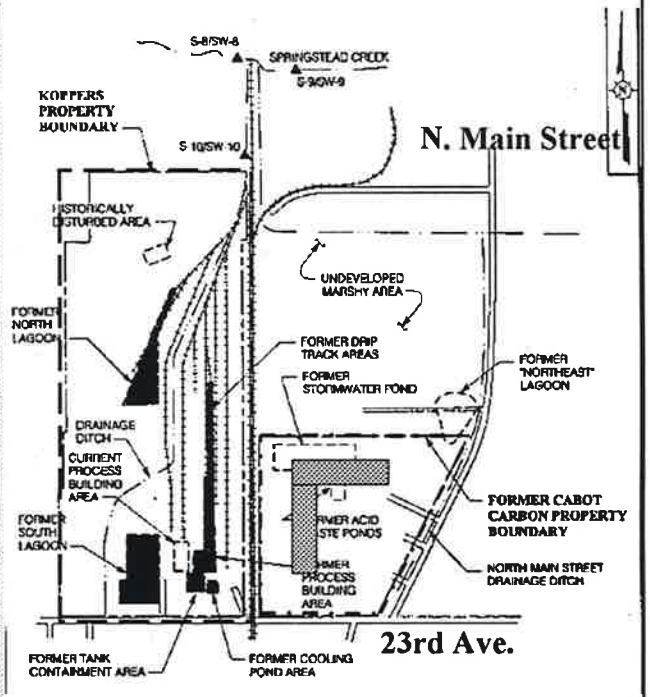
Cabot Carbon-Koppers Superfund Site,
Gainesville, FL

USEPA - Region 4
Atlanta, GA

Site Layout



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Definitions

- **PAHs - Polynuclear Aromatic Hydrocarbons: a group of chemicals commonly found at wood treating and other industrial facilities**
- **DNAPLs - Dense Non-Aqueous Phase Liquids: Oils That are Heavier Than Water; like Creosote.**

Site History (1900 - 1990)

- **Listed on the National Priority List in 1983**
- **1988 Order Signed Between EPA, Cabot, and Beazer to Complete Remedial Investigation (RI) and the Feasibility Study (FS).**
- **RI Was Approved Feb., 1990**
- **FS Was Approved May, 1990**
- **Public Meeting Was Held August 14, 1990.**
- **Record of Decision Issued September 1990.**

Record of Decision (ROD)
September 1990

- **CABOT:**
  - Institutional Controls
  - Extraction of Groundwater, discharge to the Gainesville Treatment Utility
  - Lining the North Main Street Ditch
- **KOPPERS:**
  - Excavation of Contaminated Soil in the Two Ponds, soil treatment and backfill
  - In-situ Bioremediation and institutional controls of process areas
- **Confirmatory Sampling of Springstead Creek**

What Happened Since 1990?

- **1991 EPA issued an Order to Koppers and Beazer directing them to develop a Design for the Remedies Selected in the 1990 Record of Decision**
- **1992 Cabot Signed an Agreed Order to Develop the Design and Implement the Remedial Action on the Cabot Potion of the Site.**
- **1994 EPA Amended the Order to Beazer and Koppers to Perform Additional Work Including A Supplemental feasibility Study (SFS).**
- **1995 Beazer Installed a Groundwater Recovery and Treatment System.**

What Happened Since 1990?

- Cabot Completed Design and Construction of the ROD Remedy by 1995.
- Beazer Completed Sampling the Springstead Creek
- Beazer has Operated the Perimeter Recovery Wells, and Treatment System.
- 1997 Beazer Submitted a SFS Including Results of Additional Investigation
- EPA did not Find it Satisfactory
- 1999 Beazer Submitted a Revised SFS
- EPA Reviewed and Amended the the 1999 SFS.
- Proposed Plan May 2001.

Test Pits at Koppers

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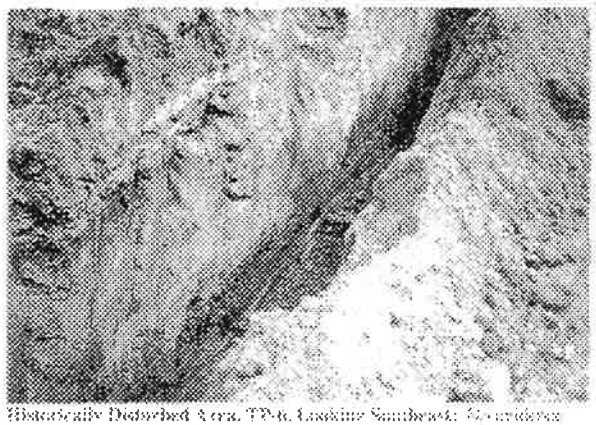

Historically Disturbed Area, TP-6, Looking Southwest, November

Proposed Plan Objectives

- **Amend the Record of Decision to Select a Remedy for the Koppers Site That Meets the Cleanup Criteria**

How Does EPA Evaluate Cleanup Alternatives?

NINE (9) Criteria Are Used:

- **Protection of Human Health and The Environment**
- **Compliance with Laws (ARARs)**
- **Long-Term Effectiveness**
- **Reduction in Toxicity, Mobility, or Volume Through Treatment**
- **Implementability**
- **Short-Term Effectiveness**
- **Cost**
- **Community Acceptance**
- **State Acceptance**

Risk Evaluation

- **Evaluates *Who* could be exposed**
- **Selects *What* Chemicals are a Concern**
- **Determines *How* Clean is Clean (Cleanup Levels)**

Cleanup Alternatives

- **Alternative 1 - Continue GW Extraction & Treatment**
- **Alternative 2 - Continue GW Extraction & Treatment + Institutional Controls**
- **Alternative 3 - Continue GW Extraction & Treatment + Institutional Controls +**
  3A - Wearing Cover
  3B - Impermeable Cap

Cleanup Alternatives

- **Alternative 4 - Containment By a Wearing Surface Cover + a Biotreatment Wall + Institutional Controls**
- **Alternative 5 - Containment By a Low Permeability Cap + a Continuous Barrier + Groundwater Extraction + Institutional Controls**

Cleanup Alternatives

- **Alternative 6 - Removal of Surface Soils + Containment with a Biotreatment Wall + Institutional Control**
- **Alternative 7 - Removal of Surface Soil + Containment with Physical Barrier + Institutional Controls**
- **Alternative 8 - Removal of Surface Soils + Stream Extraction +In-Situ Bioremediation + Institutional Controls**

Cleanup Alternatives

- **Alternative 9 - Removal to the Hawthorn Clay + Ex-Situ Treatment + Biotreatment where Removal is not Feasible + Institutional Controls**
- **Alternative 10 - Removal to the Hawthorn Clay + Ex-Situ Treatment + Containment of Biotreatment Wall Where Removal is not Feasible + Institutional Controls**

Surface Soil Sub-Alternatives

- A - On-Site Landfill
- B - On-Site Incineration
- C - On-Site Thermal Desorption
- D - Bioremediation, Soil Washing, Stabilization, and Backfill
- E - Off-Site Incineration
- F - Stabilization, backfill, and Impermeable Cap

EPA's Preferred Alternative

- Alternative 7 F
  - Removal of Surface Soil, Treatment, Backfill On-Site
  - Impermeable Cap
  - Continuous Physical Barrier
  - Institutional Controls

Why Alternative 7F

- Meet Threahold Criteria
- Meets More Balancing Criteria Than Other Alternatives
- Contains Source and Prevents Further Groundwater Contamination
- Proven Effective Technology
- Implementable
- Restores Most of the Site for Unrestricted Use

What Happens Next?

- Select Remedy Based on Public Comments
- EPA Issues a Record of Decision Amendment
- Responsible Parties Will Start Remedial Design
- Public Meeting to Introduce Specific Design to the Community

Questions / Comments?