



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

SEP 11 2013

Mr. Jerry Banks
Mississippi Dept. of Environmental Quality
P. O. Box 2261
Jackson, MS 39225

Subject: Southeastern Wood Preserving Site – Residential Property Assessment
Covington Drive and Hargon Street, Canton, Madison County, Mississippi

Dear Mr. Banks:

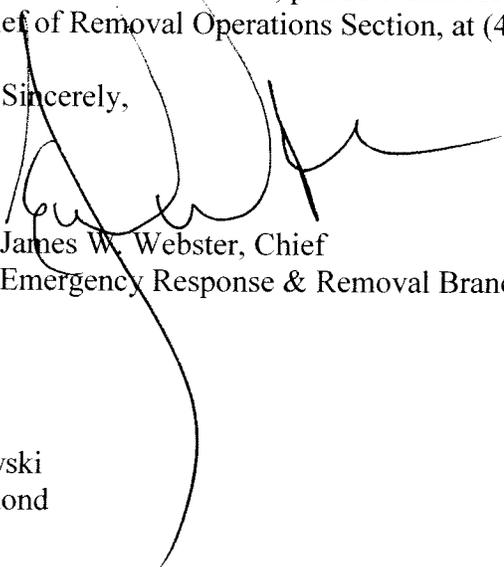
The U.S. Environmental Protection Agency's Emergency Response and Removal Branch (ERRB) conducted a Removal Site Evaluation (RSE) at the above referenced site for potential removal action eligibility under the National Contingency Plan (NCP).

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 Kevin Eichinger, OSC, at (404) 562-8268, 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
Kevin Eichinger
Kerri Sanders
Terry Stilman
Anita Davis
Ronald Saskowski
Richard Hammond
Carol Monell
Derek Matory

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Southeastern Wood Preserving Residential
Removal Site Evaluation POLREP



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region IV

Subject: POLREP #1
Removal Site Evaluation
Southeastern Wood Preserving Site - Residential Property Assessment
Covington Drive and Hargon Street, Canton, Madison County, MS 39046

Latitude: 32.617500 N
Longitude: -90.020265 W

To: Matt Taylor, USEPA R4 ERRB
From: Kevin Eichinger, On-Scene Coordinator
Date: 08/14/2013
Reporting Period: 07/30/2013 – 08/13/2013

1. Introduction

Site Number: 041L
CERCLIS ID: MSD000828558
Response Authority: CERCLA
Response Type: Time-Critical
Response Lead: EPA
Incident Category: Removal Assessment
NPL Status: Non NPL

1.1 Site Description

The Southeastern Wood Preserving (SWP) Site is an abandoned wood preservation plant facility which operated from 1928 until approximately 1984. The Site covers approximately twenty acres and is located in a predominantly commercial/residential area just east of downtown Canton, Madison County, Mississippi. Batchelor Creek and the former Illinois Central Gulf Railroad border the Site to the north. The City of Canton's drinking water well field is located just south of the Site. An abandoned industrial area lies to the east and a residential area borders the Site to the south and to the west. The site is currently owned by Madison County Industrial Development Authority.

The production process involved debarking of the Southern Yellow Pine timbers and placing them in retort cylinders for drying and pressure treatment using creosote and pentachlorophenol as preservatives.

Prior to 1977 and the Clean Water Act, the facility reportedly discharged approximately 50,000 gallons of wastewater directly into Batchelor Creek. In May of 1977, the company was connected into the City of Canton sewage system. The wastewaters were to be pre-treated prior to discharge into the City lagoons. On several occasions the City ordered the facility to cease discharge due to failure to adequately treat the wastewaters.

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.

This Site was listed on the National Priorities List (NPL) in May of 2012. A Phase 1 Remedial Investigation (RI) Field Study (FS) was conducted by the Region 4 Superfund Remedial Branch between November 6, 2012 and April 1, 2013 which included sampling of surface and subsurface soils from residential properties adjacent to the SWP Site.

The Region 4 Superfund Remedial Program referred the residential and commercial properties to the Emergency Response and Removal Branch to determine if a Removal Action is warranted.

1.2 Preliminary Removal Assessment/Removal Site Inspection Results

The levels of benzo(a)pyrene and dioxins in surficial soils of twelve residential and commercial properties adjacent the SWP Site exceed the Regional Removal Management Levels (RML) and present a threat to public health and the environment. The contamination was found at a depth of 0 – 6 inch. See Table 1 for a summary of these sample results.

1.3 Site Location

The twelve properties of concern are located in Canton, Madison County, Mississippi. The properties are spread throughout a seventeen acre area of Northeast Canton, Mississippi. They are located south of the SWP Site, between Miller Street to the West, Parker Street (Barfield Street) to the East and North of Barfield Street. One additional property of concern is located near the intersection of Yandell Avenue and Miller Street. The area is mixed residential and commercial. See Attachment 1 for a site map. The street addresses are:

- Commercial/Industrial Properties
 - 388 Miller Street
 - Parcel #093D-19A-279/02.00 - Southside of Covington Street
- Residential Properties
 - 340 Miller Street
 - 525 Barfield Street
 - 535 Barfield Street
 - 543 Barfield Street
 - 549 Barfield Street

- 553 Barfield Street
- 557 Barfield Street
- 561 Barfield Street
- 563 Barfield Street
- 605 Barfield Street

In addition to these twelve properties, six properties that have not been sampled to date may need to be included in any potential action due to the proximity to other contaminated properties. Access was not granted to these properties at the time of the sampling event.

The former SWP Site is located along Covington Drive in a predominantly agricultural and residential area. See Attachment 1 for a site layout. The SWP Site covers approximately twenty acres of land. Current Site features include a scale house presently being used by a wood chipping operation that leases property on the eastern portion of the Site; a silo which housed wood chips used for boiler fuel currently being used for storage; and a large stockpile of contaminated soil and waste. The SWP Site is bounded to the north by Batchelor Creek, and the Illinois Central Gulf Railroad which is no longer in operation; to the east by a residential and industrial area; to the south by Covington Drive; and to the south and to the west by residential and agricultural properties. The City of Canton owns active and inactive municipal drinking water wells north, south, east, and west of Site.

2.0 Removal Site Evaluation

The Region 4 Superfund Remedial Branch conducted the Phase 1 RI field study between October 24, 2012 and April 1, 2013 which included sampling of surface and subsurface soils from residential 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 twenty-five locations (SWP201-SWP225) from October 24 to 29, 2012. At each location, a five-point composite surface soil sample was collected for chemical analysis from 0 to 6 inches and subsurface samples were to be collected from 6 to 12 inches bls, in an approximate 50 × 50 ft grid.

In response to high dioxin concentration detected during the October 2012 investigation, an additional eleven locations (SWP226-SWP236) were sampled January 23 and 24, 2013 to further delineate the extent of contamination. These samples were also collected as five-point composite samples in an approximate 50 × 50 grid unless modified by the yard configuration. Surface samples (0 to 6 inches) were collected from all eleven locations, and subsurface samples (6 to 12 inches) were collected from three of the locations (SWP226, SWP229, and SWP236).

An additional nine locations (SWP237 – SWP245) were sampled in March and April, 2013 to further delineate the extent of contamination. These samples were also collected as five-point composite samples in an approximate 50 × 50 grid unless modified by the yard configuration. Surface samples (0 to 6 inches) were collected from all four locations.

Of the forty-five properties sampled, twelve properties exceeded the Regional Removal Management Levels for dioxins and benzo(a)pyrene. The contamination was found at a depth of 0 – 6 inch. See Table 1 for a summary of these sample results.

Table 1: Summary of Results for Properties Exceeding the Regional Removal Management Levels

Address	Sample #	Heptachlorodibenzodioxin	Dioxin Toxic Equivalent (TEQ)	Benzo(a)pyrene	Benzo(a)pyrene TEQ
Industrial Regional Removal Management Levels		50,000 ng/kg	2300 ng/kg	24,000 µg/kg	24,000 µg/kg
388 Miller Street	SWP223	52,000 ng/kg			
Parcel #093D-19A-279/02.00 - S/S Covington Drive	SWP204	54,000 ng/kg			
Residential Regional Removal Management Levels		9400 ng/kg	150 ng/kg	1500 µg/kg	1500 µg/kg
340 Miller Street	SWP208		600 ng/kg		
525 Barfield Street	SWP233	42,000 ng/kg	460 ng/kg		
535 Barfield Street	SWP235	78,000 ng/kg	1,000 ng/kg	3800 µg/kg	5491 µg/kg
543 Barfield Street	SWP211	57,000 ng/kg	500 ng/kg		
549 Barfield Street	SWP245	22,000 ng/kg	230 ng/kg		
553 Barfield Street	SWP244	56,000 ng/kg	470 ng/kg	2700 µg/kg	4704 µg/kg
557 Barfield Street	SWP243	59,000 ng/kg	500 ng/kg		
561 Barfield Street	SWP242	10,000 ng/kg			
563 Barfield Street	SWP212	20,000 ng/kg	200 ng/kg		
605 Barfield Street	SWP229	23,000 ng/kg	240 ng/kg		

In response to a request from the Region 4 Superfund Remedial Program, the EPA Region 4 Emergency Response, and Removal Branch (ERRB):

- 1) Reviewed the soil sampling results provided by the Region 4 Superfund Remedial Program;
- 2) Conducted a site walk and met with the potentially impacted residents from the City of Canton.

3.0 Anticipated Activities

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 Technical Services

Section has reviewed the EPA residential sampling results 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 twelve properties of this City of Canton Community.

The Benzo(a)pyrene and dioxin contamination present poses 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 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 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.

Section 300.415 (b)(2)(iv) *High levels of hazardous substances or pollutants or contaminants in the soils largely at or near the surface, that may migrate;* The analytical results of soil samples collected by EPA show benzo(a)pyrene and dioxins in the top few inches of soil. Exposures occur when residents conduct routine activity such as cutting the grass. Some of the yards are very thinly grassed and the lawn mowers produce visible emissions of dust/dirt that blow onto neighboring yards or in the street. The benzo(a)pyrene and dioxin contamination found in these yards migrated there from the former creosote and pentachlorophenol wood treating facility several hundred feet away. Other than the roads, there is little protection to prevent further migration.

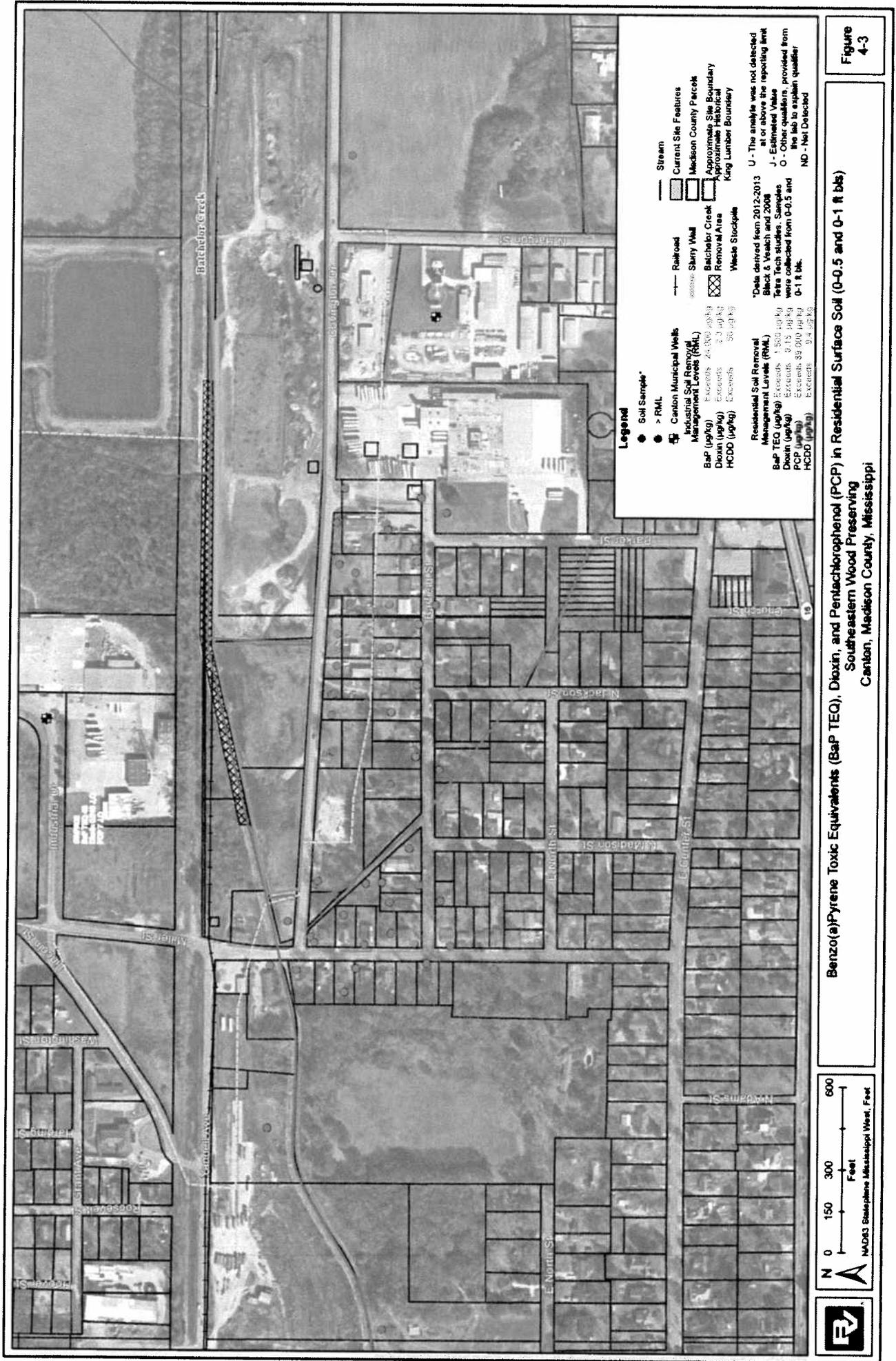
Section 300.415 (b)(2)(v) *Weather conditions that may cause hazardous substances or pollutants or contaminants to migrate or be released;* Drought conditions may contribute to the potential for air-borne migration of surface soils. Wind action during dry conditions can lead to migration of fine-grained particles from contaminated surface soil. This dust can be ingested and brought into the homes.

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 State of Mississippi has requested EPA assistance with the removal action at this City of Canton Community and has indicated it lacks the resources necessary to deal with the threat. MDEQ has indicated that the State lacks available funds to implement a cleanup at the Site in a timely manner. If the EPA Region 4 does not respond to this release, no other federal agency, state or local government has the capacity to respond in a time-critical manner.

Based on the presence of benzo(a)pyrene and dioxin-contaminated soil identified during the removal site evaluation and the suggestions provided by the Technical Services Section, the EPA Region 4 Emergency Response Removal Branch recommends the removal of the contaminated soil from the properties where the contamination exceeds Regional Removal Management Levels.

Concur - Matt Taylor 9/10/13

ATTACHMENT 1
FIGURES



Legend

- Soil Sample*
- > RML
- ☒ Canton Municipal Wells
- ☒ Industrial Soil Removal Management Levels (RML)
- BaP (µg/kg) Exceeds 2,500 µg/kg
- Dioxin (µg/kg) Exceeds 2.3 µg/kg
- HCCO (µg/kg) Exceeds 50 µg/kg
- ☒ Current Site Features
- ☒ Madison County Parcel
- ☒ Approximate Site Boundary
- ☒ Approximate Historical King Lumber Boundary
- ☒ Slurry Wall
- ☒ Batcher Creek Removal Area
- ☒ Waste Stockpile
- ☒ Stream
- ☒ Railroad

*Data derived from 2012-2013 Black & Veatch and 2008 Tetra Tech studies. Samples were collected from 0-0.5 and 0-1 ft bl.

U - The analyte was not detected at or above the reporting limit

J - Estimated Value

O - Other qualifiers, provided from the lab to explain qualifier

ND - Not Detected

0 150 300 600
Feet
NAD83 StatePlane Mississippi West, Feet

Benzo(a)Pyrene Toxic Equivalents (BaP TEQ), Dioxin, and Pentachlorophenol (PCP) in Residential Surface Soil (0-0.5 and 0-1 ft bls)
 Southeastern Wood Preserving
 Canton, Madison County, Mississippi

Figure 4-3

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