to stabilize three unlined surface impoundments that contained creosote sludge and water as well as an August 2009 emergency response action to remove contaminated soil and sediment and installed a slurry wall along the south bank of Batchelor Creek.

These multiple sampling events and response actions have found polycyclic aromatic hydrocarbons, pentachlorophenol, and dioxins contamination in surficial and in subsurficial soils both on and off-site.

The Preliminary Assessment and Site Inspecting (PA/SI) was completed on July 17, 2009. The Site was proposed to the NPL in March 2011. The Site was listed on the NPL on May 15, 2012. The RI/FS, including a Human Health Risk Assessment, is underway with phase 1 completed in May 2013. In order to evaluate if any of the private properties adjacent to the SWP Site are impacted by Site contaminants, surface and subsurface soil samples were collected during Phase 1 of the RI/FS. Of the 45 properties sampled, nineteen exceeded the Regional Removal Management Levels for dioxins and benzo(a)pyrene in residential and commercial soils. The contamination was found at a depth of 0 – 6 inch. These residential and commercial properties were referred to the Region 4 Emergency Response and Removal Branch to address under a Removal Action.

1.1.2.1 Location

There are twelve residential and seven commercial properties of concern. The properties are spread throughout a 17-acre area of Northeast Canton, Mississippi. The properties are located south of the SWP Site, across Covington Drive, between Miller Street to the West, Parker Street (Barfield Street) to the East

and North of Barfield Street. One property of concern is located near the intersection of Yandell Avenue and Miller Street. One additional property of concern is located near the intersection of Miller Street and Covington Drive.

The residential properties consist of small lots with houses and outbuildings. A number of the residential properties have vegetable gardens. A few lots are sparsely vegetated, and exposed surface soil is present; playground equipment is also present. Vacant lots are not fenced, and there is also evidence of exposed surface soil and children playing in these areas.

1.1.2.2 Description of Threat

The elevated benzo(a)pyrene and dioxin contamination presents a high probability of exposure to persons who live in the community. The contamination is found at ground surface. The Site consists of residential and commercial properties that are unsecured. There are children in this community who play in multiple yards. A number of the yards also have vegetable gardens. The hazardous substances in the soil pose a direct contact threat to the surrounding population. Benzo(a)pyrene and dioxins are classified as probable human carcinogens and have been shown to have mutagenic, reproductive and developmental health effects.

Benzo(a)pyrene and dioxins are hazardous substances as defined by CERCLA 101 (14) and listed in Title 40 of the Code of Federal Regulations (CFR), Section 302.4. The EPA's TSS has reviewed the EPA residential sampling results and the EPA Removal Site Evaluation and determined there is a threat to public health and the environment resulting from the elevated benzo(a)pyrene and dioxin contamination present at the Site. This contamination is persistent and has been released to the yards of at least nineteen properties of the Center Terrace Community of the City of Canton.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The Region 4 Superfund Remedial program conducted the Phase 1 Remedial Investigation Feasibility Study between November 6, 2012 and September 30, 2013, which included sampling of surface and subsurface soils from residential and commercial properties adjacent to the SWP Site.

In order to evaluate if any of the private properties adjacent to the SWP Site are impacted by Site contaminants, surface and subsurface soil samples were collected from 45 locations. At each location, a five-point composite surface soil sample was collected for chemical analysis from zero to six inches and subsurface samples were to be collected from six to twelve inches below ground surface, in an approximate 50 × 50 foot grid.

Of the 45 properties sampled, twelve exceeded the Regional Removal Management Levels (RML) for dioxins and benzo(a)pyrene in residential soils, and seven commercial properties exceeded the Regional RMLs for dioxins and benzo(a)pyrene in industrial soils. The contamination was found at a depth of zero to six inches.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

Soil at residential properties along Barfield Street are being addressed. About one foot of soil is being excavated on most properties. Sampling results show there is dioxin and/or benzo(a)pyrene concentration above Remedial Management Levels (RML) within the first twelve inches of soil, but concentration is well below RML at a depth of thirteen to twenty-four inches. Clay layer is found at a depth of about eight inches.

Front yards at 543, 535, and 531 exceeded Hazard Index of 1 for dioxin TEQ (concentration greater than 51 ppt) from a soil depth of thirteen to twenty-four inches. During excavation of these yards, the clay layer was located at more than one foot deep but not quite two feet in most areas. Therefore, actual soil excavation depth was determined by the location of the clay layer. This same plan will be used for properties located at 552 and 544 Covington Drive since soil samples were found to exceed 51 ppt for dioxin TEQ from thirteen to twenty-four inches.

2.1.2 Response Actions to Date

The following properties have been addressed as of February 28, 2014.

607 Barfield: Complete
605 Barfield: Complete
603 Barfield: Complete
561 Barfield: Complete
557 Barfield: Complete
553 Barfield: Complete
549 Barfield: Complete
543 Barfield: Complete.
535 Barfield: Front yard complete. Back yard remains.
531 Barfield: Front yard complete. Back yard remains.
525 Barfield: Front yard receiving backfill. Back yard remains.
340 Miller St: Complete

Remaining properties to be addressed in no particular order:

381 Miller St.

353 Parker St.
464 Covington Dr.
535 Covington Dr.
543 Covington Dr.
544 Covington Dr.
552 Covington Dr.

The properties along Covington Drive are multi-parcel lots.

EPA OSC is working with Remedial Program to determine location and amount of nonhazardous soil generated from site can be staged for future Remedial use. Remedial Program will address staged soil in their plan. MSDEQ representative is aware of this plan.

EPA began sending nonhazardous soil generated from residential yards to CERCLA-approved city landfill on February 27, 2014.

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

The enforcement process is currently moving forward. The seven commercial properties are currently being vetted to determine liability.

2.2 Planning Section

2.2.1 Anticipated Activities

Excavation at Covington Drive properties should begin March 1, 2014.

2.2.2 Issues

Waste soil generated from residential and commercial properties is not listed waste. Consistent flooding from creek and railroad ties found on properties may have caused elevated levels of dioxin and benzo(a)pyrene found in yards.

2.3 Logistics Section

Not applicable.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

2.5.1 Safety Officer

The Safety Officer and Assistant Safety Officers for the site were assigned. A Site Specific Health and Safety Plan was created. EPA, START, ERRS and MS DEQ concurred on the plan. A copy of the plan is found online at www.epaosc.org/SoutheasternWood. A hard copy with appropriate signatures is maintain on-site in the Site Trailer.

3. Participating Entities

3.1 Cooperating Agencies

State of Mississippi Department of Environmental Quality

City of Canton Mayors Office

City of Canton Police Department

4. Personnel On Site

The following personnel were on-site at various times throughout the reporting period:

EPA: 1

START: 1

ERRS: 9

MSDEQ: 1

5. Definition of Terms

5.1 Commonly Used Abbreviations

OSC: On-Scene Coordinator

START: Superfund Technical Assistance Response Team Contractor

ERRS: Emergency Response Removal Services (ERRS) Contractor

MS DEQ: State of Mississippi Department of Environmental Quality

TEQ: Toxic Equilivent

6. Additional sources of information

6.1 Internet location of additional information/report

The site website and online repository for documents, pictures, figures, and reports are found at www.epaosc.org/SoutheasternWood.

6.2 Reporting Schedule

POLREP should be generated monthly unless an issue arises.

7. Situational Reference Materials

The site website and online repository for documents, pictures, figures, and reports are found at www.epaosc.org/SoutheasternWood.