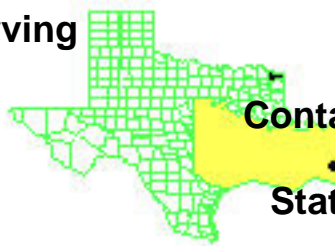


**Texarkana Wood Preserving  
Texarkana, Texas**

**EPA Region 6**



**Contact: Charles David Abshire,  
214-665-7188**

**EPA ID# TXD008056152  
Site ID: 0601695**

**State Congressional District: 4  
Updated: April 2009**

### **Current Status**

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The Environmental Protection Agency (EPA) is funding the investigation and cleanup of this site. The EPA and Texas Commission on Environmental Quality (TCEQ) are presently developing a remedy, which will address source material, contaminated soils and contaminated ground water. Several investigations have been conducted to determine nature and extent of risks posed by the site. Investigations conducted were: 1989 Remedial Investigation/Feasibility Study (RI/FS); 1999 soils and ground water sampling, additional monitoring wells (2003), geoprobe investigations (2003), ground water sampling and treatability tests (2004), a chemical oxidation pilot study (2005); and most recently (November 2007), a Supplemental RI and Human Health and Ecological Risk Assessments. The information gathered from past and recent efforts was used in numerical modeling simulations (computer generated ground water flow and contaminant transport over time) to determine if a remedy is needed, define the most appropriate remedy and bring the site to closure. EPA has developed a Feasibility Study document, which defines the most effective remedies to address site contaminants. Following selection of a preferred remedy, a Public Meeting will be held to present the preferred remedy to the public; subsequent to approval of the preferred remedy in the Proposed Plan, the existing ROD will be amended.

### **Benefits**

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The completion of the supplemental investigation and chemical oxidation pilot study will allow EPA to select a remedy to mitigate threats to public health and the environment. The objective is to reduce the mobility of contaminants in soils and ground water, to prevent contaminants from moving vertically into deeper aquifers or laterally to Days Creek which will prevent the public's exposure to contaminants.

### **Site Description**

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**Location:** Lubbock Street, Texarkana, Texas near the Texas - Arkansas border.

**Population:** Approximately 200 people live within one-third of a mile of the site.

**Setting:** Nearest residence is 500 feet west of the site.  
Most area drinking water comes from Wright Patman Lake (formerly Lake Texarkana), which is not impacted by the site.  
Former wood preserving operations.  
Abandoned equipment, tanks, and buildings.  
On-site retention ponds and evaporation ponds.

**Hydrology:** Depth to first water zone - 12 feet.  
Sandy soils in the area.  
Ground water is not used in vicinity of site.  
Confining zone at 110 feet.

## Wastes and Volumes

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The principal pollutants at the site include polynuclear aromatic hydrocarbons (PAHs), pentachlorophenol (PCP) and dioxins. Waste volumes at the site are estimated to be 88,920 cubic yards of soil and sludge contaminated with PAHs, PCP, and dioxin, 460,000 gallons of dense non-aqueous phase liquid (DNAPL), and 49,000,000 gallons of contaminated ground water.

## Site Assessment and Ranking

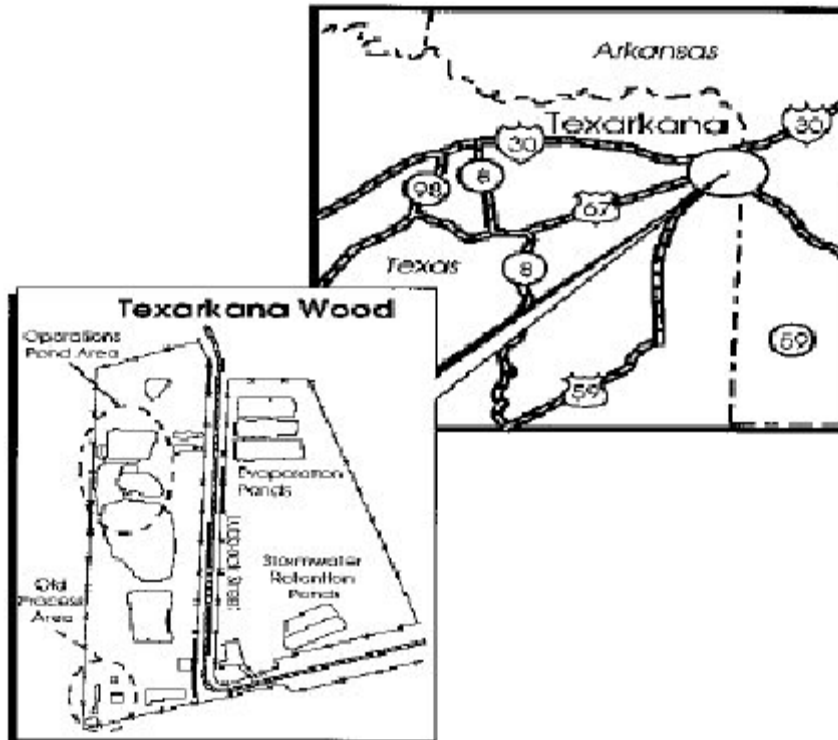
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### NPL LISTING HISTORY

Site HRS Score: 40.19  
Proposed Date: 3/29/85  
Final Date: 6/10/86  
NPL Update: No. 4

## Site Map and Diagram

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## The Remediation Process

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### Site History:

- Abandoned wood treating facility operated from 1909 to 1984 under various owners.
- Prior removal actions have controlled site runoff and restricted public access.
- During the period from December 1986 to October 1990, the EPA conducted five (5) removal actions to address contamination and potential off-site releases from site.
- On July 8, 1994, the Regional Administrator asked the State environmental agency to let bids received from incineration contractors expire without an award to allow the Congressional Office of Technology Assessment (OTA) and General Accounting Office (GAO) to complete a study of incineration and alternatives for the site. Incineration of contaminated soils at this abandoned creosote site had been selected by the EPA under the Superfund law in 1990. Community outreach efforts and unusually strict operating requirements did not quell objections by some local residents prompting requests from Congress for OTA and GAO studies. As a result, the EPA withdrew the selected remedy.
- During October 1996, the EPA collected contaminated soil samples from the site for soil stabilization and bioremediation bench scale laboratory testing. The EPA used the results of these tests to determine the suitability of several alternative remedies.
- The Texas Natural Resource Conservation Commission (TNRCC)(presently the Texas Commission on Environmental Quality (TCEQ)) awarded a contract in 1997 to improve fencing around the site and to decontaminate and remove existing process equipment and structures. This work was completed in 1997.
- On November 13, 1997, the EPA presented to the community the draft of an Amendment to the Record of Decision proposing that the site be capped and that the ground water remedy be studied further. The 30-day comment period of this Record of Decision closed December 5, 1997. This ROD Amendment was signed on March 13, 1998.
- The State collected additional data on the extent of soil and water contamination and issued a detailed report in March 1999.
- A field pilot study to evaluate the effectiveness of trenches in the collection and removal of Non-Aqueous Phased Liquid (NAPL) was completed in November of 2000. The test indicated that trenches were not the most effective method in collection of NAPLs.
- Eight additional wells were installed in August of 2002 to confirm hydraulic conductivity through pump tests, and to investigate the lateral extent of free product (NAPL) and ground water contamination. The wells found additional NAPL in areas considered NAPL free.
- In August 2003, geoprobe rigs were used to take subsurface cores and install temporary wells to characterize the NAPL free product mass, NAPL residual and dissolved concentrations. In October 2003, ground water sampling was conducted to delineate the lateral extent of dissolved contaminants.
- The subsurface soils and ground water analytical data acquired from the August, October and November 2003 fieldwork was used in numerical models to develop an understanding of the attenuative properties of the contaminated aquifer and to assist in the selection of the most effectiveness remedy.
- EPA completed bench-scale solidification and chemical oxidation treatability tests on soils and ground water collected during the 2003 geoprobe investigation.
- A Chemical Oxidation pilot test was conducted to determine the applicability/effectiveness of Chemical Oxidation in the creosote/pentachlorophenol source and dissolved plume areas. These treatability values were used in ground water computer model simulations to assist in determining if solidification and/or chemical oxidation and Monitored Natural Attenuation (i.e., dissolved contaminants adsorb to natural organics in the soil and the microbes within the soil degrade the contaminants) will be cost effective remedies. The Chemical Oxidation pilot test was completed in October, 2005; the final report, which also contained computer model simulations, was submitted to EPA in July 2006.

- A RI Report, and Human Health and Ecological Risk Assessment Reports were developed from the November 2007 field sampling effort; these reports assist in developing the Feasibility Study, which presents the most appropriate remedial alternatives for this site. The Feasibility Study document has been developed and is being reviewed.
- Ready-For-Reuse: No reuse determination has been made; the property is in the remedial investigation and remedy determination stage.
- Human exposure is presently under control due to site access measures; however, remedial action is required to address site contaminants for long term protection.
- **Health Considerations** \_\_\_\_\_
- Nearest drinking water well is 2,400 feet east of the site.
- Creosote contaminated soils and ground water present a human health hazard.

**Other Environmental Risks:**

Contamination of ground water; drainage is to the southeast to Day's Creek; however, the creek is not presently affected by ground water contaminants.

**Record of Decision** \_\_\_\_\_

Signed: September 25, 1990  
 (Source and Shallow Ground Water)  
 Signed: September 30, 1993  
 (Deeper Ground Water)  
 Record of Decision Amendment  
 Signed: March 13, 1998  
 (Revised Source/Soils Remedy)

**The 1990 ROD was to remediate contaminated Ground Water by:**

Extracting, treating, and injecting the ground water into the shallow aquifer.

**The 1990 ROD was to remediate contaminated Soils by:**

Excavation of contaminated soils, on-site thermal destruction, and burial on site (Soil remedy amended in February 1998, which required capping of the soils in place)

**Other Remedies Considered**

1. Capping
2. Chemical Treating
3. Solidification
4. Biological Treatment
5. Offsite Thermal Destruction
6. "No Action"

**Reason Not Chosen**

- No reduction in volume or toxicity of contaminants.
- Only partially effective.
- Not permanent.
- Only partially effective.
- Too costly; transportation risks.
- Not protective of human health and the environment.

**Record of Decision Amendment**

The soil remedy was amended in 1998 to replace excavation of contaminated soils and on-site thermal destruction of contaminated soils with containing contaminated soils beneath a soil cap on-site. This ROD amendment remedy was never implemented.

**Future Amendment**

EPA proposes to amend the surface soil (source) and shallow ground water remedy in the near future. Characterization revealed that source in surface soils would continue to deliver source and dissolved ends to the underlying ground water.

## Community Involvement

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Community Involvement Plan: Developed 12/87, revised 5/91

Open houses and workshops: 1/88, 6/89, 6/92, 9/92, 1/93, 5/96

Proposed Plan Fact Sheet and Public Meeting: 7/14/90 (Source), 1/93 (Ground Water)

ROD Fact Sheet: 10/90 (Source); 2/93 (Ground water)

Milestone Fact Sheets: 5/88, 11/90, 2/91, 2/93, 6/99 (TNRCC Site Update Newsletter)

Citizens on site mailing list: 1400+ includes Texas and Arkansas residents.

Constituency Interest:

- Site cleared of vegetation in February 1991 in response to local fire officials concerned about potential air releases from grass fires on the site.
- Opposition to incineration remedy by community became very vocal in 1992.
- Arkansas Attorney General filed suit in December 1992 opposing remedy implementation; the suit was dismissed.
- Congressman Chapman requested that incineration not be implemented until after the OTA and GAO complete their study of incineration safety and the alternatives available for remediating the Site.
- Incineration placed on hold pending review by Office of Technology Assessment.
- Incineration replaced with on-site capping remedy in Amended ROD on March 13, 1998.
- General Accounting Office visited the community twice to interview citizens and assess impact of site issues. The EPA studied alternative remedies for suitability.
- Community formed a Community Advisory Group (CAG).

Site Repository: Texarkana Public Library, Texarkana, TX.

The community is informed when any new remedial actions are proposed for the site.

## Technical Assistance Grant

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Availability Notice: 1/11/89

Letters of Intent Received:

1. Citizens Against Pollution (CAP) - 10/19/92

Final Application Received: None

Grant Award: N/A

Current Status: Working with citizen groups to develop interest in an application.

## Contacts

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**State Contact:** (TCEQ) Robert Musick, 512-239-2243, Mail Code 136

**Community Involvement Coordinator (EPA):** Donn Walters, 214-665-6483, Mail Code: 6SF-T

**Attorneys (EPA):** Joseph Compton III, 214-665-8506, Mail Code: 6SF-DL

**State Coordinator (EPA):** Mail Code: 6SF-AP

**R6 Public Liaison (EPA):** Donn R. Walters, 214-665-6483

**Prime Contractor:** EA Engineering

EPA Toll Free Telephone Number: 1-800-533-3508

## Enforcement

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**PRPs Identified:** 14

**Viable PRPs:** None