

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



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #23
Excavation continues
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: 3/26/2014

Reporting Period: March 19, 2014 to April 16, 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:	EPA	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

Properties found to have elevated level of dioxin TEQ within one foot in soil depth are being excavated to clay layer if within one foot depth or to one foot depth. Properties found to have elevated level of dioxin TEQ within two feet in soil depth are being excavated to clay layer if within two feet depth or to two feet depth.

There appears to be a correlation with sample depth result and location of clay layer. Properties found to have elevated levels at two feet have a clay layer at around one and a half feet. Properties found to have elevated levels at only one foot have a clay layer at around eight inches.

In few areas where clay layer was not reached, soil excavated two feet.

2.1.2 Response Actions to Date

The following properties have been addressed as of April 16, 2014.

Residential Lots

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: Complete
531 Barfield: Complete
525 Barfield: Complete
340 Miller: Complete

Commercial Lots

535 Covington: Complete
544 Covington: Complete

464 Covington: Complete
552 Covington: Complete
381 Miller St.: Complete
353 Parker St.: Ongoing

Remaining commercial properties to be addressed: Parcels 093D-20B-236/00.00 and 093D-20B-237/00.00 (vegetable gardens only)

Covington Drive property owner of parcels 093D-20B-236/00.00 and 093D-20B-237/00.00 agreed to allow EPA to excavate soils from vegetable gardens only. Previously, property owner did not want EPA to address property since it would require him to temporarily shut down his business. Areas that were not excavated have been covered with rocks to reduce exposure to soil. Sample results show property exceeds site specific Residential Management Level for dioxin TEQ (51 ppt) but below site specific Industrial Management Level (750 ppt). Property is composed of two commercial parcels.

Lab results from soil samples collected at 353 Parker Street reveal the yards located on the east and west sides need to be excavated (in addition to north side). Dioxin TEQ concentration on both sides exceed 51 ppt (Hazard Quotient of 1) within one foot depth. Lab results show no concerns with constituents that are consistent with a plating facility (property used to be a plating facility). Property owner has been informed of results.

Residential property owners of 605 Barfield Street were informed by EPA OSC and MDEQ that their vegetable garden slightly exceeded EPA's site specific Residential Management Level. The garden's lab result for dioxin TEQ was 53 ppt and the site specific RML is 51 ppt. The owners did not want their garden excavated. After discussions with EPA's Technical Support Services, it was determined that the vegetable garden did not need to be addressed. MDEQ supports decision.

Soil samples from the staged soil excavated from the site were sent to lab for dioxin and benzo(a)pyrene analysis to determine if staged soil is below EPA's Remedial Industrial Management Levels (750 ppt for dioxin TEQ, 50,000 ppt for hexachlorodibenzo-p-dioxin [HCDD], and 24 ppm for benzo(a)pyrene). Remedial section will use lab results to determine future application of staged soil in their design.

ATSDR will visit site on April 16-18 to film site for documentation.

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

Site activities should be complete during week of April 21, 2014.

2.2.2 Issues

None.

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 MDEQ 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: 11

MDEQ: 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

MDEQ: 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.