



## REGION 7

LENEXA, KS 66219

### **ACTION MEMORANDUM**

**SUBJECT:** Approval and Funding for a Time-Critical Removal Action at the Houston Wood Treatment Plant Site, Houston, Texas County, Missouri

**FROM:** for Brianne Stubblefield, On-Scene Coordinator  
Response, Removal & Oil Planning Section

**THRU:** Danny O'Connor, Supervisor  
Response, Removal & Oil Planning Section

Adam Ruiz, Manager  
Assessment, Emergency Response, and Removal Branch

**TO:** Robert D. Jurgens, Director  
Superfund and Emergency Management Division

#### **I. PURPOSE**

The purpose of this Action Memorandum is to request approval for a fund-lead, Time-Critical Removal Action for the Houston Wood Treatment Plant site, located in Houston, Texas County, Missouri. The site is a former wood preserving facility that operated from 1969 to 2013. Historical operations resulted in the release of pentachlorophenol (PCP) to the environment. The primary objective of this Removal Action is to address contaminated soils impacted by previous site operations.

#### **II. SITE CONDITIONS AND BACKGROUND**

Site Name: Houston Wood Treatment Plant  
EPA ID#: MOD041877309  
SSID#: B7O5  
CERCLA Sequence #: RV002  
Removal Category: Time-Critical, Non-NPL  
Nationally Significant: No  
Site Location: Houston, Texas County, Missouri  
Lat/Long: 37.344132, -91.936961  
Potentially Responsible Party: See Enforcement Addendum

## **A. Site Description**

### **1. Removal site evaluation**

Due to the lack of a financially viable Potentially Responsible Party and the previously documented releases to the environment, the Missouri Department of Natural Resources (MoDNR) referred the site to the EPA Superfund and Emergency Management Division in October 2022.

A Removal Site Evaluation (RSE) was conducted by the EPA in July 2023. The RSE consisted of general site reconnaissance, soil sampling, and liquid waste sampling. Soil sampling was conducted by utilizing a grid system of 50-by-50-meter and 25-by-25-meter cells over the entirety of the site. To delineate the extent of wood treating related contamination, suspected worst-case areas were targeted where stained soils were observed or near former process equipment areas where spills/releases were most likely. These locations were delineated and became smaller, separate assessment cells within the larger grid cells. Based on the RSE observations, the soil sample data is consistent with observations of staining and the highest PCP concentrations reported. Elevated levels of PCP up to 9,400 milligram per kilogram (mg/kg) were identified outside of the treatment building where visible soil staining surrounding the tank outlet was observed.

A separate, Time-Critical Removal Action (RV001) was undertaken in January and February 2024 to address abandoned and spent wood treating solutions at the site (see Section B.1 and B.2).

### **2. Physical location**

The site is located at 16841 Oak Hill Drive Road, Houston, Texas County, Missouri. Approximate geographic coordinates at the center of the site (facility treatment building) are 37.344098 degrees north latitude and -91.936564 degrees west longitude. The site is located on the northern end of Houston, Missouri. Nearby businesses include a license office, Probation Services, and Family Services. The nearest resident is located approximately 400 feet west of the site, and an inactive mobile home park is located 400 feet northeast of the site. The site is fenced along the perimeter with a locked gate at the main entrance.

The EPA has conducted an environmental justice (EJ) review of the community where the site is located using EJScreen, EPA's EJ mapping and screening tool. EJScreen provides a nationally consistent dataset and approach for combining environmental and demographic indicators. The EPA uses EJScreen to evaluate a community where a Superfund site is located to determine whether additional consideration, analysis, or outreach is appropriate, as determined by the site team, as the EPA plans for, and conducts, response actions in the community. According to the EJScreen for this site, the data indicates potential areas of EJ concern. The EJScreen for this site is included in the Administrative Record.

Per the EJScreen, the thresholds for the following categories have been met, or exceeded, with regard to the community where the site is located:

**Socioeconomic Indicators**

Low Income – 87%tile for State

Population over 64 – 86%tile for State

**Borderline Socioeconomic Indicators**

Less Than High School Education – 74%tile for State

**3. Site Characteristics**

The site is the location of a former wood treating business that operated from 1969 to 2013. During wood treating operations, PCP was added to diesel fuel and utilized to chemically pressure-treat and preserve wood products. The site consists of an approximately 14-acre parcel of land. Structures remaining on the site include an office, maintenance building, and sawmill building.

**4. Release or threatened release into the environment of a hazardous substance, or pollutant, or contaminant.**

Analytical results from soil samples indicate the presence of PCP at concentrations up to 9,400 mg/kg and 120 mg/kg dioxin Toxic Equivalency (TEQ). PCP is a hazardous substance per 40 CFR 302.4 and has been released to the environment based on visible soil staining and soil sampling data. The PCP release to soil is the result of historical wood treating operations, as evident by the location of observed staining and the highest sample data results being in close proximity to former operational areas.

**5. National Priority List (NPL) status**

The site is not listed on the National Priorities List.

**6. Maps, pictures and other graphic representations**

Figures depicting the site location, site layout, and sampling grid with PCP exceedances are included in Attachment 1, Attachment 2, and Attachment 3, respectively.

**B. Other Actions to Date**

**1. Previous actions**

In August 2000, the EPA's Resource Conservation and Recovery Act (RCRA) program conducted a Compliance Evaluation Inspection, which designated the facility as a significant non-complier, and documented concentrations of PCP up to 1,900 mg/kg) in soil. The RCRA program determined the site was a conditionally exempt small quantity

generator of PCP, ignitable waste, and other wastes from wood preserving (F032/F027, and K001), as well as an illegal disposal facility.

On August 1, 2018, the RCRA program referred the site to MoDNR to review the site for completeness. The MoDNR conducted sampling on June 22, 2022, to assess PCP and dioxin contamination in the surface soils as part of a site reassessment investigation. Soil sample results from the site reassessment investigation documented PCP in soil up to 19,000 mg/kg and a dioxin TEQ of up to 78,970 nanograms per kilogram (ng/kg), well above the EPA composite worker Removal Management Levels (RML) of 400 mg/kg for PCP and 720 ng/kg for dioxin.

## **2. Current actions**

A separate, Time-Critical Removal Action is currently being conducted to address abandoned and spent wood treating solutions and associated wastes. The liquid removal included the transfer of the PCP and diesel liquid waste from two large tanks to eight (330-gallon) totes and the tanks were rendered unusable. In addition, sludge and woodchip scrap was transferred to 30 (55-gallon) drums. These waste streams are currently staged at the site awaiting transportation for off-site disposal.

### **C. State and Local Authorities' Roles**

#### **1. State and local actions to date**

The MoDNR conducted a site visit and sampling event to assess PCP and dioxin contamination in June of 2022, as part of a site reassessment. The MoDNR referred the site to the EPA for a Time Critical Removal Action and the EPA is continuing to coordinate with the MoDNR.

#### **2. Potential for continued state/local response**

No response actions by the MoDNR or local authorities are anticipated at this time.

### **III. THREATS TO PUBLIC HEALTH OR WELFARE OR THE ENVIRONMENT AND STATUTORY AND REGULATORY AUTHORITIES**

Where the EPA makes a determination, based on the factors set forth in 40 C.F.R. § 300.415(b)(2), that there is a threat to public health or welfare or the environment, it may take any appropriate removal action to abate, prevent, minimize, stabilize, mitigate, or eliminate the release or threat of release. The factors in 40 C.F.R. § 300.415(b)(2) that apply to this site are:

**300.415(b)(2)(i) Actual or potential exposure to nearby human populations, animals, or the food chain from hazardous substances, or pollutants, or contaminants.**

Soil sampling indicated elevated levels of PCP and dioxin near former operating areas at the site, which could pose a direct contact threat to nearby residents or trespassers. Although the site is fenced and gated, the fence is not well maintained, and there is a mobile home park within 400 feet of the site.

**300.415(b)(2)(iv) high levels of hazardous substances, pollutants, or contaminants in in soils largely at or near the surface, that may migrate.**

Analytical results from surface soil samples indicate the presence of PCP at concentrations up to 9,400 mg/kg. Respective health-based action levels specific to the site were calculated to be 397 mg/kg PCP. Weather conditions such as flooding, could cause the contaminants in surface soils to migrate off-site.

**300.415(b)(2)(v) weather conditions may cause hazardous substance or pollutants/contaminants to migrate or be released.**

Extreme rain events or flooding will increase the chances of migration of the contaminants.

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

The MoDNR referred the site to the EPA and does not have the resources to respond to this removal action.

**IV. ENDANGERMENT DETERMINATION**

Actual or threatened releases of hazardous substances from this site, if not addressed by implementing the response action selected in this Action Memorandum, may present an imminent and substantial endangerment to public health, or welfare, or the environment.

**V. PROPOSED ACTIONS AND ESTIMATED COSTS**

**A. Proposed Actions**

**1. Proposed Action Description**

The objective of this Removal Action will be to address PCP contaminated soils exceeding the site-specific RML of 397 mg/kg. Areas that have been determined to exceed the site PCP RML will be excavated, guided by visual observation and confirmation sampling. The excavated areas will be backfilled with gravel or soil to the pre-removal grade. An estimated 1,300 tons of soil will be excavated and disposed of off-site.

The aforementioned actions have been developed based on industrial/commercial land use and associated exposure scenarios. Following the planned Removal Action, contamination may remain at depth and/or in surface soils at concentrations exceeding residential use limits. For these reasons, Post Removal Site Controls (PRSC) will be necessary to ensure the effectiveness of this removal action. PRSCs should ensure the property remains as industrial/commercial land use and EPA recommends an institutional control be implemented and monitored to support this effort.

Consistent with 40 *Code of Federal Regulations* 300.415(l) and the EPA's 1990 Policy on Management of Post-Removal Site Controls for Fund-Financed Removal Actions, the EPA will seek written state commitment for assuming responsibility for PRSCs at the site. A notification letter was issued on March 6, 2024, and request for state commitment made, prior to initiating this proposed Removal Action.

## **2. Contribution to Remedial Performance**

No Remedial Action is anticipated; however, the fund-lead Removal Action proposed in this Action Memorandum should not impede any future remedial plans or other responses.

## **3. Applicable or Relevant and Appropriate Requirements (ARARs)**

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) at 40 C.F.R. Part 300.415 requires that removal actions shall, to the extent practicable, considering the exigencies of the situation, attain ARARs under federal environmental, state environmental, or facility-siting laws. The following ARARs have been identified as being potentially applicable for this action:

### **Federal**

- Subtitle D of RCRA, Section 1008, 42 U.S.C. §6941 et seq., State or Regional Solid Waste Plans and implementing federal and state regulations.
- Subtitle C of RCRA, Section 3001, 42 U.S.C. §6941 et seq., State or Regional Solid Waste Plans and implementing federal and state regulations.
- 49 CFR Parts 171-179, Hazardous materials transportation
- The CERCLA off-site rule promulgated pursuant to CERCLA section 121(d)(3), 42 U.S.C. § 9621(d)(3), and formally entitled "Amendment to the National Oil and Hazardous Substances Pollution Contingency Plan; Procedures for Planning and Implementing Off-Site Response Action: Final Rule," 58 Fed. Reg. 49200 (Sept. 22, 1993), codified at 40 CFR § 300.440, will be applicable for wastes disposed off-site.

## State

A letter requesting that the state identify ARARs for this site was sent to the MoDNR on February 21, 2024. Potential ARARs received by the EPA will be considered in accordance with 40 C.F.R. 300.400(g).

### **4. Project schedule**

Response activities are anticipated to begin in spring 2024, and field work is anticipated to last six weeks dependent upon weather, availability of subcontractors, and other factors. Additional time has been factored in for arranging disposal, transportation, and final reporting.

Planned Removal Action start date: May 13, 2024.

Planned Removal Action completion date: December 31, 2024.

### **B. Estimated Costs**

The estimated costs associated with this Removal Action include the removal and off-site disposal of contaminated soil. Assumptions on cost for transport and disposal are based on previously completed work on other similar sites in Region 7 and the remote location of this site.

#### Extramural Costs:

	<u>Total</u>
Removal Costs	\$ 1,027,256
Extramural Cost Contingency (20 percent)	<u>\$ 205,451</u>
Removal Ceiling	\$ 1,232,707

**EPA direct and indirect costs, although cost recoverable, do not count toward the Removal Ceiling for this removal action. Refer to the enforcement section for a breakout of these costs.**

### **VI. EXPECTED CHANGE IN THE SITUATION SHOULD ACTION BE DELAYED OR NOT TAKEN**

Delayed action will result in a continued threat to public health or welfare or the environment.

### **VII. OUTSTANDING POLICY ISSUES**

None.

### **VIII. ENFORCEMENT**

See the Confidential Enforcement Addendum for this site. For NCP consistency purposes, it is not a part of this Action Memorandum.

## XI COSTS

The total EPA costs for this removal action based on full-cost accounting practices are estimated to be:

	<u>TOTAL</u>
Direct Extramural Costs	\$1,232,707
Direct Intramural Costs	\$ 22,500
<u>EPA Indirect (41.14 percent)</u>	<u>\$ 516,392</u>
Total Costs	\$1,771,597

**Direct costs include direct extramural and direct intramural costs. Indirect costs are calculated based on an estimated indirect cost rate expressed as a percentage of site-specific direct costs, consistent with the full cost-accounting methodology effective October 2, 2000. These estimates do not include prejudgment interest, do not take into account other enforcement costs, including Department of Justice costs, and may be adjusted during the course of a removal action. The estimates are for illustrative purposes only and their use is not intended to create any rights for responsible parties. Neither the lack of a total cost estimate nor deviation of actual total costs from this estimate will affect the United States' right to cost recovery.**

## X. RECOMMENDATION

This decision document represents the selected Removal Action for addressing the hazardous substances, pollutants or contaminants present at the site. The Removal Action was developed in accordance with CERCLA, as amended, and is not inconsistent with the NCP. This decision is based on the Administrative Record for the site.

The conditions at the site meet the NCP criteria for a Removal Action, as set forth in 40 CFR 300.415(b). I recommend your approval of the proposed Removal Action. The Removal Action ceiling will be \$1,232,707. These funds will come from the Regional Removal Advice of Allowance.

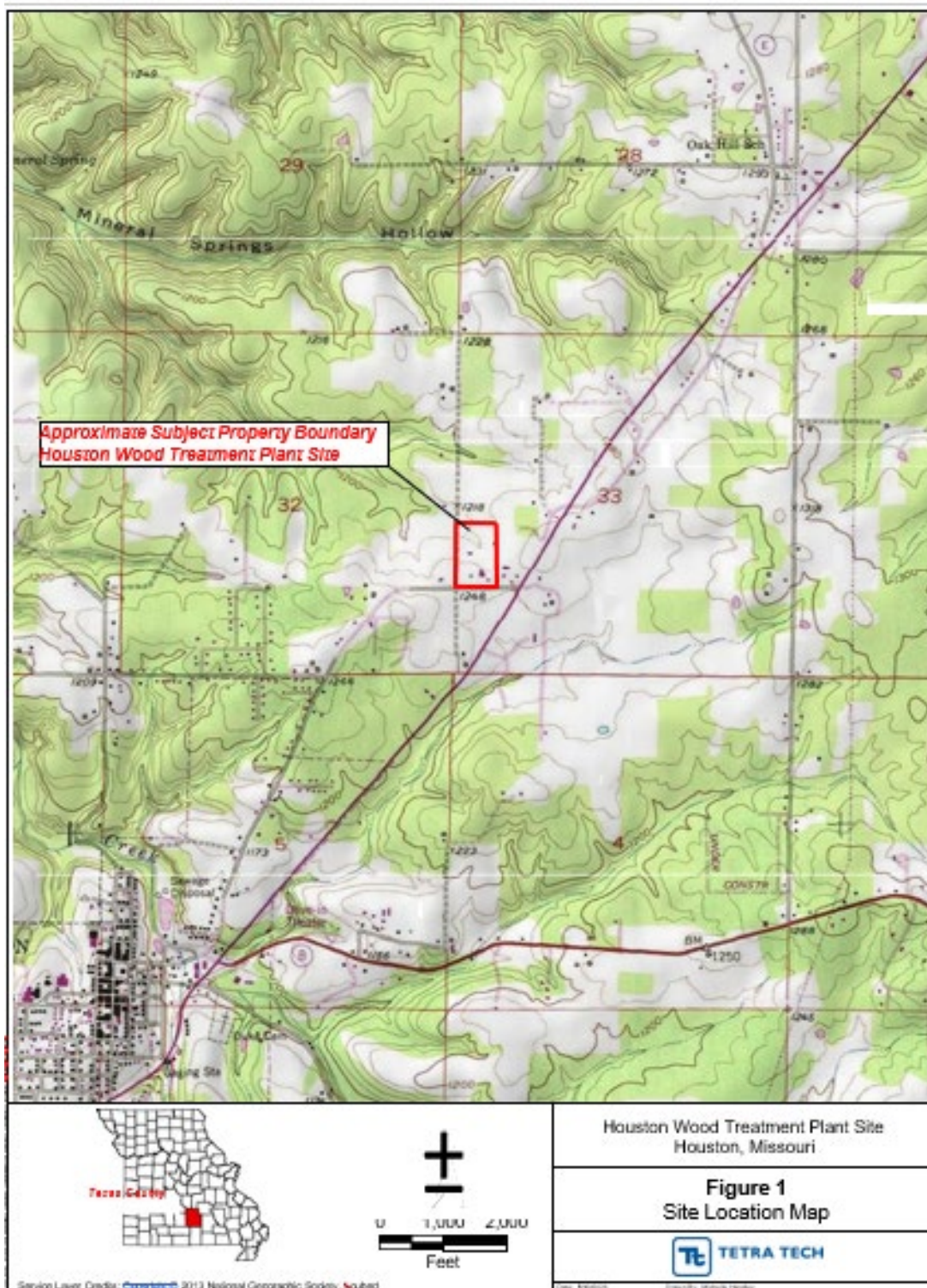
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Robert D. Jurgens, Director  
Superfund and Emergency Management Division

Attachments:  
Attachment 1 – Site Location  
Attachment 2 – Site Layout  
Attachment 3 – Sampling Grid with PCP Exceedances



# Attachment 1 - Site Location



## Attachment 2 – Site Layout





### Attachment 3 – Sampling Grid with PCP Exceedances

