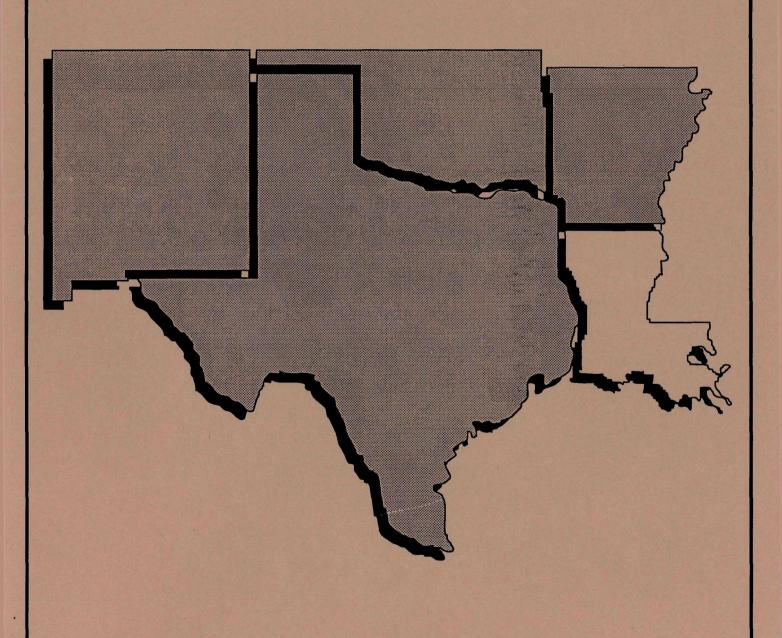




PROGRESS AT REGION 6 SUPERFUND SITES IN LOUISIANA



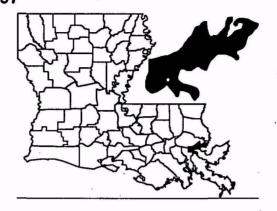
AGRICULTURE STREET LANDFILL LOUISIANA

REGION 6
CONGRESSIONAL DISTRICT

02

Orleans Parish New Orleans

EPA ID# LAD981056997



Site Description

Location:

• The site is located in New Orleans, Orleans Parish, Louisiana. It is approximately three miles south of Lake Pontchartrain and 2.5 to 3.0 miles north-northeast of the Vieux Carre and the Central Business District. The approximate geographic coordinates for the center of the site are 29°59'20" north latitude and 90°02'31" west longitude. The site is bounded on the north by Higgins Road and on the east from Clouet Street (to the south) to Montegut Street (to the north). On the south and west, the site runs along the Southern Railroad right-of-way. The Peoples Avenue and Florida Avenue canals are located west and south of the site, respectively.

Population:

• The 1990 Census identifies 374 residential units on site. The community is predominately African American.

Setting:

- Approximately, a 100 acres site that formerly served as a municipal landfill in 1910 until it was closed in 1957. The area was reopened in September 1965, to receive debris caused by Hurricane Betsey. Records indicate that disposal of municipal waste and municipal waste incinerator ash occurred at the former landfill; however, records did not indicate that industrial or chemical waste were ever transported to, or disposed of at, the site.
- From the 1970s through the late 1980s approximately 47 acres of the Agriculture St. Landfill were developed for private and public use that included: private single-family homes, multiple-family private and public housing units, Press Park Community Center, a recreation center, retail businesses, and Moton Elementary school. The remaining 48 acres of the former landfill are currently undeveloped and covered with dense vegetation.

Hydrology:

- The main surface water features in the immediate site vicinity are the Peoples Avenue canal to the west and the Florida Avenue canal to the south, both of which receive stormwater runoff from the site vicinity via a network of storm drains. The Peoples Avenue canal flows to the south, discharging into the Florida Avenue canal. From the Florida Avenue canal, the water is pumped by Pumping Station 19 to Industrial Canal which discharges into Lake Pontchartrain.
- A shallow aquifer (that is not a drinking water source) that underlies the site is encountered between 2 and 9 feet below land surface.

Wastes and Volumes.

• Based on historical records and field observations, numerous wastes were deposited at the site, which included municipal garbage, construction debris, incinerator and open burning ash, glass, etc. This type of material ranged in depth from 2 to > 32.5 feet.

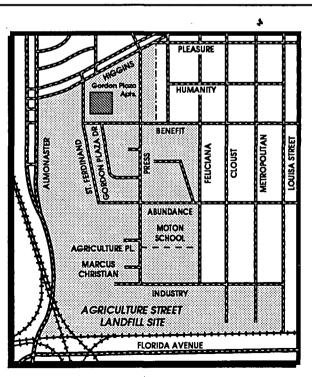
Site Assessment and Ranking

NPL LISTING HISTORY Site HRS Score: 50.00

Proposed Date: 8/23/94 Final Date: 12/16/94 NPL Update: No. 13

Site Map and Diagram





The Remediation Process

Site History:

- Property was used as a municipal landfill from 1910 to 1957, and operated an incinerator reportedly, on site. Waste disposal records are not available, and little information could be located regarding the type and extent of debris deposited in the landfill.
- The incinerator on site was decommissioned in 1958, the stack was demolished and the building converted to a machine shop.
- The landfill reopened in September 1965 to receive debris created by Hurricane Betsey, and open burning of the waste continued for 6 to 7 months, after which the area was covered with ash from city incinerators and compacted with bulldozers.
- From the late 70's through 1986, the northern portion of the inactive landfill was developed to support housing, small businesses, and a elementary school.
- A Site Inspection (SI) was conducted by EPA May 1986. On December 18, 1986, the FIT completed an EPA Potential Hazardous Waste Site Identification and Preliminary Assessment (PA) and a Potential Hazardous Waste SI Report on the site.
- August 1986, the SI was finalized, and a Hazard Ranking System (HRS) package was prepared under the 1982 HRS model, and the resultant site score was not sufficient for consideration of its placement on the National Priorities List (NPL).
- EPA requested the Agency for Toxic Substances and Disease Registry (ATSDR) to evaluate the site to determine if a health advisory was warranted. ATSDR concluded that residents of the area were not at immediate risk and that a health advisory was not warranted (1987).
- LDHHR, the New Orleans City Health Department and the CDC conducted a blood lead level study of 188 children from an unspecified area around the Moton Elementary School in December 1986. The results of the study found that all blood level values were within acceptable ranges for each age group.
- In February 1987, the site was referred to LDEQ by EPA for further evaluation.
- On May 4, 1993, concerned local community leaders of the Moton Elementary school area filed a complaint with the Gulf Coast Tenants Organization and requested EPA to re-evaluate the site.
- EPA sponsored open houses 8/31/93 and 9/16/93, to discuss issues surrounding the landfill, to inform the public of upcoming sampling, and to answer the community's questions.
- Through the Emergency Response Branch, an Expanded Site Inspection (ESI) work plan was developed September 7, 1993 to collect additional samples to perform an updated HRS (utilizing Final Rule December 14, 1990).

- The ESI Report was submitted December 20, 1993, and the results were discussed with the community. Elevated levels of lead, arsenic and polynuclear aromatic hydrocarbons (PAHs) exists in the soils.
- The HRS package was submitted for EPA's review on February 14, 1994.
- In April 1994, EPA initiated plans to implement a Remedial Removal Integrated Investigation at the site. Fieldwork was completed in May 1994, which included erecting a fence around the undeveloped area.
- The site was proposed to the NPL August 23, 1994.
- Due to community concerns created by the Superfund listing, the school board announced on August 24, the Moton would not open this year and the students would be relocated to a different school.
- The Technical Assistance Grant was awarded September 27, 1994.
- The site was formally promulgated to the NPL on December 16, 1994, less than four months after proposal and only seven months after submittal of the HRS package.
- The development of the draft RRII report is on-going.
- A draft RRII was issued to the community in November 1994 for comments.
- The site was finalized on the NPL on December 16, 1994.

Health Considerations:

- The review of the FS is on-going.
- Potential human exposure risks include direct contact with, and accidental ingestion of, contaminated soils and inhalation of contaminated dust.
- Based on data in the ESI and the RRII, people living on the site may be exposed to elevated levels of lead, arsenic, and PAHs via the soil media.

Other Environmental Risks:

• Elevated levels of various contaminants increases with depth in the subsurface soils.

Record of Decision —		· ·	
	Signed: Amended:		

Community Involvement

- Community Involvement Plan: Developed 03/94
- Open houses and workshops: 8/93, 9/93, 2/94, 6/94, 9/94, 10/94, 11/94, 1/95
- Original Proposed Plan Fact Sheet and Public Meeting: N/A
- Original ROD Fact Sheet: N/A
- Milestone Fact Sheets: 8/93, 9/93, 12/93, 2/94, 3/94, 5/94, 10/94, 12/94, 11/94
- Citizens on site mailing list: 458
- Constituency Interest:
 - High level of interest by citizens
 - High level of interest by school system
 - High level of interest by City of New Orleans
 - High level of interest by HUD
- Site Repository:
- Helen Edwards Elementary School Library 3039 Higgins Blvd.
 New Orleans, LA 70126 504/942-3625
- (2) Community Outreach Office 3221 Press Street New Orleans, LA 70126 504/944-6445

Technical Assistance Grant

- Availability Notice: 6/94; re-advertised 7/94
- Letters of Intent Received:
 - 1) Concerned Citizens of Agriculture St. Landfill (CCASL)
 - 2) Citizens For An Environmentally Safe Press Park
- Final Application Received: 9/20/94
- Grant Award: 09/27/94
- Current Status: Group (the Concerned Citizens for Agriculture St. Landfill-CCASL) is finalizing contracts with two Technical Advisors; EPA is currently reviewing both contracts.

Fiscal and Program Management -

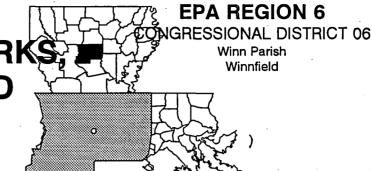
- Remedial Project Manager: Ursula Lennox
- On-scene Coordinator: Craig Carroll
- State Contact: Bill Perry
- Community Involvement Coordinator: Olivia Rodriguez Balandran
- Attorney: John Dugdale
- State Coordinator: Marilyn Owen
- Prime Contractor: Ecology and Environment

Present Status and Issues

- The development of the draft RRII report was completed in November 1994. Comments on the draft are being incorporated and plans are underway to finalize this document.
- The comment period for the site's proposal to the NPL ended on 11/7. The site was finalized to the NPL on 12/16/94.
- Numerous Congressional inquiries are being received, requesting a buyout.
- The draft FS is currently being reviewed.
- Elevated levels of lead was detected in the play area of the Press Park Community Center. Plans are underway to relocate the play equipment to another area where an additional barrier will be constructed to prevent the formation of wear patterns which may expose children to the native soil. Sod will be placed in the bare area where the equipment was originally located.

AMERICAN CREOSOTE WORK INC. (WINNFIELD PLANT) LOUISIANA

EPA ID# LAD000239814



Site Description

Location:

• Winnfield, Winn Parish, Louisiana

• Site covers approximately 34 acres at 1006 Front Street

• Primarily residential area

Population:

• Winnfield, LA (Population 7,000)

Setting:

• Residential on 3 sides, industrial on 1 side

Hydrology:

• Alluvial deposits

• Two aquifers within upper 60 feet

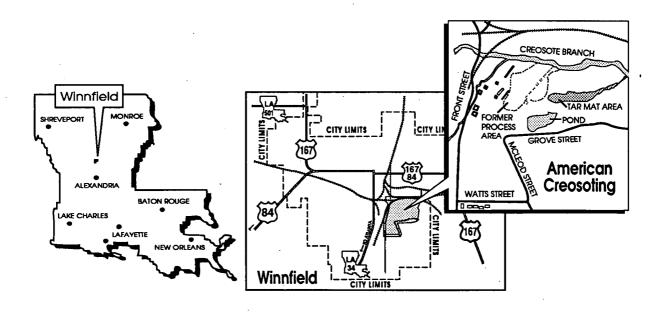
Wastes and Volumes

- 1. Principle Pollutants:
 - Pentachlorophenol in concentrations up to 6,000 pp
 - Carcinogenic Hydrocarbons (CPAH's) in concentrations up to 506,000 ppb
- 2. Volume:
 - 25,000 cubic yards of "TAR" mat deposits
 - 275,000 cubic yards contaminated soils
 - 1 million gallons subsurface creosote product
 - 24 million gallons contaminated groundwater

NPL LISTING HISTORY Site HRS Score: 50.7

Proposed Date: 2/7/92 Final Date: 10/14/92 NPL Update: No. 12

Site Map and Diagram



The Remediation Process

Site History:

- Site operated as a wood treater from the turn of the century through the 1980s.
- Site abandoned in the mid 1980s.
- April May 1988, EPA Emergency Response Branch conducted emergency removal to prevent oils and sludges from seeping out of storage tanks and flowing to a nearby creek: contaminants were pumped from pits, treated and contained on site.
- June September 1988, the Potentially Responsible Party (PRP), under an EPA Administrative Order, fenced the site.
- Site wastes still seeping subsurface into the bayou and soil surface wastes present a direct contact threat.

Health Considerations:

• Direct contact with site risks and potential for drinking water contamination.

Other Environmental Risks:

• Site wastes leading into adjacent bayou and potentially impacting biota.

Record of Decision -

Signed: April 28, 1993

Selected Remedy:

- Onsite incineration of 25,000 cubic yards tar mat.
- In-situ biotreatment of 275,000 cubic yards of contaminated soils.
- Pump and treat liquid contaminants.

Other Remedies Considered

Reason Not Chosen

- 1. Total Incineration
- 2. Cap
- 3. Solidification

Not cost effective No treatment (statutory preference) Failed in treatability studies

3

Community Involvement

- Community Involvement Plan: Developed
- Open houses and workshops: 2/92, 4/92, 7/92, 5/93, 9/93, 4/94, 7/94
- Original Proposed Plan Fact Sheet and Public Meeting: 8/3/92, 9/8/92
- Final Proposed Plan Fact Sheet: 03/01/93
- Original ROD Fact Sheet: 5/93
- Milestone Fact Sheets: Remedial Design 9/93
- Citizens on site mailing list: 232
- Site Repository: Winn Parish Public Library, Winnfield.

Technical Assistance Grant

- Availability Notice: 10/92
- Letters of Intent Received:
 - 1) 10/92 Winnfield AC TAG, Inc.
 - 2) 2/93 Greater Winn Parish Development Corporation
- Grant Award: N/A

Fiscal and Program Management -

- Remedial Project Manager: Warren Arthur
- State Contact: Duane Wilson, LDEQ
- Community Involvement Coordinator: Melanie Lillard
- Attorney: John Dugdale
- State Coordinator: Marilyn Owen
- Prime Contractor: IT/DAVY (A Joint Venture)

Present Status and Issues -

- RA contract signed June 1994
- Pre-construction conference conducted September 1994
- Corps of Engineers resident office establised in Winnfield December 1994
- Construction design review initiated January 1995
- No current issues

Cleanup Measurements

The American Creosote Works, Inc. (Winnfield Plant) site is approximately 34 acres in size and is located in a primarily residential area. The activities conducted at this site were primarily wood-treating operations. This property has had numerous owners, the first of which was the Bodeau Lumber Co., which began operations in 1901. Louisiana Creosoting Co. acquired 22 acres of the property in 1922 and then resold the parcel of land to American Creosote Works of Louisiana, Inc. in 1938. In 1950, the entire property, along with 12 additional acres, was sold to American Creosote, which was later bought out by Dickson Lumber Co. in 1977. The property was seized by the city for taxes after Dickson declared bankruptcy. Wood treatment operations were taken over by Stallworth Timber in 1980 which then abandoned the site in 1985. The sources of contamination at the site include: five unlined pits used for the disposal of wastes generated by the wood-treating process, storage areas containing creosote and treated and untreated wood, and the plant at which the wood-treating operations took place. These buildings and equipment were found in a deteriorating and unstable state. Contamination also was caused by on-site drainage ditches which received surface water run-off from the facility. Creosote in these ditches, which are lined with a tar-like substance, was observed leaching into the ground. The contents of these ditches are discharged to freshwater wetlands in the area. Area surface water, including Creosote Branch and Port de Luce Creek, are used for recreational fishing. Local residents, including school children, frequently crossed the site before a fence was constructed. An estimated 5,700 people live within a mile of the site.

Immediate actions such as the construction of a fence and the prevention of contaminants from migrating have reduced the risks posed to the health and safety of the nearby population while additional investigations are underway and activities are being planned for permanent cleanup of the site.

BAYOU BONFO

LOUISIANA

EPA ID# LAD980745632

EPA REGION 6

SONGRESSIONAL DISTRICT 01

St. Tammany Parish Near Slidell

Site Description

Location:

- The site is at the location of the former American Creosote Works Plant within St. Tammany Parish, Slidell, Louisiana.
- The site is south of West Hall Avenue in Slidell and north of and adjacent to Bayou Bonfouca.

Population:

• Approximately 26,000 residents live in the surrounding community.

Setting:

- Nearest residence potentially impacted by the site is approximately 400 feet from the site, across the bayou to the southwest.
- Nearest drinking water well is approximately 1/4 mile northeast of the site.
- The site was used for commercial operations involving the treatment of wood products with creosote.
- The site encompasses approximately 52 acres.
- There are eight highly contaminated creosote areas at the site.
- The northern half of the site is heavily wooded.
- The site is bordered on the east by a drainage ditch, on the west by a creek, and on the south by Bayou Bonfouca.
- The contaminants have been found in the bayou.

Hydrology:

- Seven stratigraphic layers were encountered in the first 60 feet during the Remedial Investigation of the site.
- Three ground water systems were encountered at the site, including a surficial aquifer, a shallow artesian aquifer at 30 feet, and a deep artesian aquifer at 60+ feet.
- The elevation of the 100-year floodplain is 9 feet (MSL). Most of the site would be inundated by a flood of this elevation.

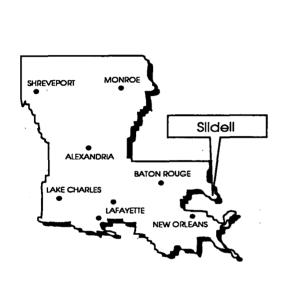
Wastes and Volumes

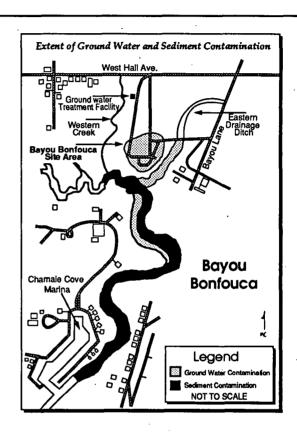
The principle pollutants at the Bayou Bonfouca Superfund site include Polynuclear Aromatic Hydrocarbons (PNAs) - Creosote Compounds.

NPL LISTING HISTORY Site HRS Score: 29.78

Proposed Date: 12/30/82 Final Date: 9/8/83 NPL Update: Original

Site Map and Diagram .





The Remediation Process

Site History:

- A creosote plant began operating at the site around the turn of the century.
- Over the years, the plant operated under several owners, including Gulf States Creosoting,
 Southern Creosoting Company, American Creosote Works, and Hattiesburg Creosoting
 Company, with property ownership resting finally with the Braselman Corporation.
- Numerous releases of creosote occurred during the years of operation.
- In 1970, the American Creosote Works plant burned down and it is thought that a large amount of creosote may have spilled from storage tanks and flowed across the site and into the bayou.
- July August 1985, the Potentially Responsible Party (PRP), under an EPA Administrative Order, fenced the site.

Health Considerations:

- From ingestion of contaminated ground water from the shallow artesian aquifer, (currently not used as a drinking water source);
- From exposure to contaminated on-site soils;
- From exposure to contaminated sediments in the western creek; the eastern channel; and the bayou; and,
- From ingestion of fish and shellfish from the bayou.

Other Environmental Risks:

Record of Decision

Signed: March 31, 1987
Incorporated the Source Control ROD of August 15, 1985.

- The Bayou Bonfouca Superfund site remedy for the overall site remedy includes:
 - On-site incineration
 - o Ground water treatment
 - Bayou dredging

Other Remedies Considered

Reason Not Chosen

- 1. On-site Landfill
- 2. Offsite Landfill
- 3. Biological Treatment
- 4. No Action

Bayou sediments would not be treated Least preferred under SARA Feasibility concerns

Would not adequately protect human health and the environment

Community Involvement

- Community Involvement Plan: Developed 04/84, revised 08/85
- Open houses and workshops: 04/85, 06/86, open houses 9/6/89, 7/12/90, 12/5/90, 6/26/91, 11/11/92, 12/8/93, 1/13/93, 3/3/93, 5/19/93, 7/21/93, 9/93, 11/93, 4/94, 6/94, 8/94, 12/94, 2/95
- Original Proposed Plan Fact Sheet and Public Meeting: 02/87
- Original ROD Fact Sheet: 07/87
- Milestone Fact Sheets: Update 03/88,08/89,06/90,12/90 ESD decision 1/90, 1/93, 9/93, 11/93, 2/94, 5/94, 7/94
- Citizens on site mailing list: 318
- Constituency Interest: High interest at site. Nearby residents strongly oppose on-site landfill.
- Site Repository: St. Tammany Parish Library, Slidell Branch, Slidell, Louisiana

Technical Assistance Grant

• Availability Notice: 02/89, 5/94, 6/94

• Letters of Intent Received:

Slidell Working Against Major Pollution (SWAMP), 5/94;

Earth Beautiful Foundation, 6/94

• Final Application Received: 11/94

• Grant Award: 12/94

Fiscal and Program Management

- Remedial Project Manager: Robert M. Griswold
- State Contact: Duane Wilson
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: George Malone
- State Coordinator: Marilyn Owen
- Prime Contractor: CH2MHill

Cost Recovery:

• PRPs Identified: 2

• Viable PRP: 0

Present Status and Issues

- Completion of construction of the ground water pumping and treatment unit along with activation of the pumping/treatment operations has reduced the volume of contamination and prevented further migration.
- As of May 1994, 4.4 million gallons of contaminated ground water has been treated and 12,500 gallons of creosote oils recovered.
- Incineration operations have been successfully continuing since November 1993, when trial burn activities were conducted. Construction should be completed in December 1996.
- Earlier noise issues were addressed by the installation of an "in-stack" silencer.
- No current issues.

Cleanup Measurements

- Initial fencing around the area has reduced the potential exposure to hazardous substances at Bayou Bonfouca while cleanup activities are underway.
- Upon completion of the cleanup, over 170,000 cubic yards of contaminated soils and sediment, and 10 million gallons of contaminated ground water will be treated.

BAYOU SORREL SITE LOUISIANA

EPA ID# LAD980745541

EPA REGION 6 CONGRESSIONAL DISTRICT 04 Iberville Parish

> Other Names: **Environmental Purification** Advancement Halliburton Services (CLAW) Grand River Pits (local name)

Site Description

Location:

- 20 miles SW of Baton Rouge, six miles north of the Town of Bayou Sorrel.
- Iberville Parish, Louisiana

Population:

- Less than 100 year round residents within 5 miles of site.
- 33.000 in Iberville Parish

Setting:

- Remote backswamp environment.
- Three permanent residences within two miles.
- Nearest drinking water well is 1/2 mile; wells used for washing/bathing, not drinking.
- Total site = 265 acres.
- Three landfill areas, four closed-out ponds, one landfarm area.
- Total waste disposal areas = 40-50 acres.

Hydrology:

- 75-125 feet of clays & silts beneath site.
- Below clays sand, gravels & silts possibly to 700 ft. below land surface.
- This sand, silt and gravel layer is the Plaquemine aquifer.
- Ground water withdrawal from the Plaquemine aquifer is minimal, due to low population density and poor ground water quality.

Wastes and Volumes

Principle pollutants include the following:

- Process wastes from pesticide/herbicide manufacturing.
- Sulfide-containing wastes from hydrocarbon processing and exploration.
- Spent wash from boiler and process-equipment cleaning.

Volume:

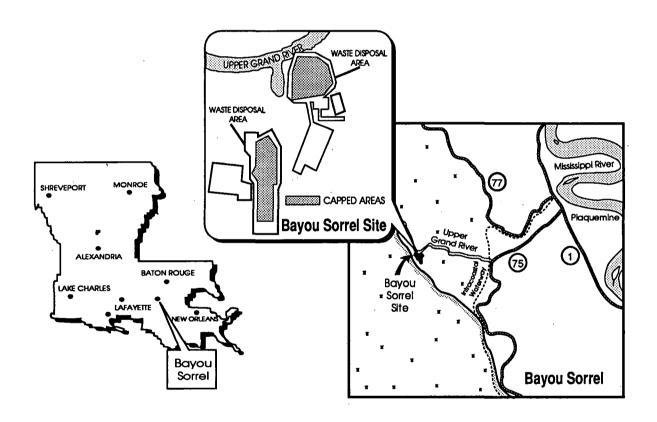
• Approximately 1,000,000 cubic feet of contaminated soil/ wastes

NPL LISTING HISTORY Site HRS Score: 34.69

Proposed Date: 12/30/82 Final Date: 9/8/83 NPL Update: Original

• The PRP challenged the ranking package with respect to the air score using an observed air release from four years prior. This release resulted in one death. No changes were made to the package.

Site Map and Diagram _____



The Remediation Process ____

Site History:

- 1977-1978 received wastes from Petrochemical Industries in LA, TX, AR, and MS.
- 1978-1979 closure overseen by State after death of a truck driver.
- Operated by EPA, Inc., sister Company of CLAW, Inc. (Injection well)

Health Considerations:

• Direct Contact: Exposure to contaminated soil/sediment

• Ground Water: Ingestion of contaminated source

• Surface Water: Ingestion of contaminated source

Other Environmental Risks:

• Same risks as above with respect to aquatic organisms and onsite game animals.

Record of Decision -

Signed: November 14, 1986

• The remedy for the site includes a geomembrane cap with slurry wall around the most contaminated areas. Extensive O&M Plan with GW monitoring.

Other Remedies Considered

Reason Not Chosen

1. On-site incineration

2. Offsite RCRA landfill

3. No Action

4. Clay cap (without geomembrane)

Takes 10-30 years, >\$200M Not cost effective Not protective Poor long-term effectiveness

Community Involvement

- Community Involvement Plan: Developed 06/84, revised 07/90.
- Open houses and workshops:
- Original Proposed Plan Fact Sheet and Public Meeting: 01/86.
- Original ROD Fact Sheet:
- Milestone Fact Sheets: Updates 7/88, 3/89, 3/90, Open House 9/90, Reconnaissance visit to prepare for Ribbon cutting 9/91.
- Citizens on site mailing list: 87
- Constituency Interest: Moderate; the citizens/residents are not opposing the remedy.
- Site Repository: Iberville Parish Library

Technical Assistance Grant

Availability Notice: 02/13/89
Letters of Intent Received: None

• Grant Award: N/A

Fiscal and Program Management -

- Remedial Project Manager: Bill Luthans
- State Contact: Richard Johnson
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Mel MacFarland
- State Coordinator: Marilyn Owen
- Prime Contractor: Flour Daniel, EPA Oversight ERM Southwest, PRP Contractor

Cost Recovery:

- PRPs Identified: 95
- Viable PRP: 35
- Enforcement Options:
 - Consent Decree signed with settling PRPs for RD/RA in December 1987 for \$800,000 for response costs prior to 6/15/87 and up to \$1,885,000 for future oversight costs.
 - 1989 Consent Decree with BFI for \$185,000 completed.
 - Referral issued for cost recovery from Cyril Hinds, recalcitrant former owner/operator, in 1992.

Present Status and Issues

- Site is in long-term Operation & Maintenance, with all remedial activities completed. The first 5-Year Review (necessary because wastes remain onsite) was completed in September 1993.
- Present ground water monitoring data indicates cap and slurry wall performing as designed.
- EPA has recovered all past costs with the exception of approximately \$150,000 which is presently being pursued from the recalcitrant former owner/operator, Cyril Hinds.

Cleanup Measurements

- Over 1 million cubic feet of waste has been contained in a slurry wall, multilayered clay cap system. The remedy includes extensive monitoring to ensure protectiveness is maintained.
- •Remedy ensures protection of nearby sensitive environmental areas as well as protection of underlying aquifer used by thousands of people in the Parish.
- With the completion of the above mentioned activities, all contaminants have been contained and exposure potential has been eliminated. The EPA continues to monitor the site to ensure that the site is safe and no longer poses a threat to public health or the environment.

CLEVE REBER

EPA ID# LAD980501456

EPA REGION 6

CONGRESSIONAL DISTRICT 03

Ascension Parish

Other Names: Reber Landfill

Site Description

Location:

- Ascension Parish, Louisiana.
- Between Baton Rouge and New Orleans.
- One mile south of Highway 22 on the east side of Highway 70.

Population:

• Eleven residences close to the site.

Setting:

- Nearest residence is approximately 100 feet from the northern property line of the site.
- Nearest drinking water well is located on the residence about 100 feet away from the site.
- The surrounding land to the east and south are covered by dense vegetation and swamp.
- The areas to the north and west are primarily residential and agricultural. The residential areas are sparsely populated.
- 25 acre site an abandoned landfill that accepted both municipal and industrial wastes.
- One large pond (12 acres) and three small ponds (total approximately one acre) exist on-site.
- It is estimated that 6,400 drums are buried on-site.

Hydrology:

- The site is underlain by approximately 250 feet of very plastic clays with low permeabilities.
- Within this clay formation is a clayey/silty sand formation that varies between 3-10 feet in thickness, and is located 30-50 feet below the ground surface. At 200 feet is another sand formation that is approximately 30 feet thick. This layer is referred to as the Deep Sand Aquifer.
- The drinking water aquifer is called the Norco aquifer and lies below the Deep Sand. The Norco Aquifer is separated from the Deep Sand by 10 feet of clay.
- The upper sand zone (30 feet) is contaminated with low-level organics (HCB). There are no known users of this zone. The Norco is not contaminated and the potential for contamination is considered negligible.
- The Norco is an artesian aquifer that is free-flowing for most of the year.

Wastes and Volumes.

Principle pollutants include the following:

- Hexachlorobenzene (9,500 ppm on-site waste)
- Hexachlorobutadiene (8,600 ppm on-site waste)

Volume:

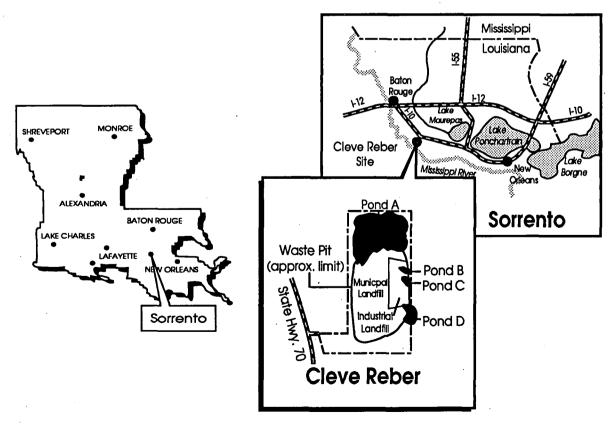
- The estimated total volume of material buried on-site is 220,000 cu. yds., including the municipal waste. The ROD calls for excavating approximately 15,000 cu. yds. of drums and bulk sludges as source control.
- The volume of on-site surface water is estimated to be 22,000,000 gallons, with about 21,500,000 gallons being located in the large pond.

Site Assessment and Ranking -

NPL LISTING HISTORY Site HRS Score: 48.80

Proposed Date: 12/30/82 Final Date: 9/8/83 NPL Update: Original

Site Map and Diagram



The Remediation Process

Site History:

- The site was originally cleared and used as a source of borrow material in the construction of the embankments of the Sunshine Bridge and portions of Hwy 10.
- The site was then permitted for the disposal of municipal wastes (Ascension Parish Sanitary Landfill).
- Environmental Controls Company, with Cleve Reber as president, leased the facility in 1970, and from 1970 to 1974, both municipal and industrial wastes were disposed of at the site.
- The site was abandoned in 1974.
- In 1983 the State fenced the site.
- July 1983, EPA conducted an emergency action removing 1,100 surface drums and waste piles.
- A thin clay cap was placed over the areas thought to contain buried drums and wastes.
- In 1984 and 1986, EPA conducted two comprehensive field investigations that indicted all significant contamination was restricted to the site.
- EPA completed the RI/FS in September, 1986.
- EPA signed a ROD in March, 1987.
- EPA completed all design activities in February, 1990.
- EPA issued UAO and the RA was initiated by the PRPs in April, 1991.

Health Considerations:

- Direct contact with on-site wastes.
- Potential for drinking contaminated ground water from currently unused water-bearing formation beneath site.
- Potential for cross-contamination between the shallow sand zone and deep drinking water aquifer of deep wells drilled in the future.

Other Environmental Risks:

• Potential for fugitive volatile emissions during construction (to be evaluated in the design).

• The remedy includes on-site thermal destruction (incineration) of drums and bulk sludges; RCRA cap.

Other Remedies Considered

Reason Not Chosen

- 1. No action
- 2. On-site landfill
- 3. Offsite landfill
- 4. Offsite incineration

Not protective Not long-term (inconsistent with SARA) Inconsistent with SARA

Not cost effective compared to on-site

Community Involvement -

- Community Involvement Plan: Developed 05/84, revised 03/91.
- Open houses and workshops: 05/84 Press Release, 11/90, 5/91
- Original Proposed Plan Fact Sheet and Public Meeting: 05/85, 02/87.
- Original ROD Fact Sheet: 09/87
- Milestone Fact Sheets: Updates 3/88 and 12/88; 2/90;9/90; RD fact sheet; 3/90 workshop; fact sheet, open house 5/91, 12/91, 6/94
- Citizens on site mailing list: 237
- Constituency Interest: Medium
- Site Repository: Ascension Parish Public Library

Technical Assistance Grant

- Availability Notice: Yes
- Letters of Intent Received:
 - 1) 6/18/88 from Ascension Superfund Koalition (ASK)
- Grant Award: 06/01/92

Fiscal and Program Management -

- Remedial Project Manager: David Weeks
- State Contact: Yasoob Zia
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Nelly Shirer
- State Coordinator: Mark Satterwhite
- Prime Contractor: Ch2MHill

Cost Recovery:

- PRPs Identified: 23
- Viable PRP: 4 (Uniroyal, Vulcan, Monochem, and Stauffer)
- Enforcement options: PRPs are currently performing the RA under a UAO.
- EPA is currently negotiating with the PRPs for past cost and oversight cost.

Present Status and Issues										
 Negotiations with PRPS regarding responsibility for RD fell through. Federal contractors performed RD. Currently in RA Phase; final cleanup activities in process 										
● The EPA has determined that fencing of the site and the removal of contaminated drums and waste piles have significantly reduced the potential of exposure to contaminants at the Cleve Reber facility while final cleanup activities are underway.										
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EPA ID# LAD072606627

EPA REGION 6
CONGRESSIONAL DISTRICT 01
Livingston Parish
Denham Springs

Site Description

Location:

• Four miles N.E. of Denham Springs, Louisiana, at Milton Road and Burgess

Road.

Population:

• Nearest residence is 200 yards.

• Approximately 500 people live within a 1 mile radius of the site.

Setting:

• Eleven surface impoundments of varying sizes and depths.

• Several underground and above-ground tanks.

• Waste oil recycling operation.

Hydrology:

• Impoundments are in the Pleistocene alluvium.

• Discharge to West Colvell Creek which drains into Amite River.

Wastes and Volumes

- The principal pollutants at the Combustion, Inc. Superfund site include Lead, Benzene, Silver, Nickel, PCBs, Toluene, and Mercury.
- The site contains approximately 29,630 drum equivalents of waste oil and sludge.

Removals, Site Assessment and Ranking

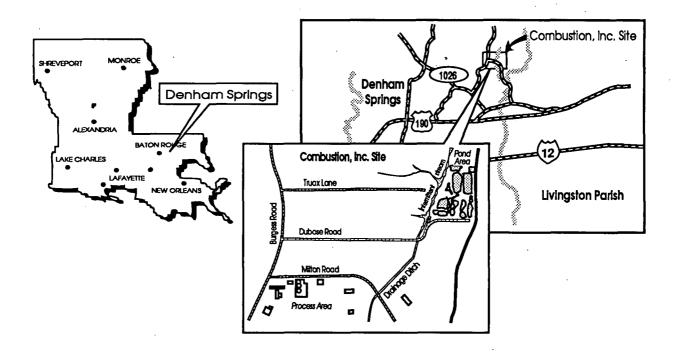
• Primary ranking factors: presence of airborne contaminants, and shallow ground water contamination with 1,2-Dichloroethane.

NPL LISTING HISTORY
Site HRS Score: 33.79
Proposed Date: 6/20/86
Re-proposed Date: 6/24/88
Final Date: 8/30/90

NPL Update: Nos. 5 & 7

- After proposing the Combustion, Inc. site to the NPL, the EPA determined that there were no immediate safety actions required while awaiting the results of the site studies and cleanup activities.
- Participating parties conducted a removal action to remove oils from the surface impoundments, tanks and buildings at the site which was completed in the fall of 1993.
- LDEQ approved Phase I Removal workplan on October 19, 1992; approved Phase II Removal workplan on January 5, 1993.

Site Map and Diagram



The Remediation Process

Site History:

- Operated as waste oil recycling facility until 1982.
- Notices of Violation and Warning Letters issued by LDEQ for various RCRA noncompliance.
- RCRA Compliance Order issued 1/18/84.

- Enforcement Agreement between EPA and LDEQ for State Enforcement Lead signed by LDEQ January 7, 1987; signed by EPA February 7, 1987.
- Interim Settlement Agreement between LDEQ and PRPs signed March 27, 1987, for technical studies of the site, the development of a RI workplan, and the evaluation of a removal action.
- Draft RI/FS Work Plan submitted August 5, 1987; Second draft RI/FS Work Plan submitted to LDEQ February 17, 1987; received by EPA March 22, 1988.
- RI/FS Agreement signed by all participating parties and by Louisiana Attorney General, October 25, 1988.
- Preliminary RI Report submitted to EPA on April 13, 1990.
- Remedial Action Objectives submitted to EPA on August 15, 1990.
- Phase II RI/FS is currently underway. Field work began on 1/30/95.

Health Considerations:

• Preliminary Public Health Evaluation and Endangerment Assessment submitted to LDEQ and to EPA on February 16, 1990.

Record of Decision -

RI/FS Underway - No Record of Decision At this Time

Community Involvement -

- Outreach activities are the responsibility of LDEQ
- Community Involvement Plan: Developed 6/89
- Open houses and workshops: 9/90, 9/91, 7/92, and 5/94
- Milestone Fact Sheets: 4/89, 8/90, 2/91, 9/91, and 5/94
- Citizens on site mailing list: 36
- Constituency Interest: A class-action citizens lawsuit is pending
- Site Repository: Livingston Parish Library, Denham Springs/Walker Branch, 10095 Florida Boulevard, Denham Springs, LA 70726

Technical Assistance Grant

• Availability Notice: 5/9/89

• Letters of Intent Received: None - no apparent citizen interest

• Final Application Received: N/A

• Grant Award: N/A

Fiscal and Program Management

- Remedial Project Manager: Cathy Gilmore
- State Contact: Todd Thibodeaux
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Jim Costello
- State Coordinator: Mark Satterwhite
- Prime Contractor: Woodward-Clyde Consultants
- Prime Oversight Contractor: none

Cost Recovery: Enforcement Agreement between EPA and the LDEQ February 9, 1987. LDEQ is responsible for obtaining settlement agreements with the PRPs.

- PRPs Identified: 87
- Viable PRP: Steering Comittee of 28 PRPs.

Present Status and Issues

- The removal action reduced the threat of exposure to the site by area residents.
- Air monitoring during the removal was done to regulate emissions from the site.
- Phase II RI/FS is addressing ground water and off-site areas.

Cleanup Measurements

- 15,000 cubic yards of sludges and soil were excavated from the site and disposed of offsite.
- 70,000 gallons of oil sent off-site for energy recovery.
- Above ground and underground storage tanks emptied of contents, dismantled, and sent for recycling.

D.L. MUD, INC

LOUISIANA

EPA ID# LAD981058019

EPA REGION 6
SONGRESSIONAL DISTRICT 07

Vermilion Parish

Other Names: Galveston-Houston Yard

Site Description

Location:

- 2.5 miles southwest of Abbeville, Louisiana.
- 1.5 miles west of Vermilion River.
- Adjacent to Gulf Coast Vacuum Services Superfund Site.

Population:

- 13,000 in Abbeville, Louisiana.
- 50,000 in Vermilion Parish, Louisiana

Setting:

- Site is an inactive drilling mud facility and a vacant lot.
- Approximately 2,600 people obtain drinking water, and about 1,000 acres are irrigated, from private wells within three miles of the site.
- 9,000 acres are irrigated with potentially threatened surface water.
- Site is approximately 12.5 acres.
- The site is inactive.

Hydrology:

- Possible surface drainage to Le Boeuf Canal, Coulee Galleque, and eventually to Vermilion River.
- An average of 20 feet of alluvial terrace deposits overlie the shallow sand aquifer that is used for drinking water and irrigation.

Wastes and Volumes

Principle pollutants at the site include the following:

- Mercury, chromium, arsenic, lead, zinc, barium.
- Petroleum related hydrocarbons.

Volume:

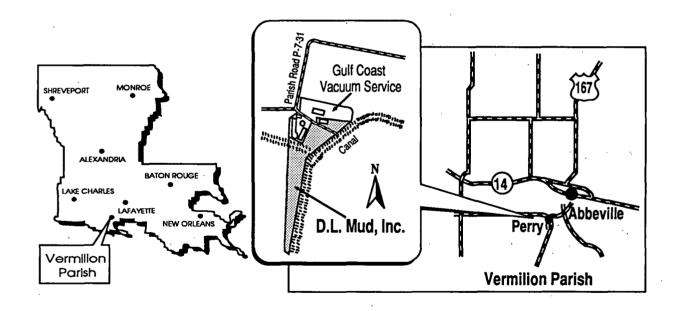
- Residual contamination at a depth of 2 feet in soil (approx. 20,000 cubic yards of soil).
- Unknown petroleum contaminants located in three abandoned pits (approx. 5000 cu. yds.).

NPL LISTING HISTORY Site HRS Score: 32.37

Proposed Date: 6/24/88 Final Date: 10/4/89 NPL Update: No. 7

• A former owner, Dowell-Schlumberger, commented that the score should be lowered because they conducted a cleanup at the site. EPA responded that, even though the Louisiana Department of Environmental Quality (LDEQ) accepted the cleanup as sufficient for a proper closure, it occurred after the ranking system had taken place and therefore would not affect the score.

Site Map and Diagram _



The Remediation Process

Site History:

- Owner, Gulf Pre-mix Mud and Vacuum Service Co., sold the site in 1979 to Galveston-Houston Fluid Services, Inc. Site sold again in 1981 to Dowell Fluid Services, a subsidiary of Dow Chemical. Sold in 1984 or 1985 to D.L. Mud, Inc., which went out of business in 1986.
- Drilling muds and fluids were stored in 16 on-site tanks.
- LDEQ negotiated a site cleanup with Dowell Schlumberger which was done in 1987. 1.3 million pounds of solids and 14,800 gallons of liquids from the tanks were disposed, and the tanks were dismantled.
- Soil was excavated from the tank bases and from the south end of the property.

Health Considerations:

- Potential for contamination of water supply used as drinking water for 2,600 people and of surface water to irrigate 9,000 acres.
- Potential risk to future residents from residual surface soil contamination.

Other Environmental Risks:

• Potential for contamination of Vermillion River, which flows to the Gulf of Mexico.

F	Reco	rd	Ωf	De	ciei	ion

Signed: September 22, 1994

Community Involvement

- Community Involvement Plan: Developed 11/90.
- Open houses and workshops: 9/90, 10/93
- Projected Proposed Plan Fact Sheet and Public Meeting: 4/94, 10/94
- Projected ROD Fact Sheet: First Quarter 1995
- Milestone Fact Sheets: 5/90; 12/93
- Citizens on site mailing list: 334
- Constituency Interest: Potential for contamination of surface and ground water.
- Site Repository: Vermilion Parish Library, 200 North Street, Abbeville, LA 70511

Technical Assistance Grant

- Availability Notice: 08/04/89
- Letters of Intent Received: 08/20/89
 - 1) Vermilion Association to Protect the Environment (VAPE)
- Final Application Received: VAPE submitted final application for grant on 6/1/90.
- Grant Award: 9/27/90
- Current Status: Wilma Subra is the designated VAPE Technical Advisor

Fiscal and Program Management -

- Remedial Project Manager: Bill Luthans
- State Contact: Rich Johnson
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Nelly Shirer
- State Coordinator: Marilyn Owen
- Prime Contractor: PRC, EPA Oversight Contractor CH2M Hill, PRPs Contractor

Cost Recovery: PRP Lead (Enforcement)

- PRPs Identified: 97Viable PRP: Several
- General Notice/104(e) letters issued 8/89
- Special Notice Letters issued 12/89
- Administrative Order on Consent requiring PRPs to conduct RI/FS was signed June 21, 1990.

Present Status and Issues

- •The removal of soils, muds, and solid waste by the potentially responsible parties and the LDEQ eliminated the sources of contamination and reduced the potential of exposure to contamination at the D.L. Mud site while an investigation leading to the selection of final cleanup activities is underway.
- Findings from the Remedial Investigation indicate low level risks still onsite.
- PRPs conducted Feasibility Study to address low level risks.
- Low level threats due to barium and unidentified organics; risks due to barium are being reevaluated.
- Barium toxicity (expressed as subchronic RfD value) are being reevaluated by EPA ECAO.
- Feasibility Study will proceed pending ECAO findings.
- Proposed Plan issued in March 1994 describing EPA's preferred alternative of institutional controls (deed restrictions, fencing) to address low level risks from residual surface soil contamination and excavation and offsite disposal of subsurface soil contamination associated with the pit bottoms.
- EPA presently drafting the Record of Decision which will describe the selected remedy and respond to comments on the Proposed Plan.

- Remediation at the site will address barium residuals in approximately 20,000 cubic yards of surface soils and 5,000 cubic yards of pit bottoms contaminated with tentatively identified organics.
- Risk reduction will be necessary to protect the health of potential future site-area residents.



EPA REGION 6
CONGRESSIONAL DISTRICT 03
Ascension Parish

Site Description

Location:

• Dutchtown, Ascension Parish, Louisiana.

• Location at the juncture I-10 and Highway 74.

Population:

• 4,000 people live within three miles of the site.

Setting:

• Site had ten storage tanks, a rail car tanker, a 0.07 acre oil pit, and a 0.8 acre holding pond containing oil and water.

• Site area is five acres.

Hydrology:

• Within Mississippi River watershed.

• Surficial silty loam with poor drainage; silty clay at 8-12 ft. depth; clay and silty

clay at 8-24 ft. depth.

• Contaminated shallow sand aquifer at 7-12 ft. depth; deeper aquifer at 30-35 ft.

appears not be contaminated.

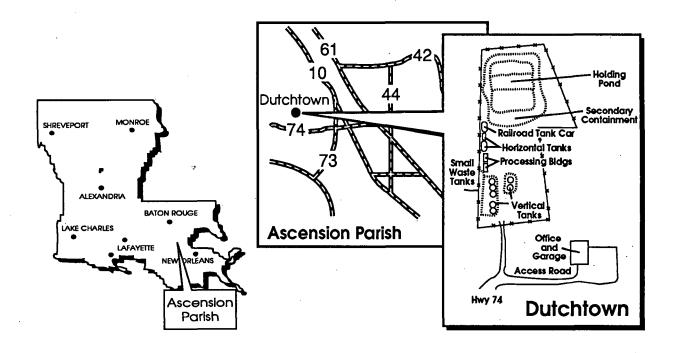
Wastes and Volumes -

- The principle pollutants on the site include benzene, ethylbenzene; toluene; and, lead.
- Holding pond 1.2 million gallons.
- Storage tanks 60,900 gallons.

Site Assessment and Ranking

NPL LISTING HISTORY Site HRS Score: 36.41 Proposed Date: 01/22/87 Final Date: 07/22/87

NPL Update: No. 6



The Remediation Process.

Site History:

- Oil refinery and reclamation facility from 1965 January 1982.
- State had owner (now deceased) develop a closure plan in 1982. The plan was rejected.
- In 1984, the State performed an investigation and identified contaminated surface soils, sludges and water. The upper aquifer was also found to be contaminated.
- The State undertook two emergency actions in 1984 to prevent overflow of the on-site lagoon/holding pond.
- EPA cleaned up a diesel fuel spill that ran offsite, in March 1987. PRPs began Expedited Response Action (removal) in November 1990. Waste handling phase of ERA completed on August 27, 1991. ERA scheduled to be fully completed on October 5, 1991.
- RI and Risk Assessment approved by EPA on 12/23/92.
- Revised FS submitted on 3/9/93.

Health Considerations:

• Inhalation of fumes, contamination of drinking water, direct contact with waste pits and storage tanks contents.

Other Environmental Risks:

• Grand Goudine Bayou is 1,875 feet downslope from site.

Record of Decision

Signed: March 1988
Expedited Response Action
ROD Signed: June 20, 1994

- Thermal destruction offsite of the ponds and tanks contents. Treatment of contaminated soils and contaminated water.
- Natural attenuation of contaminated ground water with contingencies if contaminated ground water migrates out or down from the current location.

Other Remedies Considered

Reason Not Chosen

- No Action
- In-Site Biological Treatment
- Ground Water Extraction, Treatment, Discharge
- Not protective
- Active remediation not currently warranted
- Active remediation not currently warranted

Community Involvement

- Community Involvement Plan: Developed 05/89.
- Open houses and workshops: 09/89; 01/90; 10/90.
- Proposed Plan Fact Sheet and Public Meeting: 02/88, 10/93.
- ROD Fact Sheet: 7/94
- Milestone Fact Sheets: 12/87 removal fact sheet, 6/88, 9/88, 12/88, 4/89 update, 2/91 update (by PRPs), 4/91 update (by PRPs).
- Citizens on site mailing list: 334
- Constituency Interest: Ground water contamination; offsite transport of hazardous materials; on-site discharge; air emissions
- Site Repository: Ascension Parish Library

Technical Assistance Grant

- Availability Notice: YesLetters of Intent Received:
 - 1) 6/18/88 from Ascension Superfund Koalition (ASK)
- Grant Award: 06/01/92

Fiscal and Program Management

- Remedial Project Manager: Cathy Gilmore
- State Contact: Tom Stafford
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Mel McFarland
- State Coordinator: Mark Satterwhite
- Prime Contractor: PRP, Woodward Clyde Consultants

Cost Recovery:

- PRPs Identified: 85
- Viable PRP: 50
- The EPA and approximately 20 PRPs agreed to all the terms of a Consent Decree for the ERA on March 1, 1989. The EPA and 20 PRPs agreed to the terms of an Administrative Order On Consent for the RI/FS. The RI/FS began August 7, 1989. The Consent Decree for the ERA was entered on 5/23/90, starting the ERA.

Present Status and Issues ———

- Revised FS under review. Revised FS addresses ground water contamination only.
- Expedited Response Action is complete.

Cleanup Measurements

- 4500 cubic yards of contaminated soil were excavated, treated, placed onsite, and capped during the Expedited Response Action.
- The emergency actions taken to prevent overflow of a contaminated lagoon, cleanup of a diesel fuel spill and capping over a contaminated area at the Dutchtown Treatment Plant site have limited the spread of contaminated wastes and have lessened the potential for exposure to contaminants at the site. Thus, the site is safer while it awaits further long-term cleanup actions.

GULF COAST VACUUM SERVICE

EPA ID# LAD980750137

EPA REGION 6
CNGRESSIONAL DISTRICT 07
Vermilion Parish

Other Names: Galveston-Houston Yard

Site Description

Location:

• Approximately 2.5 miles southwest of Abbeville, Vermilion Parish.

• 1.5 miles west of the Vermilion River.

• Adjacent to the south is the D.L. Mud, Inc. Superfund site.

Population:

• Approximately 2,600 people

Setting:

• Approximately 2,600 people obtain drinking water and about 1,000 acres are irrigated by private wells within three miles of the site.

• 9,000 acres are irrigated with potentially threatened surface water.

• Site is surrounded by agricultural and residential land.

Hydrology:

• The site is located above the shallow sand of Abbeville Unit of the Upper Chicot aquifer.

• The Abbeville Unit is the primary source of drinking water.

• Surface water drainage is to the LeBouf Canal or to the north drainage which flows to the Coulee Galleque.

Wastes and Volumes

1. Principle Pollutants:

- The contaminants in the site sludges and shallow aquifer include benzene, toluene, mercury, lead, chromium, arsenic, barium and numerous organic compounds.
- The contaminants in the site soils included arsenic and barium.

2. Volume:

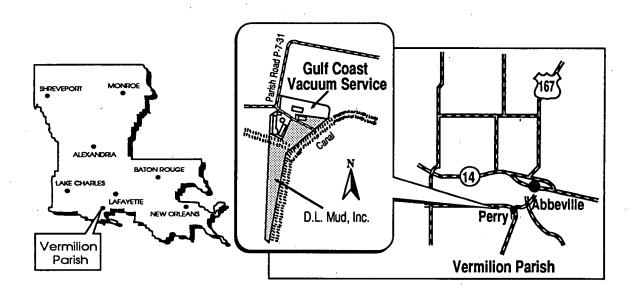
- Estimated 15,000 cubic yards of sludge in the 3 pits.
- Estimated 43,857 gallons of sludge and liquid in the five above ground tanks.
- 19,500 cubic yards of contaminated soil in the northeast and northwest site fields.

Site Assessment and Ranking.

NPL LISTING HISTORY Site HRS Score: 42.78

Proposed Date: 6/24/88 Final Date: 3/31/89 NPL Update: No. 7

Site Map and Diagram.



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Site History:

- Inactive facility, which handled wastes primary associated from oil and gas exploration. The company operated from approximately 1969 until 1984 when it filed for bankruptcy.
- March May 1990 and February March 1991, EPA emergency removal funds used: to repair fence, replace warning signs, collect and analyze samples, construct holding levee, pump and treat waste water from pits.
- April 1992, due to heavy rainfall, waste water from pits was pumped and treated again.
- A total of 1,250,000 gallons were pumped and treated during emergency removal actions.
- The interim action, Operable Unit 2, was performed by 15 PRPs under a 12/11/92 unilateral Administrative Order and completed in January 1994.

Health Considerations:

• Direct contact and upstream risk; also a potential groundwater threat.

Other Environmental Risks:

• Potential for contamination of Vermillion River.

Record of Decision -

Signed: September 30, 1992

(Operable Unit 1 - Final Source Action)

• SELECTED REMEDY: Onsite Incineration of organic contaminated sludges/soils; stabilization of inorganic soils.

Other Remedies Considered

Reason Not Chosen

1. No Action

Not protective

2. On-site stabilization/ solidification/ disposal

Does not address organic

3. Off-site incineration

Too costly for benefit received.

(Operable Unit 2 - Interim Action)

• SELECTED REMEDY: Pit dewatering and consolidation.

Other Remedies Considered

Reason Not Chosen

- 1. No Action
- 2. Continual pump out treat

Not protective Too expensive

Community Involvement

- Community Involvement Plan: Developed 11/90
- Open houses and workshops: 9/90.
- Original Proposed Plan Fact Sheet and Public Meeting: 7/92.
- Milestone Fact Sheets: 04/91, 08/91
- Citizens on site mailing list: 328
- Site Repository: Vermillion Parish Library in Abbeville, Louisiana

Technical Assistance Grant

- Availability Notice: 08/04/89
- Letters of Intent Received:
 - 1) 8/29/89 from Vermilion Association to Protect the Environment (V.A.P.E.).
- Final Application Received:
- Grant Award: 09/27/90.
- Current Status: TA, Wilma Subra

Fiscal and Program Management -

- Remedial Project Manager: Kathleen Aisling
- State Contact: Rich Johnson
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: George Malone
- State Coordinator: Marilyn Owen
- Prime Contractor: Sverdrup For RI/FS, RD/RAa oversight

Cost Recovery: PRP Lead (Enforcement)

- PRPs Identified: 400+
- Viable PRP: 150+

Present Status and Issues

- 1. General Notice/104(e) letters issued 8/89.
- 2. Pursue PRP lead RI/FS.
- 3. Special Notice Letters issued 12/89.
- 4. The 60-day RI/FS moratorium ended 2/8/90.
- 5. RI/FS was Fund lead.
- 6. ROD issued 9/92.
- 7. UAO issued 12/11/92 for Interim Action. 15 PRPs complied; completed 1/94.
- 8. Special notice issued for source control Operable Unit 1

- 9. The Region has negotiated a CD with the site PRPs to conduct the RD/RA; it was lodged (1/95) and is awaiting entering.
- 10. A Deminimis Settlement with 54 PRPs became effective 9/26/94. Three million dollars was recovered under the settlement.

Cleanup Measurements

The completion of OU2 activities eliminated the threat of overflow of accumulated rainwater contaminated by the sludge pits, thereby reducing the direct contact threat to nearby residents and the threat to the local drinking water supplies. The sludge has been consolidated and coveed and is stable awaiting initiation of OU1 activities.

LINCOLN CREOSOTE LOUISIANA

REGION 6

CONGRESSIONAL DISTRICT

Bossier Parish Bossier City

EPA ID# LAD981060429



Site Description

Location:

• The site is located in Bossier City, Bossier Parish, in northwestern Louisiana. The site is north of Shed Road, east of Benton Road, south of Montgomery Lane, and west of Airline Drive. Residential neighborhoods border the site to the north, northeast, south and west. Several apartment complexes are located immediately north and south of the site. Portions of the residential neighborhoods to the north and northeast and the apartment complex to the north make up the area of study for the offsite portion of the site.

Population:

• Bossier City (population 52,721 in 1990)

Setting:

• The former wood treatment plant encompasses approximately 20 acres. Lincoln Creosote is an abandoned wood treatment facility that was operated from approximately 1935 to 1969 by several different owners and operators. The amount of the surrounding neighborhood to be included as a part of the site is not yet determined.

Hydrology:

- The most shallow ground water at the Lincoln Creosote site occurs within the sand and gravel layers of the Red River Alluvium. The water levels at the Lincoln Creosote site range from about 6.0 to 7.5 feet below ground surface. However, the ground water is reported to be partially confined below a 20-foot thick surficial clay unit and actual depth to water in the alluvial aquifer may be deeper than observed in the onsite monitoring wells. Ground water was shown to flow in an easterly direction in the shallow alluvial water-bearing zone.
- The Lincoln Creosote site is within the Red River Drainage Basin. The Red River is about 0.4 miles west of the site. The Bossier City Area is drained almost entirely by the Red River and its extensive network of small tributaries. The tributaries eventually flow into the river to the southeast due to the natural and manmade levees along the river. Drainage is poor and slow due to the flat topography.

Wastes and Volum	nes
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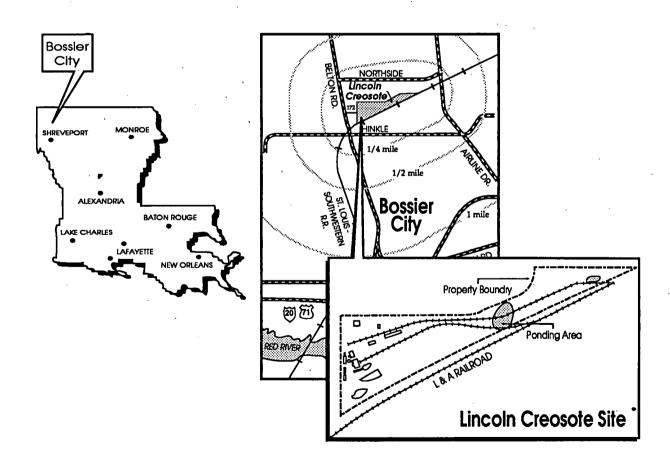
• Treatment processes for the plant included the use of creosote, pentachlorophenol (PCP), and chromated copper arsenate (CCA). The contaminants of concern are the creosote-related polycyclic aromatic hydrocarbons (PAHs) or semivolatile organic compounds, PCP, chromium, copper, and arsenic.

Site Assessment and Ranking _

NPL LISTING HISTORY Site HRS Score: 33.05

Proposed Date: 1/18/94
Final Date: / /
NPL Update: No.

Site Map and Diagram



The	Rem	ediation	Process
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Site History:

- The site is an abandoned wood treatment facility operated from approximately 1935 to 1969 by several different owners and operators.
- From 1935 to 1950, the site was operated by the Lincoln Creosote Co., and from 1950 to 1969 by the Joslyn Manufacturing and Supply Co. The Koppers Co. owned the site from 1969 to 1971. Since that time, the property has been sold a number of times in several parcels to different owners.
- During site operation, wood products such as railroad ties and utility poles were pressuretreated using creosote, copper, chromium arsenate (CCA) and pentachlorophenol (PCP) as preservatives.
- Upon closure of the facility, most buildings, tanks, impoundments and other structures were removed. Former process areas were covered with fill and revegetated.
- While much of the former facility has remained vacant and undeveloped, a mini-warehouse facility and a commercial building have been placed on the northwest portion of the site.
- In 1985, EPA conducted a site investigation and found high concentrations of creosote-related semivolatile compounds in onsite soil samples.
- A remedial investigation completed by the Joslyn Corp. in 1989, showed significantly elevated concentrations of numerous creosote-related semivolatile compounds, PCP, chromium, and arsenic in onsite soils.
- Remedial activities at the wood treatment site began in February 1992 under State authority and included excavating and disposing of contaminated soils offsite.
- During an expanded site investigation conducted by the EPA in March 1992, high concentrations of creosote-related semivolatile organic compounds were detected in the soil samples collected on residential and commercial properties around the site.
- The site was proposed for the National Priorities List on January 18, 1994. In June 1994 EPA began an Expanded Sampling Investigation, Remedial Investigation, and Risk Assessment in the neighborhood surrounding the Lincoln Creosote site. Sampling was completed in late July. A draft report is due to EPA in late December 1994.
- An Engineering Evaluation and Cost Analysis (EE/CA) Approval Memorandum was signed for a removal in a portion of the neighborhood surrounding the site on August 23, 1994. This will enable EPA and Joslyn Corporation to pursue a possible removal action in one portion of the neighborhood. The EE/CA is scheduled to be released to the public in early March 1995.

Health Considerations:

- Residents in the study area have been contacted regarding recommendations on potential long-term health risks by the Agency for Toxic Substances and Disease Registry (ATSDR).
- Soil samples from some residential properties in the area show elevated levels of PAHs which are a group of chemicals formed from the incomplete combustion of coal, oil, and other organic substances and are often found in creosote and tar-like substances.
- Exposure to these chemicals, at the levels found in the area, could cause a slightly increased risk of cancer.

Other Environmental Risks:

• There appears to be no significant environmental or ecological risk from the site as it lies in a highly urbanized area of Bossier City.

Record of Decision -

There is no ROD or Action Memorandum completed to date.

Signed: Amended:

Community Involvement —

- Community Involvement Plan: Developed/implemented September 1994.
- Open houses and workshops: Open houses were held with the community on 1/94, 2/94, 4/94, 6/94, 7/94, 12/94.
- Original Proposed Plan Fact Sheet and Public Meeting: / .
- Original ROD Fact Sheet: /
- Milestone Fact Sheets: 3/93, 1/94
- Citizens on site mailing list: 220
- Constituency Interest: People are especially concerned about the health of those residents who might be exposed to contamination from the site. Many residents are concerned about the possible long term effects the site could have on property values.
- Site Repository:
 - Bossier Parish Library
 2206 Beckett Street
 Bossier City, Louisiana 71111
 318/746-1693
 - Louisiana Department of Environmental Quality 7290 Bluebonnet
 Baton Rouge, Louisiana 504/765-0487
 - 3. Environmental Protection Agency Region 6 1445 Ross Avenue Dallas, Texas 75202 214/665-6444

Technical Assistance Grant

- Availability Notice: January 1994
 Letters of Intent Received: None
- Final Application Received:
- Grant Award:
- Current Status:

Fiscal and Program Management

- Remedial Project Manager: Cathy Gilmore
- State Contact: Todd Thibodeaux
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Jim Costello
- State Coordinator: Marilyn Owen
- EPA Prime Contractor: Roy F. Weston
- PRP Prime Contractor: ERM Southwest

Cost Recovery:

- PRPs Identified: 4
- Viable PRP: 1

Present Status and Issues

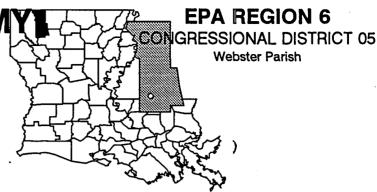
- The Lincoln Creosote Superfund site is in Bossier City which is located in northwest Louisiana.
- The Lincoln Creosote facility was operated as a wood treatment and preservation facility from 1935 through 1969 by the Lincoln Creosote Company (1935 1950) and the Joslyn Manufacturing and Supply Company (1950 1969).
- The Koppers Company owned and dismantled the site (1969 1971), but never operated the facility.
- The Lincoln Creosote facility is mostly abandoned and undeveloped.
- Operations at the facility included the pressure treatment of wood products including railroad ties and utility poles. Chemical substances including creosote, chromated copper arsenate (CCA) and pentachlorophenol (PCP) were used in wood-treating processes at the facility.
- During the operation of the facility, waste water from the wood-treating process was discharged from the Lincoln Creosote facility into the natural drainage pathways surrounding the facility. It is suspected that the waste water included wood-treating wastes and other organic and metal contaminants associated with the wood-treating process.
- Review of historical drainage pathways around the facility during its period of operation indicates that releases of waste water would have flowed to the northeast/east, away from the site into drainage ditches that are now located in a developed residential area.
- The undeveloped portion of the former facility property is fenced to restrict access.
- Since the Lincoln Creosote facility became inactive, the site has been sold a number of different times in several parcels of land to several owners.
- Large residential neighborhoods border the Lincoln Creosote facility to the north, northeast, south and west.

- A U.S. Department of Housing and Urban Development (HUD) apartment complex is located immediately north of the facility, and another apartment complex is located to the south. Areas of commercial development are present to the east and west. Areas to the south are separated by a railroad line.
- Bossier City, Shreveport and Barksdale Air Force Base form a metropolitan area of over 275,000.
- Removal action for one area of the residential neighborhood is under negotiation with the PRPs. PRPS have been sent special notice letters for the performance of the non-time-critical removal action. A good faith offer was received from the PRPs on 11/1/94.

Cleanup	Measurements
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• Not yet determined.

LOUISIANA ARM AMMUNITION PLANT LOUISIANA EPA ID# LA0213820533



Site Description

Location:

• 22 miles east of Shreveport on U.S. Highway 80, in Bossier and Webster Parishes.

Population:

• Approximately 10,250 people live in this predominantly agricultural area, within 2 miles of the site.

Setting:

• Nearest drinking water well is 1,968 feet.

• The installation covers 14,974 acres of level to slightly rolling forest land near the towns of Minden and Doyline. The HRS ranking was based on 16 one-acre leaching pits. (Area P.)

Hydrology:

- The Terrace aquifer lies approximately 20 feet below land surface and is reportedly used for drinking water in surrounding areas. Water supplies on the facility are provided by the 300 foot sands (Wilcox aquifer).
- Analytical tests performed to date show that no contamination of the area drinking water wells has occurred, and that contamination has not migrated from the shallow aquifers to the deeper aquifers.
- Migration of the waste appears to be retarded in the vertical direction by the Cane River Formation (CRF). The CRF forms a lower hydrogeologic boundary to the Terrace Aquifer and an upper confining unit for the Wilcox Aquifer across most of the installation.
- The updated Remedial Investigation, however, shows that the CRF pinches out west of Area P. This creates a situation where the upper Terrace deposits lay directly on top of the Wilcox formation. Thus, a possible hydrogeologic connection between the contaminated Terrace aquifer and deeper Wilcox aquifer does exist.
- The Army contends that a Corps of Engineers study shows that no real connection exists because the deeper aquifers of the Wilcox are overlain by substantial clay members of this same formation.

Wastes and Volumes _

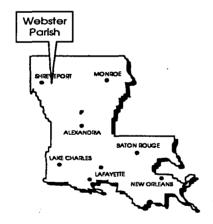
- The shallow ground water is contaminated by explosive wastes including the explosives, RDX up to 27,000 ppm and TNT up to 25,000 ppm.
- The Army incinerated 105,000 tons of con taminated soils and sludges from Area P. Contaminated soils from other operable units will be addressed in the Feasibility Study that is currently ongoing.

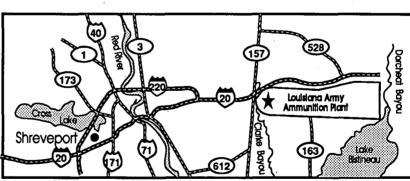
Site Assessment and Ranking_

NPL LISTING HISTORY Site HRS Score: 30.6

Proposed Date: 10/15/84 Final Date: 3/31/89 NPL Update: No. 2

Site Map and Diagram.





The Remediation Process

Site History:

- The plant began producing explosives in 1942. Several contractors have operated the facility. The current contractor is Thiokol Corporation.
- The Phase I investigation was completed by the Army in May 1978, and was received by EPA in January 1985.
- The Phase II, Stage 1 investigation was completed in September 1982.
- RI for ground water was completed in January 1987.
- RI/FS for soil contamination in Area P was completed in August 1987.
- An updated RI for the ground water is ongoing. Sampling began in June 1990, and should be completed in early 1991.
- FS for ground water was completed in 1993.
- EPA and Army agreed on schedule for completion of the ground water RI/FS in April 1989.
- An Interim Response Action (IRA) which consisted of incineration of contaminated soils and sludges from Area P was completed in early April 1990. The initial IRA work plan required the Army to excavate the lagoons to a depth of five feet. If soil contamination in the lagoons was greater than 500 ppm of total nitro bodies, the Army would continue to excavate in one foot increments until the soil contamination was 500 ppm or less of total nitro. The excavated soils and sludges were incinerated on-site with the resulting clean ash to be placed back into the lagoons.
- The original schedule submitted by the Army showed that the IRA would be completed in August of 1990. However, the Army informed the EPA that recent investigations showed that the contamination of Area P is not as extensive as originally stated. The Army formally requested on October 26, 1989, that the cleanup criteria be revised to reflect a smaller amount of soils and sludges to be excavated and incinerated. The EPA, in conjunction with the Louisiana Department of Environmental Quality, reviewed this request. EPA approved this change to the cleanup criteria on December 21, 1989. The new cleanup criteria required that the lagoon in Area P be excavated to 100 ppm total explosives. This averages a depth of excavation of two to three feet. The excavation and incineration at Area P was completed in April 1990. Capping of the lagoons in Area P was completed in October 1990. Operation and maintenance of the area is ongoing:
- RI & Risk Assessment approved on March 23, 1992 for seven areas.
- Draft RI submitted 11/94.
- Draft RI/FS Workplan for 12 new areas submitted 12/94.

Health Considerations:

• Shallow contaminated aquifer is hydraulically connected with the deep Wilcox aquifer used by the facility as a potable water supply.

Other Environmental Risks:

• Some residents in the surrounding areas may use the shallow ground water for drinking.

Record of Decision

Signed: Interim Response Action, 01/31/89, Area P only, Approved with Signatures on Federal Facility Agreement (FFA)

• Remedy: Incineration

Responsibility of the ARMY

- Community Involvement Plan: 07/88, revised 09/88.
- Open houses and workshops:
- Original Proposed Plan Fact Sheet and Public Meeting:
- Original ROD Fact Sheet:
- Milestone Fact Sheets: 02/90.
- Citizens on site mailing list: 76
- Constituency Interest: Unconcerned
- Site Repository: Webster Parish Public Library

Technical Assistance Grant

Availability Notice: 03/24/89
Letters of Intent Received: None

Grant Award: N/A

Fiscal and Program Management -

- Remedial Project Manager: Cathy Gilmore
- State Contact: Duane Wilson
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Mike Barra
- EPA Contractor: none
- Prime Contractor: USAEC/ESE/Woodward Clyde/IT

Cost Recovery:

- PRPs Identified: ARMY
- Viable PRP: 1
- Enforcement Options: Continued oversight; Interagency Agreement; Yellow book procedure

Present Status and Issues	•
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- Army is adding an additional area into consideration. A draft RI/FS for the Y-Line Chromium etching facility was submitted 11/94.
- Draft RI/FS Workplan for 12 new load/assembly/pack and test areas submitted 12/94.

Cleanup Measurements

• The incineration of wastes and contaminated soils at the Louisiana Army Ammunition Plant site has been completed and has reduced the potential for exposure to hazardous substances. The Army is conducting investigations, which will lead to further reductions in contaminants, thereby protecting the public health and the environment.

OLD INGER REFINERY

LOUISIANA

EPA ID# LAD980745533

EPA REGION 6

CONGRESSIONAL DISTRICT 03

Ascension Parish

Other Names: Darrow Oil

Site Description

Location:

- Between Highway 75 and the Mississippi River, Ascension Parish, midway
- between Baton Rouge and New-Orleans.
 4.5 miles north of Darrow.

Population:

• 19,500 people live within 10 miles of site.

Setting:

- Rural, adjacent to the Mississippi River levee.
- Nearest residence is 0.3 miles south of the site.
- Nearest drinking water well is 0.5 miles south of the site.
- Area is generally flat and subject to water-ponding during heavy rains.

Hydrology:

- The site soil profile consists predominantly of silty and sandy clays, silts, and fine sands to a depth of about 115-to-125 feet.
- Ground water is encountered generally at a depth of 6-to-12 feet and rises to within a few feet of the ground surface.
- The horizontal ground water gradient is thought to vary during the year, but generally is anticipated to be away from the Mississippi River and to be lessethan one foot per year.
- The vertical gradient varies during the year, but is generally downward, away from the River, and is estimated to be fairly steep during average Mississippi River flow conditions.

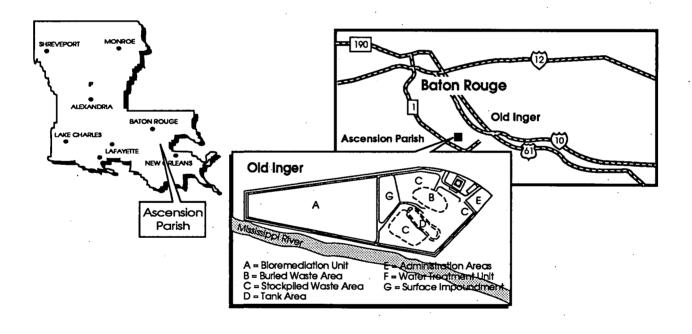
Wastes and Volumes

- 1. Principle Pollutants:
 - Polynuclear aromatic compounds (ex; 49,000 ppb phenanthrene in sediment).
 - Heavy metals (ex; 130 ppm zinc sediment).

NPL LISTING HISTORY Site HRS Score: 48.98

Proposed Date: 12/30/82 Final Date: 9/8/83 NPL Update: Original

Site Map and Diagram _



The Remediation Process

Site History:

- 1967 began operations as an oil refinery.
- 1976 site was obtained by Old Inger Oil Refinery for use as an oil reclamation plant for refinery waste; waste oil brought to the site by barge and by truck.
- 1978 large spill occurred and the site was sold shortly thereafter.
- 1980 site was abandoned.
- April 1983 August 1988, five emergency removal actions were conducted to stabilize the site to include: site security, migration control, excavation and containment of consolidated soils, sampling and analysis.

Health Considerations:

- Ground water in area used for drinking.
- Surface water used for irrigation.

Other Environmental Risks:

• Ground water and soil are contaminated to a depth of 40 feet and 6 feet, respectively, by organic chemicals.

Record of Decision

Signed: September 25, 1984

Remedy:

- On-site land treatment of contaminated soils and sludge Treatment will include synthetic liner (per 10-29-87 HQ decision).
- Close and seal an ungrouted on-site well.
- Pump and treat shallow ground water via carbon absorption.
- Carbon adsorption treatment and discharge offsite of contaminated surface waters onsite.
- In-situ containment and capping of slightly contaminated soils & sludge.

Other Remedies Considered Reason Not Chosen 1. Deep well disposal of contaminated fluids 2. Offsite disposal Cost; non-permanent remedy 3. On-site landfill Possibility of major release if levee falls 4. No action Poses threat to public health and the environment

Community Involvement

Outreach activities: Responsibility of LDEQ

- Community Involvement Plan: Developed 11/82; Revised 4/85, 4/90.
- Open houses and workshops: 01/90, Video 11/90
- Original Proposed Plan Fact Sheet and Public Meeting: 6/84
- Original ROD Fact Sheet: 10/84
- Milestone Fact Sheets: 4/85, 12/88, 10/89
- Citizens on site mailing list: 65
- Constituency Interest: Most complaints are about odors
- Site Repository: Ascension Parish Library Gonzales.

Technical Assistance Grant

- Availability Notice: //
- Letters of Intent Received:
 - 1) 6/18/88 from Ascension Superfund Koalition (ASK).
- Final Application Received:
- Grant Award: 7/90.
- Current Status:

Fiscal and Program Management —

- Remedial Project Manager: Paul Sieminski
- State Contact: Tim Knight
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Carlos Zequeira
- State Coordinator: Marilyn Owen
- Prime Contractor: State Contractor IT Corp. -(design and oversight)
 Westinghouse Haztech, Inc. (cons't)

Cost Recovery: State (LDEQ) Lead (Enforcement)

- PRPs Identified: 17
- Viable PRP: None
- Enforcement options: None

Present Status and Issues		 		 	

- Site had been on hold while resolving land ban issues with Headquarters. On October 29, 1987, Headquarters submitted an approval with revisions to the original design. LDEQ Cooperative Agreement amendment in the amount of \$340,000, for addition of liner, expanded ground water study, and associated engineering. Awarded June 1988. Additional RA funds of \$1,646,308 awarded to LDEQ on September 29, 1989.
- RA contract for construction of the land treatment unit advertised July 19, 1989. Bids opened August 29th. Contract awarded 9/29/89.
- Supplemental grand water study began March 1990 under IAG with USACE.
- LDEQ is finalizing bid documents for operation of the Land Treatment Unit, which is expected to be advertised in the Spring of 1995.

The immediate actions taken to reduce the contamination in the pits and lagoons and to limit site access have reduced the potential for contact with site contamination and the further spread of contaminated materials. These initial cleanup actions have made the Old Inger Oil Refinery site safer while long-term cleanup activities proceed.



EPA REGION 6 ONGRESSIONAL DISTRICT 07

Vermilion Parish

Site Description

Location:

• Southern Louisiana in Vermilion Parish.

• Site is located three miles north of Abbeville along Highway 167.

Population:

• 13,000 in Abbeville (nearest town).

• 50,000 in Vermilion Parish.

Setting:

• Primary land use in the vicinity of the site is agricultural and residential.

• Three Abbeville city wells located within three miles of the site provide water for 18,000 people.

• Private wells within three miles of the site serve another 2,100 people.

• Facility used for disposal of oil based drilling muds and other oil field related

• Located on a 21-acre plot of land and consists of three disposal pits and four steel holding tanks.

• Site pits cover an area of approximately 300 feet by 360 feet.

Hydrology:

• Underlying the site is a series of over-consolidated clays and sands.

• Major aquifer underlying the site is the Chicot aquifer.

• Normal ground water flow is west/northwest.

Wastes and Volumes

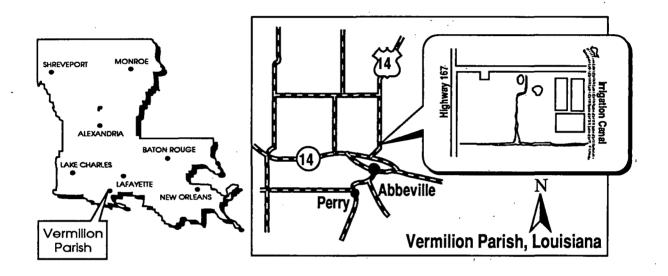
- Contaminants detected in the pit sludges include barium, chromium, lead, manganese, ethylbenzene, acetone, toluene and xylene, PAHs.
- 30,000 cubic yards soils and sludges
- 10,000,000 gallons of surface water

Site Assessment and Ranking.

NPL LISTING HISTORY Site HRS Score: 38.94

Proposed Date: 6/24/88 Final Date: 3/31/89 NPL Update: No. 7

Site Map and Diagram _



The Remediation Process

Site History:

- Property is owned by Edmond Mouton estate.
- Operated as a disposal facility for oilfield waste from 1979 until 1982 by a lease agreement with PAB Oil and Chemical Services, Inc.
- Citizens' complaints of site operations in 1980 led to EPA investigations of the site.
- In November 1982, the State ordered the site properly closed.
- The company claimed it had no money for closure.
- October 1991 Potentially Responsible Party (PRP), with EPA oversight, addressed a possibly dangerous problem with a damaged storage tank.

Health Considerations:

• Site is located over the Chicot Aquifer, which is a major source of drinking water.

Other Environmental Risks:

- High rainfall and short distances to surface water create the potential for contaminants to migrate offsite to Coulee Kenny Irrigation Canal; thence, to the Vermillion River.
- The site is unfenced and creates a potential for direct contact.

Record of Decision -

September 22, 1993

• Proposed remedy consists of bioremediation then stabilization of pits sludges, surface water treatment and disposal, and ground water monitoring. Issued 3-26-93.

Other Remedies Considered

Reason Not Chosen

1. Stabilization

2. Incineration

Will not address organics
Not cost effective

Community Involvement

- Community Involvement Plan: Developed 11/90.
- Open-houses and workshops: Fact sheet, Press clips 5/90, 9/90 (S.I.T.E. Demo); Open house 9/90; Responsiveness Summary (S.I.T.E. Demo) 2/91; Superfund "101" Workshop, Press clips 2/91. Letters to local officials and citizens 4/91. Fact sheet 4/91, 12/92 Open House
- Original Proposed Plan Fact Sheet and Public Meeting: 04/93.
- Original ROD Fact Sheet: 10/93
- Milestone Fact Sheets: 12/92
- Citizens on site mailing list: 337
- Constituency Interest: Potential contamination of surface and ground water
- Site Repository: Vermilion Parish Library, Abbeville, Louisiana

Technical Assistance Grant

- Availability Notice: 08/04/89
- Letters of Intent Received:
 - 1) Received 8/29/89 from V.A.P.E.
- Grant Award: 09/27/90
- Current Status: Technical Advisor, Wilma Subra, Subra Company

Fiscal and Program Management

- Remedial Project Manager: Madhugiri Ramesh
- State Contact: Todd Thibideaux
- Community Involvement Coordinator: Melanie Ontiveros Lillard
- Attorney: Nelly Shirer
- State Coordinator: Marilyn Owen
- Prime Contractor: Sverdrup Corporation

Cost Recovery:

PRPs Identified: 106Viable PRP: Several

• Enforcement:

- 1. General Notice/104(e) letters issued 8/89.
- 2. Special Notice Letters issued 12/89
- 3. PRPs did not conduct RI/FS. EPA will conduct further enforcement activities for the purpose of having the PRPs conduct the RD/RA.
- 4. PRPs did agree to conduct emergency removal under an AOC. Effect on Remedial work is unchanged.
- 5. Pre-Referral Negotiation package 4/93.
- 6. RD/RA Special Notice letters sent January 1994.
- 7. Good Faith Offer received March 18, 1994 rejected by EPA.

Present Status and Issues

- Proposed Plan issued on 3-26-93. Plan proposes to address site contaminants utilizing bioremediation and stabilization technologies along with ground water monitoring and surface water treatment and discharge.
- Wastes found at the site are mostly RCRA exempt oil and gas exploration & production wastes which some PRPs feel are also CERCLA exempt. Potential for future litigation on this issue.
- PRPs and local citizens appear satisfied with proposed remedy. State has concurred.
- Record of Decision issued on 9/22/93 calling for bioremediation followed by stabilization of site sludges.
- PRPs did not submit a "Good Faith Offer" to conduct RD/RA, therefore EPA is evaluating enforcement options.
- EPA negotiating a de minimis settlement with several small contributing PRPs.

Cleanup Measurements

- Over 27,00 cubic yards of waste and 10,000,000 gallons of surface water will be treated at the site.
- Remediation of this site will reduce environmental risk for over 15,000 people within a four mile radius of the site.
- The off-site treatment and disposal of all wastes contained in the four on-site disposal storage tanks reduced the threat to off-site drainage systems and residents while site studies are underway.



Site Description

Location:

- The Petro Processors Inc. Site consists of two locations near Scotlandville, East Baton Rouge Parish, Louisiana, about ten miles north of the City of Baton Rouge.
- The Scenic Highway Site is located just west of US Highway 61 and north of the intersection of Scenic Highway 964 and US Highway 61.
- The Brooklawn Site is located about 2 miles west, southwest of the Scenic Site.

Population:

• The community predominantly rural with a few houses located about 800 to 1000 feet from the border of Scenic Highway.

Setting:

- Nearest residence is about 3,000 feet from the site.
- Nearest drinking water well is 3,000 ft. upgradient of the site.
- The Petro Processors Site is comprised of two former petrochemical disposal areas situated about 1.5 miles apart: the Scenic Highway Area and the Brooklawn Area.
- Both areas total 62 acres; Brooklawn is the larger of the two areas.
- The Scenic site is now covered by a soil cap and seeded and the area is contoured to control erosion. No recovery wells have yet been placed to contain the shallow groundwater.
- Most of the Brooklawn area has been covered by a soil cap and seeded and the area is contoured to control erosion. Approximately 97 sumps have been placed and are in operation at the Brooklawn Site. Recovery wells in operation total about 100, with new wells being installed every week.
- Brooklawn still has two disposal ponds which remain open (Upper and Lower Lagoon); all other pits and one former pond ("Cypress Swamp") have been filled and evered. An old channel of Bayou Baton Rouge runs through part of the area and may be a conduit for migration of wastes.

Hydrology:

- Portions of both sites are on the Bayou Baton Rouge flood plain.
- The bayou flood plain at Brooklawn is also on the Mississippi River flood plain; the Mississippi River flood plain immediately south of Brooklawn (Devil's Swamp) is a Wetlands.
- Pleistocene terrace deposits are predominately clays, while alluvium deposits are interlayered silty clays and sandy silts.
- The shallow ground water regime is referred to as 40 MSL zone. The deep groundwater regime of concern is the "400-foot sand".
- Receptor analysis modeling is being conducted to protect the N400-foot sand".

Wastes and Volumes _

- The site's principle pollutants are petrochemical wastes including the following:
 - Chlorinated Hydrocarbons (Hexachlorobutadiene is predominant contaminant)
 - Polycyclic Aromatic Hydrocarbons (PAHs)
 - Heavy Metals
 - Oils

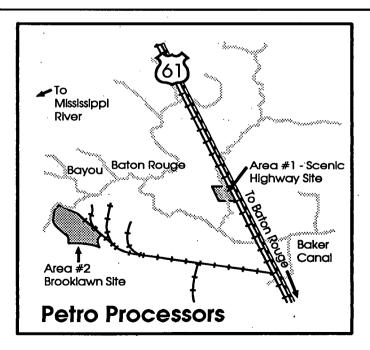
Site Assessment and Ranking

NPL LISTING HISTORY Site HRS Score: 41.44

Proposed Date: 9/8/83 Final Date: 9/21/84 NPL Update: No. 1

Site Map and Diagram





The Remediation Process

Site History:

- The Scenic Highway Site originated as a borrow pit used for petrochemical waste disposal from 1961-1974. Brooklawn was opened in 1969 to accept petrochemical wastes since the Scenic area was filled to capacity.
- Although siled and closed in 1974, the potential for leachate migration and erosion of the Scenic pit was of concern due to the hazardous constituents contained in the pit. Operations at Brooklawn ceased in 1980, but ponds were left open to the elements.
- In July 1980, the U.S. Department of Justice, the State of Louisiana, the City of Baton Rouge, and the Parish of East Baton Rouge filed suite against PPI and several generators which had materials transported to PPI. A Consent Decree for site closure was eventually developed with the participation of all parties and court and was entered into the Federal Courts record on February 16, 1984.
- The Consent Decree required the Defendants to investigate, design and implement a conceptual remedial action specified in the Consent Decree. The conceptual remedy generally called for the excavation and solidification of all visible contamination at the site and subsequent placement into an onsite landfill with an "appropriate" liner and leachate collection system. Additional elements included the solidification, incineration, or off-site disposal of all nonaqueous phase wastes within the lagoons. In addition, recovery wells were to be installed and operated in those areas where free phase organic liquid.
- Shortly after the entering of the Consent Decree, the Industry Defendants (through a company they set up known as NPC Services, Inc.) prepared workplans, conducted investigations and prepared a Remedial Design and Construction Plan which detailed site remediation activities. Unfortunately, during the early phases of construction (late 1987) NPC's air monitoring program detected the release of volatile hazardous substances from the Brooklawn site. NPC determined that vapor emissions were, or could be, generated from several sources.
- NPC subsequently reported in a Supplemental Remedial Action Plan (SRAP) dated December 1988 that "After a thorough study of the causes and effects of these releases it was determined that remediation could not continue under the approved plan without causing further releases". Under the terms of the consent Decree, NPC was then required to examine alternate methods of remediation. The SRAP presents NPC's evaluation of alternate remediation methods.
- The various alternatives investigated by NPC included (1) modification of original closure plan by modifying excavation techniques and deploying typical emission source controls such as foams, water sprays, visqueen and soil covers, (2) in-situ volatilization, (3) bioremediation, (4) incineration, (5) solvent extraction, (6) in-situ solidification and capping, (7) vapor containment structures and (8) hydraulic containment and recovery. NPC determined that hydraulic recovery and containment was the only technology that could be safely employed at the present time due primarily to the potential for vapor emissions problems caused by implementation of the other technologies.

- Upon review, EPA Region 6 rejected the SRAP because it did not contain a sufficiently rigorous evaluation of the alternate technologies. EPA subsequently embarked upon its own review of possible alternative remediation technologies. Upon completion of its eighteen month long study, EPA concluded that two other technologies in addition to hydraulic containment and recovery had merit. These two alternatives included air/stream stripping and in-situ soil flushing. However, EPA recognized that these technologies needed to be bench-scale and pilot tested before EPA could argue their merit to a Federal Judge.
- The Federal Judge recognized EPA's concern and ordered Louisiana State University (LSU) to conduct research on the applicability of alternate technologies and to act as his expert witness to resolve technical disputes between the Industry Defendants and EPA. LSU is currently beginning its first phase of research.
- The end result of all the discussions between EPA, the State of Louisiana and the Federal Court, was an amended Consent Decree in 1987 which specified the implementation of hydraulic containment and recovery. NPC subsequently began additional investigation, design and construction activities necessary to implement the new remedy.

Health Considerations:

- Spontaneous ignition of the waste resulted in fires in the upper lagoon on several occasions.
- In 1969, a spill from the lagoons contaminated portions of a nearby ranch and 30 cattle were killed.
- Site is located over the "400-foot sands". a major drinking water aquifer.

Other Environmental Risks:

- Lagoons are in the Mississippi River flood plain.
- Bayou Baton Rouge flows by both sites and fingers into Devil's Swamp, a Wetlands area immediately south of Brooklawn. This area is used recreationally.

Record of Decision

Signed: Consent Decree 1984
Amended: Consent Decree 1989

- The existing 1984 Consent Decree and 1989 Amendment may be considered a Source Control and Groundwater Containment Remedial Action for the Petro Processors Site.
- The Supplemental Remedial Action Plan (SRAP), incorporated by reference into the Consent Decree calls for a system of about 200 recovery and containment wells at the Brooklawn Site, following capping of the contaminated lagoons. A similar system will be designed for Scenic.

Community Involvement

- Community Involvement Plan: Developed 10/84, revised 01/88, and again revised 03/91.
- Open houses and workshops: 7/90, 1/91, 3/94, 7/94
- Original Proposed Plan Fact Sheet and Public Meeting: /.
- Original ROD Fact Sheet:
- Milestone Fact Sheets: 07/87 press release; update 02/89; 10/89, 06/90, 02/91, 3/91.
- Citizens on site mailing list: 112
- Constituency Interest: Concerned. Odors, contamination of air, surface and ground water, PRP oversight.
- Site Repository: Alsen Community Center

Technical Assistance Grant

- Availability Notice: None
- Letters of Intent Received:
 - 1) 9/18/90 Coalition for Community Action:
 - 2) LOI notice published 10/14/90.
- Final Application Received: 01/23/91
- Grant Award: 09/05/91
- Current Status:

Fiscal and Program Management

- Remedial Project Manager: Cynthia Kaleri
- State Contact: Harold Etheridge
 Community Involvement Coordinator: Melanic Cativeros Lillard
- Attorney: Jon Weisberg
- State Coordinator: Mack Some white
- Plane Contractor: PRC, 1.10. Oversight, EPA

NPC, Inc. - Pars' Remedial Company

Cost Recovery:

- PRPs Identified: 11
- Viable PRP: Petro Processors of Louisiana, Inc.; J.S. Steel Corp., Capplymer Rubber and Chemical Corp.; Uniroyal, Inc.; Ethyl Corp.; Dow Chemical Co.; Shell Oil Company, American Hoechst Corp.; Exxon Corp.; Exxon Chemical Co.; Allied Chemical Corp.; Rubicon Chemicals Corporation.
- Chersight of the implementation of the Consent Decree. Consent Decree entered into the Record on February 17, 1984.

Present Status and Issues		•	
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- The existing 1984 Consent Decree and 1989 Amendment may be considered a Source Control and Groundwater Containment Remedial Action for the Petro Processors Site. Site boundaries are well defined by the Remedial Planning Activities Report, incorporated by reference into the Consent Decree.
- The Supplemental Remedial Action Plan (SRAP) called for a system of about 200 recovery and containment wells at the Brooklawn Site, following capping of the contaminated lagoons.
- An air emissions risk assessment was conducted utilizing data from previous years, before the caps were in place. Excess risks calculated were within or less than EPA's risk range of 10-4 10-6.
- All contaminated source areas, except the upper and lower lagoons at the Brooklawn Site are capped and a full scale treatment facility is operational for the wells currently in place. A similar system for the Scenic Highway Site is being developed; the Scenic Site cap is now in place.

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- An air pathway risk assessment was conducted utilizing historical data to assess the impact from the 2 lagoons left open. Excess risks calculated were within or less than the risk range established in the NCP for remedial actions.
- A full scale treatment facility has been constructed at the Brooklawn location to manage contaminated groundwater and organics currently being recovered from Brooklawn and that planned to be recovered from Scenic. The treatment scheme includes the following: 1) Phase separate water and organics; 2) air strip contaminated water; 3) incinerate fumes from air strippers and incinerate organic liquids from phase separation unit; 4) polish treated water via carbon adsorption; and 5) discharge the water under an NPDES permit. Although the facility is operational, final testing for the incinerator, liquid mode is not complete so organic liquids are currently being stored onsite.
- A trial burn (agency oversight testing of the liquid mode operation of the incinerator) is scheduled for November 7, 1994 and the facility will be fully operational following the trial burn since the incinerator may continue to operate under an interim status prior to final operating conditions being set.
- With operation of the new facility, plans are also underway for closing out the upper and lower lagoons.

Cleanup Measurements

• Construction of some phases of the remedy, such as the engineered clay fills covering the Brooklawn and Scenic sites, the installation of a french drain system in Cypress Swamp and recovery wells at Brooklawn, have been completed. These measures have helped to reduce the migration of contaminants and prevent air emissions from the source areas. With operation of the full scale treatment facility, wells can be added at Scenic to complete the containment/recovery remedy.