U.S. Environmental Protection Agency

Cape Fear Wood Preserving Superfund Site Proposed Plan Cleanup Summary

Fayetteville, Cumberland County, North Carolina **August 2022**

Introduction

The U.S. Environmental Protection Agency is proposing changes to the cleanup approach to treat contaminated groundwater at the Cape Fear Wood Preserving Superfund Site (Site), located in Fayetteville, North Carolina (see Figure 1), and is soliciting public comment on the proposed remedy changes. This fact sheet summarizes the Proposed Plan for cleanup and provides instructions for submitting public comments. Due to public health concerns related to the COVID-19 virus, the EPA will conduct the public meeting via a virtual Zoom platform. The public meeting will explain the Proposed Plan, the public comment process and will answer related questions. Through these alternative means, the EPA seeks to provide a full opportunity for public participation and comment without risking public health.

Join the Public Meeting for the Proposed Cleanup Plan Thursday, August 30, 2022 6:00 p.m. – 7:30 p.m.

Join the meeting online at: this Zoom link or enter www.epa.gov/superfund/cape-fear-wood-preserving in your browser.

You may also join the meeting by phone at (669) 254-5252.

Use meeting ID: 160 903 3311

We want your comments!

The EPA depends on public input to make sure community concerns are considered during the selection of an effective cleanup. The public is encouraged to comment on the site's Proposed Plan from **August 12** thru **September 11, 2022.**

Thornton.Hilary@epa.gov

Summary of the Preferred Alternative

EPA's earlier cleanup work at the site removed contaminated soil and sediment and addressed surface water. The EPA is now proposing changes to address remaining groundwater contamination. Contaminants of Concern (COCs) include Volatile Organic Compounds (VOCs) such as Benzene, and PAHs (Polycyclic Aromatic Hydrocarbons) such as Napthalene and Benzo(a)pyrene. Risk assessments indicate that changes to the cleanup actions are needed to more effectively eliminate, reduce or control risks to human health and the environment.

In evaluating new remedial alternatives, groundwater contamination at the Site was classified into three contaminated media zones (CMZs) that were the basis for remedial alternative screening and remedy selection. Dividing the Site into CMZs allowed remedial alternatives and technologies to be tailored to Site conditions, resulting in a more economical and focused remedy. Figure 2 illustrates the designated CMZ boundaries. The three CMZs are: **Main Source Area (MSA)**, **Secondary Source Area (SSA)** and **Dissolved Plume (DP)**. EPA's recommended remedial alternative (the "Preferred Alternative") is a combination of the alternatives evaluated for each CMZ.

The cleanup objectives for the Site are:

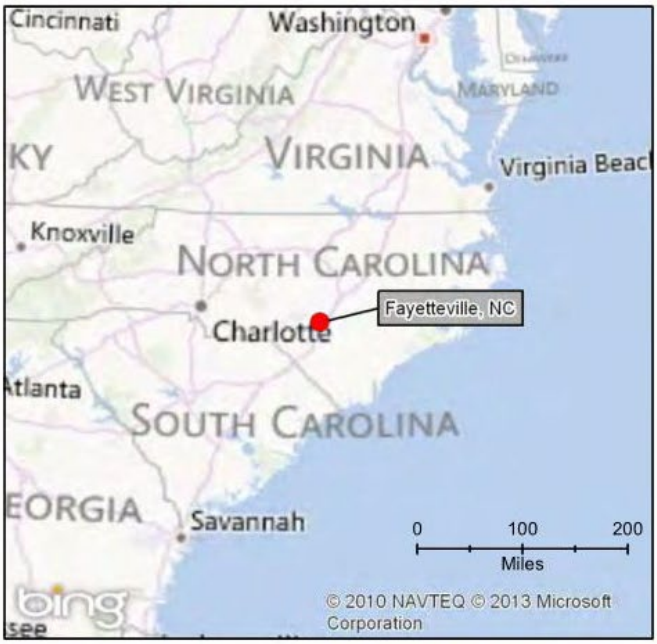
- Prevent further migration of contaminated groundwater that exceeds drinking water standards.
- Eliminate or contain principal threat waste (DNAPL) in groundwater, to the maximum extent practicable, to minimize the continuing source of contamination to groundwater
- Restore groundwater quality throughout the plume to meet drinking water standards
- Prevent human ingestion of and contact with groundwater containing COCs at concentrations above state standards or federal maximum contaminant levels (MCLs), whichever is more stringent.

The major components of the Preferred Alternative to achieve cleanup objectives:

- In situ solidification/stabilization treatment of the Main and Secondary Source Areas.
- Construction of a composite cap over the treated areas
- Installation of grout walls perpendicular to the railroad to alleviate the need for track replacement.
- Injecting oxygen or other reagents into the aquifer via underground injection wells to enhance the rate of natural degradation of contaminants in groundwater
- Long-term cap maintenance and groundwater monitoring
- Implementation of institutional controls to prevent well installation and use of contaminated groundwater, to provide increased public awareness, and to restrict disturbance of in-situ treated waste that remains at the Site and interference with other remedy components

The Preferred Alternative is based upon consideration of the cleanup objectives and the detailed comparative analyses of the remedial alternatives using the nine criteria in accordance with the National Contingency Plan (NCP). The action will bind the COCs into a solid low permeability soil/cement matrix essentially preventing their movement, allowing them to safely remain in place deep beneath the site and allowing for the restoration of groundwater outside of the source areas. The EPA believes the Preferred Alternative meets the threshold criteria and provides the best balance of tradeoffs with respect to the balancing criteria. Implementing institutional controls, as well as conducting Five-Year Reviews are integral components of ensuring the continued protectiveness of the Preferred Alternative. The estimated present value cost for the Preferred Alternative is approximately $20 Million. The Preferred Alternative is shown in Figure 3.

Figure 1: Site Location:



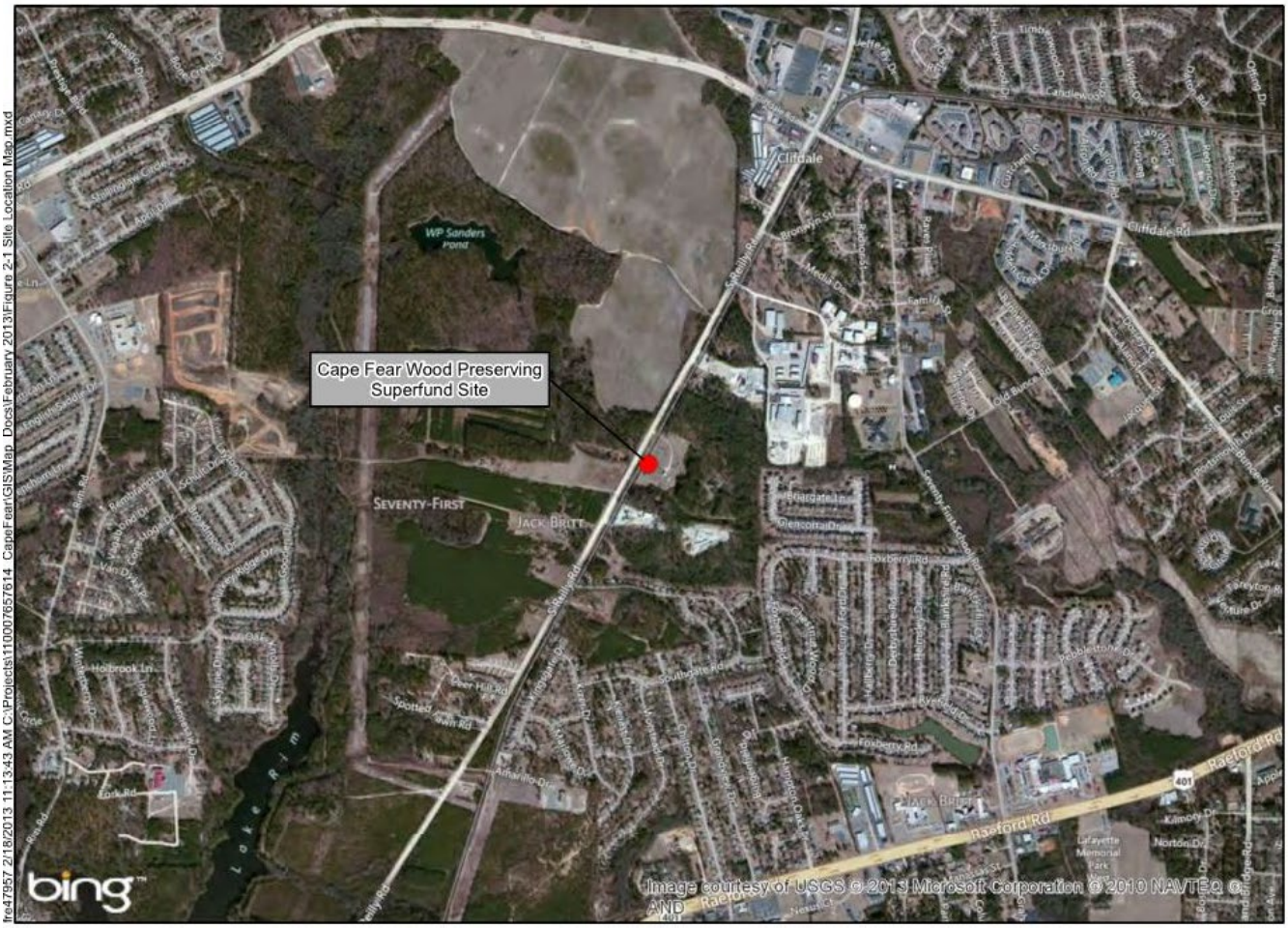
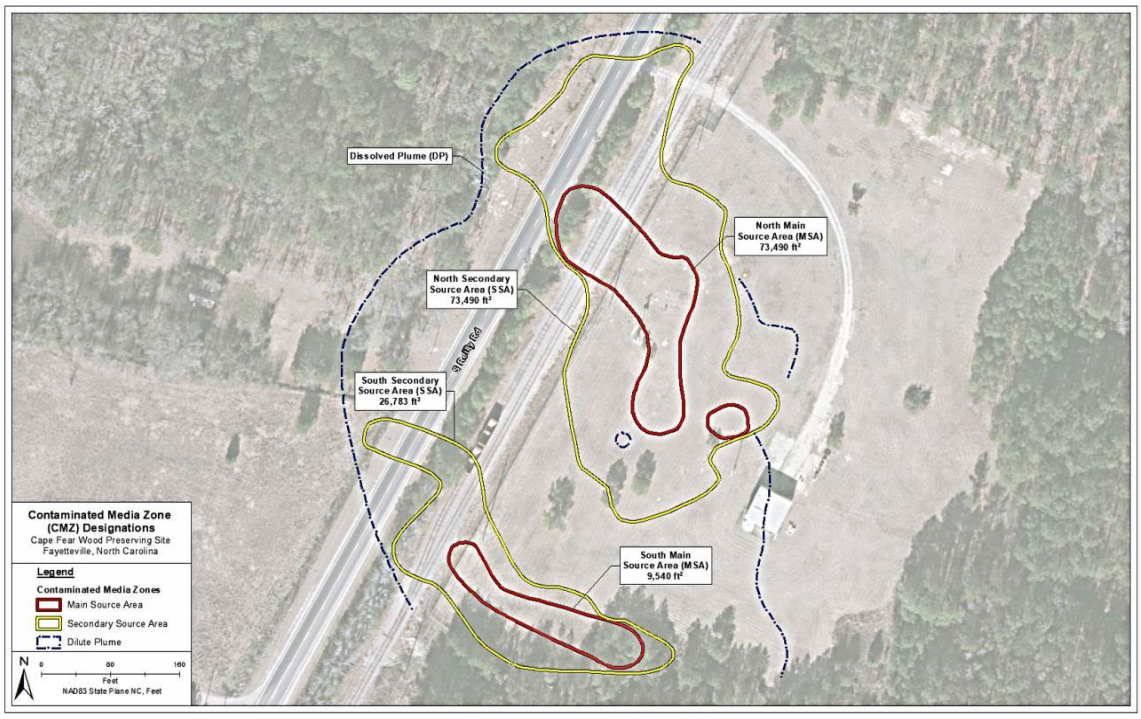


Figure 2: Contaminated Media Zone (CMZs)



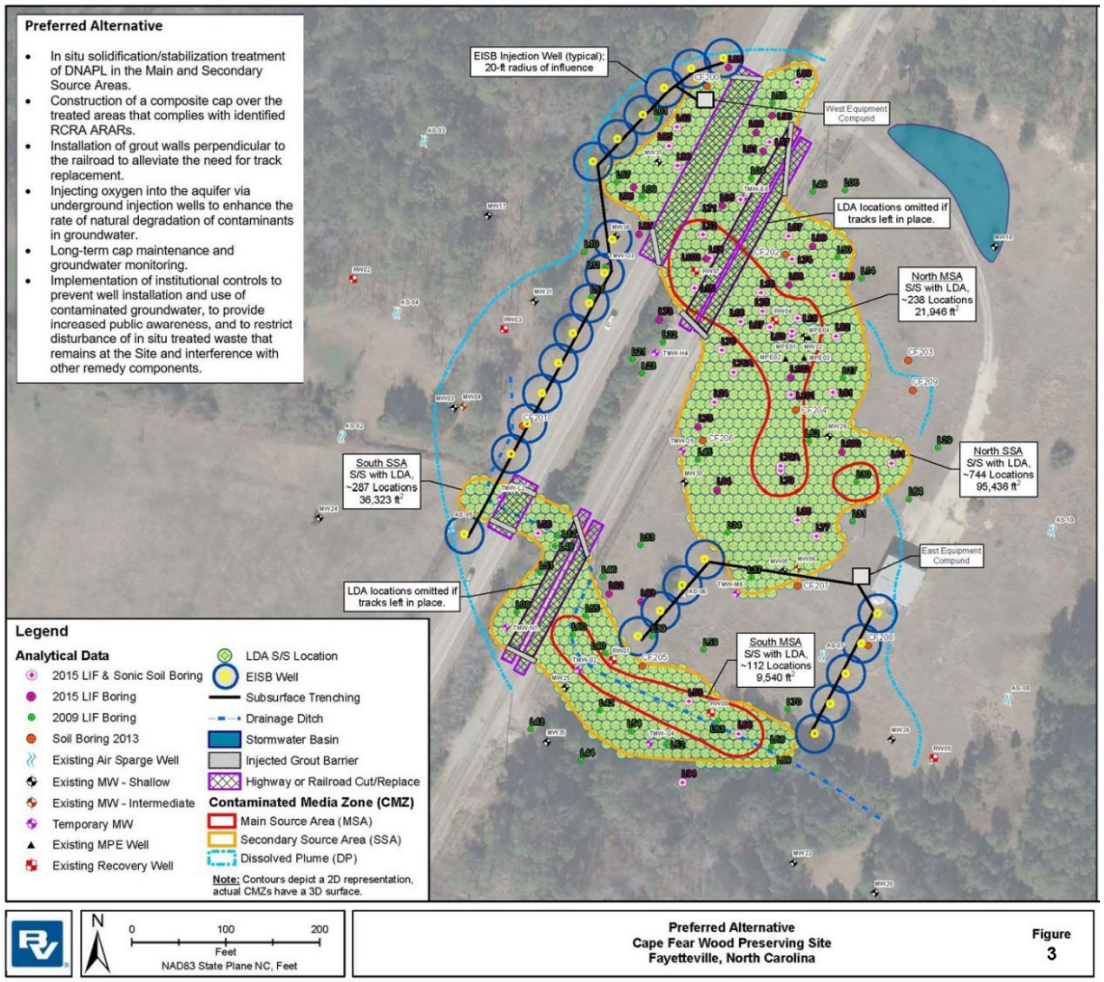


Figure 3: Preferred Alternative

Background

The Cape Fear Site is located at 1219 South Reilly Rd, Fayetteville, Cumberland County, North Carolina. Figure 1 shows the Site location. Wood treating operations occurred at the Site from 1953 to 1983. The facility produced creosote-treated wood from 1953 to 1978, and later treated wood by the chromated copper arsenate (CCA) process.

Both liquid and sludge wastes were generated by these two wood treatment processes (creosote and CCA). Wastes from the creosote process were pumped into a concrete sump north of the treatment unit. As liquid separated from the sludge, it was pumped into a drainage ditch that lies southeast of the developed portion of the Site and discharged into a diked pond. Storm water runoff from the treatment yard also drained into this ditch. In addition, waste from the CCA treatment process was pumped into an unlined 36-foot (ft) square by 9-foot-deep lagoon north of the dry kiln and allowed to percolate into the ground.

In 1977, the Site was determined to be contaminated with constituents of coal tar and coal tar creosote. State authorities ordered the owner/operator to comply with North Carolina law. The owner/operator complied and changed operations to limit further releases, installed a new potable water well for a neighbor west of the Site, and removed 900 cubic yards (cy) of creosote contaminated soil from the treatment yard and the drainage ditch that parallels the Aberdeen and Rockfish Railroad (A&RR). Between 1979 and 1980, a new closed circuit CCA plant was installed, and the old creosote and CCA facilities were decommissioned. In 1983, the company operating the CCA plant went out of business and the Site was abandoned until 1988, when Seco Investments, Inc. purchased the property.

In 1985, the EPA conducted an emergency removal action, which included removal of sump sludges, stabilization/solidification of sludge from the lagoon to seven (7) feet below land surface (bls) with fly ash, soil removal from drainage ditch along the railroad tracks, soil excavation, and transportation and disposal of sludges. In the late 1980s, a Remedial Investigation/Feasibility Study (RI/FS) was conducted and in 1989, the EPA issued a Record of Decision (ROD) for the Site. The remedy selected in the 1989 ROD included: off-site disposal of all on-site wastes; decontamination and demolition of all structures; excavation and on-site treatment of contaminated surface and subsurface soils; and groundwater remediation with an extraction, treatment and discharge system. The remedial action was conducted in four (4) phases between 1995 and 1999.

In 2001, the EPA issued an Amended ROD to change the groundwater remedy. The amended groundwater remedy included hydraulic containment and treatment of the shallow and intermediate aquifers with a groundwater recovery and treatment system. However, sampling and investigation in the early 2000s demonstrated that the treatment system was not effectively treating contaminated groundwater. Between 2015 and 2017, the EPA conducted further investigation and study at the Site to develop new remedial alternatives.

Public Comment

This Proposed Plan is part of the EPA's public participation responsibilities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). The EPA is the lead agency for action at the Site. The agency relies on public input to make sure community concerns are considered during the selection of effective remedies for each Superfund site.

The public comment period runs from August 12, 2022, through September 11, 2022. To access information about the site history, cleanup plans and parties involved, please explore the Site's information repositories and the EPA webpage for the Site, listed on the next page.

EPA will host a virtual public meeting on August 30, 2022, from 6:00 p.m. to 7:30 p.m. The public can join virtually/online using the information on the first page of this fact sheet. If you cannot access the EPA website, please contact EPA's Community Involvement Coordinator, Stephanie Y. Brown, at (404) 562-8450 or Brown.Stephaniey@epa.gov to arrange to receive the information in another format.

Written comments may be emailed to Thornton.Hilary@epa.gov or mailed (postmarked no later than September 10, 2022) to Hilary Thornton at US EPA Region 4, Superfund & Emergency Management Division, 61 Forsyth Street, SW, MS 9T25, Atlanta Georgia 30303 at any time during the public comment period.

After considering comments and questions during the public comment period, the EPA will summarize the comments and provide responses in the Responsiveness Summary which will be part of the Amended Record of Decision (AROD). The AROD will select the final remedial action and will provide the rationale of the Agency's selection.

FOR MORE INFORMATION & CONTACTS

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Site related documents can be accessed online at the Information Repository:
Cumberland County Public Library and Information Center
300 Maiden Lane
Fayetteville, North Carolina 28301