

Taking Action for Environmental Renewal & Community Wellness

Former Houston Wood Preserving Works

SITE HISTORY

The former Houston Wood Preserving Works (HWPW) site, once owned and operated by Southern Pacific, was a wood treatment facility in Fifth Ward from 1911-1984. While operational, the facility treated wooden railroad ties (the rectangular “support beams” of the track) with creosote, a commonly-used chemical preservative of the time, created from wood or coal tar.

Over time, creosote and other wood-treating chemicals migrated through the soil to groundwater zones, with some chemicals dissolving into the groundwater and creating groundwater plumes. No water from the site plume is consumed or used in any manner.

CLEANUP EFFORTS & REGULATORY AGENCIES

Since taking over the former HWPW site in 1997, Union Pacific Railroad has maintained cleanup of the site in accordance with federal and state regulations issued by the U.S. Environmental Protection Agency (EPA) and Texas Commission on Environmental Quality (TCEQ).

More than 11,000 tons of creosote-impacted soil was consolidated onsite and covered with a soil cap in 2016 to prevent exposure to the community. Union Pacific conducted over 110 quarterly site inspections since 1994, when the initial permit was effective.

FAST FACTS

25+

Years of continuous cleanup efforts in coordination with regulatory agencies and the community.



2

Regulatory agencies with unique testing and evaluation criteria that Union Pacific is responsible for meeting.

120+

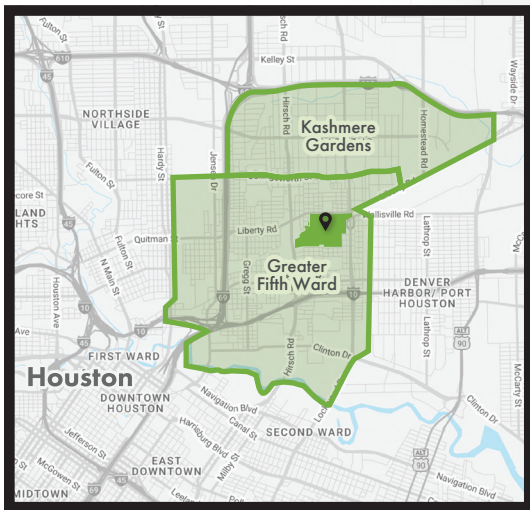
Groundwater monitoring wells installed by Union Pacific within the site and surrounding areas.

OVER 3,000

Groundwater samples tested as a part of cleanup efforts.

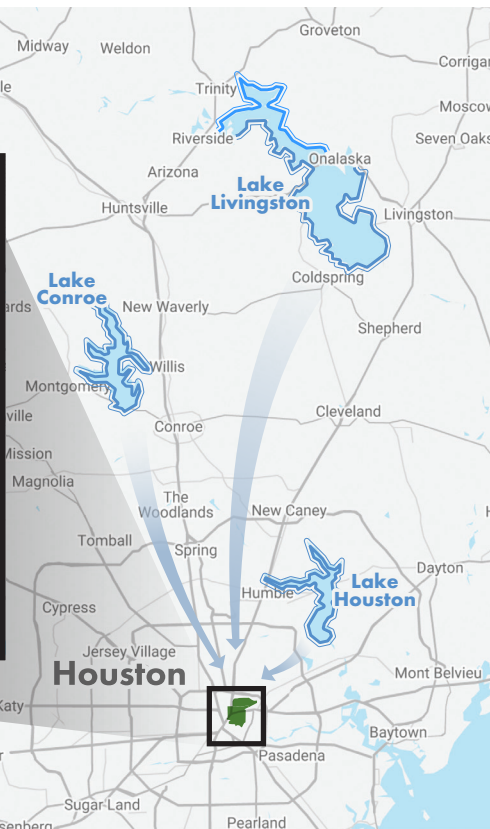
SITE LOCATION

- Kashmere Gardens/Fifth Ward
- HWPW Site



REGIONAL DRINKING WATER SOURCES

- City of Houston Drinking Water Source



AREA DRINKING WATER

Union Pacific is committed to protecting the community from environmental hazards. Studies have not revealed a significant pathway for the contamination to reach any residents living near the former HWPW site, and drinking water has been deemed safe by the City of Houston and EPA.

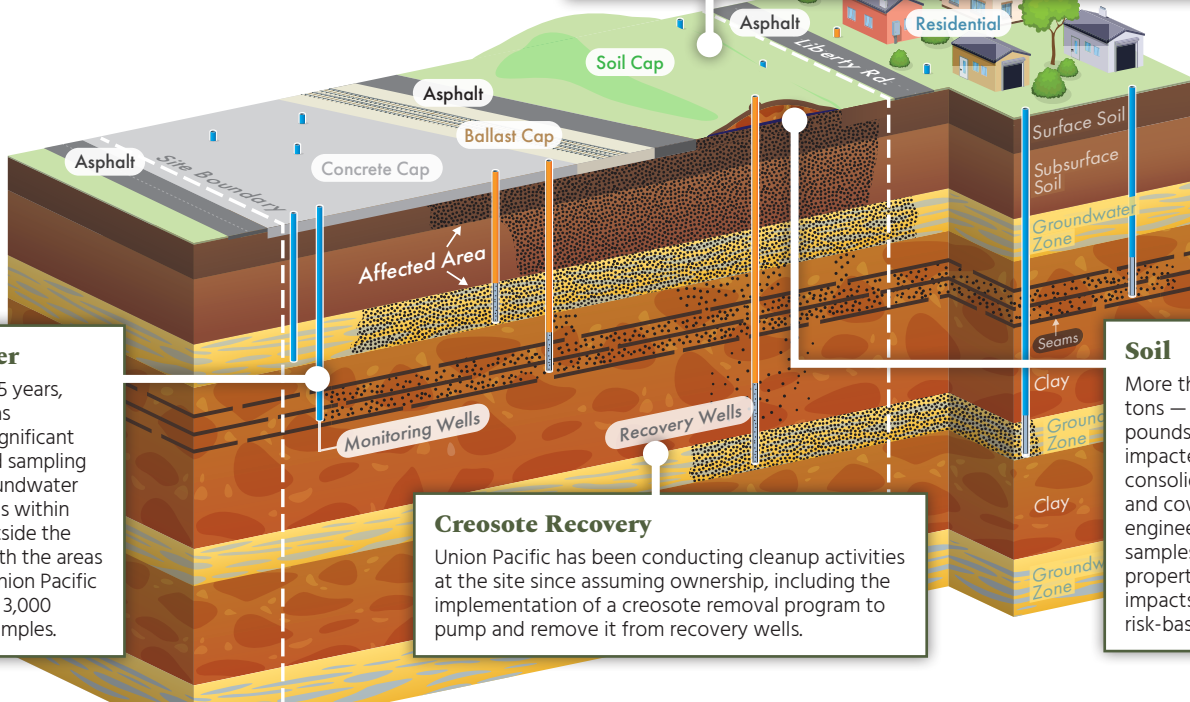
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CURRENT CONDITIONS

Union Pacific has accomplished the following clean up and remediation activities to date, approved and under TCEQ supervision:

Site Inspections

Union Pacific conducts weekly inspections of the site and quarterly inspections and maintenance of the engineered cap areas. Since 2016, Union Pacific has conducted over 25 quarterly site inspections. Cap inspection reports are submitted annually to the TCEQ. Reports are also posted on HoustonWoodPreservingWorks.com and physical copies can be viewed at the Tuttle Neighborhood Library on Kress St.



Groundwater

Over the past 25 years, Union Pacific has implemented significant and widespread sampling of over 120 groundwater monitoring wells within the site and outside the property beneath the areas in Fifth Ward. Union Pacific has tested over 3,000 groundwater samples.

Creosote Recovery

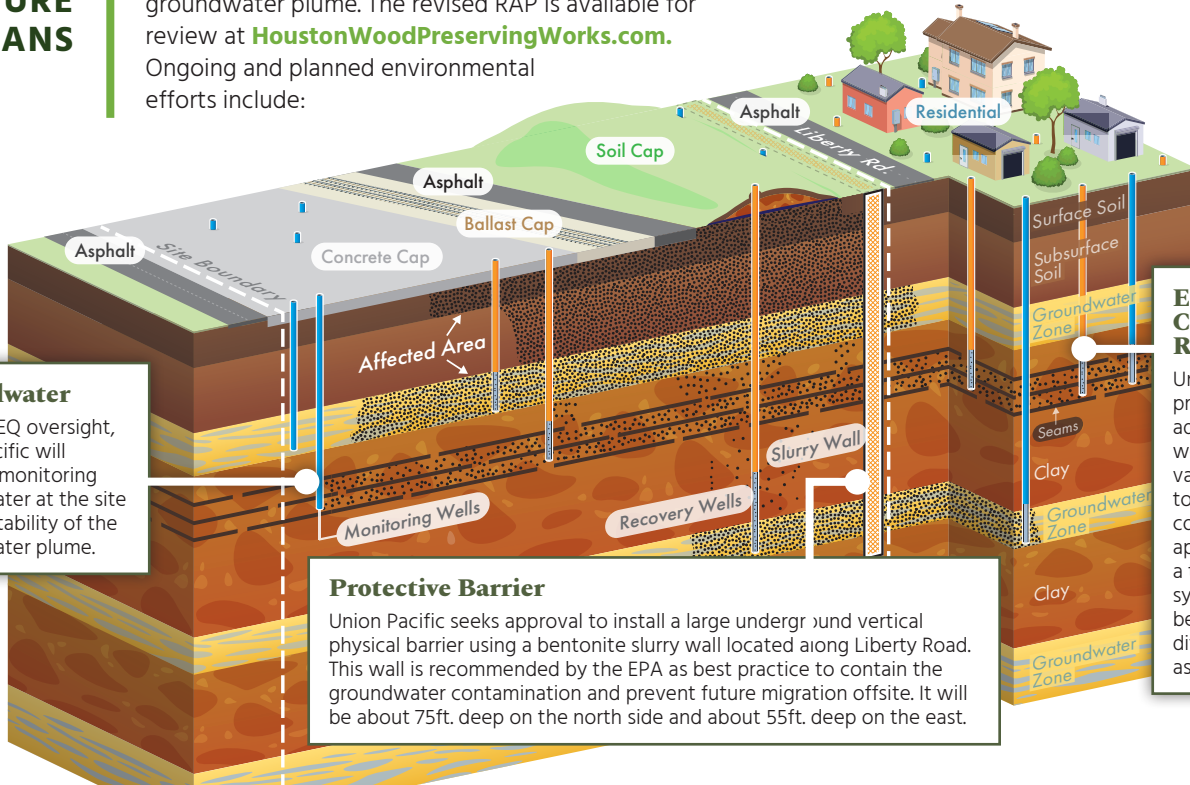
Union Pacific has been conducting cleanup activities at the site since assuming ownership, including the implementation of a creosote removal program to pump and remove it from recovery wells.

Soil

More than 11,000 tons — or 22 million pounds — of creosote-impacted soil was consolidated onsite and covered with an engineered cap. Soil samples near residential properties do not show impacts above TCEQ risk-based levels.

FUTURE PLANS

A revised Remedial Action Plan (RAP) was submitted to the TCEQ in August 2020 detailing the proposed response actions for the onsite and off-site groundwater plume. The revised RAP is available for review at HoustonWoodPreservingWorks.com. Ongoing and planned environmental efforts include:



Groundwater

Under TCEQ oversight, Union Pacific will continue monitoring groundwater at the site and the stability of the groundwater plume.

Protective Barrier

Union Pacific seeks approval to install a large underground vertical physical barrier using a bentonite slurry wall located along Liberty Road. This wall is recommended by the EPA as best practice to contain the groundwater contamination and prevent future migration offsite. It will be about 75ft. deep on the north side and about 55ft. deep on the east.

Expanded Creosote Recovery

Union Pacific proposes installing additional recovery wells and using a vacuum process to remove contaminants. This approach will use a trailer-mounted system that can be moved to different locations as necessary.

