# SUPERFUND: Progress at National Priority List Sites

# FLORIDA 1995 UPDATE

# How to Use the NPL Book

The site fact sheets presented in this book are comprehensive summaries that cover a broad range of information. The fact sheets describe hazardous waste sites on the NPL and their locations, as well as the conditions leading to their listing ("Site Description"). The summaries list the types of contaminants that have been discovered and related threats to public and ecological health ("Threats and Contaminants"). "Cleanup Approach" presents an overview of the cleanup activities completed, underway, or planned. The fact sheets conclude with a brief synopsis of how much progress has been made in protecting public health and the environment. The summaries also pinpoint other actions, such as legal efforts to involve polluters responsible for site contamination and community concerns.

The fact sheets are arranged in alphabetical order by site name. Because site cleanup is a dynamic and gradual process, all site information is accurate as of the date shown on the bottom of each page. Progress is always being made at NPL sites, and the EPA periodically will update the site fact sheets to reflect recent actions. The following two pages show a generic fact sheet and briefly describe the information under each section.

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# How Can You Use This State Book?

You can use this book to keep informed about the sites that concern you, particularly ones close to home. The EPA is committed to involving the public in the decision making process associated with hazardous waste cleanup. The Agency solicits input from area residents in communities affected by Superfund sites. Citizens are likely to be affected not only by hazardous site conditions, but also by the remedies that combat them. Site cleanups take many forms and can affect communities in different ways. Local traffic may be rerouted, residents may be relocated, temporary water supplies may be necessary.

Definitive information on a site can help citizens sift through alternatives and make decisions. To make good choices, you must know what the threats are and how the EPA intends to clean up the site. You must understand the cleanup alternatives being proposed for site cleanup and how residents may be affected by each one. You also need to have some idea of how your community intends to use the site in the future, and you need to know what the community can realistically expect once the cleanup is complete.

The EPA wants to develop cleanup methods that meet community needs, but the Agency only can take local concerns into account if it understands what they are. Information must travel both ways in order for cleanups to be effective and satisfactory. Please take this opportunity to learn more, become involved, and assure that hazardous waste cleanup at "your" site considers your community's concerns.

## NPL LISTING HISTORY

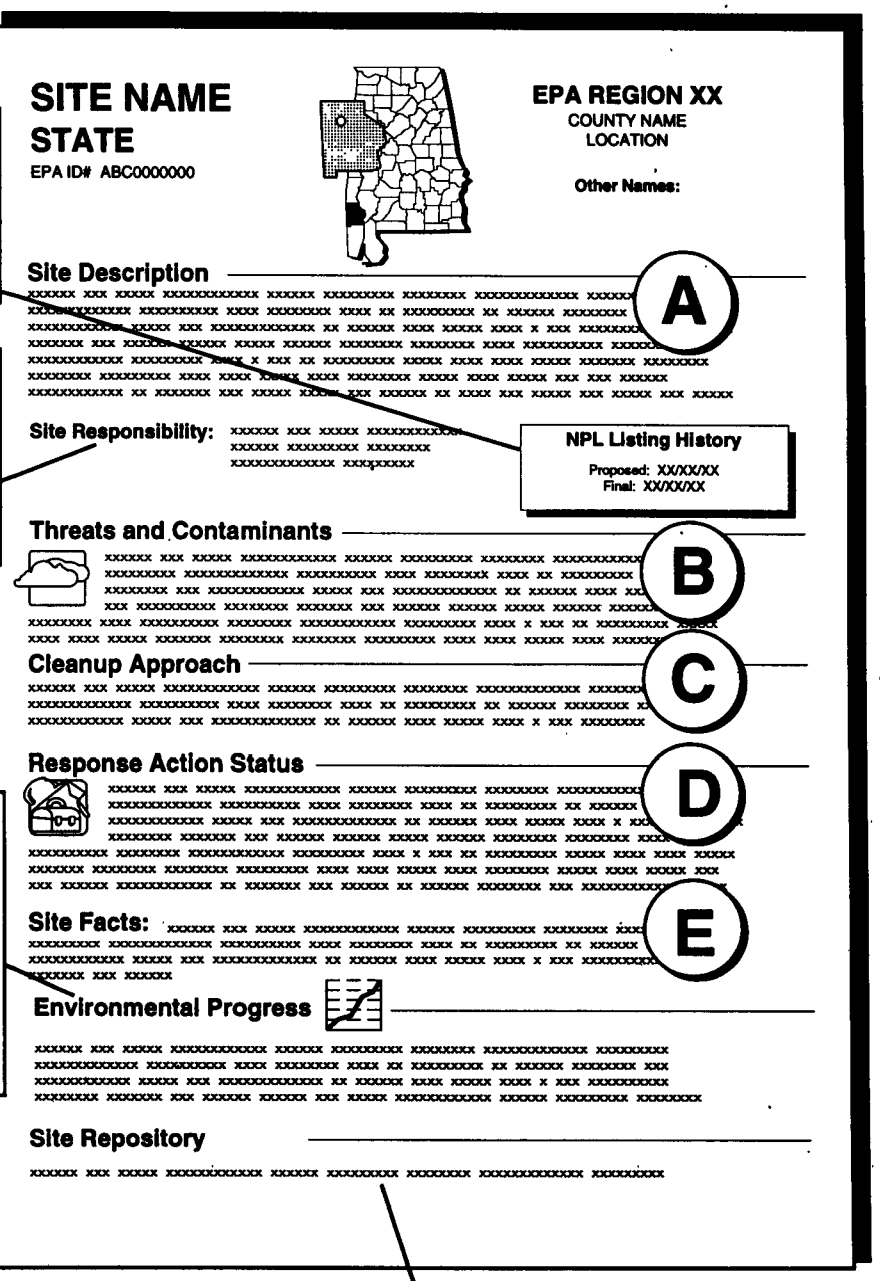
Provides the dates when the site was Proposed, made Final, and Deleted from the NPL.

## SITE RESPONSIBILITY

Identifies the Federal, State, and/or potentially responsible parties taking responsibility for cleanup actions at the site.

## ENVIRONMENTAL PROGRESS

Summarizes the actions to reduce the threats to nearby residents and the surrounding environment and the progress towards cleaning up the site.




## SITE REPOSITORY

Lists the location of the primary site repository. The site repository may include community relations plans, public meeting announcements and minutes, fact sheets, press releases, and other site-related documents.

A

## SITE DESCRIPTION

This section describes the location and history of the site. It includes descriptions of the most recent activities and past actions at the site that have contributed to the contamination. Population estimates, land usages, and nearby resources give readers background on the local setting surrounding the site.

B

## THREATS AND CONTAMINANTS

The major chemical categories of site contamination are noted, as well as which environmental resources are affected. Icons representing each of the affected resources (may include air, groundwater, surface water, soil, and contamination to environmentally sensitive areas) are included in the margins of this section. Potential threats to residents and the surrounding environments arising from the site contamination also are described.

C

## CLEANUP APPROACH

This section contains a brief overview of how the site is being cleaned up.

D

## RESPONSE ACTION STATUS

Specific actions that have been accomplished or will be undertaken to clean up the site are described here. Cleanup activities at NPL sites are divided into separate phases, depending on the complexity and required actions at the site. Two major types of cleanup activities often are described: initial, immediate, or emergency actions to quickly remove or reduce imminent threats to the community and surrounding areas; and long-term remedial phases directed at final cleanup at the site. Each stage of the cleanup strategy is presented in this section of the summary. Icons representing the stage of the cleanup process (initial actions, site investigations, EPA selection of the cleanup remedy, engineering design phase, cleanup activities underway, and completed cleanup) are located in the margin next to each activity description.

E

## SITE FACTS

Additional information on activities and events at the site are included in this section. Often details on legal or administrative actions taken by the EPA to achieve site cleanup or other facts pertaining to community involvement with the site cleanup process are reported here.

# Guide to the NPL Book Icons

The "icons," or symbols, accompanying the text allow the reader to see at a glance which environmental resources are affected and the status of cleanup activities at the site.

## Icons in the Threats and Contaminants Section

Contaminated *Groundwater* resources in the vicinity or underlying the site. (Groundwater is often used as a drinking water source.)

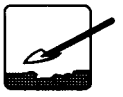
Contaminated *Surface Water and Sediments* on or near the site. (These include lakes, ponds, streams, and rivers.)

Contaminated *Air* in the vicinity of the site. (Air pollution usually is periodic and involves contaminated dust particles or hazardous gas emissions.)

Contaminated *Soil and Sludges* on or near the site. (This contamination category may include bulk or other surface hazardous wastes found on the site.)

Threatened or contaminated *Environmentally Sensitive Areas* in the vicinity of the site. (Examples include wetlands and coastal areas or critical habitats.)

## Icons in the Response Action Status Section



*Initial, Immediate, or Emergency Actions* have been taken or are underway to eliminate immediate threats at the site.

*Site Studies* at the site to determine the nature and extent of contamination are planned or underway.


*Remedy Selected* indicates that site investigations have been concluded, and the EPA has selected a final cleanup remedy for the site or part of the site.

*Remedy Design* means that engineers are preparing specifications and drawings for the selected cleanup technologies.

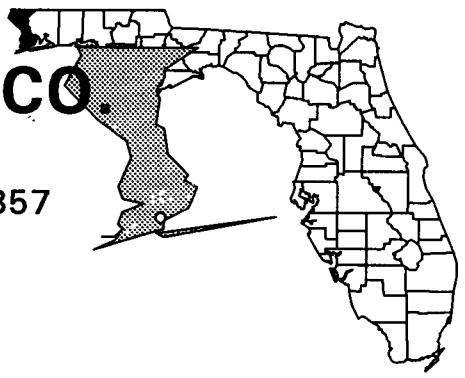
*Cleanup Ongoing* indicates that the selected cleanup remedies for the contaminated site, or part of the site, currently are underway.

*Cleanup Complete* shows that all cleanup goals have been achieved for the contaminated site or part of the site.

| EPA ID NUMBER | SITE NAME |
|---|---|
| FLD980221857 | AGRICO CHEMICAL CO. |
| FLD004145140 | AIRCO PLATING CO. |
| FLD041495441 | ALPHA CHEMICAL CORP. |
| FLD008161994 | AMERICAN CREOSOTE WORKS INC (PENSECOLA PLT) |
| FLD020536538 | ANACONDA ALUMINUM CO./MILGO ELECTRONICS |
| FLD981014368 | ANODYNE, INC. |
| FLD004574190 | B & B CHEMICAL CO., INC. |
| FLD980494660 | BEULAH LANDFILL |
| FLD052172954 | BMI-TEXTRON |
| FLD981930506 | BROWARD COUNTY - 21ST MANOR DUMP |
| FLD980728935 | BROWN WOOD PRESERVING |
| FLD980709356 | CABOT/KOPPERS |
| FL5170022474 | CECIL FIELD NAVAL AIR STATION |
| FLD080174402 | CHEMFORM, INC. |
| FLD004064242 | CHEVRON CHEMICAL CO. (ORTHO DIVISION) |
| FLD055945653 | CITY INDUSTRIES, INC. |
| FLD991279894 | COLEMAN-EVANS WOOD PRESERVING CO. |
| FLD980602288 | DAVIE LANDFILL |
| FLD000833368 | DUBOSE OIL PRODUCTS CO. |
| FLD008168346 | ESCAMBIA WOOD-PENSACOLA |
| FLD050432251 | FLORIDA STEEL CORP. |
| FLD071307680 | GOLD COAST OIL CORP. |
| FLD000602334 | HARRIS CORP. (PALM BAY PLANT) |
| FLD053502696 | HELENA CHEMICAL CO. (TAMPA PLANT) |
| FLD980709802 | HIPPS ROAD LANDFILL |
| FLD004119681 | HOLLINGSWORTH SOLDERLESS TERMINAL |
| FL7570024037 | HOMESTEAD AIR FORCE BASE |
| FL6170024412 | JACKSONVILLE NAVAL AIR STATION |
| FLD980727820 | KASSAUF-KIMERLING BATTERY DISPOSAL |
| FLD981019235 | MADISON COUNTY SANITARY LANDFILL |
| FLD076027820 | MIAMI DRUM SERVICES |
| FLD084535442 | MUNISPORT LANDFILL |
| FLD980602643 | NORTHWEST 58TH STREET LANDFILL |
| FLD041140344 | PARRAMORE SURPLUS |
| FLD004091807 | PEAK OIL CO./BAY DRUM CO. |
| FL9170024567 | PENSACOLA NAVAL AIR STATION |
| FLD032544587 | PEPPER STEEL & ALLOYS, INC. |
| FLD980798698 | PETROLEUM PRODUCTS CORP. |
| FLD980556351 | PICKETTVILLE ROAD LANDFILL |
| FLD056116965 | PIONEER SAND CO |
| FLD004054284 | PIPER AIRCRAFT/VERO BEACH WATER & SEWER |
| FLD984167569 | PLYMOUTH AVENUE LANDFILL |
| FLD000824896 | REEVES SOUTHEAST GALVANIZING CORP. |
| FLD980602882 | SAPP BATTERY SALVAGE |
| FLD062794003 | SCHUYLKILL METAL CORP. |
| FLD043861392 | SHERWOOD MEDICAL INDUSTRIES |
| FLD980728877 | SIXTY-SECOND STREET DUMP |
| FLD004126520 | STANDARD AUTO BUMPER CORP. |
| FLD004092532 | STAUFFER CHEMICAL CO. (TAMPA PLANT) |
| FLD010596013 | STAUFFER CHEMICAL CO. (TARPON SPRINGS) |

| EPA ID NUMBER | SITE NAME |
|---|---|
| FLD000648055 | SYDNEY MINE SLUDGE PONDS |
| FLD980494959 | TAYLOR ROAD LANDFILL |
| FLD004065546 | TOWER CHEMICAL CO |
| FLD070864541 | TRI-CITY OIL CONSERVATIONIST CORP |
| FLD980602346 | VARSOL SPILL SITE |
| FLD980602767 | WHITEHOUSE OIL PITS |
| FL2170023244 | WHITING FIELD NAVAL AIR STATION |
| FLD041184383 | WILSON CONCEPTS OF FLORIDA, INC. |
| FLD981021470 | WINGATE ROAD MUNICIPAL INCINERATOR DUMP |
| FLD004146346 | WOODBURY CHEMICAL CO. (PRINCETON PLANT) |
| FLD980844179 | YELLOW WATER ROAD DUMP |
| FLD049985302 | ZELLWOOD GROUND WATER CONTAMINATION |

# AGRICO CHEMICAL CO.
## FLORIDA
EPA ID# FLD980221857



**EPA REGION 4**
Escambia County
2 miles southwest of
Pensacola Municipal Airport

## Site Description

The 30-acre Agrico Chemical Co. site is bordered on the north by undeveloped land that is used for recreational purposes, on the east by interstate 110, on the south by Fairfield Drive, and on the west by CSX Transportation tracks. Industrial activity on the site began in 1889, when a company started producing sulfuric acid from iron pyrite. Around 1920, the American Agriculture Chemical Company began making fertilizer from phosphate rock. The plant underwent numerous ownership changes and its name was changed to Agrico. In 1975, Agrico stopped production, tore down the buildings, and sold the land. All that remains on the site are the foundations of five buildings, including a plant where phosphate was processed. Four ponds that were used to store liquid manufacturing wastes lie to the north and east of the ruins. In 1958, a municipal water well 1 1/4 miles from the site was closed due to high acidity and fluoride concentrations. The primary aquifer under the site is highly permeable, which facilitates the movement of contaminants into the groundwater. Given the direction of the flow, any contamination could enter Bayou Texar or Pensacola Bay. Thirteen county wells serving approximately 114,000 people lie within 3 miles of the site. Few residents live in the immediate vicinity of the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 10/04/89

## Threats and Contaminants

The groundwater, soil, and surface water are contaminated with fluoride, lead and arsenic. Investigations have revealed that the groundwater plume associated with the site is impacting Bayou Texar, a bayou located approximately 1 mile downgradient from the site. Residences in the immediate vicinity of the site are connected to the city water supply and are at little risk of contamination.

## Cleanup Approach

This site is being addressed in two long-term remedial phases focusing on source control and water pollution.

### Response Action Status

**Source Control:** An investigation of on-site soils was completed in 1992. The selected remedy includes: solidification/stabilization of soils; construction of a multi-media cap over the affected areas; and the construction of a slurry wall. Following completion of technical designs of the remedy, construction began in late 1994, and is expected to be completed in late 1996.

**Water Pollution:** Under EPA oversight, the parties potentially responsible for site contamination completed an intensive study of site problems. The selected remedy to address the groundwater contamination includes: groundwater monitoring, surveying of irrigation wells, surface water monitoring of affected bayou advisory programs, establishing institutional controls, and plugging four abandoned irrigation wells with owners' permission.

## Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that no immediate actions were needed at the Agrico Chemical Co. site while cleanup actions are being planned and constructed.

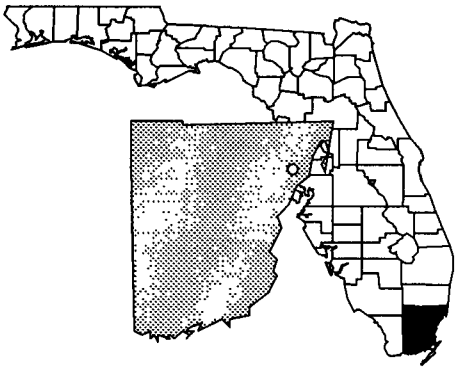
## Site Repository

Pensacola Public Library, 200 West Gregory Street, Pensacola, FL 32501

# AIRCO PLATING CO.

## FLORIDA

EPA ID# FLD004145140



**EPA REGION 4**

Dade County
Miami

## Site Description

The 1 1/2-acre Airco Plating Co. site has operated as an electroplating shop since 1957. Nickel, cadmium, chromium, copper, and zinc plating are the chief processes. Before 1973, operators disposed of plating wastes, including sludge, in three on-site seepage ponds. Since 1973, treated wastes have been released to the Miami sewage system. Since 1982, workers have separated out the sludges and shipped them to an EPA-approved hazardous waste facility. During a 1985 investigation, the EPA discovered that one of the former seepage ponds had been covered with asphalt pavement and a lawn. Soil and groundwater near the ponds contained contaminants associated with electroplating. The site lies over the recharge zone for the Biscayne Aquifer, which supplies drinking water for all of Dade County. Four municipal well fields supplying water to approximately 750,000 people are within 3 miles of the site. These wells are retrofitted with air strippers, because of contamination from a variety of sources. The site is located in a primarily industrial area about a mile north of the Miami International Airport. An estimated 6,500 people live within a 1-mile radius of the site. The Miami Canal, which flows into the Miami River, is located about 1/2 mile from the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 02/21/90

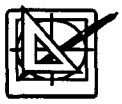
## Threats and Contaminants

Shallow groundwater in the areas of the ponds, surface and sub-surface soil near the ponds, and the lawn area between the ponds are contaminated with perchloroethylene (PCE) and heavy metals including cadmium, chromium, copper, and nickel from former electroplating operations. PCE also has been detected at elevated concentrations in the deep groundwater under the site. The individuals who are most at risk of contact with contaminated soils are workers conducting cleanup activities at the site. Future users of the groundwater in this area could be exposed to PCE.

## Cleanup Approach

The site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status



**Entire Site:** The parties potentially responsible for the contamination of the site began an intensive study of soil and water contamination in 1991. This investigation explored the nature and extent of pollution of the soil and groundwater, and recommended the best strategies for final cleanup. The remedy selected includes soil vapor extraction, capping, and a groundwater pump and treat system that includes air stripping. The potentially responsible parties are currently conducting engineering designs under EPA oversight.

**Site Facts:** A site investigation was performed by the parties potentially responsible for site contamination under an order issued by Dade County. The EPA entered into a separate agreement with the parties to complete site sampling and to evaluate cleanup technologies.

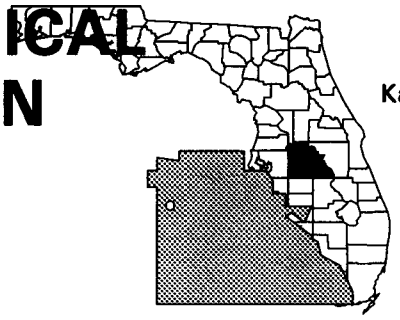
## Environmental Progress

The EPA performed preliminary site investigations and determined that, with no private drinking water wells in the area adjacent to the site, there are no immediate threats at the Airco Plating Co. site while the potentially responsible parties complete engineering designs for the final cleanup activities.

## Site Repository

JFK Public Library, 190 West 49th Street, Hialeah, FL 33012

# ALPHA CHEMICAL CORPORATION
## FLORIDA
EPA ID# FLD041495441



**EPA REGION 4**
Polk County
Kathleen, 3 miles north of Lakeland

**Other Names:**
**Alpha Resins Corporation**

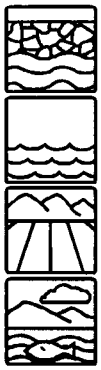
## Site Description

The Alpha Resins Corporation (ARC), formerly known as Alpha Chemical Corporation, is a wholly-owned subsidiary of the Alpha Corporation of Tennessee and has produced unsaturated polyester resin for fiberglass manufacturers at this 32-acre site since 1967. The process yields wastewater containing small amounts of volatile organic compounds (VOCs). Under a State permit, the company disposed of this waste in two unlined surface ponds (Pond #4 and #3-2), relying on natural biological processes to break down the organics. In 1976, ARC began incinerating the wastewater instead. Pond #4 dried up, and workers used the area as a solid waste landfill for a year, covering it with soil in 1977. In 1977, Pond #3-2 was divided, and sludge waters were pumped from #2 to #3. Pond #2 was lined with concrete to receive wastewater. No waste was discharged from Pond #2, and this pond was covered with soil in 1988. In 1982, when ARC sought to line Pond #3 with concrete for caustic wash water disposal, the Florida Department of Environmental Regulations (FDER) requested groundwater monitoring information. New monitoring wells revealed contamination of the surficial aquifer. Of the 23 organic compounds detected, ethyl benzene occurred most often and in the highest concentrations. The area around the site is residential and commercial. Approximately 650 people live within ½ mile of the site. A 20 foot thick impermeable clay layer shields the Floridian Aquifer from contaminated groundwater; this aquifer, which provides drinking water for area residents, is not polluted. Surface water from the site drains into a vegetated, low-lying wetland.

**Site Responsibility:** This site was addressed through Federal, State, and potentially responsible parties actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



The groundwater, sediments, and soil were found to be contaminated with VOCs, mainly ethyl benzene and xylene from former process wastes. There is no threat to the public, since the surficial aquifer is not used for drinking water, and no contamination has been detected in the deeper Floridian aquifer.

## Cleanup Approach

### Response Action Status

**Entire Site:** The EPA selected a cleanup remedy for this site in 1988, which featured capping the small, unlined, Pond #3 to keep rainwater and runoff from spreading contaminants and long-term monitoring of groundwater and surface water to assure the effectiveness of cleanup. The parties potentially responsible for contamination at the site conducted the engineering design and began cleanup activities in 1989. Construction of the cap was completed later that year and sampling of the groundwater and surface water is ongoing. Monitoring of groundwater samples have shown that the site no longer poses a risk to the public or environment. In 1994, EPA conducted a 5-year review to assess the need for continued monitoring and the effectiveness of the cap. The review confirmed the results of the groundwater monitoring. Based on this review and the monitoring results, EPA plans to delete the site from the NPL in 1995, following public notification.

**Site Facts:** A Consent Decree was signed in 1989 by the State and the parties potentially responsible for the contamination to clean up the site.

## Environmental Progress

Cleanup activities have been completed at the Alpha Chemical site and monitoring of groundwater and surface water has ensured the effectiveness of the remedy and safe conditions for nearby residents and the environment.

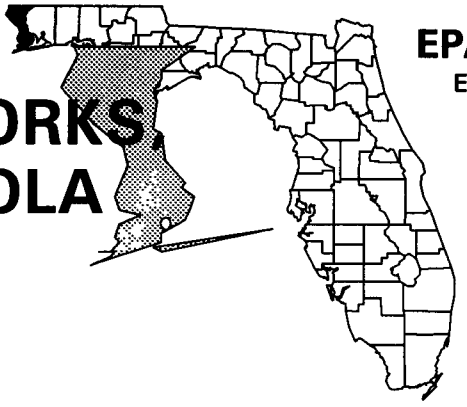
## Site Repository

Lakeland Public Library, 100 Lake Morton Drive, Lakeland, FL 33801

# AMERICAN CREOSOTE WORKS, INC. (PENSACOLA PLANT)

## FLORIDA

EPA ID# FLD008161994



**EPA REGION 4**
Escambia County
Pensacola

## Site Description

The 18-acre American Creosote Works, Inc. (Pensacola Plant) site is an inactive wood-treating facility in Pensacola, located about 1/4 mile north of the confluence of Bayou Chico and Pensacola Bay. It operated from the early 1900s until 1981, when the company filed for bankruptcy. Workers treated poles with creosote before 1950, when they began using pentachlorophenol (PCP) with increasing regularity. Operators discharged liquid process wastes into two unlined, 80,000-gallon percolation ponds. Before 1970, these wastewaters were allowed to overflow through a spillway and follow a drainage course into Bayou Chico and Pensacola Bay. Later, workers drew wastewaters off the ponds periodically and discharged them into designated "spillage areas" on site. Additional discharges occurred when heavy rainfall flooded the ponds, which then overflowed their dikes. The site lies in a commercial and residential area. No drinking water wells lie within the area of known contamination.

**Site Responsibility:** This site is being addressed through Federal actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

Major contaminants in the soil and groundwater are volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs), PCP, and dioxin from the former wood-treating processes. PAHs also were found in sediments from a drainage ditch off-site. Additional bay sediment sampling did not reveal significant contamination. Exposure from inhaling dust on the site and accidentally ingesting or coming into direct contact with contaminated soils or groundwater may pose a health risk.

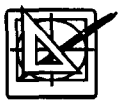
## Cleanup Approach

This site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on soil and sludge cleanup and long-term groundwater treatment.

### Response Action Status

**Emergency Actions:** The EPA undertook several emergency actions at this site. In 1983, workers drained, treated, and discharged contaminated water in the on-site ponds, solidifying the remaining sludge and temporarily capping this solidified material with a layer of clay to keep rainfall and runoff from spreading contaminants. In 1984, the drums on the site were staged and a fence was built around them. In 1985 and 1986, the cap was repaired and workers installed a fence around the capped area. In 1991, old process buildings were demolished, a nearby private irrigation well was plugged, debris was removed from the site, and the cap and fence were repaired.

**Soil and Sludge Cleanup:** In 1989, the EPA selected biological treatment for addressing PAH and PCP contamination in surface soils at the site. However, the results of treatability studies conducted during the design phase indicated that biological treatment might not be effective in addressing the contaminants in the soil. For this reason, the EPA is evaluating new alternatives for the combined treatment of surface and subsurface soils and solidified sludges. A revised remedy identifying the EPA's preferred method of cleanup is anticipated in mid-1995.



**Groundwater Cleanup:** In February 1994, the EPA selected a combination of enhanced recovery of dense non-aquiring phase liquids (DNAPLs) followed by biological treatment to address groundwater contamination. Following the completion of design investigations and the development of plans and specifications, the EPA anticipates awarding a construction contract in early 1996.

## Environmental Progress

The soil excavation, capping, fence installation, and other emergency actions performed by the EPA have reduced the potential for exposure to contaminants at the American Creosote Works, Inc. (Pensacola Plant) site while groundwater design activities and soil cleanup remedies are being completed.

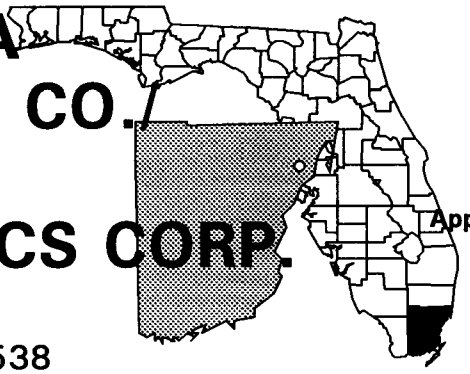
## Site Repository

West Florida Regional Library, 200 West Gregory Street, Pensacola, FL 32501

# ANACONDA ALUMINUM CO./ MILGO ELECTRONICS CORP.

## FLORIDA

EPA ID# FLD020536538



**EPA REGION 4**

Dade County
Miami

**Other Names:**
**Anaconda Aluminum**
**Applied Technologies and Engineering**
**Milgo Electronics Corporation**

## Site Description

The 1½ acre Anaconda Aluminum Co./Milgo Electronics Corp. site is composed of two facilities located directly across the street from each other. The two facilities are Anaconda Aluminum and Milgo Electronics. The Anaconda portion of the site covers approximately 1 acre. Operations began in 1957 and consisted of an electrochemical process using acids and an aluminum-laden caustic base to produce a film of protective coating on aluminum. Raw materials used in the process included sulfuric acid, sodium hydroxide, caustic soda, detergents, and dyes. Waste anodizing sludge was pumped to a cement neutralizing pit where sulfuric acid or caustic soda was added to balance the pH levels. Air was used for mixing, and then solids were left to settle on the bottom. The clear liquid was pumped to a soakage pit for disposal to the groundwater. The sludge subsequently was disposed of at the County dump. The soakage pit had a holding capacity of approximately 1,900 gallons and was licensed by the County. In 1979, the County required Anaconda to install a groundwater monitoring well southeast of the pit. Anaconda ceased operations in early 1983. Operations began at the Milgo portion of the site in 1961 and consisted of chrome, nickel, and copper electroplating of data processing equipment and the manufacturing of cabinets for electronic components. A chrome reduction treatment system discharged treated wastewater to a 360-square-foot drainfield on the premises. The system was designed to treat an average daily flow of 7,200 gallons. Samples collected from the effluent in 1973 by the County contained iron, chromium, zinc, and lead. Approximately 1,200 gallons of sludge generated yearly by the treatment system were removed by tanker truck and hauled off site. Operations at Milgo ceased in summer 1984. Both companies disposed of liquid wastes via on-site drainfields. Sampling conducted in 1987 indicated heavy metal contamination in the groundwater. The contaminated groundwater reaches the Biscayne Aquifer, the source of drinking water for approximately 750,000 residents of the Miami area. The site is located in an industrialized area northeast of Miami International Airport.

**Site Responsibility:** The site is being addressed through Federal and State actions.

**NPL LISTING HISTORY**
Proposed Date: 11/14/89
Final Date: 08/30/90

## Threats and Contaminants

The groundwater contained cyanide and heavy metals such as cadmium, lead, zinc, iron, selenium, chromium, and copper from the former manufacturing and process waste disposal practices. Sediment, surface water, and soils contained heavy metals such as mercury, selenium, and arsenic. There was a potential health threat if people came into direct contact with the contaminated groundwater, soil, sediments, or surface water; however, sampling has indicated there are no current human health threats from this site.

## Cleanup Approach

### Response Action Status

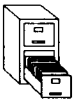
**Early Action:** In 1993, the parties potentially responsible for site contamination conducted a removal of source soils from different areas, but concentrated on an alley way at the site. This excavated area measured 50 feet by 7 feet, with a depth of 7 feet. All soils were removed and disposed of at an EPA-approved facility.


**Entire Site:** Following the 1993 soil removal, the EPA completed an investigation of the site. The investigation indicated that the site no longer posed a threat to public health or the environment. The EPA proceeded to choose a "no further action" remedy for the site. The groundwater has been monitored on a quarterly basis for one year; the final measurement is scheduled to occur in mid-1995. Following final testing of the groundwater in 1995, procedures for deleting Anaconda Aluminum Company/Milgo Electronics Corporation from the NPL will begin.

## Environmental Progress

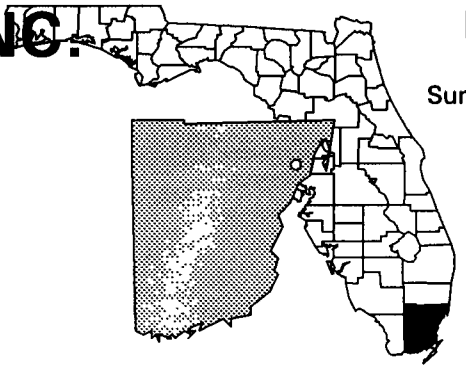
After removing contaminated source soils from the Anaconda Aluminum Co./Milgro Electronics Corp. site to the NPL, the EPA determined that the site no longer poses a threat to public health or the environment. Procedures for deleting the site are expected to begin in 1995.

## Site Repository



North Central Library, 9590 NW 27th Avenue, Miami, Florida

# ANODYNE, INC.
## FLORIDA
EPA ID# FLD981014368



**EPA REGION 4**
Dade County
Sunshine State Industrial Park
in North Miami Beach

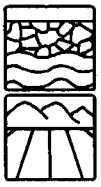
## Site Description

The Anodyne, Inc. site is a building in North Miami Beach that covers less than an acre. The building periodically is leased to various service-oriented businesses. From the early 1960s until 1975, however, Anodyne, Inc. produced lithographs and silkscreen prints on the site. Workers reportedly disposed of wastes in an injection well near the building as early as 1960. In a 1973 inspection, Dade County discovered that the waste also was being dumped directly onto the ground. Groundwater contamination was discovered in 1986 as a result of an EPA inspection of the site. The Biscayne Aquifer, which supplies drinking water for all of Dade County, is directly beneath the site. The site is located in an industrial park. The W.A. Oeffler and Westside well fields are within 3 miles of the site; they provide drinking water to approximately 148,000 people.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 03/21/66
Final Date: 02/21/90

## Threats and Contaminants

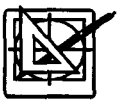


Investigations completed in 1992 identified elevated levels of several heavy metals from former site operations in the shallow, on-site groundwater. In addition, a plume of contamination from volatile organic compounds (VOCs) is emanating from the injection well. Soil samples from the perimeter of the building contain elevated levels of several heavy metals. People may be placed at risk by coming into direct contact with or accidentally ingesting contaminated soil or groundwater.

## Cleanup Approach

Cleanup of the site is being addressed in a long-term approach for the entire site, which is separated into three areas: a lower groundwater zone of VOC contamination; an upper groundwater zone of VOC contamination; and the contaminated soil.

### Response Action Status



**Entire Site:** The site is divided into three areas: the lower groundwater zone; the upper groundwater zone; and the soil. Investigations were completed for all three areas in 1993. The chosen remedy for the lower groundwater zone is pumping and treating the contaminated groundwater plume using air stripping. The remedy for contaminated soil is excavation and removal from the site. The EPA expects that the removal of contaminated soils will achieve cleanup goals for the upper groundwater zone, although a pump and treat remedy is also in place as a contingent plan should the soil removal fail to achieve these goals. The remedies include long-term monitoring of both groundwater zones. Engineering designs have begun for both the upper groundwater zone and the lower groundwater zone, and construction is expected to begin in early 1996.

**Site Facts:** Because contamination is located in different areas of the site and there have been frequent changes in ownership, potential liability for cleanup is being separated for the deep and shallow zones of contamination.

## Environmental Progress

The EPA has investigated the site and determined that no immediate actions are necessary while design of the remedy for the deep plume of groundwater contamination is underway.

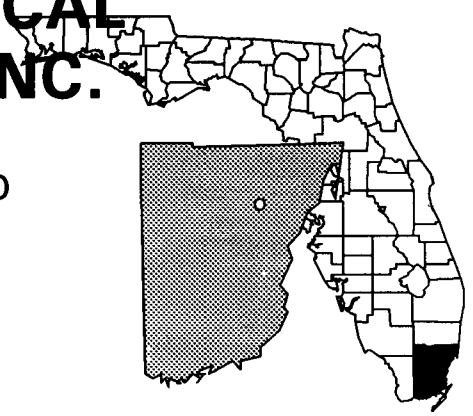
## Site Repository

North Dade Regional Library, 2455 NW 183rd Street, Miami, FL 33056

# B & B CHEMICAL COMPANY, INC.

## FLORIDA

EPA ID# FLD004574190



**EPA REGION 4**

Dade County
Hialeah

## Site Description

The B & B Chemical Company, Inc. has manufactured industrial cleaning compounds on this 2-acre site in Hialeah since 1962. The company prepares its products in mixing vats, which, along with the company's tank trucks, are washed down once a year. Before 1976, the wash water was put into unlined lagoons. Since then, the company has run it through a treatment system before discharging it to the Hialeah sewers. Officials have been concerned about the impact of the lagoons on groundwater quality since 1975. The underlying Biscayne Aquifer supplies drinking water for all of Dade County. This site is in a highly industrialized area. Four public well fields are within 3 miles of the site and serve approximately 750,000 people. One well is within 3,000 feet of the site. Production from the well fields has been curtailed due to groundwater contamination. The Miami Canal is 800 feet to the southwest of the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

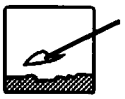
**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 08/30/90

## Threats and Contaminants

In 1985, the EPA found volatile organic compounds (VOCs) including chlorobenzenes and dichloroethylene from former manufacturing operations in monitoring wells on and off the site; they also found chromium in on-site wells. Drinking or coming into direct contact with polluted groundwater may pose a health threat.

## Cleanup Approach

### Response Action Status



**Initial Action:** B & B Chemical Company, under an agreement with Dade County, operated the groundwater recovery and treatment system at the site until July 1989, when they unilaterally stopped recovery of the groundwater. Groundwater recovery was restarted in November 1989.


**Entire Site:** In September 1994, EPA chose a remedy which includes the natural attenuation of groundwater contaminants, imposition of institutional controls over the south central part of the property, and groundwater monitoring to verify that cleanup through natural attenuation is occurring. Given the currently low contaminant concentrations in the groundwater and the observed decreasing trends in concentrations, it is anticipated that natural attenuation will further reduce groundwater contamination to established cleanup standards within 2 years.

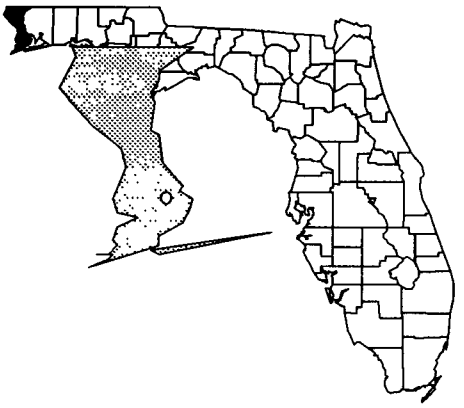
## Environmental Progress

The earlier groundwater treatment performed by the potentially responsible party has reduced the potential for exposure to contaminants from the B&B Chemical Company, Inc. site while natural attenuation of the contaminated groundwater is taking place.

## Site Repository

John F. Kennedy Library, 190 W. 49th Street, Hialeah, Florida

# BEULAH LANDFILL
## FLORIDA
EPA ID# FLD980494660



**EPA REGION 4**
Escambia County
Pensacola

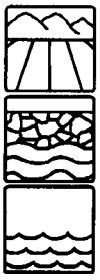
## Site Description

The 80-acre Beulah Landfill site was operated by Escambia County from 1950 to 1984. Its northern and southern sections were run independently. The northern landfill, used from 1950 to 1960, accepted mostly municipal trash. The southern sludge disposal pits began receiving domestic septic tank wastes in 1968 and continued to take municipal trash, industrial waste, demolition debris, and municipal sludges until 1984, when the State ordered a halt to operations at the pits. From 1980 to 1986, the landfill operated under State order, accepting only specified wastes. Several residences within 3 miles of the landfill use drinking water from the upper 150 feet of the local sand and gravel aquifer. The nearest well is 700 feet from the site. Eleven Mile Creek, at the downstream edge of the site, is used for recreational activities.

**Site Responsibility:** This site is being addressed through Federal and State actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 02/21/90

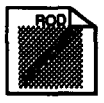
## Threats and Contaminants



EPA tests showed that wastes and soils on the site contain anthracene, naphthalene, fluoranthene, pyrene, pentachlorophenol (PCP), polychlorinated biphenyls (PCBs), and zinc. However, assessments indicated that these contaminants were within acceptable limits for the protection of human health and the environment. Pentachlorophenol was found to exist in an on-site well. This contaminant was added to the list of groundwater sampling parameters for which the Florida Department of Environmental Protection (FDEP) will be monitoring. The groundwater and surface water also are contaminated with low levels of zinc.

## Cleanup Approach

### Response Action Status




**Soil and Groundwater:** With EPA oversight, potentially responsible parties conducted an investigation of soil and groundwater contamination at the site. A "No Action" remedy was selected in 1993 because contamination was found to be within acceptable limits for the protection of human health and the environment.

**Site Facts:** From 1980 to 1986, the landfill operated under a Consent Order with the FDEP to accept only specified wastes. The potentially responsible parties, under an Administrative Order on Consent, were required to undertake investigations of the site.

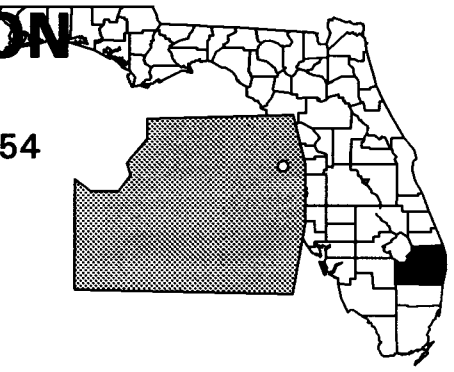
## Environmental Progress

Potentially responsible parties conducted an investigation that concluded that no cleanup actions were required at the Beulah Landfill site. The site is presently being closed in accordance with the State of Florida Landfill Closure Law. FDEP has taken the lead for closure of the site.

## Site Repository

George Stone Vocational School Media Center, 2400 Long Leaf Drive, Pensacola, Florida

# BMI-TEXTRON
## FLORIDA
EPA ID# FLD052172954



**EPA REGION 4**
Palm Beach County
Lake Park

**Other Names:**
**Basic Microelectronics, Inc.**

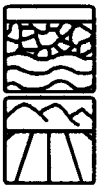
## Site Description

From 1969 until 1986, operators of the 3½-acre BMI-Textron facility made chrome-backed glass plates used in producing electronic components. Workers used cyanide to etch the glass. The facility discharged liquid wastes to percolation ponds and drain fields for four years under an industrial wastewater permit issued by the Florida Department of Environmental Regulation (FDER). Four wells at the facility monitored compliance with the terms of the permit. In 1983, operators received a Notice of Violation from the State, and subsequently reported that the site's soil and groundwater were contaminated with cyanide. Two municipal water systems draw from wells within 3 miles of the site. They serve approximately 106,000 people in Lake Park, Riviera Beach, North Palm Beach, Palm Beach Shores, and Palm Beach Gardens.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 08/30/90

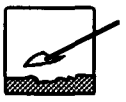
## Threats and Contaminants



EPA's initial investigation found that the groundwater and soil are contaminated with cyanide and fluoride from former production processes. Shallow groundwater also is contaminated with barium, chromium, and nitrates. Contaminated groundwater used for a water supply source on the site poses potential health threats and could enter downgradient wells. A fence surrounding the site limits threats from exposure through direct contact with or inhalation of the contaminated soil and dust.

## Cleanup Approach

### Response Action Status



**Immediate Actions:** Under a State Order, the owner removed about 680 cubic yards of cyanide-contaminated soil and transported it to an EPA-approved hazardous waste facility in 1984. In 1986, the EPA discovered cyanide and fluoride in on-site groundwater and soil. Approximately 200 cubic yards of contaminated soils were removed from the landfill. In addition, a third area was capped with asphalt. A fence was installed to restrict access to the site. The potentially responsible parties company implemented an Interim Remedial Action Plan (IRAP), a Containment Assessment Plan (CAP), and a Soil Removal Plan. Contaminated soils were removed from the percolation ponds, and another area of contaminated soil was capped with asphalt.


**Entire Sites:** In August 1994, the EPA chose natural attenuation and degradation of the contaminants as the remedy. Site monitoring for one year and institutional controls are also included. The institutional controls require the potentially responsible parties to notify anyone wishing to install a well within the impacted area that the State of Florida, Palm Beach County Health Department, and the South Florida Water Management Department require a "Consumptive Use Permit" and "Water Well Construction Permit."

**Site Facts:** In 1984, BMI and the State of Florida entered into an agreement requiring the company to remove contaminated soils from the site and to submit a detailed monitoring program for determining the nature and extent of groundwater contamination. BMI agreed to comply with another State Consent Order in 1986 to develop a plan to clean up contaminated groundwater.

## Environmental Progress

The removal of contaminated soils and capping of other areas have reduced the potential for exposure to hazardous materials at the BMI-Textron site. Approximately 900 cubic yards of contaminated soil have been removed, and a fence was installed to restrict access to the site. These actions have protected the public health and the environment while monitoring activities are being planned and institutional controls are established.

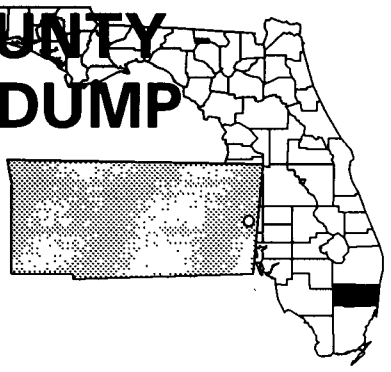
## Site Repository

Town of Lake Park Library, 529 Park Avenue, Lake Park, Florida 33403

# BROWARD COUNTY 21ST MANOR DUMP

## FLORIDA

EPA ID# FLD981930506



**EPA REGION 4**
Broward County
Ft. Lauderdale

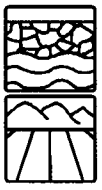
## Site Description

The Broward County - 21st Manor Dump site, located in a residential area, was an open dump located on the southern portion of the Meadowbrook Elementary School property. Owned and operated by the Broward County School Board, this 4 1/2-acre dump received municipal wastes from the 1950s to the late 1960s. No record of the types and quantities of wastes disposed of at the site was kept. Unauthorized parties also deposited wastes at the site. Conditions such as permeable sand and limestone and shallow groundwater facilitate the migration of contaminants. The Biscayne Aquifer is the sole source of drinking water in Southeast Florida. Over 400 students attend Meadowbrook Elementary School and an estimated 13,000 people live within 1 mile of the site. Approximately 162,300 people obtain drinking water from public and private wells within 4 miles of the site; the nearest private well is less than one-quarter mile from the site.

**Site Responsibility:** This site was addressed through Federal, State, and County actions.

**NPL Listing History**
Proposed Date: 07/29/91

## Threats and Contaminants



In 1987, numerous heavy metals including mercury, chromium, lead, and zinc were detected in on-site monitoring wells. In addition, manganese and zinc, as well as the volatile organic compounds (VOCs) trichloroethylene and dichlorethylene were found in three off-site private wells. Numerous VOCs were detected off site in Well #18 of Fort Lauderdale's South Dixie Wellfield. The South Dixie well has since been taken out of service. In subsequent studies in the early 1990's, EPA concluded that the site is not the source of groundwater contamination and that the marginal soil contamination does not pose a threat to human health or the environment.

## Cleanup Approach

The site was addressed through immediate actions. No further cleanup is being undertaken at this site.

### Response Action Status

**Immediate Actions:** Well #18 of Fort Lauderdale's South Dixie Wellfield was taken out of service. EPA and the City of Fort Lauderdale have installed a treatment system at the wellfield water treatment plant.

**Entire Site:** This site was not finalized on the NPL and EPA has terminated any further study. The site's status on the NPL is being re-evaluated. The groundwater problem is being addressed through another site known as the Peele-Dixie Wellfield.

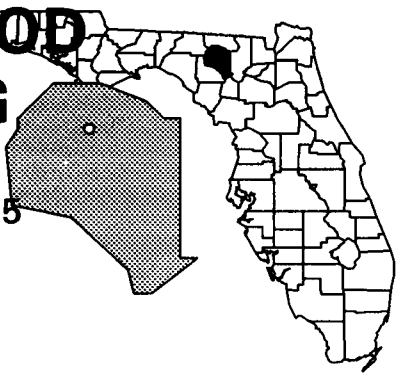
## Environmental Progress

EPA determined that site conditions do not pose a threat to human health or the environment.

## Site Repository

Not established.

# BROWN WOOD PRESERVING
## FLORIDA
EPA ID# FLD980728935



**EPA REGION 4**
Suwannee County
2 miles west of Live Oak

**Other Names:**
**Live Oak Perry**
**South Georgia Railway/Wood Plant**

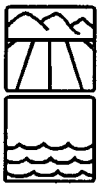
## Site Description

From 1946 until 1978, the Brown Wood Preserving site was operated as a wood-treatment facility on this 55-acre site in Live Oak. Several different companies ran the facility over its 30-year lifespan; the plant burned and was rebuilt in 1974. Operators used creosote and pentachlorophenol (PCP) in pressure treatment processes and discharged wastewater into an open ditch, where it flowed into a 5-acre unlined impoundment. A 3-acre upgradient lagoon contained 3,000 cubic yards of creosote materials. The area surrounding the site is rural and light agricultural. Homes, businesses, light industry, a trailer park, a private airport, and a County storage yard are all located within 1/2 mile of the site. The trailer park houses approximately 450 residents. Sinkholes and public and private wells lie within 2 miles of the site, but contamination has not yet reached the aquifer.

**Site Responsibility:** The site was addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/30/82
Final Date: 09/08/83

## Threats and Contaminants



Testing during cleanup studies in 1985 and 1986 showed soils in the disposal lagoon and drainage ditch to be contaminated with carcinogenic polycyclic aromatic hydrocarbons (PAHs) from the wood-treatment processes. Sediments in the disposal lagoon and drainage ditch also were found to be contaminated with PAHs. Direct contact with or accidental ingestion of contaminated soil or dust could have endangered human health.

## Cleanup Approach

### Response Action Status

**Immediate Actions:** Initial actions were performed at the site in 1988. Activities included: treatment and discharge of approximately 200,000 gallons of lagoon and pit water; demolition, salvage, and removal of facilities and process equipment on site; excavation and solidification of 15,000 tons of contaminated sludges; and backfilling of the pit where ore was heated to extract metal. These actions reduced the levels of contaminants in the soil. The site was fenced, and warning signs were posted in 1988.

**Entire Site:** The EPA selected the following cleanup remedy for the site: removing the lagoon water, treating it as necessary, and discharging it to a sewage treatment plant; excavating and treating the most severely contaminated soil and sludge with off-site disposal; breaking down contaminants in the remaining soils biologically in a 14-acre treatment area constructed with a liner and an internal drainage and spray irrigation system; covering this treatment area with clean fill after it served its purpose; and monitoring groundwater and the biological cleanup system for three years. The parties potentially responsible for site contamination finished the cleanup actions outlined in the remedy to the EPA's satisfaction in 1989. In conducting the cleanup activities, workers also cleared 6 acres, removed an abandoned railroad track, installed a clay liner, built containment berms around the perimeter, installed a treatment area surface drainage network and run-on drainage swales, shaped the runoff retention road, placed contaminated soil in the treatment and stockpile area, and installed an irrigation system. Operation and maintenance consisted of semi-annual groundwater sampling to ensure the effectiveness of the remedies.

**Site Facts:** The Consent Decree between the EPA and the parties responsible for the contamination was entered into on October 24, 1988 for performance of the engineering design and actual cleanup activities, as well as the operations and maintenance functions for the site. Under EPA supervision, the parties responsible for site contamination have finished cleaning up the site.

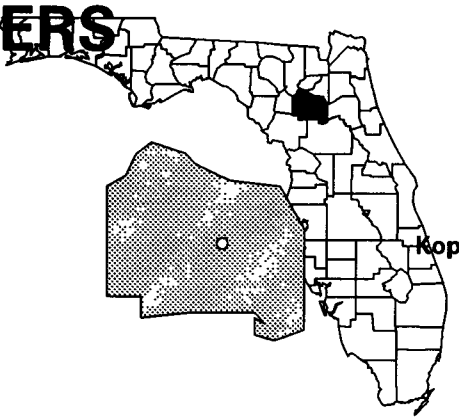
## Environmental Progress

The Brown Wood Preserving site has been cleaned up and meets all Federal and State standards. The site was monitored for an additional year to ensure that the cleanup methods were effective and continued to protect human health and the environment.

## Site Repository

Suwannee River Regional Library, 207 Pine Street, Live Oak, FL 32060

# CABOT/KOPPERS
## FLORIDA
EPA ID# FLD980709356



**EPA REGION 4**
Alachua County
Gainesville

**Other Names:**
**K-Mart Site**
**Cabot Carbon**
**Koppers Timber Company Site**

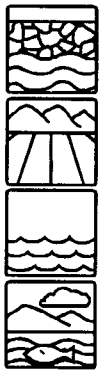
## Site Description

The Cabot/Koppers site covers 170 acres bridging two properties in Gainesville, near the intersection of N. 23rd Avenue and N. Main Street. Koppers, a wood-treating operation, owns the western part of the site and still operates on 82 acres of the site. Cabot Carbon formerly operated on the eastern portion of the site, on its own 49 acres, making naval stores and charcoal from pine stumps. Koppers preserves wood utility poles and timbers using creosote and chromated copper arsenate. Pentachlorophenol (PCP) was used in the past. Koppers currently recycles its process wastes and disposes of residues in an environmentally sound manner. The contamination on the site may be attributable to the past use of wastewater holding ponds. The old pond areas since have been filled with clean dirt and now are used as wood storage areas. During the years that Cabot Carbon operated (1945-1965), the plant generated about 6,000 gallons of crude wood oil and pitch each day. Workers discharged process wastewater containing pine tar into unlined surface impoundments. A local developer purchased the land in 1966 and drained the contaminated ponds into a nearby wetland and into Hogtown Creek. The land was sold again in 1977 to a different developer, who began building a shopping complex. Construction workers mixed the remaining pine tar sludges from the pond areas into the topsoil and built an unlined stormwater retention pond over the old contamination site. Citizens soon noticed a dark-stained, foul-smelling liquid seeping into an uncovered drainage ditch along N. Main Street. Gainesville's population is 151,300, and about 2/3 of the city is drained by Hogtown Creek. Approximately 2,000 people live within a 1/2-mile radius of the site, and there are 11 schools within a 1-mile radius of the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 09/08/83
Final Date: 09/24/84

## Threats and Contaminants



Groundwater is contaminated with arsenic; groundwater near the land surface contains polycyclic aromatic hydrocarbons (PAHs) and creosote compounds from the former process waste disposal practices. The soil and leachate in Hogtown Creek also are contaminated with creosote products. Contaminated groundwater leaching into a ditch may be causing damage to aquatic life. Contact with or accidental ingestion of the contaminants may pose a health risk.

## Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Initial Actions:** The initial actions include for the collection of up to 150,000 gallons of leachate per day from the N. Main Street ditch. This water is pumped by the State from a lift station on the ditch to the Kanapha Sewage Treatment Plant for treatment. Water quality data indicate that the leachate collection and removal system has been effective in significantly removing contamination from Hogtown Creek.

**Entire Site:** In 1984, the Florida Department of Environmental Protection (FDEP) began an intensive study of soil and groundwater contamination at the site. In 1987, when the FDEP ran out of funds, the EPA entered into an Administrative Order on Consent (AOC) with the potentially responsible parties for the site contamination to conduct an investigation of the site. In 1990, the investigation was completed and EPA selected the remedy for the site. The selected remedy includes in-situ bioremediation of two source areas on the Koppers Industries Plant, excavation of soils, washing and treatment of residuals of two accessible sources on the Koppers facility, and groundwater treatment of the surficial aquifer under the site. The design for groundwater cleanup is complete, and the potentially responsible parties are currently implementing the groundwater cleanup on their respective properties. However, after further investigation of the site, sources of dense nonaqueous phase liquid (DNAPLs) were discovered within the Koppers Industry property. As a result of the discovery, a supplemental study is being conducted by Koppers Industries. Once the study is completed, scheduled for late 1995, EPA anticipates issuing an amendment to the remedy to address the additional contamination.

**Site Facts:** The FDER requested civil penalties, injunctive relief, and cost recovery in its 1983 complaint against Cabot Corporation, but the court struck all motions except cost recovery in 1984. The potentially responsible parties, Beazer EAST (formerly Koppers) and Cabot Corporation, worked under a Consent Order and have completed site studies of the contamination and evaluated cleanup options. Beazer EAST is proceeding with the initial cleanup of the Koppers facility under a Unilateral Administrative Order issued by the EPA in March 1991. The Cabot Corporation is proceeding with the cleanup on its part of the site under a Consent Decree with the EPA. An amendment to the selected site remedies is expected in late 1995 to address the discovery of the additional DNAPL contamination on the site.

## Environmental Progress 

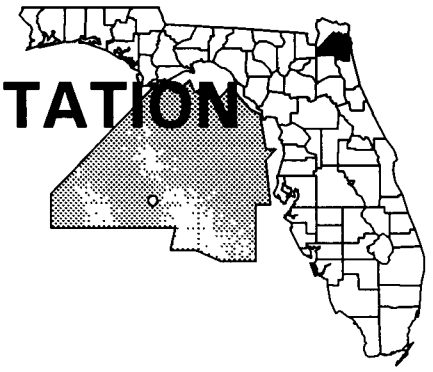
The leachate pumping system has been effective in removing much of the contamination from Hogtown Creek and the N. Main Street ditch, thereby reducing the potential for exposure to hazardous materials for the surrounding population while groundwater cleanup is underway at the Cabot/Koppers site.

## Site Repository 

Alachua County Library, 401 East University Street, Gainesville, FL 32601

# CECIL FIELD NAVAL AIR STATION FLORIDA

EPA ID# FLD517002244



**EPA REGION 4**

Duval County
12 miles southwest of
downtown Jacksonville

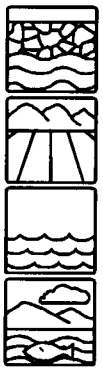
## Site Description

The Cecil Field Naval Air Station (NAS) site is divided into three areas: NAS Cecil Field (proper), the Yellow Water Weapons Department, and the Whitehouse Outlying Landing Field. Work in support of the base mission includes fuel storage and transportation systems and intermediate maintenance and repair of aircraft and engines. Maintenance activities over the years generated a variety of materials that were disposed of on the facility. These include materials resulting from construction activities; municipal solid waste and municipal wastewater treatment plant sludge; and miscellaneous industrial wastes including waste oils or solvents, paints, and spilled fuels. Current disposal practices are surveyed regularly for conformance with local, State, and Federal regulations. Approximately 3,500 people live on the base and 2,200 people live within a 1-mile radius of the base. Water is supplied to base residents from wells that tap the Floridian Aquifer. Off-base residents receive water from private wells that tap into the secondary artesian aquifer. The area surrounding the base contains wetlands, rivers, streams, and agricultural land. All surface waters within 3 miles downstream of Cecil Field NAS waste sites are classified by the Florida Department of Environmental Regulation (FDER) as Class III waters, which are suitable for recreational use and for the propagation and management of fish and wildlife. Lake Fretwell is stocked with bass for sport fishing, and a recreational complex has been developed along its northeastern shore.

**Site Responsibility:** This site is being addressed through Federal actions.

**NPL LISTING HISTORY**
Proposed Date: 07/14/89
Final Date: 11/21/89

## Threats and Contaminants

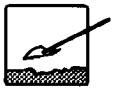


On-site groundwater near seven of the sources of contamination is contaminated with heavy metals, solvents, paint wastes, and trichloroethylene (TCE) from former waste disposal practices. Solvents have been identified in surface and subsurface soils near the known sources of contamination. Sediments from Rowell Creek, which is dammed to form Lake Fretwell, contain methylene chloride and heavy metals. Shallow groundwater is used for irrigation and fire fighting. The potential exists for on-site contaminants to migrate into the groundwater in both aquifers and into off-base private wells. If contaminated groundwater should move off site, local residents also could be exposed to contaminants that have bioaccumulated in produce or aquatic life. Surface water located on the site that has shown contamination includes Yellow Water Creek and its tributaries, Caldwell Branch, Sal Taylor Creek, Rowell Creek, and Lake Fretwell.

## Cleanup Approach

The site is being addressed in two stages phases: initial actions and seven phases focusing on cleanup of the base landfills, oil/sludge disposal areas, a rubble disposal area, fire-fighting training areas, an ordnance disposal area, a pesticide disposal area, and a seepage pit.

### Response Action Status



**Initial Action:** In May 1993, the Navy performed removal actions at Lake Fretwell.

**Landfills:** The Navy began investigations of the base landfills at the end of 1989. Upon completion of these investigations, expected in mid-1995, the Navy will begin cleanup activities.


**Oil/Sludge Disposal Areas:** The Navy began investigating the oil/sludge disposal areas for contaminants in 1990. A cleanup remedy was selected in 1994.

**Rubble Disposal Area:** The Navy began initial investigations of the nature and extent of contamination at the rubble disposal area in 1990 and expect them to be completed by early 1996.

**Fire-Fighting Training Areas:** The Navy began investigations at the fire-fighting training areas in early 1992 and expect them to be completed in late 1995.

**Ordnance Disposal Area:** The Navy initiated investigations at the ordnance disposal area in early 1992 and expect them to be completed in late 1995.


**Pesticide Disposal Area:** The Navy began investigating the pesticide disposal area for contamination in early 1992. An interim cleanup remedy was selected in 1994. The selected remedy entails the following cleanup procedures: excavating and overpacking contaminated pesticide containers; excavating soil, testing it to determine if treatment is required prior to disposal, decontaminating the soil as needed, and disposing of the treated soil in a hazardous waste landfill; treating empty containers left on site by high-pressure washing, and transporting the clean containers to a solid waste landfill; transporting full, partially full, and leaking pesticide containers for off-site incineration; and backfilling excavated areas with clean soil.

**Seepage Pit:** The Navy began investigations at the seepage pit at the end of 1990. A remedy to address cleanup of the seepage pit was selected in 1994, and cleanup activities, which are currently underway, are expected to be completed in 1999.

**Site Facts:** The Cecil Field NAS is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DOD facilities.

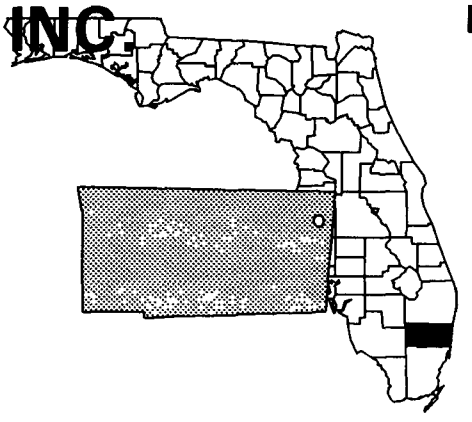
## Environmental Progress

The removal actions performed at Lake Fretwell have addressed immediate concerns at the site while studies into cleanup technologies are being conducted by the Navy and cleanup activities are being planned.

## Site Repository

Charles D. Webb Wesconnett Branch, Jacksonville Public Library, 6887 103rd Street, Jacksonville, FL 32210

# CHEMFORM, INC.
## FLORIDA
EPA ID# FLD080174402



**EPA REGION 4**
Broward County
Pompano Beach

## Site Description

The 4-acre Chemform, Inc. site began as a precision machine shop manufacturing metal parts for the aerospace industry. Operations continued from 1967 to 1985. The operations included conventional machine making as well as the manufacturing of a high-tech electro-chemical milling machine, which involved the use of electrolytic solutions and strong electric current. In 1977, the Broward County Pollution Control Board found the company in violation of regulations for the discharge of industrial wastes onto the ground. In 1985, the EPA found the soil and groundwater to be contaminated with heavy metals and other contaminants. The Chemform, Inc. site is located adjacent to Wilson Concepts of Florida, Inc., another NPL site. The Biscayne Aquifer is underneath the site and supplies all municipal water to Broward County. Four municipal wells are located within 3 miles of the site and serve approximately 93,000 people.

**Site Responsibility:** This site was addressed through Federal and potentially responsible parties' actions.

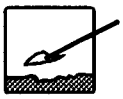
**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 10/04/89

## Threats and Contaminants

The groundwater and soil were contaminated with heavy metals including chromium, nickel, and copper from former manufacturing processes. People who were exposed to contaminated groundwater or soil by accidentally ingesting or coming in direct contact with them may have been at risk. Numerous cavities in the limestone underlying the site could have facilitated movement of contaminants through the groundwater.

## Cleanup Approach

### Response Action Status



**Immediate Actions:** In 1990, several drums were removed. Approximately 600 cubic yards of soil were excavated in addition to the removal of debris, soil, and sludge from two underground storage tanks. An additional 3,000 cubic yards of soil were removed during a subsequent removal action in 1992.

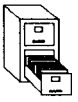
**Entire Site:** The parties potentially responsible for site contamination have completed a study of the groundwater. Based on the results of the groundwater investigation, the EPA determined no further action was required, except for one year of monitoring, because the concentrations of contaminants of concern have either decreased or remained stable. The year of monitoring was completed in 1994 and showed that the volume and concentrations of groundwater contaminants observed during EPA's site screening studies and during the early phase of the investigation have been greatly reduced due to the soil and source area cleanup activities.

**Site Facts:** In 1989, the EPA and the parties potentially responsible for the site contamination signed an Administrative Order, requiring them to conduct a study of the site. Chem-Form, Inc. is located adjacent to Wilson Concepts of Florida, which also is on the NPL.

## Environmental Progress

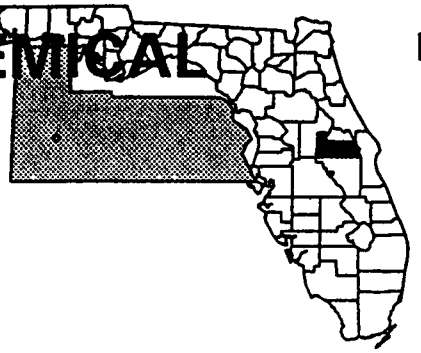
The removal of drums, debris, soil, and sludge from the Chemform, Inc. site has eliminated the threat to groundwater contamination. All cleanup remedies have been completed, and the site is presently undergoing the process of deletion from the NPL.

## Site Repository



Broward County Library, Main Branch Government Document Department, 100 South Andrews Ave., Ft. Lauderdale, FL 33301

# CHEVRON CHEMICAL COMPANY
## FLORIDA
EPA ID# FLD004064242



**EPA REGION 4**
Orange County
Orlando

## Site Description

The Chevron Chemical Co. Inc. (Ortho Division) site covers approximately 4 1/3 acres in an industrial area of Orlando. The Chevron Chemical Co. operated on the site a chemical blending facility for pesticides, citric sprays, and nutritional sprays. Prior to 1970, two unlined rinsate ponds onsite were used for the collection and disposal of pesticide formulating rinse water, barrel rinse water, and storm water. After 1970, the pesticide formulating rinsate was collected and disposed of offsite at an unknown location. Chevron Chemical ceased operations in 1976. The remaining inventories were removed from the site and the rinsate ponds were backfilled with soil prior to the sale of the property in 1978. The Central Florida Mack Trucks Service Center operated at the site from 1978 to 1986. Operations consisted of overhauling truck engines, starters, generators, and front/rear ends. In March 1984, a tanker truck filled with 3 percent hydrochloric acid and an unknown amount of nitric acid apparently leaked in the vicinity of the former western rinsate pond, resulting in an explosion. The contaminated soils were excavated and disposed of in a secured landfill. The excavation was backfilled with clean fill. In May 1989, the EPA conducted an inspection at the site, which showed contamination in soil and groundwater. In September 1990, Chevron Chemical conducted a contamination assessment of soil and groundwater.

**Site Responsibility:** The site is being addressed through Federal and potentially responsible parties' actions.

**NIL LISTING HISTORY**
Proposed Date: 01/18/94
Final Date: 05/31/94

## Threats and Contaminants

Chemicals used in pesticide formulation included xylene, kerosene, mineral oil, and aromatic naphtha. A few of the pesticides formulated in large volumes consisted of chlordane, lindane, dieldrin, and aldrin. Soil samples indicated the presence of pesticides, benzene, toulene, xylene, chlordane, naphthalene, and heavy metals. Groundwater samples contained metals, benzene, toulene, xylene, pesticides, trichlorethylene, and chlorobenzene. Anyone coming into contact with or ingesting soil or groundwater is at risk.

## Cleanup Approach

The site is being addressed in a long-term remedial phase focusing on cleanup of soil and groundwater.

### Response Action Status

**Initial Actions:** The EPA has removed all concrete, buildings, and the water tower. Between 1990 and 1992, Chevron Chemical undertook a number of initial actions, including soil removal, site dewatering, water treatment and disposal of treated water. In early 1994, Chevron began to remove soils from a neighboring trailer park that had been contaminated by site runoff.

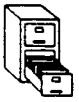
**Entire Site:** In early 1993, Chevron began an investigation into the nature and extent of site contamination. Once this investigation is completed, scheduled for early 1995, final cleanup remedies will be selected.

**Site Facts:** On May 15, 1990, EPA, Chevron Chemical Co., and Robert R. Uttal, owner of Central Florida Mack Trucks Service Center, signed an Administrative Order on Consent to perform the initial cleanup actions at the site described above. On January 25, 1993, EPA and Chevron entered into an Administrative Order on Consent for Chevron to conduct a comprehensive site investigation.

## Environmental Progress

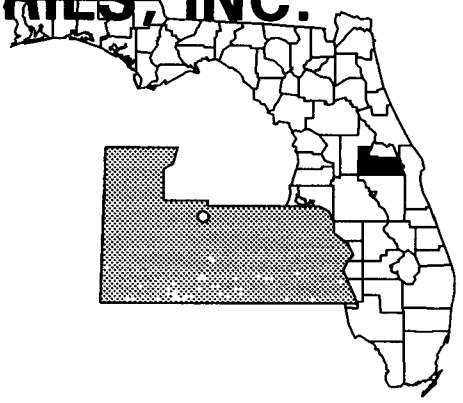
The removal of contaminated soils and buildings from the site and water treatment have made the site safe while investigations leading to final cleanup remedies are being conducted.

## Site Repository



Not yet established.

# CITY INDUSTRIES, INC.
## FLORIDA
EPA ID# FLD055945653



**EPA REGION 4**
Orange County
Winter Park

**Other Names:**
**City Chemical**

## Site Description

The City Industries, Inc. site operated from 1971 to 1983 on a 1-acre parcel of land and was involved in the receipt, handling, storage, reclamation, and disposal of a wide variety of waste chemicals including solvents, paint/varnish wastes, plating wastes, polychlorinated biphenyls (PCBs), and inks. The company abandoned the site in 1983, informing the State that it lacked the resources to continue operations and leaving approximately 1,200 drums and 12,000 gallons of unknown liquids and sludges in large tanks. Volatile organic compounds (VOCs) were found in the shallow aquifer beneath the site. Approximately 120,000 people live within 3 miles of the site. The nearest residence is a mile away from the site. Within 3 miles of the site are schools, nursing homes, and hospitals. Municipal wells are located ¼ mile upgradient of the site in the deeper Floridian aquifer.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/15/84
Final Date: 10/04/89

## Threats and Contaminants

The groundwater and surface water are contaminated with VOCs from former waste disposal practices. The soils were contaminated with VOCs, phthalates, and various heavy metals. People who come in direct contact with or drink contaminated surface water or groundwater may be at risk, although the groundwater is not currently used for drinking water. The shallow aquifer beneath the site is contaminated, and the contaminant plume could migrate to the Floridian aquifer. The risk posed by the contaminated soil has been reduced as a result of soil removal activity.

## Cleanup Approach

### Response Action Status

**Immediate Actions:** In 1983, the State crushed and removed 41 tons of drums and disposed of 65 truck and tanker loads of contaminants at an EPA-approved facility. In 1984, the EPA emptied, cut open, and cleaned the holding tanks. Approximately 1,700 tons of contaminated soil were incinerated to remove the contaminants. The treated soil remains on the site.

**Entire Site:** The EPA has selected a remedy that includes treating the extracted groundwater by aeration followed by surface water discharge. The EPA completed the design in 1992. Construction of the remedy was completed in late 1993. The treatment system was operating as designed by mid-1994. Approximately 105 gallons per minute of groundwater is currently being treated at the site. Treatment is expected to continue for up to 10 years.

**Site Facts:** In 1984, the EPA issued an Administrative Order to City Industries requiring cleanup of the site; the company ignored the Order. Also in 1984, the State filed a civil complaint against the land owner, operator, and four companies associated with the operator. The EPA negotiated a Consent Decree in December 1991 with the potentially responsible parties to fund the activities necessary for cleaning up the site.

## Environmental Progress

All construction cleanup remedies have been completed at the City Industries, Inc. site. The removal of solid waste and treatment of soil have eliminated all direct contact threats from hazardous materials. Groundwater is being extracted and treated to remove hazardous substances prior to surface water discharge.

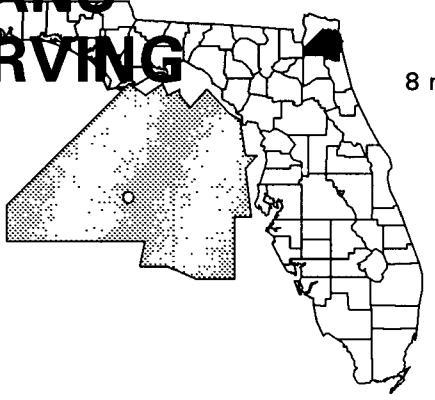
## Site Repository

Winter Park Public Library, 460 East New England Avenue, Winter Park, FL 32789

# COLEMAN-EVANS WOOD PRESERVING CO.

## FLORIDA

EPA ID# FLD991279894



**EPA REGION 4**

Duval County
Whitehouse,
8 miles west of Jacksonville

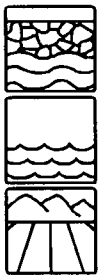
## Site Description

The Coleman-Evans Wood Preserving Company site is a former wood-preserving facility located in a residential and light industrial area of Whitehouse. The site covers 11 acres and consists of two distinct areas: the western portion, which contained a wood treating facility, and the eastern portion, which consisted of a landfill and had been used to dispose of wood chips and other wastes. Since 1954, Coleman-Evans produced wood products that contained pentachlorophenol (PCP). Wastewater from this process was discharged into an on-site drainage ditch. Sludges were placed into two unlined disposal pits. Contamination was discovered in the groundwater in the area in 1980. As a result, the facility constructed a wastewater treatment system. Approximately 1,000 people reside within a 1-mile radius of the site. This heavily populated residential area is not connected to a municipal water supply; therefore, the area residents depend on private wells for their drinking water. There are approximately 180 wells within a 1-mile radius of the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

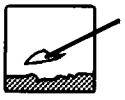


Shallow groundwater in the residential area adjacent to the site is contaminated with PCP, volatile organic compounds (VOCs) including phenol and toluene, and heavy metals including chromium and lead from former process wastes. Sediments are contaminated with PCP and dioxin, and the soil is contaminated with heavy metals, PCP, dioxin, and fuel oil. Area residents are at risk of direct contact with contaminated soil. Accidental ingestion of contaminated groundwater from the shallow aquifer is also a health threat.

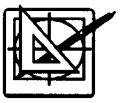
## Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status



**Immediate Actions:** In 1986, the EPA excavated two, on-site sludge disposal pits and disposed of them off site. In 1991, approximately 1,000 pounds of pure product PCP was removed from the site. Dioxin-contaminated soil and sediment in the residential area was excavated and placed on site. In 1993, dioxin-contaminated structures on site were demolished during a removal action, and beginning in 1994, additional dioxin-contaminated soil and sediment in the residential area was excavated and placed on site. Fencing is being installed around the site.



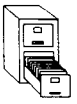
**Entire Site:** In 1986, the EPA chose a remedy that includes excavation and treatment by soil washing; biotreatment and solidification/stabilization of contaminated soils, with the treated material backfilled on the site; groundwater recovery through a dewatering process; and analysis and treatment of the groundwater by carbon adsorption and chemical precipitation before it is discharged to an on-site drainage ditch. However, the EPA is now in the process of amending this remedy since it has proven, during the engineering design, ineffective in cleaning up dioxins. The EPA anticipates selecting an appropriate cleanup approach over the summer of 1995.

**Site Facts:** In 1980, complaints of taste and odor problems in nearby private wells led to investigations by State and local officials. On October 15, 1984, the State of Florida issued an Administrative Consent Order to Coleman-Evans Wood Co. to clean up the site. The EPA has since taken over the lead at this site and will undertake any future cleanup actions.

## Environmental Progress

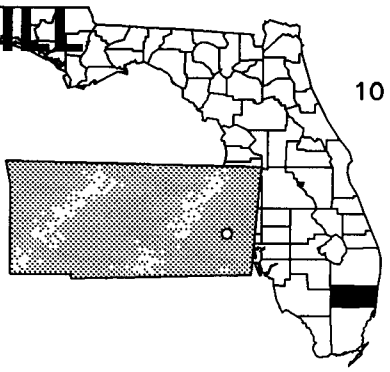
The removal of contaminated soils and the installation of the fence have reduced the immediate threat of exposure to contamination at the site while final cleanup remedies are being evaluated.

## Site Repository



Whitehouse Elementary School, 11160 General Avenue, Whitehouse, FL 32220

# DAVIE LANDFILL
## FLORIDA
EPA ID# FLD980602288



**EPA REGION 4**
Broward County
10 miles southwest of Fort Lauderdale

**Other Names:**
**Broward County Solid Waste Disposal Facility**

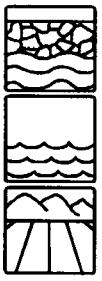
## Site Description

The Davie Landfill site, consisting of an 80-acre trash landfill, a 30-acre sanitary landfill, and a 10-acre sludge lagoon near the intersection of Orange Drive and Boy Scout Road, began operation in 1964, accepting trash and ash from the County's adjacent garbage incinerator. The sludge lagoon was constructed in 1971 in an unlined natural depression on site to accept grease trap pump-outs and septic tank and treated municipal sludge. The lagoon overflowed on several occasions, resulting in surface water discharges to an adjacent borrow pit. The sludge lagoon was closed in 1981. The incinerator was closed in 1975 because the excessive particulate emissions failed to meet new air regulations. The sanitary landfill was opened to replace the closed incinerator. Landfilling activities ceased in 1987, when the facility reached its design capacity. The solid waste landfill was used to dispose of the municipal solid waste being burned at the on-site incinerator. Construction debris, tires, and other wastes that could not be incinerated also were placed in the solid waste landfill. Dairy farms, ranches, and horse stables are located in the vicinity of the site. Approximately 50 homes are located to the south of the site; the nearest residence is 1/2 mile away. There are five wells within 500 feet of the site and 21 within 1/4 mile. All municipal water supplies in the area receive water drawn from the Biscayne Aquifer. The aquifer is the sole source of potable water for about 10,000 residents in the area.

**Site Responsibility:** This site is being addressed through a combination of Federal, State, and County actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



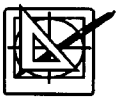
The groundwater and the water in the borrow pits on site and downgradient of the site show elevated levels of sulfate, chloride, lead, and ammonia. Antimony, benzene, vinyl chloride, and other contaminants have been detected in monitoring wells and private wells south of the landfill. Sludge from the lagoon was found to contain cyanide and sulfides. Potential health threats include accidental ingestion, inhalation, and direct contact with contaminated soil, groundwater, surface water, and sediments. The site is fenced, and access to the site is restricted.

## Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on cleanup of the sludge lagoon and groundwater.

### Response Action Status

**Sludge Lagoon:** Cleanup technologies chosen to address sludge lagoon contamination included: dewatering and stabilizing the sludge lagoon contents; placing treated sludge lagoon contents in a lined sanitary landfill cell; and installing an approved cover on the cell. The State required the County to provide service connections to the municipal water supply system for each affected residence near the site. The County offered affected residents bottled water until the water lines were functional. The alternate water supply is in place. The County initiated site construction on the sludge lagoon in 1989, and cleanup activities are completed.



**Groundwater:** An investigation into the nature and extent of groundwater contamination at the site began in early 1992 and was completed in 1994. Vinyl chloride and antimony concentrations in groundwater were detected. Due to the low levels of contamination detected, natural attenuation was selected as the remedy. In addition, EPA required the County to monitor residential areas and provide service connections to the municipal water supply system for affected residences near the site. Designs for the municipal water supply connections are currently underway and are scheduled for completion in mid-1995.

## Environmental Progress

The provision of an alternate water supply and the completion of the sludge lagoon cleanup activities have reduced the danger of exposure to contamination while additional municipal water supply lines are being designed.

## Site Repository

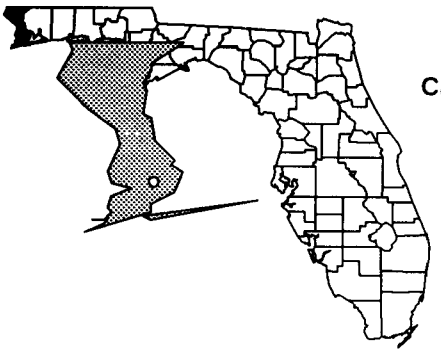
Broward County Library, Main Branch-Government Document Department, 100 South Andrews Ave., Ft. Lauderdale, FL 33301

Broward Community College, South Regional Library, 7300 Pines Boulevard, Pembroke Pines, Florida 33024

# DUBOSE OIL PRODUCTS COMPANY

## FLORIDA

EPA ID# FLD000833368



**EPA REGION 4**

Escambia County
Cantonment, 10 miles north of Pensacola

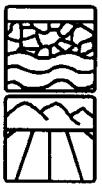
## Site Description

The 20-acre Dubose Oil Products site consists of a process facility and three bermed ponds. The site was an oil recovery facility that operated from 1979 through 1981. Waste materials handled on the site included waste oils, petroleum refining waste, wood-treatment process waste, spent solvents, spent "pickle liquors," and various paint wastes. These materials initially came to the site in bulk tanker trailers and drums and then were stored in a treatment tank prior to processing. Spent solvent and process wastes from petroleum refining and wood treatment operations were transported to the facility in 55-gallon drums. Analysis of samples taken from the site indicated the presence of numerous volatile organic compounds (VOCs). The site ceased operations in 1982. Dubose sold some drums and crushed, stacked, and buried a number of other drums on the site. The Dubose site has significant levels of pentachlorophenol (PCP) contamination in the soil, and the site was sampled for both dioxins and furans, which are often found in areas contaminated with PCBs; however, none were found above levels requiring action. This is a rural residential area with some agricultural and forest land nearby. Approximately 2,400 people live within 3 miles. The nearest residents live adjacent to the site. A low-lying area that forms the headwaters of Jack Branch, a tributary of the Perdido River, is located along the northern edge of the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/15/84
Final Date: 06/10/86

## Threats and Contaminants



The groundwater and soils are contaminated with low levels of VOCs and heavy metals including manganese, iron, and aluminum from former process wastes. Soil is contaminated with PCP. Iron naturally occurs in the water in the area. Residents in the immediate area are provided with city water supplies, which are not threatened by contaminated groundwater. However, in the future, contaminants could leach into the groundwater, which could then migrate to a nearby sand and gravel aquifer that is the source of drinking water in the area.

## Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Immediate Actions:** In 1984 and 1985, the Florida Department of Environmental Regulation (FDER) excavated 40,000 cubic yards of contaminated soil and placed it in a lined vault on site to prevent further contamination of the groundwater. Contaminated leachate from the vault is being treated and discharged into the North Pond.

**Entire Site:** In 1990, following an investigation, the EPA selected a final remedy for site cleanup, which includes: excavation and bioremediation of contaminated soils; drainage and filling of the on-site ponds; placement of a topsoil layer over the ravine and former pond area followed by grading and vegetation; installation of surface water runoff controls; groundwater monitoring; and deed restrictions to prevent inappropriate future use of the site. Following the completion of the cleanup design in early 1993, the potentially responsible parties were awarded a contract for construction of the remedy. To date, all contaminated soils have been excavated and treated, and the ponds have been drained and backfilled. Final grading and erosion control features are expected to be complete by late 1995.

**Site Facts:** The EPA and the parties potentially responsible for site contamination signed a Consent Decree, under which the parties performed the engineering design and agreed to conduct the cleanup actions selected by EPA. The public was concerned that the dam holding the North Pond, which was not well built, would break and that the pond will subsequently flood the downstream areas. Following pond draining, the dam was lowered and the slope was reduced to facilitate erosion control and maintenance.

## Environmental Progress

Provision of an alternate water supply and soil treatment have reduced the potential for exposure to contaminants and the further spread of these contaminants at the Dubose Oil Products Company site while cleanup activities are being completed.

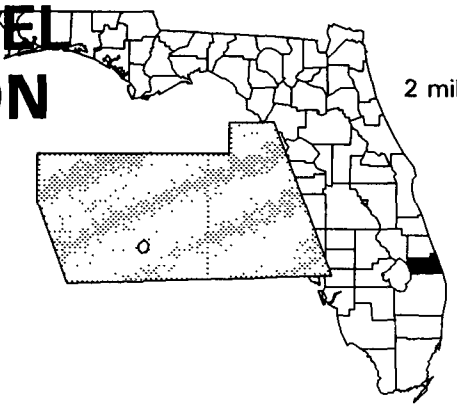
## Site Repository

J.M. Tate High School, Tate High School Road, Gonzalez, FL 32560

# FLORIDA STEEL CORPORATION

## FLORIDA

EPA ID# FLD050432251



**EPA REGION 4**

Martin County

2 miles northwest of Indiantown

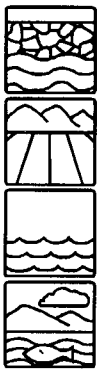
## Site Description

The 150-acre Florida Steel Corporation site is a former steel mill that operated from 1970 to 1982, when it closed for economic reasons. During its operation, casting and rolling were performed at extremely high temperatures. Subsequently, equipment and motors were cooled by water, which picked up iron oxide and small particles from the hot steel, and collected excess lubricating oils and hydraulic fluid. The cooling water was captured by concrete drains and sumps and then piped to a Concrete Recirculating Reservoir (CRR), where the iron oxide particles and dense oils settled out. The floating oil that resulted from this process was then removed by an oil skimmer. In addition to the steel products, three types of by-products were associated with the Indiantown Mill: mill scale, the oxidized iron that separated from the hot steel as it was cooled with water sprays; slag, low-grade ore formed when lime was introduced as a flux into the furnace to remove impurities; and Emission Control (EC) dust, the fine particles generated as the high temperatures of the electric arc furnace drove off and oxidized some of the iron and most of the other volatile metals contained in the scrap. Some of the EC dust was spread over the facility's roads, and 75,000 cubic yards were deposited on the southern portion of the site in waste piles. In 1980, Florida Steel began to collect EC dust in three baghouses and transported it to a chemical plant in South Carolina for recovery of lead and zinc. The EPA found arsenic, cadmium, and lead in the EC dust and groundwater. In addition, polychlorinated biphenyls (PCBs) were found at various locations on the site. Approximately 4,800 people live within a 2-mile radius of the site. The Indiantown public water supply comes from a group of shallow wells located within 3 miles of the site. Seasonal wetlands and unimproved land adjoin three sides of the property.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/30/82
Final Date: 09/08/83

## Threats and Contaminants

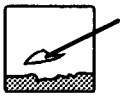


Heavy metals including cadmium, lead, and zinc from former plant processes exist in the on-site EC dust. The groundwater is contaminated with sodium chloride and radium. Radium is a naturally occurring radioactive element found in the subsurface soil and groundwater at the site. Limited amounts of on-site surface soils are contaminated by PCBs, a majority of which have been cleaned up. Area residents could be exposed to sodium and radium contaminants in their drinking water. Other potential health threats include inhaling and coming into direct contact with metals contaminated soil. Sediment in one wetland has been impacted by metals from the site.

## Cleanup Approach

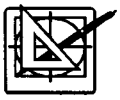
This site is being addressed in two stages: immediate actions and two long-term remedial phases focusing on cleanup of the soil and the groundwater and wetlands.

### Response Action Status



**Immediate Actions:** The parties potentially responsible for site contamination removed 8,000 tons of EC dust in 1985. Also in 1985, nearly 19,000 tons of PCB-contaminated soil were excavated and subsequently incinerated on site.

**Soil:** In 1987, the potentially responsible parties began an investigation to determine the best ways to clean up the site. In June 1992, the EPA chose a remedy that includes the excavation and solidification of incinerator ash, soils contaminated with metals, and soils contaminated with PCBs. All solidified material will be disposed of in an on-site landfill. The cleanup design was completed in September 1994. Construction activities are underway and are expected to be completed in mid-1996.



**Groundwater and Wetlands:** Contaminated groundwater and wetlands are to be addressed in separate cleanup activities chosen in 1994. The wetland cleanup includes excavating a portion of the sediment containing the highest levels of lead and zinc, followed by revegetating the area. The groundwater cleanup includes pumping the contaminated groundwater, followed by blending, treating, and on-site discharging the treated water. Cleanup designs are ongoing and are scheduled to be completed in late 1995.

**Site Facts:** Negotiations with the parties potentially responsible for site contamination were concluded in 1987. As a result, these parties initiated an investigation to characterize site contamination. In March 1993, the EPA and the parties' potentially responsible signed a Consent Decree that commits the parties to conduct the design and construction of the remedy selected for the Soil area. The parties have already submitted workplans for the design and have paid over $330,000 dollars to the EPA for past Agency costs. The EPA and the parties signed a Consent Decree for the Groundwater and Wetlands area October 1994.

## Environmental Progress

The initial removal and treatment of soil has greatly reduced the potential for exposure to hazardous materials, and has reduced the migration of contaminants from the site, while further investigations and cleanup activities take place at the Florida Steel Company site.

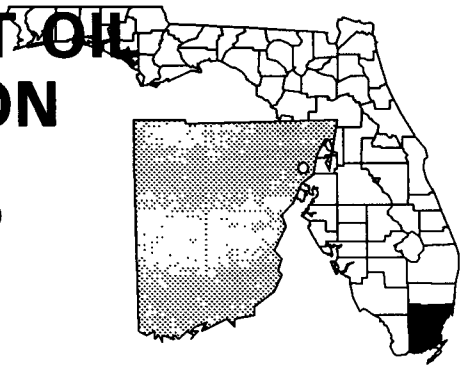
## Site Repository

Indiantown Public Library, 15200 S.W. Adams Avenue, Indiantown, Florida 34956

# GOLD COAST OIL CORPORATION

## FLORIDA

EPA ID# FLD071307680



**EPA REGION 4**
Dade County
Miami

## Site Description

Gold Coast Oil Corporation operated a solvent reclaiming facility and bulk storage area on a 1 1/2-acre site leased from the Seaboard Coast Line Railroad from 1971 to 1982. Wastes generated by the recovery process were sprayed directly on the ground or stored in drums on site. The sources of contamination at the site include a storage area of approximately 2,500 corroded and leaking drums containing sludges from the reclamation process, contaminated soil and paint sludges, 26 storage tanks of hazardous substances, and extensively contaminated surface soils and groundwater. The contaminated groundwater is part of the Biscayne Aquifer, the sole drinking water source for the Miami area. The area surrounding the facility is primarily industrial. The majority of the residents within a 3-mile radius of the site are served by two public water supply wells fields that are not affected by the contamination at the site. The site currently is inactive and is fenced with a locking gate.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

The site was originally contaminated with volatile organic compounds (VOCs) in the groundwater, including methylene chloride from the former solvent recovery activities. The soil was also contaminated with VOCs, as well as heavy metals such as lead.

## Cleanup Approach

### Response Action Status

**Initial Actions:** In 1982, 1989, and 1990, Seaboard removed five tank truck loads of contaminated bulk liquids, 1,600 cubic yards of contaminated sludges and soils, and 2,500 leaking drums.

**Entire Site:** In 1989, the EPA implemented a remedy to clean up the site that included excavating and removing soil and sludges to a federally-approved facility; recovering the contaminated groundwater and treating it before discharging it; and removing and disposing of storage tanks and various structures and debris on the site. An air stripping system for treating the contaminated groundwater has been installed, and has treated approximately 80,000,000 gallons of contaminated groundwater to date. The EPA is currently evaluating the effectiveness of the groundwater cleanup efforts to determine if further actions are needed.

**Site Facts:** In 1982, Seaboard Coast Line Railroad evicted Gold Coast Oil from the property and volunteered to perform initial removal activities. The EPA has negotiated an agreement with 14 companies formerly associated with this site to finance and perform the cleanup under EPA supervision.

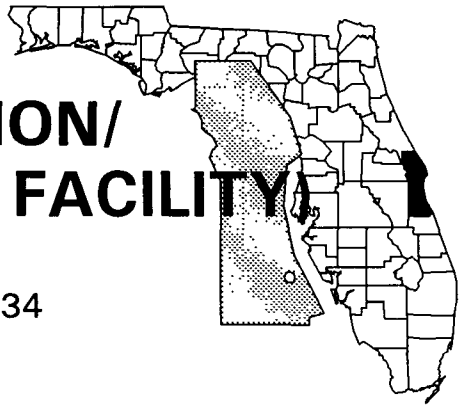
## Environmental Progress

The construction of all cleanup activities at the site is complete. Cleanup goals for groundwater have been achieved, with the exception of periodic exceedances at a few wells. Efforts are underway to bring these areas permanently into compliance. Afterwards, the EPA is expected to monitor the site for several years to ensure that no further cleanup is required.

## Site Repository

West Dade Regional Library, 9445 Coral Way, Miami, FL 33165

# HARRIS CORPORATION/ (PALM BAY FACILITY)
## FLORIDA
EPA ID# FLD000602334



**EPA REGION 4**
Brevard County
Palm Bay

**Other Names:**
**Harris Semiconductor**
**Harris Building 100**
**Harris Government (Electronics) Systems**
**Harris Corp./**
**General Development Utilities**

## Site Description

The Harris Corporation/Palm Beach Facility is a 345-acre site which includes the groundwater and soil contamination associated with Harris Corporation, plus the groundwater plumes extending from Harris onto the adjacent property owned by Palm Bay Facilities, formerly General Development Utilities, Inc. Harris manufactures a wide variety of electronic devices and components, while Palm Bay Facilities provides drinking water and manages the wastewater collection, treatment, and disposal system for much of Palm Bay. The Palm Beach Utilities well field consists of approximately 27 public water supply wells and is located downgradient from the Harris facility. In 1982, the EPA found the wells at Palm Beach Utilities to be contaminated as a result of manufacturing operations at Harris. Palm Beach Utilities provides approximately 33,000 residents of Palm Bay with drinking water. Approximately 27,500 people live within 3 miles of the site. Also included within the 3-mile radius are schools, nursing homes, hospitals, and a park.

**Site Responsibility:** This site is being addressed through Federal, State and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 04/10/85
Final Date: 07/22/87

## Threats and Contaminants

The groundwater is contaminated with various volatile organic compounds (VOCs) and heavy metals including chromium and lead from former process waste disposal practices. People who are exposed to the contaminated groundwater may be at risk.

## Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on groundwater treatment.

## Response Action Status

**Immediate Actions:** Contaminated wells at Palm Beach Utilities have been taken out of service. Harris operates two extraction/treatment systems, with some of the effluent used as process water. This process water is treated and then injected into deep wells. Harris also paid for an air stripper at Palm Beach Utilities for the treatment of water from contaminated production wells.

**Groundwater Treatment:** Harris installed a groundwater treatment system in 1985 at their Electronic Systems Sector in agreement with the Florida Department of Environmental Protection (FDEP). According to periodic sampling tests conducted since 1988, groundwater contamination levels were reduced. As a result of additional investigations, the EPA elected to expand the pump and treat remedy to the remaining contaminated groundwater at the site. In 1991, Harris, in agreement with the EPA, implemented a second groundwater treatment process at their Semiconductor Sector. This system removes contaminants by air stripping. Groundwater treatment remedies are expected to continue until 2029.

**Source Control:** Previous investigations revealed that the soils, surface water and sediments on the site were not contaminated, and posed no threat to the population or the environment. As a result of this finding, the EPA selected a "no further action" remedy for the soils, sediments, and surface water at the site in early 1995.

**Site Facts:** In 1983 and again in 1990, the State and Harris Corporation signed a Consent Agreement for Harris to develop a groundwater restoration system. In 1991, Harris Corporation entered into a Consent Decree with the EPA to conduct and implement a review of the treatment system installed in 1985. In 1992, Harris Corporation entered into an Administrative Order on Consent to conduct additional studies at the site to provide a comprehensive understanding of the nature and extent of contamination at the site.

## Environmental Progress

The groundwater extraction and treatment continues to reduce the potential for exposure to hazardous substances at the Harris Corporation/(Palm Bay Facility).

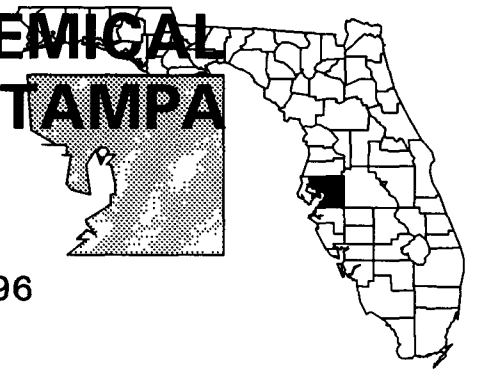
## Site Repository

Palm Bay Public Library, 1520 Port Malabar Boulevard, N.E. Palm Bay, FL 32905

# HELENA CHEMICAL COMPANY (TAMPA PLANT)

## FLORIDA

EPA ID# FLD053502696



**EPA REGION 4**
Hillsborough County
Tampa

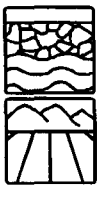
## Site Description

Helena Chemical Company is an 8-acre site in a primarily industrial area of Tampa, Florida. Helena Chemical, which is owned by Marubeni America Corporation, acquired the property from Flag Sulphur. Since 1981, the company has used the site to store, repackage, and distribute liquid pesticides. The company occasionally manufactures small quantities of liquid pesticides on demand. From 1967 to 1981, manufacturing operations were shifted to another Helena Facility and the Tampa plant received bulk shipments of various agricultural chemicals that were then formulated into liquid fertilizers and nutritional products. Raw materials used to formulate pesticides at the site included liquid zinc, liquid manganese, toluene, and xylene. Wastes generated at the site included liquid solvent runoff containing volatile organic compounds (VOCs), pesticides, and heavy metals. Until 1972, liquid solvent runoff entered into a small holding pond. From 1974 to 1981, Helena treated and neutralized liquid pesticide wastes in a system involving three interconnected underground tanks. Since at least 1976, the facility has used a retention pond to contain storm water runoff, and possibly to contain spillage from the liquid processing plant. EPA investigations conducted during 1989 and 1990 detected pesticides and pesticide constituents in on-site and off-site groundwater and soil. An estimated 6,300 people obtain drinking water from public and private wells within 4 miles of the site, the nearest being a private well 1/4 of a mile northwest of the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL Listing History**
Proposed Date: 02/07/92
Final Date: 10/14/92

## Threats and Contaminants



On-site and off-site groundwater and soil are contaminated with pesticides, VOCs, including toluene and xylene, and heavy metals, including manganese and zinc. People who touch or ingest contaminated soil or groundwater could be at risk.

## Cleanup Approach

This site is being addressed through two long-term remedial phases focusing on cleanup of the soil and groundwater.

### Response Action Status

**Soil:** The potentially responsible parties initiated an investigation into the nature and extent of contaminated soil at the site in late 1992. Once this investigation is completed, scheduled for mid-1995, the EPA will select a cleanup remedy to address the contaminated soils.

**Groundwater:** In late 1992, the parties potentially responsible for site contamination began an investigation of groundwater contamination. This study is scheduled for completion in late 1995, at which time the EPA will select a cleanup remedy.

**Site Facts:** In June 1992, the EPA issued a "Special Notice Letter" inviting Helena to enter into formal negotiations for an Administrative Order on Consent (AOC) to take responsibility for investigating site contamination. In late 1994, the EPA completed a study addressing human health and ecological risks at the Helena Chemical site. A study outlining treatment options for the site is expected to be completed in early 1995.

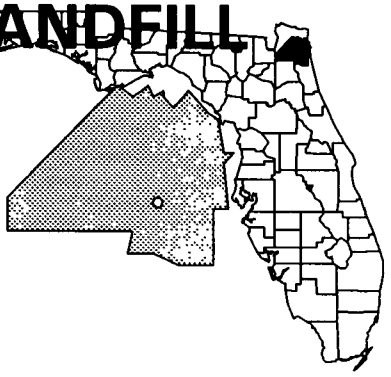
## Environmental Progress

EPA studies show that no immediate human health and ecological risks exist while further investigations are underway.

## Site Repository

Tampa-Hillsborough Public Library, East Lake Mall Branch, 5701 E. Hillsborough, Tampa, Florida 33610.

# HIPPS ROAD LANDFILL
## FLORIDA
EPA ID# FLD980709802



**EPA REGION 4**
Duval County
Jacksonville Heights

## Site Description

The Hipps Road Landfill site covers 7 acres in what was once a cypress swamp. The site area includes the landfill and an adjacent pond. During the 1960s, the facility accepted municipal and industrial wastes including cans of trichloroethylene (TCE) and artillery rounds from U.S. Navy facilities. The landfill ceased operations in 1970, was covered with a layer of soil, and was sold in residential lots. Concerns first were reported in the early 1970s, when a pond adjacent to the landfill developed a thick, smelly film, and fish and nearby vegetation died. The area residents depended exclusively on private wells for water until tests in 1983 showed contamination of the wells. Residents were given bottled water until the City extended the municipal water system. A residential area of about 150 homes surrounds the site. In the spring and summer of 1988, the potentially responsible party purchased and removed five homes from the site. A clay cap was placed over the landfill in 1990 to reduce infiltration and migration of contaminants. In addition, an eight-foot security fence was installed around the site. The landfill is situated above the flood plain. Surface water is used for swimming, boating, and fishing.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

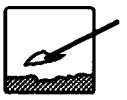
**NPL LISTING HISTORY**
Proposed Date: 09/08/83
Final Date: 09/21/84

## Threats and Contaminants

The groundwater is contaminated with volatile organic compounds (VOCs) including vinyl chloride and benzene. People who come in direct contact with or accidentally ingest contaminated water may suffer adverse health effects; however, this is unlikely as the area residents have access to the municipal water system.

## Cleanup Approach

### Response Action Status



**Immediate Actions:** In 1985, the EPA connected affected residences in the area to the municipal water line. In 1986, the potentially responsible party purchased and removed five houses from the site.

**Entire Site:** In 1986, the EPA selected a remedy to clean up the site. This remedy was amended in 1990 and includes recovering the groundwater, air stripping it to remove the contaminants, and properly closing the landfill. The second aspect of the site cleanup plan, the landfill cover system, was completed in 1990 by Wastecontrol, Inc. An eight-foot high security fence also was installed around the site. In addition, a plan to plug and abandon private wells that may be used for irrigation was implemented during the summer of 1992. Construction of the groundwater treatment system was completed in the fall of 1994. The groundwater treatment system is currently in operation, and expected to continue through 1999. Monitoring activities to ensure that the remedies have cleaned the site effectively are scheduled to continue for 20 years, using funds provided by the State of Florida.

**Site Facts:** In 1989, Wastecontrol, Inc. and the EPA entered into a Consent Decree. Wastecontrol, Inc. agreed to design the landfill cover system and the groundwater recovery system; they have completed the landfill closure. In January 1992, Wastecontrol, Inc. and the EPA entered into an amended Consent Decree. Pursuant to the Consent Decree, Wastecontrol, Inc. agreed to construct the groundwater treatment system.

## Environmental Progress

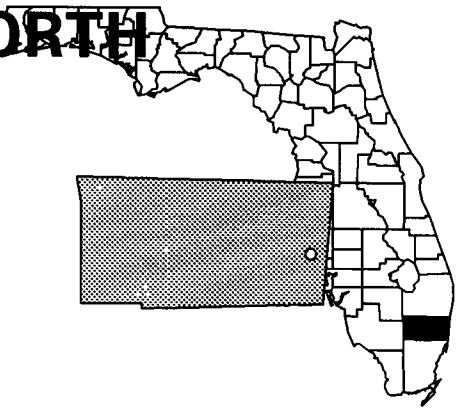
By providing an alternate water supply to nearby residents, removing houses from the site, and covering the landfill, the EPA and the potentially responsible party have eliminated immediate hazards at the Hipps Road Landfill site. The completed landfill cap also has reduced the potential for exposure to hazardous materials and has prevented the further spread of contaminants to the groundwater. All construction at the site is complete. The groundwater treatment system will complete the remedial activities associated with this site.

## Site Repository

Jacksonville Public Library, Webb Wisconnett Branch, 6681 103rd Street,
Jacksonville, FL 32210

# HOLLINGSWORTH SOLDERLESS TERMINAL COMPANY FLORIDA

EPA ID# FLD004119681



**EPA REGION 4**
Broward County
Fort Lauderdale

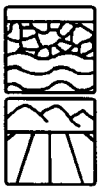
## Site Description

The Hollingsworth Solderless Terminal Company site is located on 3½ acres in an industrial and residential area of Fort Lauderdale. The plant was in operation from 1968 to 1982 as a solderless terminal manufacturing facility. The manufacturing process included using molten salt baths, degreasing parts, and electroplating. The wash and process waters, which contained varying concentrations of trichloroethylene (TCE) and heavy metals, were disposed of in on-site drainfields, by surface discharges, and in a 100-foot-deep injection well. In addition, wastes periodically entered the ground through spillage or other smaller drainfields. Several communities in the vicinity of the site draw water from the shallow Biscayne Aquifer. The nearest residential area is located approximately 200 yards southeast of the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



Volatile organic compounds (VOCs), including vinyl chloride and TCE from former process wastes, have been detected in groundwater under the site. VOCs and heavy metals including copper and tin have been detected in the soil. Potential health risks may exist for individuals who ingest, come into direct contact with, or inhale VOCs from the contaminated groundwater or soil.

## Cleanup Approach

### Response Action Status

**Immediate Actions:** In 1982, Hollingsworth took several steps to determine the extent of contamination at the site. The company pumped the injection well, installed 16 on-site monitoring wells, sampled soil, conducted a groundwater gradient study, and sampled public wells. In 1987, the EPA excavated the old drainfields, exposed contaminated soil to air to allow contaminants to evaporate, and replaced the cleaned soil in the drainfields.

**Entire Site:** The approved cleanup plan for the site includes: excavation; aeration; on-site replacement of VOC-contaminated soils; and recovery of contaminated groundwater from the sand zones of the aquifer, with treatment and reinjection into the aquifer. This soil treatment was completed in mid-1993. The groundwater treatment system is currently shut down, and all construction has been completed at the site. The site groundwater will be monitored for one year, and the need for possible further action will be evaluated at that time.

## Environmental Progress

The pumping of the well and evaporation of contaminants have reduced the potential for exposure to hazardous materials at the facility or through the public water supply while the EPA determines if further cleanup is required at the site. All construction has been completed.

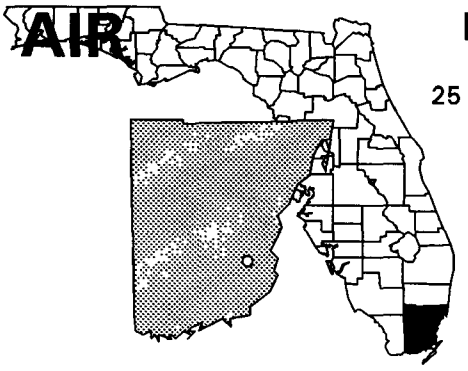
## Site Repository

Broward County Library System, Ft. Lauderdale Branch, 1000 South Andrews Avenue, Ft. Lauderdale, FL 33301

# HOMESTEAD AIR FORCE BASE

## FLORIDA

EPA ID# FL7570024037



**EPA REGION 4**

Dade County

25 miles southwest of Miami

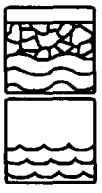
## Site Description

The Homestead Air Force Base site lies approximately 2 miles west of Biscayne Bay. The surrounding area is semi-rural, and most of the base borders on agricultural land. Work to support the base mission includes fuel storage (JP-4, gasoline, diesel, heating oil), transportation systems, and various maintenance shops. These activities have resulted in waste materials being discharged into the environment, including petroleum hydrocarbon fuels, solvents, pesticides, and heavy metals. Current disposal practices are surveyed regularly for conformance with local, State, and Federal regulations. The base is surrounded by a canal that discharges into Military Canal and, ultimately, into Biscayne Bay. An estimated 1,600 people obtain drinking water from the Biscayne Aquifer, and 18,000 acres of farmland within 3 miles of the site are irrigated from wells. The aquifer, which underlies the site, is the sole source of potable water in the area. The base was struck by Hurricane Andrew on August 24, 1992. The base suffered extensive structural damage. Emergency removals were undertaken at 16 areas of the base after the hurricane. It is estimated that approximately 70 new areas of contamination were created by the hurricane. Under the Base Realignment and Closure Act of 1991, the base was slated for realignment. Approximately 1/3 of the base will be retained under Air Force control as the Homestead Air Reserve Base. The remaining 2/3 of the base will no longer be Air Force property, but will be transferred to other public or private entities.

**Site Responsibility:** This site is being addressed through Federal actions.

**NPL LISTING HISTORY**
Proposed Date: 07/14/89
Final Date: 08/30/90

## Threats and Contaminants



The groundwater is contaminated with petroleum from former disposal practices. The canals surrounding the base are probably hydraulically connected with the aquifer, and contaminants have discharged into surface waters. Health risks may exist for individuals who come in direct contact with or drink contaminated groundwater.

## Cleanup Approach

This site is being addressed in initial actions and two long-term phases focusing on cleanup of the PCB spill area and the entire site.

### Response Action Status

**Initial Actions:** Emergency removals have been performed at 16 areas since Hurricane Andrew struck the base. The nature of the removals ranged from the excavation of petroleum-contaminated soils from petroleum spills and the removal of ruptured and leaking petroleum tanks, to the staging and removal of downed transformers. Other removal actions included the removal of hazardous wastes from the Hazardous Materials Storage Building as well as the removal of hazardous wastes, including pesticides and herbicides, from the golf course maintenance area. In 1994, two additional removals were completed at Homestead Air Force Base. At the Entomology Storage Area, the excavation of pesticide-contaminated soils was undertaken. At the Fire Protection Training Area No. 3, the excavation of petroleum-contaminated soils occurred.


**PCB Spill Area:** In late 1994, after completing a study assessing the nature and extent of contamination resulting from PCB spills, the Air Force determined that PCBs were, in fact, not a threat. No further action is anticipated at this area.

**Entire Site:** The Air Force is conducting numerous studies of contamination at the site, including the Fire Protection Training Areas, the Aircraft Wash rack, the Entomology Storage Area, the Boundary Canal, and the "HUSH" Houses. Investigations are underway to determine the nature and extent of contamination in these areas and to propose final cleanup remedies to be taken, if necessary. Investigations are scheduled to be completed in 1995 and early 1996.

**Site Facts:** The Homestead Air Force Base is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DOD facilities.

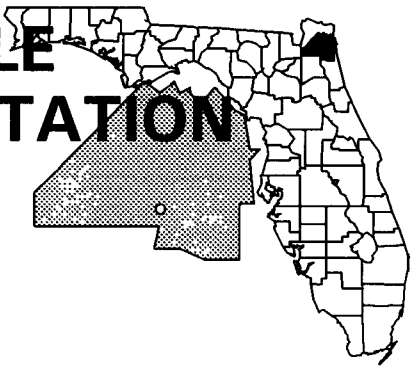
## Environmental Progress

After proposing this site to the NPL, the EPA and the U.S. Air Force performed preliminary site investigations and determined that there were no immediate actions necessary at the Homestead Air Force Base while further investigations and cleanup activities were taking place. However, 16 areas have undergone emergency removals since Hurricane Andrew struck the base. After the hurricane, it was determined that approximately 70 new contaminated areas existed at the base that were not previously identified. Approximately 40 of the 70 areas required confirmatory sampling to determine whether a release had occurred and whether a full-scale investigation was warranted. Confirmatory sampling data was compiled in 1994. Decisions on whether full-scale investigations are needed at the areas are expected in 1995.

## Site Repository

Dade Community College Library, Miami, Florida

# JACKSONVILLE NAVAL AIR STATION
## FLORIDA
EPA ID# FL6170024412



**EPA REGION 4**
Duval County
9 miles south of Jacksonville

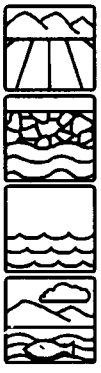
## Site Description

The Jacksonville Naval Air Station (NAS) site is located approximately 9 miles south of downtown Jacksonville. The mission of Jacksonville NAS is to provide facilities, services, and managerial support for the operation and maintenance of naval weapons and aircraft as designated by the Chief of Naval Operations. Work in support of the base mission includes fuel storage for the transportation systems and the overhaul, intermediate maintenance, and repair of aircraft and engines. Maintenance activities over the years have generated a variety of materials, some of which were disposed of in a landfill on the base. These materials include wastes resulting from construction activities; municipal solid waste and municipal wastewater treatment plant sludge; and miscellaneous industrial wastes, including waste oils, solvents, paints, radium paint waste, wastewaters containing heavy metals, and spilled fuels. Current disposal practices are regulated for conformance with local, State, and Federal regulations. Three aquifers underlie the Jacksonville NAS site: the Surficial, the Intermediate, and the Floridian. Drinking water is supplied to the base via wells that tap the Floridian Aquifer. Off-base residents use the Intermediate aquifer as a drinking water source. Approximately 300 people draw drinking water from private wells in shallow groundwater within 3 miles of the Naval Air Station.

**Site Responsibility:** This site is being addressed through Federal and State actions.

**NPL LISTING HISTORY**
Proposed Date: 07/14/89
Final Date: 11/21/89

## Threats and Contaminants

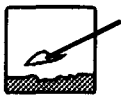


The Navy found volatile organic compounds (VOCs), polychlorinated biphenyls (PCBs), and heavy metals including cadmium, chromium, and lead in soils and the shallow groundwater near the potential sources of contamination. The Navy also found lead, chromium, and cadmium in the St. Johns River. There is no potential for direct contact with contaminants because the landfill is capped. Several creeks and two small lakes are located on the site. The St. Johns River is used for recreation and the propagation and management of fish and wildlife. The St. Johns River has a potential for contamination from glass beads used in aircraft paint stripping that were disposed of in the river. The station encompasses freshwater wetlands and critical habitats for the Florida manatee and the bald eagle, both designated as endangered species by the U.S. Fish and Wildlife Service.

## Cleanup Approach

The site is being addressed in four stages: immediate actions and three long-term remedial phases: the oil and solvent disposal pit area, the wastewater treatment area, and the industrial areas. Interim remedial actions are being planned for some sources of contamination.

### Response Action Status



**Immediate Actions:** Due to military construction, contaminated soil was removed in early 1992.

**Oil and Solvent Disposal Pit Area:** The Navy is conducting an investigation into the nature and extent of contamination in the oil and solvent disposal area. Upon completion in 1995, a remedy will be selected.

**Light, Non-Aqueous Phase Liquid (LNAPL):** An interim remedy was chosen in 1994, that addressed the source removal of LNAPL. The remedy consisted of the construction of a series of trenches which operate as a passive recovery system for the LNAPL, with the off-site treatment and disposal of LNAPL. The construction of the trenches is ongoing. It is estimated that the system will operate for approximately two years, process an estimated 10,200 gallons, at a cost of $41,000.

**Wastewater Treatment Area and Potential Sources of Contaminations:** This investigation addresses an area on the east side of the Air Station comprising of six potential sources of contamination (PSCs). These sources are: 11-Hangar 101; 12-Old Test Cell Building 101K; 13-Former Radium Paint Waste Disposal Pit; 14-Battery Shop; 15-Former Solvent and Paint Sludge Disposal Area; and 48-Base Dry Cleaners. Investigations are underway into the nature and extent of the contamination at the wastewater treatment area and the six PSCs. Following the investigations, remedies will be chosen for these areas. These investigations of the PSCs are currently scheduled for completion in late 1995, 1996, and 1997.

**Site Facts:** Jacksonville NAS is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DOD facilities.

## Environmental Progress

The removal of contaminated soil has reduced immediate threats to the health of the nearby population while investigations are being conducted.

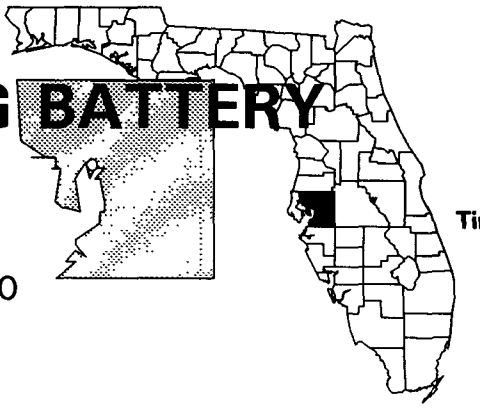
## Site Repository 

Webb Wesconnett Branch Public Library, 6887 103rd Street, Jacksonville, Florida

# KASSOUF-KIMMERLING BATTERY DISPOSAL

## FLORIDA

EPA ID# FLD980727820



**EPA REGION 4**

Hillsborough County
Tampa

**Other Names:**
**Timberlake Battery Disposal**
**58th Street Landfill**

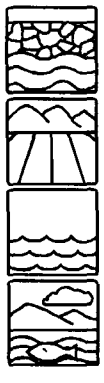
## Site Description

The Kassouf-Kimmerling Battery Disposal site includes a 1-acre landfill and a 4-acre wetland located in Tampa. Before 1978, this site was mined for peat, but in 1978, excavations in the marsh were filled 6 to 12 feet deep with lead battery casings and fill dirt that is now covered with a layer of soil. The site is bordered on the east and west by freshwater marshland. Water flows from the western to the eastern marsh via a canal across the landfill; a large lake lies to the north. The immediate area of the landfill is uninhabited and is bordered on three sides by dense plant growth. Approximately 1,500 wells are located within a 3-mile radius, although sampling has detected no well contamination off the site. The population of the surrounding neighborhood is about 5,500. The area to the south of the site is commercial and residential, with several churches, a school, restaurants, offices, and a currently inactive fish farm nearby.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



Groundwater, soil, and surface water on the site are contaminated with heavy metals including lead, cadmium, and arsenic from former waste disposal activities. Off-site contamination is restricted to some lead in surface water and sediments. People exposed to site contaminants over a long period of time could face health threats. The cleanup of the site soils was completed in the spring of 1994, eliminating any likelihood of exposure. In addition, the marsh adjacent to the site has been permanently flooded to allow for the "sequestering" of lead contaminants deep in the marsh's sediments. The sequestering prevents biological uptake or further degradation of the marsh from lead contamination.

## Cleanup Approach

The site is being addressed in two long-term remedial phases focusing on source control and cleanup of the marsh area.

### Response Action Status

**Source Control:** The EPA selected a remedy for source control at this site in 1989, which includes excavating the landfill wastes and contaminated underlying soils, solidifying the soils and applying chemical fixation, and disposing of the soils on site in the landfill area. All cleanup activities were completed in 1994.

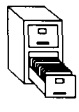
**Marsh:** The EPA arrived at a decision for cleanup of the contaminated marsh in 1990. Potentially responsible parties have completed the remedy for the selected cleanup. The cleanup included removal of the marsh sediment within 20 feet of the battery landfill to a depth of 2 feet below the sediment surface, and removal of sediments from the canal east of the site extending 150 feet from the battery landfill to a depth of 2 feet. Approximately 1,500 cubic yards of contaminated sediments were excavated from the marsh. The excavated sediments were treated using a solidification and stabilization technology and were placed with the solidified landfill materials. The remainder of the marsh sediments remained on site because removing the contaminated material may cause contaminants to migrate. In addition, the canal that currently allows the marsh to drain was redesigned to allow the marsh to remain permanently flooded. The creation or "mitigation" of off-site woodlands is scheduled to begin in 1995. Existing woodlands will be enlarged to compensate for the adverse effects caused by site contaminants.

**Site Facts:** In 1983, the EPA issued an order requiring the potentially responsible parties to monitor the groundwater and surface water, perform analysis of the battery fill material, and conduct general soil sampling.

## Environmental Progress

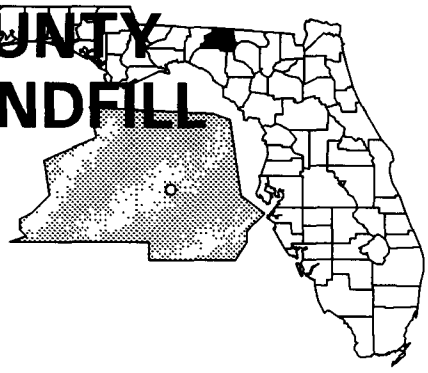
The cleanup of contaminated soils at the Kassouf-Kimmerling Battery Disposal site has eliminated immediate threats to public health or the environment while the final cleanup activities are being conducted.

## Site Repository



Tampa-Hillsborough Public Library, 900 North Ashley Drive, Tampa, FL 33602

# MADISON COUNTY SANITARY LANDFILL
## FLORIDA
EPA ID# FLD981019235



**EPA REGION 4**
Madison County
Northeast of Madison

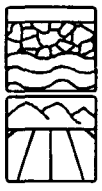
## Site Description

The Madison County Landfill is a 133-acre site located northeast of Madison that was owned and operated by the City of Madison from 1971 until 1980. Industrial waste generated by local industries reportedly was disposed of at the landfill, along with municipal waste, waste solvents, and waste buffing compounds. During that time, ITT Thompson Industries, Inc. disposed of drums and waste containing trichloroethene and other compounds. The County bought the landfill in 1980 and has been operating it since then. The landfill is licensed by the State to accept municipal solid waste. In 1984, the County found trichloroethene in monitoring wells on the site and in private wells nearby. An estimated 95 private wells and 3 city wells are located within 3 miles of the site. Contamination of these wells threatens the drinking water supply of 4,400 people.

**Site Responsibility:** This site is being addressed through a combination of Federal, State, county, municipal, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 08/30/90

## Threats and Contaminants

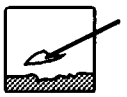


Volatile organic compounds (VOCs), including trichloroethene from former waste disposal practices, were detected in on-site monitoring wells and private wells near the site. Similar contaminants have been identified in the surface soils located within the landfilled areas. Ingestion of contaminated groundwater and direct contact with contaminated soil and groundwater pose the most significant health risks.

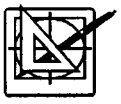
## Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

## Response Action Status



**Initial Actions:** In 1984, Madison County and the Suwanee River Water Management District installed a groundwater monitoring network at the landfill. Later that year during routine sampling activities, the Florida Health and Rehabilitation Service (HRS) detected unacceptable concentrations of several VOCs in the groundwater. This prompted the Florida Department of Environmental Regulation (FDER) to investigate the contents of the landfill. ITT Thompson was identified as having disposed of industrial waste in the landfill and therefore assisted FDER in performing two drum removal operations in 1984 and 1985. All materials were transported to an EPA-approved hazardous waste facility. When private wells in the vicinity of the landfill were found to be contaminated, the city, and later ITT Thompson, provided bottled water and ice to affected families. In addition, the city, county, and ITT Thompson installed water filtering systems and connected the affected homes to city water lines, ensuring that a safe drinking water supply was available to these families.



**Entire Site:** After the site investigation was completed, the remedy for the site was selected in the fall of 1992. The selected remedy includes construction of a groundwater extraction and treatment system, installation of a clay/soil cap, construction of a stormwater management system, and implementation of a long-term groundwater monitoring program. The design of the remedy is expected to be completed in 1995.

**Site Facts:** In February 1986, the FDER entered into a Consent Agreement with the city, county, and ITT Thompson, requiring them to investigate groundwater and soil contamination near the site. The alternate water supply activities that occurred in 1988 were completed by the potentially responsible parties under a Consent Order with the State. In June 1990, the EPA entered into a Consent Order with ITT Thompson, the city, and the county. This order required ITT Thompson to investigate the nature and extent of contamination at the site. ITT Automotive signed a modification to the Administrative Order by Consent to include design of the remedy. ITT Automotive, the City of Madison, and Madison County were sent a Unilateral Administrative Order that required them to perform cleanup activities. This Order became effective on February 1, 1994.

## Environmental Progress

The drum removal and the provision of an alternate drinking water supply have reduced the potential for exposure to contaminated substances or groundwater at the Madison County Landfill site while the final cleanup strategies are being designed.

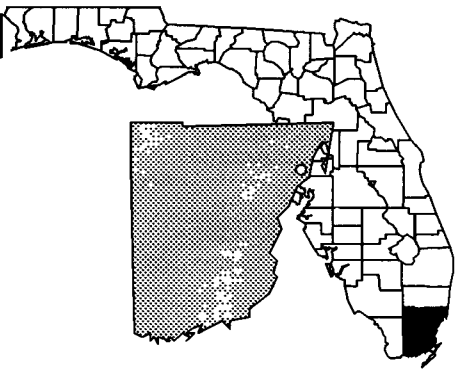
## Site Repository 

North Florida Junior College Library, Turner Davis Drive, Madison, FL 32340

# MIAMI DRUM SERVICES

## FLORIDA

EPA ID# FLD076027820



**EPA REGION 4**

Dade County
Miami

**Other Names:**
**Biscayne Aquifer**

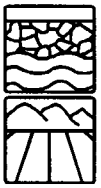
## Site Description

Miami Drum Services recycled drums for 15 years on this 1-acre site located in a predominantly industrial area of Miami. While the company was in operation, as many as 5,000 drums of various chemical wastes including corrosives, solvents, phenols, and toxic metals were observed on the site. Surface spills and percolation of contaminated wastewater saturated the soil at the facility. The Biscayne Aquifer, which underlies the site, is contaminated with various toxic organic solvents and heavy metals. The site is about 750 feet from the Medley Well Field, which extracted drinking water from the Biscayne Aquifer until it was permanently closed in 1982. Groundwater is less than 3 feet below the surface. Dade County obtained a court order to close the facility in 1981. The property, now owned by the County, became part of its new mass transit system. The EPA gave Dade County the funds to clean up the site, and the County recommended excavation and off-site disposal of contaminated soil, timed to meet its construction schedule. This site, along with the Northwest 58th Street Landfill and the Varsol Spill Site, have been studied together as the "Biscayne Aquifer Sites." Proposed on the NPL as a unit, they were considered to be a serious potential threat to regional water supply. The three sites eventually were listed on the NPL as individual sites.

**Site Responsibility:** This site is being addressed through Federal, State, County, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



Groundwater contains volatile organic compounds (VOCs), primarily vinyl chloride from former waste disposal activities. On-site soils were contaminated with phenols, heavy metals, oil and grease, pesticides, and other materials from the drum-cleaning operation. People who come in direct contact with or accidentally ingest contaminated groundwater may be at risk. No health threats exist for soils as a result of the cleanup activities.

## Cleanup Approach

### Response Action Status

**Groundwater and Soil:** The EPA formally selected the remedies for this site in 1982 and 1985. Cleanup was separated into two phases: source control and groundwater cleanup. The EPA accepted the source control strategy proposed by Dade County in 1981. The County mobilized its transportation funds to speed up cleanup activities and, by early 1982, 8,500 cubic yards of contaminated soil had been removed to an off-site disposal facility, and almost 1 million gallons of groundwater were pumped and treated. Later in 1982, the EPA funded the County's cleanup actions and a more intensive study of how contaminated groundwater was moving from the site. The 1982 cleanup activities were adequate to control the source of contaminants, and the site is now a railroad yard for the County Transit Authority. The groundwater remedy selected in 1985 called for the addition of air strippers at two water treatment plants. This technology evaporates volatile contaminants out of the water. The State undertook the engineering design for groundwater cleanup and finished it in 1987. Construction was completed and the entire system was operational as of the fall of 1992.

**Site Facts:** Dade County filed suit against the former site owner in 1981, seeking recovery of all funds spent for site cleanup, compensatory damages for harm to natural resources, and punitive damages. The EPA filed a cost recovery action, and recovered most of its costs associated with the source control action. Subsequent groundwater treatment activities initially were delayed because the State declined to conduct them, but the EPA negotiated a Cooperative Agreement with the local government, as well as a contract for assurances with the State. Historic preservationists were concerned that the air strippers proposed for cleaning up the groundwater would block the view of the historic Hialeah Water Treatment Plant, but a compromise solved the problem.

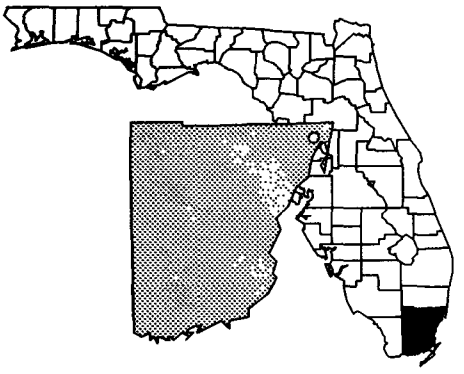
## Environmental Progress

Construction of site remedies has been completed. The cleanup activities at the Miami Drum Services site have been successful in controlling the source of contaminants, and efforts are being focused on treatment of the groundwater. The EPA determined that the site does not presently pose an immediate threat to public health or the environment while the air stripping towers are removing contamination found in certain municipal wells. The system treats 150 million gallons of water each day.

## Site Repository

Miami-Dade County Public Library, 101 West Flagler Street, Miami, FL 33130

# MUNISPORT LANDFILL
## FLORIDA
EPA ID# FLD084535442



**EPA REGION 4**
Dade County
North Miami

## Site Description

The Munisport Landfill occupies a tract of land, approximately 30 acres in size, within a larger 291-acre parcel of land owned by the City of North Miami, Florida. A developer leased the land from the City of North Miami and filled low-lying areas with clean fill and construction debris. By 1974, the landfill was accepting municipal refuse. Between 1972 and 1981, its operators piled several million cubic yards of solid waste 40 feet high, and the facility was eventually shut down for improper disposal practices. The site's operators created eight deep lakes on the site when they excavated the refuse and used debris to cover the piles. Disposal records show that the site accepted domestic garbage, yard refuse, construction debris, and hospital pathological wastes. Three major sampling and monitoring efforts were mounted in the 1980s by the EPA and the City of North Miami. The site is bordered by major roads, Florida International University, and a mangrove swamp, which separates the site from Biscayne Bay. The Bay is classified as an outstanding Florida waterway and nature preserve and is a major recreational area. Mangrove wetlands, which are becoming increasingly rare, are valuable as wildlife habitat.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/30/82
Final Date: 09/08/83

## Threats and Contaminants

Pollutants detected in groundwater, soil, and leachate samples include elevated levels of ammonia and low levels of heavy metals, pesticides, and volatile organic compounds (VOCs) from the former waste disposal activities. No public health risk exists under current uses because possible exposure routes contain relatively low levels of contaminants. A threat to the environment exists, however, due to the migration of leachate from the site into the Mangrove Preserve. Contamination of the preserve can be particularly serious because many pollutants, even at very low levels, can damage aquatic life and can bioaccumulate and concentrate in the food chain.

## Cleanup Approach

This site is being addressed in a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Entire Site:** The EPA began an intensive study of soil and water pollution at the site in 1987. A subsequent study of the Mangrove Preserve was conducted in 1989. In 1990, the EPA selected the cleanup remedy from the alternatives resulting from the investigation. Leachate will be treated for ammonia contamination in "air stripping ponds," after which it will be cycled back through the landfill. In addition, the flow of leachate into a Mangrove Preserve will be halted by the construction of a hydraulic barrier. The City has proceeded with the design of the remedy for the groundwater recovery and treatment system. The design studies showed, however, that air stripping would not be as effective in the treatment of the leachate as originally believed. The treatment component of the remedy was changed from air stripping to treatment at a Publicly Owned Water Treatment Works. This change was documented in an Explanation of Significant Differences issued in March 1994. The design for this portion of the remedy should be completed in the spring of 1995. Due to the straightforwardness of the design for the tidal restoration of the Mangrove Preserve, the design for this restoration was accelerated and completed in the summer of 1994. Construction for the causeway breach was started in the fall of 1994 and is expected to be completed in late 1995. The City submitted a permit application for the closure of the landfill in the spring of 1994. The application has been reviewed by the Florida Department of Health and Environmental Protection (FDEP). The City of North Miami is currently responding to comments from FDEP for the closure application.

**Site Facts:** Environmentalists and the State of Florida are concerned about the threat to aquatic organisms in the preserve and are working with the EPA to develop a cleanup plan for the site. Though no air pollution data are available, nuisance odors led to three citations while the site was active. The City of North Miami, as the only party potentially responsible for contamination at this site, signed a Consent Decree on September 29, 1991 to perform the remedy chosen by EPA. An Explanation of Significant Differences altering the selected treatment system was issued in March 1994.

## Environmental Progress

Design studies indicate that the quality of the Mangrove Preserve is suffering greatly due to inadequate tidal circulation with the Bay. EPA is pursuing a phased approach to improve the tidal circulation in the Mangrove Preserve and then address the long-term threat posed by the leachate-contaminated groundwater.

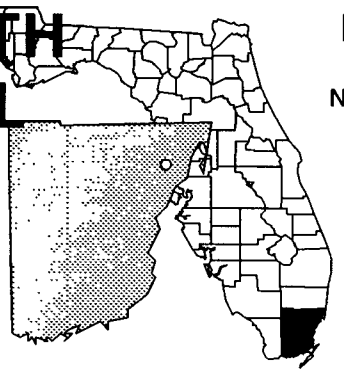
## Site Repository 

Florida International University Library, North Miami Campus Library,
North Miami, FL 33181

# NORTHWEST 58TH STREET LANDFILL

## FLORIDA

EPA ID# FLD980602643



**EPA REGION 4**

Dade County
Near the Town of Medley

**Other Names:**
**Biscayne Aquifer**

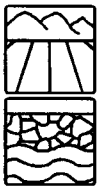
## Site Description

The Northwest 58th Street Landfill site, near the City of Miami Springs, is one of three NPL sites that comprise the Biscayne Aquifer Superfund Study. The landfill is a 1-square-mile site near Hialeah, located along the eastern edge of the Everglades wetlands. From 1952 to 1982, the site operated as a municipal landfill, receiving approximately 60,000 tons of waste in 1952 and increasing annually over the 30 years of operation to over 1,000,000 tons per year. Small quantities of household hazardous materials, such as pesticides, paints, and solvents were considered to be municipal waste. In 1975, the landfill operation initiated a program of providing daily cover to the site; however, prior to this, the operation did not compact wastes or add daily cover. Since 1982, the landfill has received only quarry wastes of water-based paint sludge. The landfill is no longer receiving waste and is undergoing formal closure procedures. Two major groups of public water supply well fields are located downgradient within 2 miles of the site. These wells serve an estimated 750,000 people.

**Site Responsibility:** This site is being addressed through Federal, State, and County actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



Leachate from the landfill has contaminated groundwater with heavy metals including arsenic and lead, as well as volatile organic compounds (VOCs) such as vinyl chloride. Potential risks to individuals exist if they drink the contaminated groundwater. In 1986, the U.S. Geological Survey identified a leachate plume migrating westerly from the site. The County is selectively pumping well fields and has constructed hydraulic barriers to control the plume.

## Cleanup Approach

### Response Action Status

**Entire Site:** The cleanup plan to be completed by Metro Dade County, the potentially responsible party, includes: controlling leachate generation by a combination of grading, drainage control, and capping; providing a public water supply to replace approximately 60 contaminated wells; and closing the landfill. The County installed an alternate water supply in 1988 and a leachate interception system in 1989. Additional cover has been applied to the landfill. In early 1991, the contract for grading, capping the landfill with a synthetic membrane, and constructing a stormwater management system, roads, berms, swales, and retention areas was awarded. The landfill was originally scheduled for closure in September 1992; however, during Hurricane Andrew, the landfill suffered damages which delayed the start of the landfill closure until June 1994. Closure activities are expected to be completed in the summer of 1995.

**Site Facts:** The State of Florida has a civil suit pending against Dade County for failure to cease operations by August 1981. The State and County are working together to develop a final plan for closing the facility. The Department of Justice completed all notice requirements to the potentially responsible parties and filed the Consent Decree with the court in January 1989. The Courts have been notified of the later closure of the landfill. The County has repaid EPA for past cleanup costs and is currently in compliance with the Consent Decree.

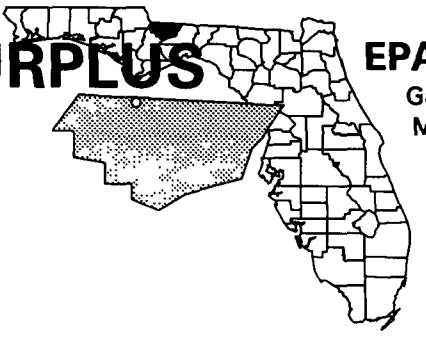
## Environmental Progress

All construction at the site is complete. The provision of an alternate water supply and the installation of a leachate control system and additional cover at the Northwest 58th Street Landfill site have reduced the potential for exposure to hazardous materials while site closure activities are being completed.

## Site Repository

Miami-Dade County Public Library, 101 West Flagler Street, Miami, FL 33130

# PARRAMORE SURPLUS
## FLORIDA
EPA ID# FLD041140344



**EPA REGION 4**
Gadsden County
Mount Pleasant

## Site Description

The Parramore Surplus site is a 25-acre storage and resale company for Navy and Air Force surplus equipment. Beginning in 1972, Parramore began storing drums on the property. The Florida Department of Environmental Regulations (FDER) inspected the site and found 400 to 600 drums, some of which were leaking and killing the vegetation. The site is located in a low-density residential area with approximately 20 homes in the immediate vicinity of the site. Fewer than 100 people live within a 1-mile radius of the site. The area surrounding the site is primarily agricultural and forest land.

**Site Responsibility:** This site was addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/01/82
Final Date: 09/08/83
Deleted Date: 02/21/89

## Threats and Contaminants

The soil was contaminated with polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and heavy metals including lead.

## Cleanup Approach

### Response Action Status

**Source Control:** The EPA, the Florida Department of Environmental Regulations (FDER), and the owner of Parramore agreed that Parramore would remove the surface contamination. After the removal was completed, samples were taken of the soil and three new areas of contamination were located. Parramore cleaned up these areas as well. Sampling after the second removal action in 1983 indicated that the contamination had been removed. In 1985, a modified investigation was conducted by the EPA to determine whether all source materials had been removed and whether there was any groundwater contamination directly related to the site. The investigation determined that all sources of contamination had been successfully removed, with the exception of the three small areas that had been the target of the second cleanup. It was determined that the amount of contamination present in these areas would not damage the environment or threaten public health. A groundwater quality assessment was recommended, however, to ensure that no groundwater contamination had occurred from past releases of hazardous substances at the site. Groundwater monitoring wells were installed, followed by two periods of groundwater sampling and analyses to ensure that the groundwater had not been adversely affected by past releases of hazardous substances. The monitoring was completed in 1987, and the site was found to be within federal safety standards and to pose no threat to human health or the environment. The site was deleted from the NPL on February 21, 1989.

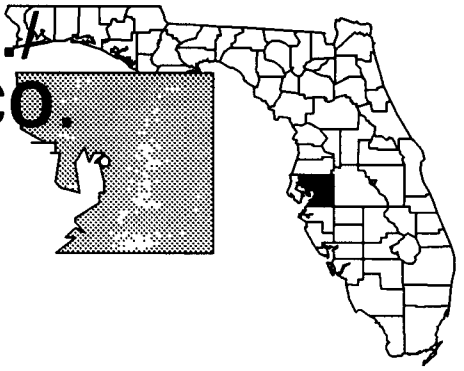
## Environmental Progress

All cleanup activities, including groundwater monitoring, were completed and the Parramore Surplus site was deleted from the NPL in 1989. The cleanup actions have achieved all established goals for surface contamination cleanup, and the site is now safe to nearby residents and the environment.

# PEAK OIL CO./ BAY DRUM CO.

## FLORIDA

EPA ID# FLD004091807



**EPA REGION 4**

Hillsborough County
Tampa

**Other Names:**
**Bay Drums**

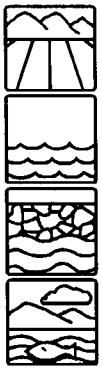
## Site Description

The 4-acre Peak Oil and 15-acre Bay Drums sites are located directly adjacent to each other in north central Hillsborough County, Florida. In 1986, the Peak Oil/Bay Drums site were co-ranked on the NPL because of their proximity and the indiscriminate waste disposal practices at the two sites. The Peak Oil Facility began operation as a waste oil refiner in August 1954. After 1979, operations reportedly were limited to blending and filtering of waste oil and resale of waste oils for fuel and flotation oil. The Bay Drums facility is a former drum reconditioning facility. When the Bay Drums site was active, drums from many sources were transported to the site for reconditioning. Nearly all of the site property was used for drum storage, although the active drum reclaiming area only covered approximately 2 acres of the site. There are two wetlands located near the site: the 6 1/4 Central Wetland, located immediately to the south of the former Bay Drums facility; and the 9 1/2-acre South Wetland, located about 500 feet southeast of the former Peak Oil facility. Neither wetland has a defined surface water inlet or outlet. Residential neighborhoods, light manufacturing facilities, warehouses and Hillsborough County's refuse-to-energy plant are located in the area around the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/15/84
Final Date: 06/10/86

## Threats and Contaminants

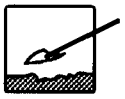


The soils, sludge, surface water, and sediments on site are contaminated with polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), and heavy metals including arsenic and lead from former process wastes. In addition, the groundwater is contaminated with VOCs and heavy metals. Potential health threats in the area may come from contact with contaminated on-site soils or surface water runoff. There are several aquifers and wetlands in the area that contain contaminants from the site.

## Cleanup Approach

This site is being addressed in five stages: immediate actions and four long-term remedial phases focusing on cleanup of the peak source area, groundwater, bay source area, and the wetlands.

### Response Action Status



**Immediate Actions:** Incineration of contaminants was approved and, in 1986, contaminated soils were excavated and prepared for test burns in a mobile incinerator. As of 1987, more than 1,500 tons of contaminated soil had been incinerated and non-hazardous debris was disposed of on site. In 1989, tanks were cut up and disposed of off site. Used oil, contaminated with PCBs, and tank sludge, also was disposed of off site. This cleanup action was completed in 1990. Mixed oil and water was removed and taken to an approved off-site facility.


**Peak Source Area:** The parties potentially responsible for site contamination have studied the nature and extent of on-site soil contamination and the ash pile resulting from the incineration. Field activities for an area-wide hydrogeological study began in 1989. Fields activities to identify the source of the contamination also began in 1989. The investigation was completed in late 1992, and resulted in various alternatives to cleanup site contamination. The remedy, selected in mid-1993, addresses the source of contamination, which represents a principal threat at the Peak Oil site. The in-place treatment includes process technologies that will treat impacted soils, sediments, and the ash pile. Design activities are expected to begin in the spring of 1995.


**Groundwater:** An investigation into the nature and extent of the contamination of the groundwater was initiated in 1988 by the potentially responsible parties. The investigation, completed in late 1992, identified remedies to clean up the groundwater. The remedy, selected in the summer of 1993, addresses groundwater in the southern surficial aquifer and the Upper Floridan Aquifer at the Peak and Bay Drums sites. The treatment consists of air stripping to remove VOCs and carbon polishing to remove semi-volatiles and other organic materials. Design activities are expected to begin in the spring of 1995.


**Bay Source Area:** The potentially responsible parties have investigated the nature and extent of contamination in the bay source area. The study was completed in late 1992 and resulted in identifying alternative remedies to clean up the Bay source area. The remedy was selected in early 1993 and addresses the principal threats posed by Bay Drums site soils and sediments. The treatment includes the excavation of contaminated materials, ex-situ stabilization/solidification, and disposal of treated material on site above the water table. A low permeability clay cap will then be constructed to reduce rainwater infiltration through the waste. Design activities are expected to begin in the spring of 1995.

**Wetlands:** The potentially responsible parties began a study in 1988 to explore the nature and extent of contamination in the wetlands area. The remedy for this area was selected in the summer of 1994. The selected remedy calls for no further cleanup action but includes ecological monitoring of the wetlands. The purpose of the selected remedy is to monitor the ecologic status of the Central and South wetlands as the Peak source area, groundwater, and Bay source area remedies are being implemented. The design for the wetlands monitoring is expected to begin in the spring of 1995.

**Site Facts:** In 1989, an Administrative Order on Consent was signed by the EPA and the potentially responsible parties that required the parties to characterize the site and perform the area-wide hydrogeological cleanup investigation.

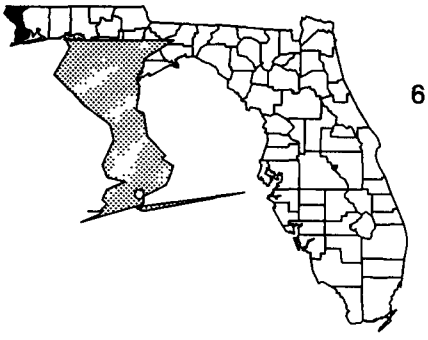
## Environmental Progress

The treatment of soil and disposal of some liquid wastes have reduced the potential for exposure to hazardous substances at the Peak Oil Co./Bay Drum Co. site. These actions have protected the public health and have prevented further environmental damage while remedies are being designed at the site.

## Site Repository

Brandon Branch Public Library, 135 West Robertson Street, Brandon, FL 33511

# PENSACOLA NAVAL AIR STATION
## FLORIDA
EPA ID# FL9170024567



**EPA REGION 4**
Escambia County
6 miles southwest of Pensacola

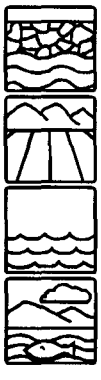
## Site Description

The Pensacola Naval Air Station (NAS) site is located on approximately 5,900 acres and is the home of two major industrial tenant commands: the Naval Aviation Depot and the Public Works Center. Work in support of the base mission includes fuel storage and transportation systems and depot-level maintenance and repair of aircraft and engines. Maintenance activities over the years generated a variety of disposed materials including waste materials from construction activities, municipal solid waste, and municipal wastewater treatment plant sludge. Miscellaneous industrial wastes including waste oils or solvents, paints, electroplating wastes, radium paint wastes, and insecticides were discharged to storm sewers until 1973, when an industrial sewer and wastewater treatment system were installed. Current disposal practices are monitored regularly for conformance with local, State, and Federal regulations. The groundwater aquifer at Pensacola NAS extends to a depth of approximately 400 feet. There are three drinking water wells on the facility tapping the upper aquifer. An estimated 15,000 people on Pensacola NAS and 30,000 customers of Peoples' Water Co. obtain drinking water from wells within 3 miles of the hazardous substances on site. The surface water bodies surrounding the site include Pensacola Bay and a tidal creek known as Bayou Grande. These surface waters are classified by the Florida Department of Environmental Regulation as Class III water, for recreational use and the propagation and management of fish and wildlife.

**Site Responsibility:** This site is being addressed through Federal actions.

**NPL LISTING HISTORY**
Proposed Date: 07/14/89
Final Date: 11/21/89

## Threats and Contaminants



Volatile organic compounds (VOCs), including benzene and ethyl benzene from former waste disposal practices, were detected in the monitoring wells. Arsenic and pesticide compounds were found in soil samples taken at a pesticide mixing area. Heavy metals were detected in surface water and sediments. Drinking water wells currently are assumed to be upgradient of the base. A large hazardous waste landfill is located next to the base golf course and a picnic area. The NAS Marina is located where a storm drain from the electroplating shops emptied into the bayou. Direct contact during recreation is a possibility for those on base and could pose a health risk.

## Cleanup Approach

In accordance with the Federal Facilities Agreement (FAA), the Navy is responsible for the investigation and cleanup of as many as 42 individual sub-sites. To facilitate the use of all parties' resources, these sites have been divided into seven different investigatory categories.

### Response Action Status

**Category 1 (OU 10)**: The Navy recently completed the field and analytical portions of an investigation of the Industrial Waste Treatment Plant (IWTP), sludge drying beds, and associated sites. The data is being evaluated for threats to human health and the environment. In accordance with a Resource Conservation and Recovery Act (RCRA) post-closure permit, a groundwater treatment system has been installed and is already operating at the site. The remedy, which is expected to be selected in 1995, will determine necessary additions and modifications to ongoing RCRA groundwater cleanup efforts.

**Category 2 (OUs 1, 3, 11, and 12):** The Navy is nearing completion of the field and analytical portions of the investigations for four high priority sites, including a large landfill, a suspected area of waterfront sediment contamination, an area of soil contamination adjacent to the Oak Grove campground, and a former hazardous waste storage area. The data is now becoming available and evaluation of the threats to human health and the environment has been initiated. The investigations are expected to be completed in 1995 and the remedy is expected to be selected in 1996.

**Category 3 (OU 2):** The Navy is nearing completion of the field investigation of a heavily-industrialized area northwest of Chevalier Field. This high priority area includes an industrial landfill, a metals plating shop and associated drainage ditch, portions of an Industrial Waste Sewer Line, two areas of potential radium waste release, and several storage and disposal areas. Potentially impacted media include soils, groundwater, and adjacent surface waters and sediments. The investigation is expected to be completed in 1996, and the remedy is expected to be selected in 1997.

**Category 4 (OUs 15, 16, and 17):** These areas were designated to characterize the impacts of the site on adjacent water bodies. They include Bayou Grande, on-base wetlands, and Pensacola Bay. Preliminary work plans have been prepared by the Navy and reviewed by the EPA. The Navy is currently synthesizing background and site information, as it becomes available, and performing scoping field work to develop final work plans. Field work is expected to begin in 1995.

**Category 5 (OUs 6 and 8):** This moderate priority category includes the following sub-sites: a fire training area, a potential area of soil contamination, a former burial/disposal site, and a dredge spoil fill area. Field work at these sites is in progress. The investigations for these sites are expected to be completed in 1995 and the remedies are expected to be completed in 1996. Construction activities associated with Base Realignment and Closure are also being conducted in this portion of the base, requiring rapid cleanup and close coordination of all investigatory and cleanup schedules for these sites with construction schedules.

**Category 6 (OUs 4 and 14):** This moderate priority category includes the following sub-sites: a pesticide rinsate disposal area and a transformer storage area. The work plans for these sites are currently being finalized, and field investigations should begin in 1995.

**Category 7 (OU 13):** This low priority category includes only one site: a refueler repair shop. The work plan for this site should be finalized and field investigations should begin in 1995.

**Site Facts:** Pensacola Naval Air Station is participating in the Installation Restoration Program, a specially funded program established by the Department of Defense (DOD) in 1978 to identify, investigate, and control the migration of hazardous contaminants at military and other DOD facilities.

## Environmental Progress

After adding the Pensacola Naval Air Station site to the NPL, the EPA evaluated conditions and determined that no immediate threats to human health or the environment exist while investigations leading to the determination of final remedies are underway.

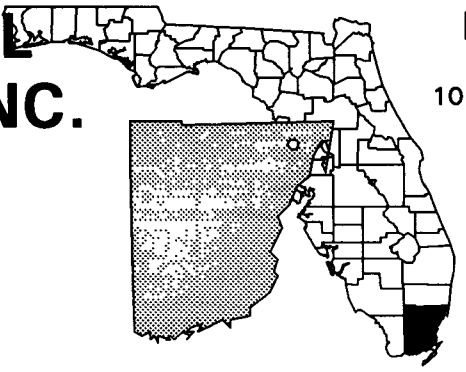
## Site Repository

Pensacola Regional Library, 200 West Gregory Street, Pensacola, FL 32501

# PEPPER STEEL & ALLOYS, INC.

## FLORIDA

EPA ID# FLD032544587



**EPA REGION 4**

Dade County
10 miles northwest of Miami

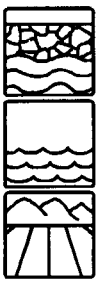
## Site Description

The 30-acre Pepper Steel & Alloys, Inc. site is located in an industrial area with no sewage system and is near three other NPL sites. Since the mid-1960s, the site has been the location of several businesses. On-site activities included manufacturing of batteries, pre-cast concrete products, and fiberglass boats, as well as the repair and service of trucks and heavy equipment. Also, sandblasting and painting services, a concrete batching plant, and an automobile scrap operation were located on the site. Pepper Steel's activities included recycling of electrical transformers, where waste oil containing polychlorinated biphenyls (PCBs) was dumped on the site. Various trash and waste products from these activities, including parts of rusted machinery, vehicles, aircraft, oil tanks, transformers, underground storage tanks, and batteries were deposited at the site. Contamination has been identified in the soil, sediments, and groundwater in and around the site. The site area is flat, and in many places the groundwater is only 1 to 2 feet below the surface.

**Site Responsibility:** This site was addressed through a combination of Federal, State, County, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 09/08/83
Final Date: 09/21/84

## Threats and Contaminants



PCBs, volatile organic compounds (VOCs), and heavy metals such as lead and arsenic from former site activities have been detected in the groundwater, sediments, and soil. Accidental ingestion of and direct contact with contaminated soil, groundwater, and sediments could pose a health hazard to nearby residents.

## Cleanup Approach

### Response Action Status

**Initial Actions:** Early in 1983, the EPA conducted a geophysical survey of the site and identified about a dozen zones requiring further investigation. Soil samples determined that PCBs were present in at least two zones. The EPA removed soil in these zones and floating oil from the shallow aquifer underlying the site. The EPA also drilled observation wells and sampled on-site wells and surface water in the immediate area.

**Entire Site:** The following actions were chosen by the EPA for the site cleanup: collection and off-site disposal of all free oil; excavation of soils containing PCBs, lead, and arsenic; solidification of the contaminated soil with a cement-type mixture to prevent the migration of the contaminants; institutional controls such as deed restrictions to ensure that future land use is compatible with the site; and monitoring groundwater to ensure the effectiveness of the cleanup. Florida Power and Light started the cleanup of the site in 1987. The site cleanup is completed, and the EPA has drafted a closeout report. The EPA will monitor the site to ensure that the cleanup remedies are effective. The site is scheduled to be deleted from the NPL in 1995.

**Site Facts:** The EPA, the State of Florida, the County of Dade, and Florida Power and Light signed a Consent Decree in 1987. Based on this Decree, Florida Power and Light took responsibility for the design and implementation of the cleanup procedure.

## Environmental Progress

All cleanup activities, including the removal of soils and liquid waste, have been completed at the Pepper Steel & Alloys, Inc. site. The site again is safe for nearby residents and the environment while the EPA conducts a final review before deleting the site from the NPL.

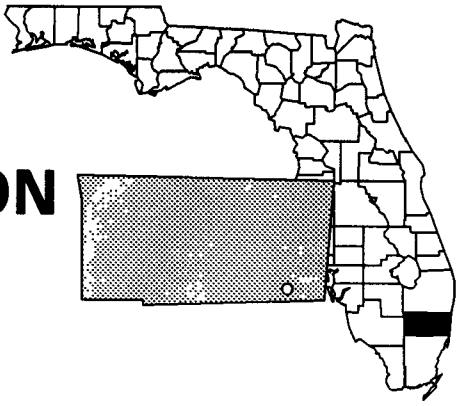
## Site Repository

Miami-Dade Public Library, 101 West Flager Street, Miami, FL 33130

# PETROLEUM PRODUCTS CORPORATION

## FLORIDA

EPA ID# FLD980798698



**EPA REGION 4**

Broward County
Pembroke Park

**Other Names:**
**Pembroke Road**

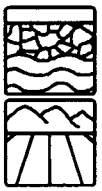
## Site Description

Petroleum Products Corporation re-refined, stored, and recycled oil on this 2-acre site from 1952 to 1972. Residents in a nearby trailer park became concerned when heavy rain triggered an overflow of a disposal pit and produced an oil slick on a lake on the trailer park grounds in 1970. The company initiated major changes in its operation and sold most of its property. The northern half of the property was cleared and the disposal pits were filled in, but a tank farm remained. In 1979, the State issued two warning notices to Petroleum Products because of oil discharges from the tank farm area. The company cleaned up two oil-soaked areas, rehabilitated the tank farm berm, and filled in low spots with clean fill. The site was converted to the Pembroke Park Mini Warehouses in 1985 and now houses small industrial and commercial businesses. The area surrounding the site is a rapidly developing and growing residential area that supports a variety of recreational and industrial activities. The population of Pembroke Park is 20,000. Approximately 150 people live in two trailer parks adjacent to the site. There are more than 200 homes using public wells within 1/4 mile of the site. The Hallandale municipal well field is 3,000 feet southeast of the site, and the Hollywood municipal well field lies 3 miles northwest of the site; these well fields serve 150,000 people. Located within the trailer park and a nearby golf course are a number of man-made lakes that are used for irrigation.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 04/10/85
Final Date: 07/22/87

## Threats and Contaminants



Groundwater is contaminated with oil, heavy metals including lead and chromium, and volatile and semi-volatile organic compounds including benzene from the former process wastes. The soil is contaminated with lead and petroleum hydrocarbons and sludges. The used oil is contaminated with polychlorinated biphenyls (PCBs), solvents, and heavy metals. The well fields near the site draw water from the Biscayne Aquifer, a sole source aquifer. The aquifer beneath the site is connected to the Floridian Aquifer, which is brackish locally. Because most of the contaminated soil at the site is underneath asphalt, there is little risk that people could come in direct contact with it.

## Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on groundwater containment and groundwater and soil cleanup.

### Response Action Status

**Immediate Actions:** In 1985, Petroleum Products removed the drums, storage tanks, and contaminated sludge from the site and transported the materials to a federally-approved disposal facility. An oil recovery system was installed for a month in 1985 to facilitate the removal of contaminants. The State installed a single well recovery system in 1987, and approximately 2,400 gallons of oil waste were recovered from the aquifer below the site. The tank farm was dismantled and fenced to prevent trespassing.

**Groundwater Containment:** In 1990, the EPA selected a temporary groundwater treatment remedy, which includes enhancing the existing oil recovery system while a permanent cleanup remedy is being selected. This cleanup action was completed in the summer of 1994. Following some difficulties, the EPA is in the process of reviewing the operation and maintenance plan.

**Groundwater and Soil:** The EPA concluded supplemental studies in mid-1992 to determine the type and extent of the contamination in the aquifer beneath the site. In the course of the study, various alternatives for cleaning the soil were evaluated. The Florida Department of Environmental Regulation (FDER) has assessed an alternative called soil washing to clean up the contamination at the site. Soil washing is a process through which contaminants are extracted by injecting a water-based solution into the soil and then pumping the mixture. Deep soil contamination, 30 to 40 feet below ground level, in the Biscayne aquifer poses difficult technical problems in evaluating workable remedial alternatives. The investigation is expected to be completed and a final remedy selected in mid-1996.

**Site Facts:** The EPA and Petroleum Products entered into a Consent Order in 1985. Under this Order, the company agreed to take immediate actions at the site to reduce threats to human health and the environment. A Consent Decree was signed by the EPA and the responsible parties in the spring of 1991 relating to the actions to contain groundwater contamination.

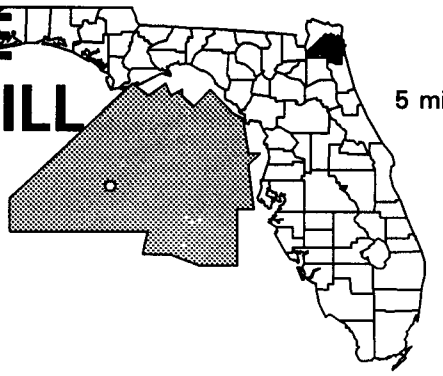
## Environmental Progress

The removal of the major sources of contamination at the Petroleum Products site has reduced the potential for exposure to contaminants and has reduced the level of contaminants in groundwater while the investigations leading to a final cleanup remedy are being conducted.

## Site Repository

Broward County Library, Main Branch - Government Documents Department,
100 South Andrews Ave., Fort Lauderdale, FL 33301

# PICKETTVILLE ROAD LANDFILL
## FLORIDA
EPA ID# FLD980556351



**EPA REGION 4**
Duval County
5 miles northwest of Jacksonville

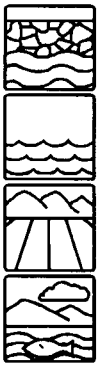
## Site Description

The Pickettville Road Landfill site covers 52 acres northwest of Jacksonville. The site began operations in the early 1940s on a limited basis; full-scale operations started in 1968, when the City of Jacksonville began using the site for a municipal dump. The site was dedicated to the disposal of hazardous and solid wastes in 1971. Wastes deposited at the landfill included waste oil, liquid acid waste from batteries, battery casings, and polychlorinated biphenyls (PCBs). All waste disposal ceased in 1977, and the site was backfilled, graded, and seeded. In 1981, the EPA detected contaminants in groundwater. Additional backfilling and regrading were completed in 1983 to curb on-site erosion and leachate draining into nearby Little Sixmile Creek. The site, located in a semi-rural area, includes residences, commercial establishments, and light industry. There are over 300 residences and two schools located within a 1-mile radius of the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

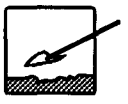


Groundwater is contaminated with heavy metals including arsenic and lead and volatile organic compounds (VOCs) including benzene and pyrene from former waste disposal activities. Private wells contain barium. Sediments from Little Sixmile Creek are contaminated with heavy metals, and the soil also is contaminated with heavy metals, as well as PCBs and VOCs. People who accidentally ingest contaminated water may be at risk. Well water is used for irrigating gardens, and contaminants may accumulate in fruits and vegetables. Fish from Little Sixmile Creek may contain bioaccumulated contaminants from the site leachate.

## Cleanup Approach

The site is being addressed in three stages: initial actions and two long-term remedial phases focusing on cleanup of the groundwater and landfill cap.

### Response Action Status



**Initial Actions:** As an initial measure to prevent potential exposure and spread of site contaminants, the site was backfilled, graded, and seeded in 1977 and again in 1983.

**Groundwater:** In September 1993, a city water hookup was provided to all potentially affected residents near the Pickettville Road Landfill site. Additionally, groundwater entering Little Sixmile Creek, which runs adjacent to the landfill, will be sampled semi-annually to ensure that unacceptable levels of site contaminants are not entering the creek.

**Landfill Cap:** In September 1993, another cleanup action was initiated at the Pickettville Road Landfill. This action will install a low permeability soil cap on the landfill surface to limit infiltration of surface water into the contents of the landfill. Construction of the cap is expected to be completed in late 1995.

**Site Facts:** In 1988, the EPA and the parties potentially responsible for contamination at the site signed an Administrative Order. Under this Order, the parties investigated the extent of contamination at the site. In 1991, the EPA and the potentially responsible parties signed a Consent Decree for the engineering designs.

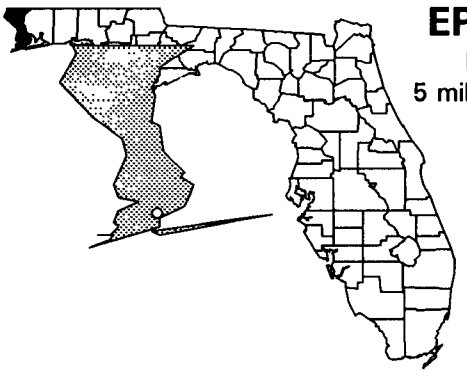
## Environmental Progress

After adding the Pickettville Road Landfill site to the NPL, the EPA conducted an evaluation of site conditions and determined that the initial actions taken at the site have controlled the immediate threats to public health or the environment while cleanup activities are underway.

## Site Repository

Jacksonville Public Library, Highland Branch, 1826 Dunn Avenue, Jacksonville, FL 32218

# PIONEER SAND COMPANY
## FLORIDA
EPA ID# FLD056116965



**EPA REGION 4**
Escambia County
5 miles west of Pensacola

## Site Description

The 11-acre Pioneer Sand Company site is an inactive quarry that was licensed in 1974 to receive shredded auto parts, construction debris, and various industrial sludges. Between 1974 and 1978, phenols and resin compounds were deposited on the site by Newport Industries, currently Reichold Chemical. Domestic and industrial wastes, including plating sludges, were received from the Pensacola Naval Air Station. Approximately 75 percent of the site is an excavation pit, while the remaining 25 percent is the fill area where the wastes were deposited. In 1981, the Florida Department of Environmental Regulation (FDER) did not renew the disposal permit and ordered the dumping to cease. The State and the EPA detected contaminants in the soil. A monitoring well installed by the company and one of the on-site disposal ponds also were found to be contaminated. A wellfield for the City of Pensacola, which has a population of approximately 67,000, is located within 3 miles of the site. Sampling of nearby private wells indicated no off-site groundwater contamination.

**Site Responsibility:** This site was addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83
Deleted Date: 02/08/93

## Threats and Contaminants

A monitoring well and surface water in the sludge pond contained elevated levels of heavy metals including chromium and lead from the former waste disposal activities. Leachate was contaminated with various heavy metals, volatile organic compounds (VOCs), and pentachlorophenol (PCP). The soil was contaminated with polychlorinated biphenyls (PCBs) and heavy metals.

## Cleanup Approach

### Response Action Status

**Immediate Action:** In 1986, the EPA excavated 20 tons of contaminated soil and transported it to a federally-approved facility.

**Entire Site:** In 1986, the EPA selected a remedy to clean up the site which included: closing the landfill and sludge pond areas according to Federal and State procedures; collecting the leachate, treating it, and disposing of it on site; treating surface water and discharging it on site; and performing long-term maintenance activities. The parties potentially responsible for site contamination removed trash from the site and installed a security fence. While developing the designs of the cleanup remedies for the site, the potentially responsible parties discovered a light non-aqueous phase liquid (LNAPL) in the landfilled area. In addition to performing all of the other selected remedies, the potentially responsible parties treated the LNAPL. The EPA conducted a final inspection of the construction and has issued a close-out report. The site will be subject to a five-year review in 1995.

**Site Facts:** The EPA and the potentially responsible parties entered into a Consent Decree in 1988. In this action, the parties agreed to clean up the site, which was completed in 1991. The responsible parties are conducting long-term operation and maintenance at the site.

## Environmental Progress

Cleanup activities are complete; all threats from site contamination have been eliminated. The site is subject to a five-year review in 1995. The site was deleted from the NPL in 1993.

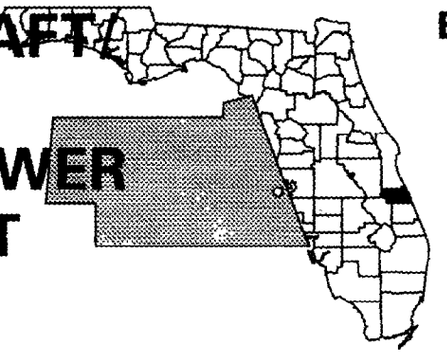
## Site Repository

John C. Pace Library, University of West Florida, 11000 University Parkway, Pensacola, FL 32514

# PIPER AIRCRAFT/ VERO BEACH WATER & SEWER DEPARTMENT

## FLORIDA

EPA ID# FLD004054284



**EPA REGION 4**

Indian River County
Vero Beach

**Other Names:**
**Vero Beach Wellfield**

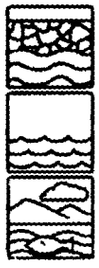
## Site Description

The Piper Aircraft/Vero Beach Water & Sewer Department site covers 90 acres in Vero Beach. The company began assembling and painting light aircraft in 1957 at the southern end of the Vero Beach Municipal Airport. Chemicals used in these operations are stored in underground storage tanks. During routine testing of the city water supply in 1978, the presence of contaminants was detected. An area search and tank testing revealed the source to be a leaky pipe-fitting on a Piper Aircraft storage tank. Well #15 of the City of Vero Beach Wellfield subsequently was shut down due to contamination. Six months later, the City developed two other wells to replace the one that was closed. In 1981, the Florida Department of Environmental Regulation (FDER) took actions against the company, after which Piper repaired the faulty equipment and began pumping out contaminated groundwater. Approximately 10,000 people obtain drinking water from public wells located within 1 mile of the site.

**Site Responsibility:** This site is being addressed through Federal and State actions.

**NPL LISTING HISTORY**
Proposed Date: 06/10/86
Final Date: 02/21/90

## Threats and Contaminants



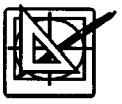
Groundwater in the on-site shallow aquifer, surface water, and the water in the Main Canal on the site are contaminated with trichloroethylene (TCE) and other volatile organic compounds (VOCs) from the leaking underground storage tank. Although a number of people obtain drinking water from nearby municipal wells, the health concerns are minimal because the city wells were relocated and are being constantly monitored. Oysters and fish from the Main Canal are contaminated with low levels of TCE and present a health risk if they are eaten.

## Cleanup Approach

The site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Initial Actions:** Since 1981, when groundwater treatment began, an estimated 2,000 gallons of solvents have been removed by pumping the contaminated water from the site through closed conduits 1/2 mile to the Main Canal. The contaminated water is sprayed into the air to remove the contaminants and then discharged into the Main Canal.



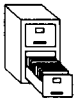
**Entire Site:** In the fall of 1992, the EPA began field work at the site to investigate the nature and extent of contamination. The investigation determined that groundwater beneath the site is contaminated with trichloroethene (TCE) and its degradation products. The EPA completed the investigation as an in-house project. In late 1993, the EPA selected a remedy which includes the installation of a full air-stripping system for the site. Design of the remedy began in the fall of 1994 and is expected to be completed in early 1998.

**Site Facts:** In 1981, the State and Piper Aircraft entered into a Consent Agreement, requiring the company to perform repairs on equipment and to treat the contaminated groundwater. In October of 1991, the EPA notified the Piper Aircraft/Vero Beach Water & Sewer Department of the potential liability and necessary investigative activities at the site. The site owners informed EPA that they would not be able to pay for the investigation due to bankruptcy proceedings.

## Environmental Progress

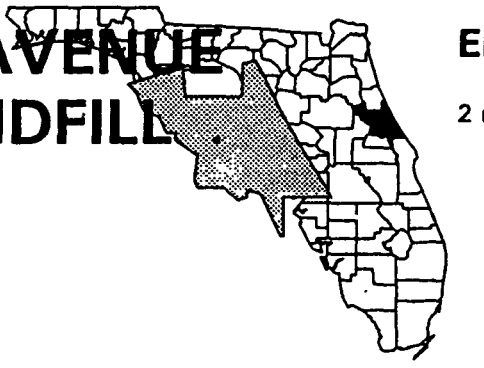
By moving municipal wells and by pumping and air-treating the contaminated groundwater from the Piper Aircraft/Vero Beach Water & Sewer Department site, the potential for exposure to hazardous substances has been reduced. These actions have protected the public water supply while design of the final remedy is taking place.

## Site Repository



Indian River County Main Library, 1600 21st Street, Vero Beach, Florida 32960

# PLYMOUTH AVENUE COUNTY LANDFILL
## FLORIDA
EPA ID# FLD984167569



**EPA REGION 4**
Volusia County
2 miles west of DeLand

## Site Description

The Plymouth Avenue Landfill site is a 131-acre area located about 2 miles west of DeLand, Florida. The surrounding area is lightly populated residential and commercial. From the early 1940s until 1971, the site was an open dump. From 1971 until the present time, the site has been a sanitary landfill under the Volusia County Department of Public Works' ownership. Although the exact history of disposal practices is not known, from 1978 to 1980, Brunswick Corp reportedly disposed of an estimated 4,500 gallons per week of nitric acid-laden process waste slurry from their steel-polishing operations. The waste was spread over the land or deposited into shallow trenches in the southeastern section of the landfill. Brunswick later switched to producing sulfuric acids and, from 1980 to 1988, the wastes from these operations, an estimated 900 pounds per day, were deposited at the site in three disposal pits. Both types of wastes contained a variety of heavy metals, such as nickel, chromium, and copper. From 1984 until 1988, the site received a variety of nonhazardous industrial and municipal wastes. No further waste from Brunswick was received by the landfill after 1988. It presently only accepts household waste, yard trimmings, and construction debris. In 1990, the EPA discovered elevated levels of contaminants in monitoring wells in the area. In addition, groundwater samples taken by Volusia County near the landfill exceeded the EPA's Primary Drinking Water Standards for nitrates. The site has several unusual topographic elements, including sinkholes. Groundwater in the area consists of a shallow aquifer and the deeper Floridan aquifer. These aquifers are hydraulically connected; water moves freely between them. The shallow aquifer supplies several domestic wells, but the Floridan aquifer is the principal source of drinking water for the county. Wells within 4 miles of the site provide water to an estimated 25,106 people, and groundwater also is used to irrigate nearby citrus groves.

**Site Responsibility:** The site is being addressed through Federal and local actions.

**NPL LISTING HISTORY**
Proposed Date: 05/10/93

## Threats and Contaminants

In 1990, the EPA discovered elevated levels of bis (2-ethylhlexyl) phthalate, barium, and the heavy metals cobalt, manganese, and nickel in monitoring wells in the shallow aquifer. In addition, groundwater samples taken from three private wells by Volusia County near the landfill exceeded the EPA's Primary Drinking Water Standards for nitrates. These well are still in use. The surficial and the Floridan aquifers underlie the site and are a source of drinking water to area residents. Drinking contaminated groundwater could pose a threat.

## Cleanup Approach

This site is being addressed in a long-term remedial phase focusing on the cleanup of the entire site.

### Response Action Status

**Entire Site:** An investigation into the nature and extent of contamination at the site is being planned.

## Environmental Progress

The EPA and Volusia County have performed initial studies at the site and have determined that no immediate actions are necessary while investigations leading to final cleanup are being planned.

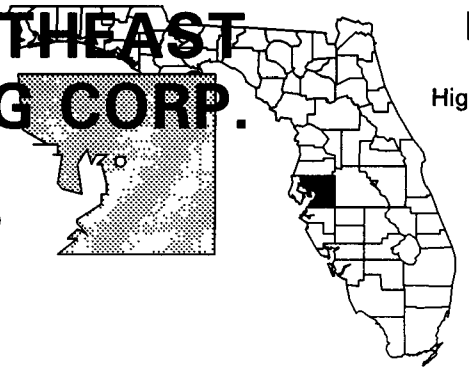
## Site Repository

Not yet established.

# REEVES SOUTHEAST GALVANIZING CORP.

## FLORIDA

EPA ID# FLD000824896



**EPA REGION 4**
Hillsborough County
Highway 574, east of Tampa

## Site Description

The Reeves Southeast Galvanizing Corp. site encompasses two areas on 28 acres and includes the Reeves Southeastern Galvanizing (RSEG) site covering 17 acres and the Reeves Southeastern Wire (RSEW) site covering 11 acres. Beginning in the 1960s, spent caustic, rinse, and acid process wastes generated at RSEG and RSEW were neutralized and discharged to storage ponds. It is believed that plating wastes were discharged in the same manner. These practices have caused contamination of groundwater and surface water. When Hillsborough County issued a notice of violation to the company in 1974, the company responded by upgrading its existing wastewater treatment facility to an advanced system to neutralize the acid and to remove 90 percent of the heavy metals. One pond at RSEW has been backfilled; two have not, but they are not used. Two ponds exist at the RSEG area, but are not presently used. Residential neighborhoods, light manufacturing facilities, warehouses, and a refuse-to-energy plant are located in the area surrounding the site. County-owned water supply wells are located about 1 mile upgradient of the site. There are approximately 56,000 people residing within 3 miles of the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

Groundwater is contaminated with heavy metals such as zinc from former process wastes. The soil and surface water also are contaminated with heavy metals, primarily zinc. Sediments contain heavy metals such as zinc and lead. Although sampling has shown that municipal and private wells are not contaminated, people who come in direct contact with or accidentally ingest contaminated surface water or soils may be at risk.

## Cleanup Approach

This site is being addressed in three long-term remedial phases focusing on cleanup of the source areas, the groundwater, and the wetlands.

### Response Action Status

**Source Control:** A remedy was selected in the fall of 1992 that addresses the principal threat, soils and sediments. The remedy calls for solidifying/stabilizing the contaminated soils and sediment, backfilling the excavated areas to grade, disposing of the solidified material above ground, and capping that material. Design of the remedy was completed in late 1994. On-site construction is expected to begin in the summer of 1995.

**Groundwater:** A remedy was selected in the fall of 1993 that addresses the contamination in the Northern Surficial Aquifer. The treatment will include the installation and implementation of a groundwater extraction system. Design of the remedy is expected to begin in the summer of 1995.

**Wetlands:** A no further cleanup action remedy was selected in the summer of 1994 that consists of ecological assessments of the wetlands for a period of at least eight years, to be performed on no less than a semi-annual basis for the first five years. Design of this remedy is expected to begin in the summer of 1995.

**Site Facts:** In 1989, the EPA and the parties potentially responsible for contamination at the site signed an Administrative Order on Consent. Under this Order, the parties conducted a study of the site under EPA oversight. The potentially responsible parties signed an amendment to the Administrative Order On Consent in March 1993 to perform the source control remedial design.

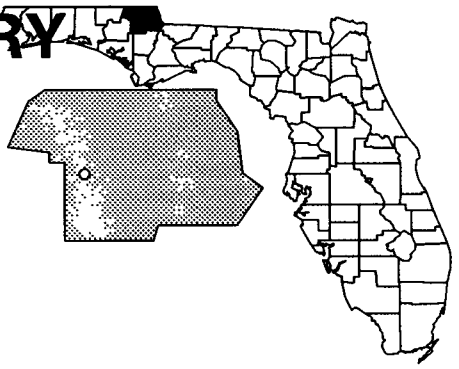
## Environmental Progress

After adding this site to the NPL, the EPA performed preliminary investigations and determined that there is no need for immediate actions while design of the final remedies is taking place.

## Site Repository

Brandon Branch Public Library, 135 West Robertson Street, Brandon, FL 33511

# SAPP BATTERY SALVAGE
## FLORIDA
EPA ID# FLD980602882



**EPA REGION 4**
Jackson County
Alford

## Site Description

The 45-acre Sapp Battery site contains three swamps connected by small channels. In 1970, Sapp Battery Service, Inc. began an operation to recover lead from used batteries, dumping the acid outside the plant, recovering the lead, and disposing of the broken battery casings in an on-site man-made fishing pond. By 1977, the acid discharge began killing nearby cypress trees. Dead and discolored vegetation, as well as strong sulfurous odors, have been noted along the drainage route from the site. Sapp Battery undertook several steps to alleviate the problem; however, none of them were effective. The owner stopped operations and abandoned the site in 1980. The site currently is contaminating the Floridian Aquifer, which provides drinking water for most of the area residents who depend on private wells. There are approximately 3,000 people living within a 3-mile radius of the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

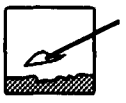
## Threats and Contaminants

The groundwater and surface water are contaminated with lead from battery wastes. Soil contaminants include heavy metals such as lead, antimony, and cadmium. People may be exposed to heavy metals from drinking contaminated water or accidentally ingesting contaminated soil.

## Cleanup Approach

This site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on cleanup of the entire site and the Steele Bay/off-site wetlands.

### Response Action Status



**Emergency Actions:** In 1980, the EPA undertook an emergency cleanup action, which resulted in a temporary restoration of pH levels similar to background levels downstream from the site. In 1984, the Florida Department of Environmental Regulation excavated and removed roughly 9,000 cubic yards of highly contaminated soil from the site.

**Entire Site:** In 1986, the EPA selected cleanup plans for the site that include: excavating soils and sediments; stabilizing excavated soils and sediments; on-site disposal of the solidified materials; removal and treatment of groundwater in the aquifers under the site; treatment and discharge of contaminated surface water from the on-site swamp and off-site Steele City Bay; and a monitoring program for drinking water wells within a 1-mile radius. In 1988, the EPA began cleaning up the sources of site contamination; however, sampling indicated that more soil than had been expected was contaminated, and the effort was suspended until the design phase is completed. The engineering design of the approved cleanup activities for the source area was completed in 1991. Sight preparation activities are currently underway.

**Steele City Bay/Off-site Wetlands:** In 1986, excavation was selected as the cleanup remedy for the Steele City Bay and the off-site wetlands. More information was required to perform the design of the cleanup, as excavation may reintroduce contaminants into surface waters. The additional studies have shown that it may be more ecologically sound to leave the sediments in place. More studies have therefore been planned to evaluate the bay and wetlands. These studies are expected to be completed in early 1996.

**Site Facts:** A Consent Decree requiring the potentially responsible parties to cleanup the soils at the site was entered into Federal court in March 1993. The EPA has also entered into a number of *de minimus* settlements with small volume potentially responsible parties. In exchange for entering into a *de minimus* settlement, the potentially responsible party is absolved from any future liabilities for the site cleanup.

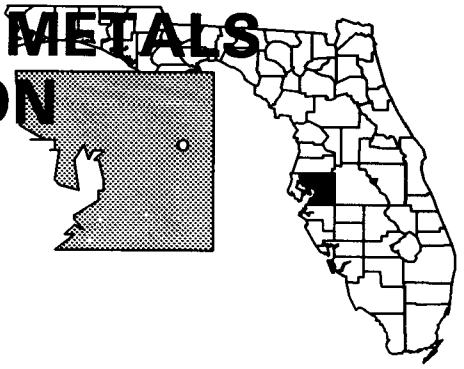
## Environmental Progress

The containment and removal of contaminated materials have reduced the potential for exposure to hazardous materials while further investigations are taking place.

## Site Repository

Jackson County Public Library, 413 North Green Street, Marianna, FL 32446

# SCHUYLKILL METALS CORPORATION
## FLORIDA
EPA ID# FLD062794003



**EPA REGION 4**
Hillsborough County
Plant City

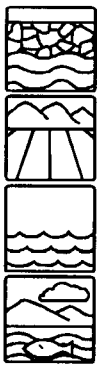
## Site Description

Schuylkill Metals Corporation (SMC) recovered lead from storage batteries on this 17 1/2-acre site from 1972 through 1986. Before 1981, acid washdown from wastewater was stored in a 2-acre unlined wastewater holding pond. Initially, lime was used to adjust the pH of the wastewater in the holding pond, and later, ammonia was used for this purpose. The wastewater treatment system was upgraded in 1981, and all wastewater was treated with sodium hydroxide for pH adjustment and was discharged under permit to the publicly owned treatment works. High levels of lead were found in the drainage ditch on site. The site is bounded by agricultural land and a housing development. Approximately 20,000 residents live within 3 miles. A junior high school, an elementary school, and a hospital are located within 1 mile of the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/30/82
Final Date: 09/08/83

## Threats and Contaminants



Groundwater contains contamination from heavy metals including lead and chromium, as well as sulfate and ammonia. Very high levels of lead also were found in the subsoil, surface water, and sediments of the associated wetlands. People could be exposed to heavy metals in the contaminated groundwater. Direct contact with or accidental ingestion of lead in the soil is unlikely because the area is fenced, but trespassers could be exposed.

## Cleanup Approach

This site is being addressed in a long-term remedial phase focusing on cleanup of the entire site.

## Response Action Status

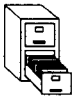
**Entire Site:** The State of Florida and SMC, the party potentially responsible for contamination at the site, have completed a study of the nature and extent of site contamination and have evaluated the various technologies available for cleanup. Further studies on the adjoining marshes have been conducted, as well as treatability studies for the soils. In 1990, the EPA decided on the best cleanup alternatives. They include excavation and solidification of contaminated soils and treatment of surface water and groundwater. Contaminated sediment in the wetlands will be removed and solidified. The disrupted wetlands will be revegetated. Fencing of the marshes and the creation of additional wetlands to compensate for the continued exposure to contamination for some wildlife were two additional remedies chosen by the EPA. Design of the remedies was completed in 1994. Cleanup activities are expected to be completed by late 1996.

**Site Facts:** A Consent Order between SMC and the Florida Department of Environmental Regulation was signed in 1986 to study site contamination and the various methods to clean it up. In March 1991, the EPA and Arrow Electronics, Inc., the parent company of SMC, signed a Consent Decree to design and implement the selected cleanup actions.

## Environmental Progress

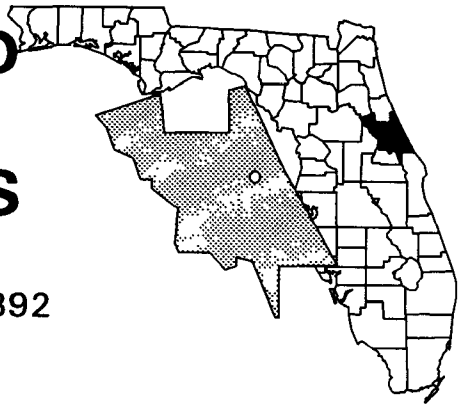
After adding this site to the NPL, the EPA constructed a fence and performed preliminary site investigations and determined that there were no immediate threats to public health or the environment at the Schuylkill Metal site while cleanup activities are underway.

## Site Repository



Plant City Public Library, 501 North Wheeler Street, Plant City, FL 33566

# SHERWOOD MEDICAL INDUSTRIES
## FLORIDA
EPA ID# FLD043861392



**EPA REGION 4**
Volusia County
3 miles north of Deland

**Other Names:**
**Sherwood Medical Industries**

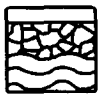
## Site Description

The 42-acre Sherwood Medical Industries site currently is occupied by several manufacturing buildings, a biological laboratory, sizeable parking areas, and additional structures, including a wastewater treatment facility built in 1983. Sherwood Medical Industries has used the property since 1959 for the manufacturing of medical supplies, primarily hypodermic needles. Industrial operations currently include grinding, cleaning, hub processing, and de-coring of stainless steel and aluminum parts used to manufacture hypodermic syringes. Sherwood also molds plastic syringes and conducts in-house laboratory work. The Sherwood facility pumps approximately 175,000 gallons of water per day from the underlying Floridian Aquifer. Water drawn for industrial needs is used for cleaning, manufacturing, and cooling/evaporation processes. Several manufacturing steps result in wastewater that must be treated. The industrial wastewater facility on the site is licensed by the Florida Department of Environmental Resources (FDER) to receive and treat wastewater from the plant and to discharge the resulting effluent. The treated effluent currently is disposed of by percolation and evaporation. In 1985, Sherwood Medical Industries installed an air stripper to treat production water used in the facility's operations. Between 1971 and 1980, the company disposed of about two tons of liquid and sludge waste into two unlined percolation ponds. During this time, solids were removed from the ponds and placed into on-site, unlined impoundments. In 1982, the Sherwood site was placed on the NPL at the request of the State of Florida because of the threat of contamination from wastes stored in the holding ponds and impoundments. Subsequent testing conducted by Sherwood Medical and the State revealed groundwater contamination in on-site wells. Fifteen residences are in the immediate area of the site. Lake Mill borders the site.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/30/82
Final Date: 09/08/83

## Threats and Contaminants



The groundwater is contaminated with volatile organic compounds (VOCs) from former process wastes. The upper aquifer is contaminated, but is not currently used as a source of drinking water. Contaminated groundwater could move off site or migrate downward into the Floridian Aquifer.

## Cleanup Approach

This site is being addressed in two long-term actions directed at cleaning up the entire site and the lake sediments.

### Response Action Status

**Entire Site:** In 1985, Sherwood Medical notified the EPA that they would perform a focused investigation at the site. During the investigation, Florida Health and Rehabilitation Services received health-related complaints concerning private wells from nearby residents. Chlorinated solvents were detected in samples from the on-site domestic water supply well, but no violations of drinking water standards were found in samples from nearby private wells. In 1987, the FDER asked Sherwood to sample the on-site water wells and a downgradient residential well to assess the extent of contamination and to evaluate the need for immediate cleanup activities to control and treat the contamination of the Floridian Aquifer. Currently, Sherwood Medical is testing all private wells immediately adjacent to the site, along Kepler Road, every 6 months. In 1991, the EPA selected a temporary remedy to prevent the migration of contaminated groundwater off site. The remedy included the installation of a system of recovery wells in the surficial aquifer on site, installation of an on-site air stripper to treat recovered groundwater, and discharge of treated groundwater into the on-site lake. This system was constructed and became operational in the summer of 1992. Following completion of the investigation, a final remedy was selected in the fall of 1992. The remedy called for continued operation of the established surficial aquifer treatment system. Additionally, the remedy requires that Sherwood continue operation of the air stripper installed in the Floridan Aquifer to treat process water, establish a long-term groundwater monitoring program, and establish and maintain institutional controls to limit access to the site. Cleanup activities underway.

**Lake Sediments:** In mid-1993, a separate investigation was begun to examine the sediments of Lake Miller. To date, this investigation has not identified significant toxicity in the sediments in Lake Miller.

**Site Facts:** In 1992, the EPA and Sherwood Medical signed a Consent Decree for the design and implementation of the selected remedy.

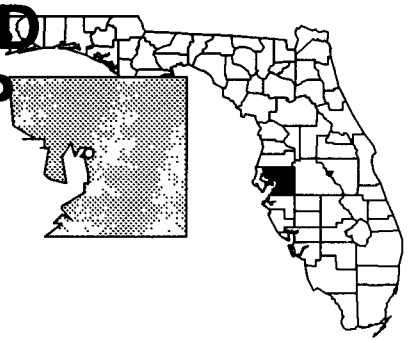
## Environmental Progress

The monitoring activities being performed at the Sherwood Medical site ensure that nearby residents are not exposed to hazardous materials while cleanup activities are being designed and implemented.

## Site Repository 

Deland Public Library, 212 West Rich Avenue, Deland, FL 32720

# SIXTY-SECOND STREET DUMP
## FLORIDA
EPA ID# FLD980728877



**EPA REGION 4**
Hillsborough County
Tampa

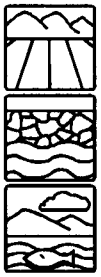
## Site Description

The Sixty-Second Street Dump is a 5 1/2-acre abandoned industrial waste dump located in Tampa. The site originally was used to mine sand. The areas excavated for sand subsequently were used by several companies to dispose of various waste materials including shredded automobile parts, batteries, waste cement, kiln dust, and kiln liners. The site came to the attention of the Hillsborough County Environmental Protection Commission in 1976, when a fish kill occurred in the Peninsular Fisheries breeding ponds on the western side of the dump. The site has been closed since 1976, but unauthorized dumping of household garbage persisted for several years after the site closed. A fence around the property presently prevents dumping. The site is located in the East Lake/Orient Park neighborhood, which has a population of approximately 5,500 people. An 80-acre marshland that drains into a nearby lake is located adjacent to the fish farm.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 12/30/82
Final Date: 09/08/83

## Threats and Contaminants



The disposal of wastes at the site has resulted in the release of heavy metals including antimony, arsenic, cadmium, chromium, copper and lead, as well as polychlorinated biphenyls (PCBs), in the soil. The shallow aquifer on site also is contaminated with cadmium, chromium, and lead above health-based levels. People may be at risk from coming into direct contact with or accidentally ingesting the contaminated groundwater or soil. A fish kill has occurred, and a nearby marshland and fish farm are threatened.

## Cleanup Approach

The site is being addressed in a single long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

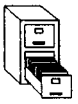
**Entire Site:** The State of Florida investigated the extent of contamination at the site between 1984 and 1990. The EPA selected a remedy which involves solidifying and stabilizing shredded auto parts/battery wastes, constructing a permanent slurry wall around the perimeter of the site, and capping the entire landfill. Construction of the solidification/stabilization phase of the cleanup has been completed. The remaining cleanup actions should be completed by the fall of 1995.

**Site Facts:** Under a Consent Decree, the parties potentially responsible for the site contamination have agreed to conduct the cleanup activities under EPA supervision.

## Environmental Progress

After adding the Sixty-Second Street Dump site to the NPL, the EPA determined that the site does not currently pose an immediate threat to the public or the environment while cleanup activities are underway.

## Site Repository

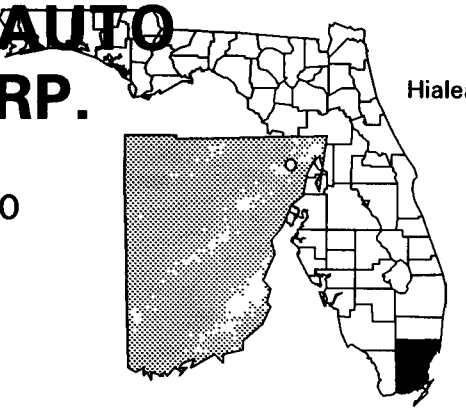


Tampa-Hillsborough County Public Library, Special Collections, 900 North Ashley
Tampa, FL 33602

# STANDARD AUTO BUMPER CORP.

## FLORIDA

EPA ID# FLD004126520



**EPA REGION 4**

Dade County
Hialeah, north of Miami International Airport

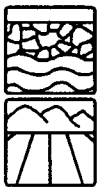
## Site Description

The Standard Auto Bumper Corporation electroplated automobile bumpers, furniture, and other metal objects with chrome on this 3/4-acre site from 1959 to 1993. Before 1972, wastewater from the electroplating and stripping process was discharged into a ditch between the process building and railroad tracks. It was allowed to drain to the north, eventually percolating into the ground. In 1972, the company began treating the plating waste before discharging it into a septic tank/percolation pit and drain field system. Since 1979, treated wastewater has been discharged into the Hialeah sewer system. The metal-containing sludge from the treatment was transported to an EPA-approved hazardous waste facility and the wastewater was treated on site and discharged into the Hialeah sewer system. In 1985 and 1987, the EPA detected heavy metals in surface soil, subsurface soil, and groundwater on the site. The most extensive contamination was near the drainage pathway. The site is in the recharge zone of the Biscayne Aquifer, which is a sole source supply of drinking water for all of Dade County. High concentrations of contaminants also were found in the drain field system and percolation pits used prior to 1972. It is unclear exactly what was placed in the pits. Four municipal well fields that supply drinking water to approximately 750,000 people are within 3 miles of the site. One well is within 4,200 feet of the site. Wells in the contaminated area have been taken out of service.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 10/04/89

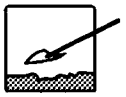
## Threats and Contaminants



Heavy metals including lead, cadmium, copper, chromium, and nickel from former waste disposal practices contaminate the on-site groundwater, surface soil, and subsurface soil. Potential risks to public health exist from direct contact with on-site industrial well water. Risks also exist, especially for former employees, from accidentally ingesting, inhaling, or coming in direct contact with the contaminated soil and dust. The site is completely fenced to limit access to the site. Private drinking water wells located downgradient of the site also may pose a health concern. Potential threats to the environment include the migration of contaminants through groundwater flow.

## Cleanup Approach

### Response Action Status



**Immediate Actions:** In 1989, Standard Auto Bumper excavated non-hazardous soils under EPA oversight and transported them to solid waste landfills. Standard Bumper also excavated the sludge pit and disposed of hazardous waste in a federally approved hazardous waste disposal facility immediately following the removal. Remaining soils above cleanup levels were addressed by EPA in a long-term cleanup. In 1993, EPA conducted an emergency removal action at the site after the owner abandoned his operation and left hazardous conditions on site.

**Entire Site:** In 1993, EPA completed an investigation of the groundwater to determine the nature and extent of contamination. Based on the results of this investigation, EPA selected natural attenuation of the groundwater and groundwater monitoring for the remedy. In early 1994, contaminated soil was excavated and transported to a local Florida Class 1 landfill for disposal by EPA. Groundwater monitoring began immediately after the soil was removed in the late summer of 1994. Groundwater monitoring will continue for a minimum of 18 months to ensure that contaminant concentrations decrease.

**Site Facts:** Standard Auto Bumper and the EPA signed an Administrative Order for the removal of contaminants in 1989, which enforced a plan for remedial action agreed upon between Dade County and Standard Auto. In 1990, an Administrative Order was signed requiring Standard Auto to conduct site studies. In 1991, these studies were taken over by the EPA.

## Environmental Progress

All construction at the site has been completed. The removal of contaminated sludges and soils has reduced the potential for exposure to contamination at the Standard Auto Bumper Corp. site. This action has helped to protect the public health and the environment.

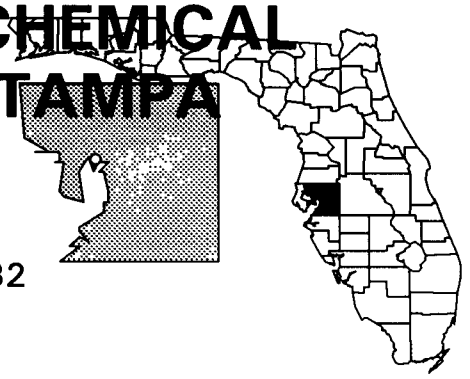
## Site Repository 

J.F. Kennedy Memorial Library, 190 West 49th Street, Hialeah, FL 33012

# STAUFFER CHEMICAL COMPANY (TAMPA PLANT)

## FLORIDA

EPA ID# FLD004092532



**EPA REGION 4**
Hillsborough County
Tampa

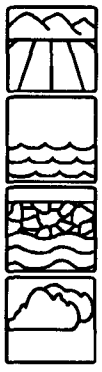
## Site Description

Stauffer Chemical Company formulated pesticides on a 40-acre property adjacent to the Tampa Bypass Canal between 1951 and 1986. The site is in an industrial area and has been owned in the past by Cheeseborough Ponds, Inc., and Unilever. It is currently owned by Imperial Chemical Industries. Stauffer Chemical received bulk shipments of agricultural chemicals, which were then formulated into insecticides and herbicides in the form of dusts, grains, and liquids for packaged distribution. Between 1953 and 1973, various portions of the property were used as disposal areas. Three of these areas are: a large area of soil called the "Barren Area" which was contaminated by runoff from a storage/disposal area; an area where between 8,000 and 10,000 gallons of toxaphene that leaked from a tank car are now buried; and an area of contaminated soil where an incinerator once operated. EPA investigations conducted in 1987 and 1988 documented contamination in on-site soils, sediments, groundwater, and air. The formations underlying the site are an unconfined surficial aquifer consisting of interlayers of sands, clays, and shells that are approximately 25 feet thick and the Upper Floridan Aquifer consisting of the Tampa Limestone, Suwanee Limestone, Ocala Group, and the Avon Park Limestone. Public and private wells within 4 miles of the site provide drinking water to an estimated 6,700 people. The nearest well is a private well less than a 1/4 mile northwest of the site. Approximately 113,000 persons work, attend school, or reside within 4 miles of the facility.

**Site Responsibility:** This site is being addressed through Federal actions.

**NPL Listing History**
Proposed Date: 02/07/92

## Threats and Contaminants

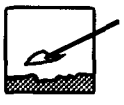


On-site soils, sediments, groundwater, and air are contaminated with the pesticides DDT, DDD, and lindane. People could be at risk by touching or ingesting contaminated soil, sedimintation, or groundwater or by inhaling contaminated air.

## Cleanup Approach

This site is being addressed in two stages: initial actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status



**Initial Actions:** During 1993, soils from four areas on-site which contained the highest levels of pesticides were removed and stored in an on-site warehouse. Treatment of these soils with an on-site, low temperature thermal desorption unit was completed in the fall of 1994.

**Entire Site:** Investigations into the nature and extent of contamination are expected to be completed in 1995. The investigations will identify contaminants in soils, surface water, and groundwater at the Stauffer Chemical site. A baseline risk assessment has been completed and a draft feasibility study, for identification of cleanup remedies is currently under review by the EPA.

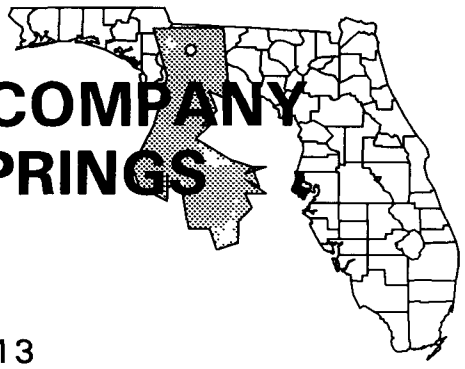
## Environmental Progress 

EPA studies show that no immediate human health and safety risks exist while further investigations are underway.

## Site Repository 

Tampa-Hillsborough Public Library, East Lake Mall Branch, 5701 E. Hillsborough, Tampa, Florida 33610

# STAUFFER CHEMICAL COMPANY (TARPON SPRINGS PLANT)



## FLORIDA

EPA ID# FLD010596013

**EPA REGION 4**
Pinellas County
Tarpon Springs

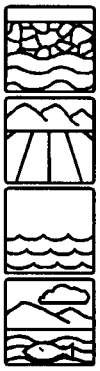
## Site Description

Stauffer Chemical is a 160-acre site located in an industrial area about 1 mile east of the Gulf of Mexico. Stauffer Management Company purchased the facility from Victor Chemical Works in 1960. From 1950 to 1981, the facility manufactured elemental phosphorus from phosphate ore. The processed ore was shipped off site to be used primarily for production of agricultural pesticides, food-grade phosphates, and flame retardants. During the years of operation, a number of processing wastes were disposed of on site. Disposal practices included: the dumping of waste scrubber liquid, phosphorus water, and overflow from a calcium silicate slag pit into seven unlined lagoons (located about 600 feet from the Anclote River); the dumping of furnace dust into an isolated pond; and the alleged burial of 900 drums of calcined phosphate sand consisting of 20 percent elemental phosphorus. At some time, two lagoons were dredged, and the dredged materials, composed of calcium sulfate/sulfite, calcium silicate, calcium fluoride, phosphate sand, and calcined phosphate dust, were placed into two piles approximately 40 feet from the Anclote River. Over all, more than 500,000 tons of chemical process wastes were disposed of on site between 1950 and 1979. An EPA study conducted between 1988 and 1989 showed on-site monitoring wells, waste piles, and the Anclote River to be contaminated with heavy metals. A surficial aquifer composed primarily of sand and the Floridan Aquifer composed of limestone are located beneath the site and show contamination. An estimated 8,500 people in the Tarpon Springs area receive drinking water from 23 public wells and three private wells located within 4 miles of the site. Surface water runoff from the facility could flow into the Anclote River which empties into the Gulf of Mexico. Although no surface water intakes are located along the drainage pathways of the site, numerous popular county and State parks and beaches are located nearby. The Anclote River is used for fishing.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL Listing History**
Proposed Date: 02/07/92
Final Date: 05/31/94

## Threats and Contaminants



On-site monitoring wells in both aquifers, on-site waste piles, and the Anclote River are contaminated with heavy metals including barium, chromium, lead, vanadium, zinc, copper, and arsenic. Because of the shallowness of the aquifers, all drinking water wells within 4 miles of the site are potentially at risk. Ingesting or touching contaminated groundwater, surface water, or soils could be a potential health risk. Several wetlands that support a number of endangered and protected species are located along the surface water pathway.

## Cleanup Approach

This site is being addressed in a long-term remedial phase focusing on the cleanup of the entire site.

### Response Action Status

**Entire Site:** An investigation into the nature is expected to be completed in the spring of 1995.

**Site Facts:** Atkemix Thirty-Seven, Inc. (a subsidiary of ICI Americas) agreed to conduct the investigations by signing an Administrative Order by Consent.

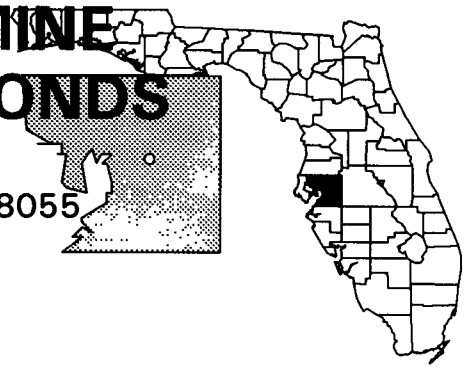
## Environmental Progress

EPA studies show that no immediate threats to human health and safety exist while further studies are underway.

## Site Repository

Craig Park Branch, Tarpon Springs Public Library, Spring Boulevard, Tarpon Springs, Florida

# SYDNEY MINE SLUDGE PONDS
## FLORIDA
EPA ID# FLD000648055



**EPA REGION 4**
Hillsborough County
Brandon

**Other Names:**
**Hillsborough County Sydney Mine**

## Site Description

The Sydney Mine Sludge Ponds site is a 9½-acre former disposal site that was strip-mined for phosphate rock from the 1930s through the 1950s. In late 1973, Hillsborough County leased a portion of the Sydney Mine site from American Cyanamid and constructed a sludge disposal pond. The pond received wastes from grease traps, septage waste, and waste oil. In 1979, the waste disposal site was expanded and modified. At that time, the operation consisted of two primary impoundments: a 1½-acre septage pond and a ½-acre waste oil pond. About 16 million gallons of waste including sludge, grease trappings, cutting oil, and other types of waste oil were placed in the two ponds by haulers serving homes, schools, hospitals, and manufacturing and commercial facilities in the area. A third impoundment was located adjacent to the eastern dike of the septage pond and reportedly was used for disposal only on a few occasions. Waste disposal activities ended in 1981, and Waste Management, Inc. purchased the property that same year. EPA tests in 1979 found contaminants in the ponds and in groundwater under the site. Approximately 4,000 people within 3 miles of the site draw water from the underlying intermediate and Floridian aquifers.

**Site Responsibility:** This site is being addressed through Federal, County, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/10/86
Final Date: 10/04/89

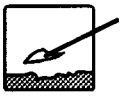
## Threats and Contaminants

The groundwater is contaminated with volatile organic chemicals (VOCs). Contaminants have migrated into the intermediate aquifer and away from the disposal area. The intermediate aquifer overlies the Floridian Aquifer.

## Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status



**Immediate Actions:** The County constructed an underground slurry wall around the ponds to prevent contaminants from escaping and groundwater from entering. Contaminated groundwater within the wall is being extracted, treated, and sprayed on the surface. Surface cleaning consisted of excavation and incineration of more than 12,000 cubic yards of contaminated materials. By 1989, the groundwater system treated more than 41 million gallons of water. The sludge from the site has been burned, under controlled conditions, to break down the contaminants.

**Entire Site:** In 1991, during additional well installation, deeper contamination was found. The EPA issued an Explanation of Significant Differences, requiring the responsible parties to investigate and clean up the deeper contamination. A group of responsible parties is working under a Unilateral Order to operate and maintain the existing pump and treat system. In addition, they have undertaken modifications to improve the effectiveness of the recovery and treatment system. These improvements were concluded in early 1993. Operation and Maintenance (pump and treat) for surficial aquifer is ongoing. Additional recovery wells are being added to recover contaminants in the intermediate aquifer system.

**Site Facts:** Some of the parties potentially responsible for the contamination of the site were issued a Unilateral Order to operate the groundwater treatment system and evaluate the performance of the recovery and treatment system since they had not voluntarily agreed to do so. These parties have been operating the system since 1989, and operation of the groundwater treatment system continues.

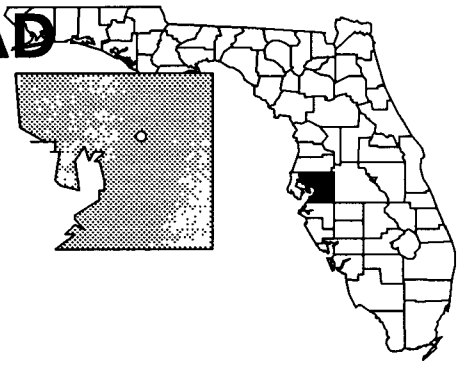
## Environmental Progress

The construction of a slurry wall and the treatment of contaminated soils, sludges, and groundwater have reduced the potential for exposure to hazardous substances at the Sydney Mine Sludge Ponds site. These actions have helped to protect the public health and the environment while further groundwater treatment takes place.

## Site Repository

Brandon Branch Public Library, 135 West Robertson Street, Brandon, FL 33511

# TAYLOR ROAD LANDFILL
## FLORIDA
EPA ID# FLD980494959



**EPA REGION 4**
Hillsborough County
⅛ mile north of Seffner

## Site Description

The Taylor Road Landfill site consists of 40 acres. It is next to two other municipal landfills: the Department of Transportation (DOT) Borrow Pit Landfill and the Hillsborough Heights Landfill. These three landfills occupy a total of 200 acres. The Taylor Road Landfill operated from 1975 to 1980; the DOT Borrow Pit Landfill was opened, filled, and closed all in 1980; and the Hillsborough Heights Landfill operated from 1980 to 1984. The three landfills were used for the disposal of municipal refuse, but unknown quantities of industrial wastes may have been dumped at the sites as well. The community around the site is mainly residential and agricultural. The closest residence is less than ⅛ mile from the site, and the estimated population of the Seffner area is 27,000. Two schools are located within ½ mile of the site. Approximately 580 wells are within 1 mile of the facility, and a community well system that serves 2,500 people is located 1 mile downgradient from the landfill. The community to the northeast of Seffner includes dairy farms, two of which are located between ¼ and ½ mile downgradient from the landfills.

**Site Responsibility:** This site is being addressed through Federal, State, local and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

Private wells in the area are contaminated with volatile organic compounds (VOCs) including benzene and vinyl chloride and heavy metals including lead from the former waste disposal activities at the site. Consuming contaminated groundwater and dairy products could pose a health hazard to people. At one time, methane gas from the landfill was detected at concentrations above the lower explosive limit near residences adjacent to the site; the County installed a gas collection system in an attempt to correct this problem. The Floridian Aquifer is the main source of drinking water in the area, and extensive sampling confirms that it is contaminated.

## Cleanup Approach

The site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Immediate Actions:** In 1983, the Hillsborough County Utilities Department installed a cap, drainage ditches, and methane gas control systems around each of the landfills. Maintenance of the landfills is conducted on a regular basis. The County also extended the water supply system to affected residences in the contaminated area south of the landfill. At this time, the landfills have been capped and closed, and access to the three landfills is restricted.

**Entire Site:** An investigation is currently underway to evaluate the full nature and extent of the contamination. Because the three large landfills are located adjacent to each other, it currently is impossible to determine which one is responsible for contaminating the groundwater. The investigation is expected to be completed in early 1996.

**Site Facts:** The EPA and the State signed a Consent Decree in 1983 with the Hillsborough County Utilities Department. The Decree requires the County to install a public water supply to residences with contaminated well water. It also requires the County to carry out a 30-year groundwater monitoring program for the entire landfill. A public town meeting was held in December of 1991 and resulted in the resampling of approximately 25 private wells in the area in early 1992.

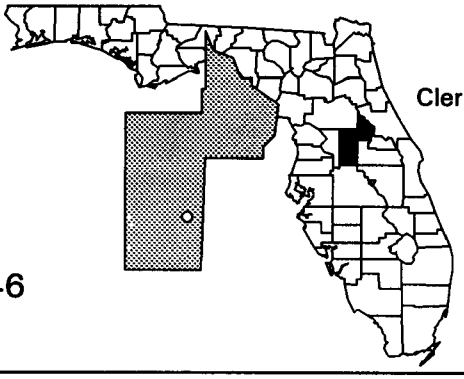
## Environmental Progress

The County's actions to cap and control the methane gas accumulation at the Taylor Road Landfill have significantly reduced the threat of exposure to contaminants while the site is undergoing investigations into the source of the contamination and the best technologies for final cleanup.

## Site Repository

Thonotosassa Public Library, 10715 Main Street, Thonotosassa, Florida 33592

# TOWER CHEMICAL COMPANY
## FLORIDA
EPA ID# FLD004065546



**EPA REGION 4**
Lake County
Clermont, 15 miles west of Orlando

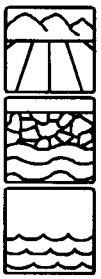
## Site Description

The 30-acre Tower Chemical Company (TCC) site is an abandoned chemical manufacturing facility. During its operation, TCC owned and used two separate parcels of land: a main facility and an irrigation field. From 1957 to 1981, TCC manufactured, produced, and stored various pesticides. TCC discharged acidic wastewaters produced in the main facility into a 1/2-acre, unlined percolation/evaporation pond where contaminants were solidified. TCC burned and buried the wastes on a 1 1/2-acre plot located at the main facility. In 1980, the wastewater pond at the main facility overflowed into an adjacent swamp and entered an unnamed stream north of the site. The acidic wastewater migrated into Gourd Neck of Lake Apopka, where vegetation and aquatic animals were affected. After two court orders, TCC stopped all discharges into the pond. High levels of DDT and associated chemicals were detected at the main facility, and low fish populations were noticed in the unnamed stream off site. The land of the former TCC plant was purchased by a group of real estate investors who later resold it in 1981 to local farmers and various small manufacturing firms. Approximately 1,000 people live near the site. The site is located in an area of mixed agricultural, residential, and industrial uses.

**Site Responsibility:** This site is being addressed through Federal actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

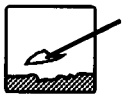


Copper and pesticides, including DDT, have contaminated on-site surface and subsurface soils, the shallow groundwater, and surface waters. Pesticides also contaminate on- and off-site sediments. Volatile organic compounds (VOCs) including ethyl benzene are present in on-site soils. Potential health threats include accidentally ingesting and coming in direct contact with contaminated surface water, groundwater, and soil. The main concern is that contaminants in the shallow aquifer may move into the deeper Floridian Aquifer, which is the only source of drinking water to people in this area.

## Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status



**Immediate Actions:** In 1983, 2,275 cubic yards of contaminated soil, 1,545 cubic yards of sediment, and 72 drums were excavated and disposed of off site. In addition, a million gallons of wastewater were pumped from the pond, treated, and then discharged to the unnamed stream. The EPA used clean fill to replace soil that was removed. The EPA built a system to divert surface water runoff and also fenced the area. These actions were conducted to prevent contaminants in the wastewater pond, on-site soil, and sediments from further migrating off site.

**Entire Site:** The EPA's remedies for cleanup of the site include: removing and treating on site approximately 100,000,000 gallons of contaminated groundwater, storing it temporarily on site, followed by discharge to surface water; excavating and burning approximately 9,000 cubic yards of contaminated surface soil from both the overflow area and portions of the burn/burial area of the site; removing any drums that should have been excavated during the previous removal activities, if any are found; decontaminating the two storage tanks and nearby concrete pads; and diverting contaminated runoff. The design for the water treatment system for the former percolation/evacuation pond was completed in 1990. To date, the following cleanup activities have been completed: installation of a private resident drinking water well to the deep aquifer; plugging and abandonment of several monitoring wells; and transport and disposal of 5,000 gallons of contaminated water, which had been stored on site in a pool formed during previous actions on the site. Recent sampling of soil and groundwater has indicated that contaminant concentrations are significantly lower than originally found. EPA is currently re-evaluating the scope of planned cleanup activities. Additional groundwater monitoring wells have been installed and soil samples have been taken to determine the most appropriate cleanup alternatives.

**Site Facts:** In 1983, the EPA issued an order to Tower Chemical Company to clean up the site. The EPA began cleanup activities at the site, because the company did not respond.

## Environmental Progress

The removal of contaminated soil, treatment of contaminated groundwater, and installation of a drinking water well have reduced the potential for exposure to and the further spread of hazardous materials at the Tower Chemical Company site while further cleanup activities are evaluated.

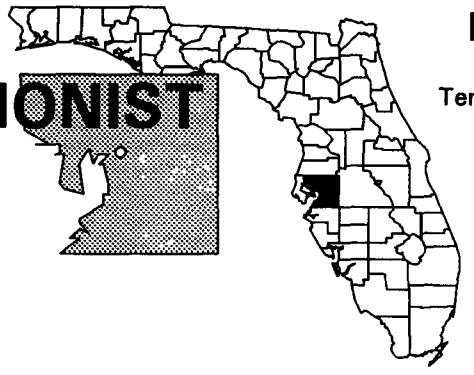
## Site Repository 

Cooper Memorial Library, 620 West Montrose Street, Clermont, FL 32711

# TRI-CITY OIL CONSERVATIONIST CORP.

## FLORIDA

EPA ID# FLD070864541



**EPA REGION 4**
Hillsborough County
Temple Terrace, near Tampa

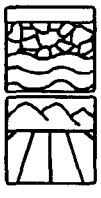
## Site Description

The Tri-City Oil Conservationist Corporation property, occupying about 1/4 of an acre, housed a heating oil business from 1960 to 1975. From 1978 to 1983, the facility acted as a waste oil storage and distribution center. Three aboveground storage tanks and one known underground storage tank were on site. While it operated, people complained to the State about the odor and sloppy practices at the facility. In 1982, 3,000 gallons of oil were spilled. When the owner failed to clean up the site at the request of the Florida Department of Environmental Regulation (FDER), the EPA removed the bulk of the oil and later removed contaminated soil. Tri-City was dissolved involuntarily in 1983, and the owners are in bankruptcy. An estimated 35 people are served by nine private wells and live within a block of the site. The site is about 3,000 feet from the Hillsborough River and within 3 miles of the public well field serving the community's 16,000 residents.

**Site Responsibility:** This site was addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 09/08/83
Final Date: 09/21/84
Deleted Date: 09/01/88

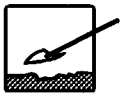
## Threats and Contaminants



Elevated levels of lead were found in initial sampling of the groundwater, but none were found in later samples. Soil excavated from the area was heavily contaminated with volatile organic compounds (VOCs) and heavy metals from former site activities. The removal of contaminated soils and sludges in 1984 has eliminated the threats to human health and the environment.

## Cleanup Approach

### Response Action Status



**Initial Actions:** The EPA cleaned up the 3,000-gallon oil spill in 1984 and excavated 850 cubic yards of contaminated soil and sludges, which were disposed of off site. The excavated areas were brought back to their original grade using clean fill, and the EPA planted grass to prevent erosion. Tests of soil, groundwater, and sediment in 1986 showed that the source of contamination was removed.

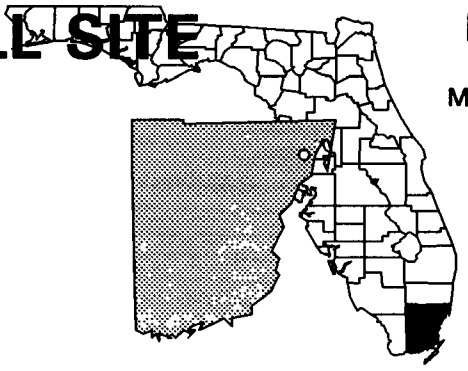
**Entire Site:** After detailed site analyses, the EPA determined that because of the success of the initial actions undertaken in 1989, no further actions were required at the site. The EPA deleted the site from the NPL in 1988.

**Site Facts:** The EPA issued an Administrative Order to the parties potentially responsible for contamination at the site in 1984, informing them that their activities represented an imminent and substantial danger to public health and the environment, and that they must promptly stop these activities.

## Environmental Progress

The removal of contaminated soil and sludge has restored the site to the environmental standards established by the State and the EPA. The completed actions are protective of the public health and the environment. The Tri-City Oil Conservationist Corp. site has been deleted from the NPL.

# VARSOL SPILL SITE
## FLORIDA
EPA ID# FLD980602346



**EPA REGION 4**
Dade County
Miami International Airport

**Other Names:**
**Biscayne Aquifer Site**

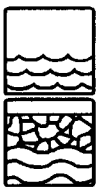
## Site Description

The Varsol Spill Site is located under a portion of the Miami International Airport. This site and two others, the Miami Drum Services site and the Northwest 58th Street Landfill, are being collectively considered as one management unit for the cleanup investigation and selection of cleanup activities. They are related, in that they all lie on the Biscayne Aquifer, which is the sole source of drinking water for the residents of southeastern Florida. Since 1966, there have been approximately 15 spills and leaks at the site totaling 2 million gallons. This included an underground pipeline leak resulting in the discharge of about 1,600,000 gallons of a petroleum solvent at the Miami International Airport. An investigative study determined in 1985 that there was no trace of the solvent at or around the airport. Several factors probably contributed to the dissipation of the contaminants in the aquifer: some of the solvent was recovered; biodegradation is believed to have taken place; and the hydrology of the area indicates that some of the solvent contributed to, and became part of, the "background" contamination in the aquifer. The area surrounding the site is highly populated, with 10,000 people living within 3 miles. The Miami Springs Well Field, which provides drinking water for a significant portion of Dade County, is located 2,000 feet from the walls of the airport.

**Site Responsibility:** This site was addressed through Federal actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83
Deleted Date: 09/01/88

## Threats and Contaminants



The surface water and groundwater were contaminated with polycyclic aromatic hydrocarbons (PAHs). The Varsol site is not a public health concern, as the contaminants from the spill can no longer be identified.

## Cleanup Approach

### Response Action Status

**Entire Site:** After detailed site analyses, the EPA signed a decision in 1985 mandating that no action needed to take place at this site, because it posed no public or environmental threat. The site was deleted from the NPL in 1988.

**Site Facts:** Dade County brought enforcement action against Eastern Airlines, the owner of the solvents that spilled. A Consent Agreement was signed to assess and clean up, if necessary, several maintenance areas and tank farms.

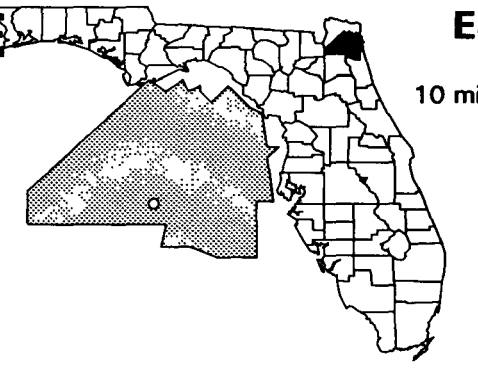
## Environmental Progress

No cleanup actions were needed at the Varsol Spill Site, as contaminants that were spilled at the site were no longer detected in the area. Therefore, the possibility of exposure to hazardous substances at the site is no longer a concern. The EPA performed final investigations and deleted the site from the NPL in 1988.

## Site Repository

Miami-Dade County Public Library, 101 West Flagler Street, Miami, FL 33130

# WHITEHOUSE OIL PITS
## FLORIDA
EPA ID# FLD980602767



**EPA REGION 4**
Duval County
10 miles south of Jacksonville

## Site Description

The Whitehouse Oil Pits site occupies approximately 7 acres of an upland area immediately adjacent to a cypress swamp. The site itself consists of seven unlined pits, constructed by Allied Petroleum, where contaminated acidic waste oil sludges from an oil reclaiming process was disposed of. The pits were constructed and filled between 1958 and 1968. In 1968, Allied Petroleum went bankrupt. The City of Jacksonville then assumed ownership of the property by tax default. In 1976, the dike around one of the pits ruptured, spilling 200,000 gallons of wastes into wetlands along McGirts Creek. The pit was backfilled after the incident. Afterwards, the City of Jacksonville installed and operated a treatment and dewatering system at the oil pits. A second pit released its contents in 1976. Contamination has been detected in all of the zones of the surficial aquifer. The site is located near the Whitehouse community, which has a population of approximately 6,000 people. Most of the residents use private wells for their drinking water source.

**Site Responsibility:** This site is being addressed through Federal, State, and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants

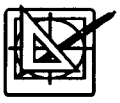
The groundwater and soil are contaminated with various heavy metals, semi-volatile and volatile organic compounds (VOCs), including benzene, from the wastes disposed of at the site. Accidental releases of wastes have contaminated the nearby wetlands areas. Residents in the area could be exposed to contaminated groundwater; however, at present, little contamination has been detected.

## Cleanup Approach

This site is being addressed in two stages: immediate actions and a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Immediate Actions:** The EPA conducted several initial cleanup actions in 1986 to stabilize site conditions and to prevent the spread of contamination. A water treatment system was developed and activated to drain the contaminated liquids from the pits. After the pits were drained, they were filled with construction debris, scrap lumber, trees, wood chips, and other non-degradable wastes to stabilize the pits. A 3-inch layer of automobile shredder waste was placed over the fill, and a mixture of dirt and oil was placed over the shredder waste as a sealer. It was then covered with 12 inches of sand and planted with local grasses. Ditches were constructed to control runoff. Final monitoring of the test wells and drainage effluents showed remaining low levels of chlorinated organics, heavy metals, and acids.

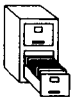


**Entire Site:** In 1985, the EPA selected a cleanup remedy that includes: construction of a slurry wall around the entire site to prevent migration of contaminants; recovery, treatment, and removal of contaminated groundwater; removal of the contaminated sediments from the northeastern tributary of McGirts Creek; and capping the entire site. In 1992, the remedy was amended. The selected cleanup activities include: excavation and treatment of pit waste by soil washing, biotreatment, and solidification/stabilization. Washed soil and stabilized sludges will be backfilled on site. Groundwater will be recovered and treated through carbon adsorption and chemical precipitation before discharging to an on-site drainage ditch. Design of these remedies is expected to be completed in early 1996. The EPA recently fenced the site and corrected deteriorating cap problems.

## Environmental Progress

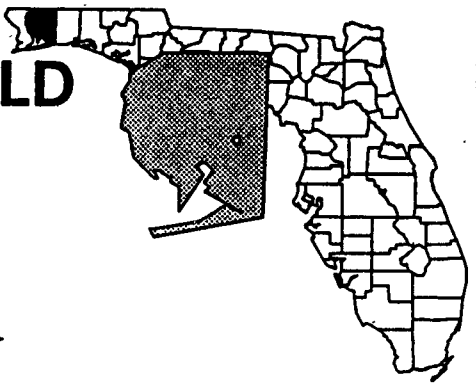
The treatment and stabilization of wastes have greatly reduced the potential for exposure to hazardous substances at the Whitehouse Oil Pits site while further investigations and cleanup activities are being planned.

## Site Repository



Whitehouse Elementary School, 11160 General Avenue, Whitehouse, FL 32220

# WHITING FIELD NAVAL AIR STATION
## FLORIDA
EPA ID# FL2170023244



**EPA REGION 4**
Santa Rosa County
7 miles north of Milton

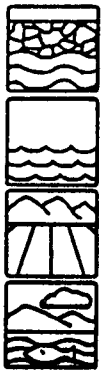
## Site Description

Whiting Field Naval Air Station is a 2,560-acre naval aviation training facility located in the northwest Florida panhandle, approximately 7 miles north of Milton and 20 miles northeast of Pensacola. Various types of wastes have been generated at the base since it was commissioned to instruct student naval aviators in 1943. Through the early 1980s, construction and demolition debris, garbage, waste solvents and oils, tank bottom sludges, fuels and machine fluids were disposed of throughout the facility. Also, solvents have been used for cleaning structural metal components prior to repair or fabrication, and for stripping paint from aluminum, steel, and alloys. In 1986, the Florida Department of Environmental Regulation discovered concentrations of benzene exceeding the State drinking water standard in one well. In addition, concentrations of trichlorethylene exceeding State drinking water standards was found in another well. These two wells were taken out of service. They were later retrofitted with a charcoal filter system and returned to service. Approximately 6,500 people are located within 4 miles of the facility and obtain their drinking water from groundwater.

**Site Responsibility:** The site is being addressed through Federal and State actions.

**NPL LISTING HISTORY**
Proposed Date: 01/18/94
Final Date: 05/31/94

## Threats and Contaminants



Groundwater, surface water, soils, and wetlands on and around Whiting Field are contaminated with various types of wastes including construction and demolition debris, garbage, waste solvents and oils, tank bottom sludges, fuels and machine fluids. On-site wells are contaminated with benzene and trichloroethylene. All three base water supply wells are currently being treated by carbon adsorption systems. Anyone coming into direct contact with or ingesting groundwater, surface water, or soils is at risk.

## Cleanup Approach

The site is being addressed in a long-term remedial phase focusing on cleanup of the entire site.

### Response Action Status

**Entire Site:** An investigation into the nature and extent of site contamination is underway. The investigation focuses on groundwater, surface water, soils, and wetlands on and around Whiting Field.

**Site Facts:** The facility does not have a Resource Conservation and Recovery Act (RCRA) treatment storage and disposal permit, but is listed as a hazardous waste generator. RCRA governs currently operating hazardous waste facilities, whereas Superfund governs those that are closed. The U.S. Navy has developed a program to monitor and control the environmental effects of activities involving hazardous substances at naval installations.

## Environmental Progress

The use of carbon adsorption systems on the three base water supply wells is protecting the public while investigations leading to the selection of final cleanup remedies at the Whiting Field Naval Air Station are ongoing.

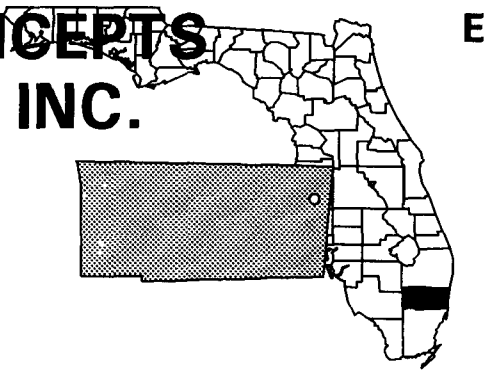
## Site Repository

Not yet established.

# WILSON CONCEPTS OF FLORIDA, INC.

## FLORIDA

EPA ID# FLD041184383



**EPA REGION 4**
Broward County
Pompano Beach

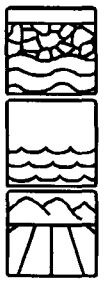
## Site Description

Wilson Concepts of Florida, Inc. is a 2-acre site located in an industrial area of Pompano Beach. This site manufactured precision-machine parts from 1974 to 1987. Since 1988, the site has been leased, and an active metal machinery operation occupies the site. The facility was leased from 1967 until 1974 by Southeast Tool and Die, Inc. (STD). In 1974, STD was purchased by Wilson Concepts, Inc. The types of activities performed here include machining, drilling, and milling of metal parts, along with vibrating, deburring, degreasing, steam cleaning, and spray-coating of parts. On several occasions, Wilson has been cited for violations of County regulations pertaining to the discharge of industrial wastes onto the ground and the overflow of wastes from two 1,200-gallon underground tanks into a storm drain, which eventually also dripped onto the ground. In 1985, the EPA discovered contamination on the ground, in groundwater samples from monitoring wells, and in a water sample from the storm drain. An investigation in 1987 found that Wilson was in violation of operating a hazardous materials facility without a license. The Wilson Concepts site is located adjacent to Chemform, Inc., another NPL site. The Biscayne Aquifer underlies the site. It is a sole source of drinking water for all the residents in Broward County. Numerous cavities in the quartz sand that overlies the limestone of the aquifer facilitate the movement of contaminants into the groundwater, as well as the movement of contaminated groundwater into drinking supplies. Approximately 93,000 people depend on drinking water from at least four municipal wellfields located within 3 miles of the site.

**Site Responsibility:** This site was addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 03/31/89

## Threats and Contaminants



On-site groundwater and surface water located in the storm drain indicated low levels of heavy metals and volatile organic compounds (VOCs) from the site spills and overflows. On-site soils located near the storm drain also showed low levels of heavy metals and VOCs. Had the Biscayne Aquifer become contaminated, area residents using this resource would have been at risk. In addition, direct contact with or accidental ingestion of contaminated surface water or soil could have presented health risks.

## Cleanup Approach

### Response Action Status


**Soil and Groundwater:** The potentially responsible parties for site contamination initiated investigations into the type and extent of contaminated soils and groundwater at the site. In mid-1991, the EPA took over the investigations, due to numerous schedule delays, and completed the investigation in 1992. After the investigation, the EPA determined that the site does not pose a threat to the surrounding community or the environment and, therefore, no action was required except one year of groundwater monitoring to ensure the site remained safe. The groundwater monitoring was completed in the summer of 1994. The site is currently undergoing the process for deletion, which is scheduled for the spring of 1995.

**Site Facts:** The EPA sent Notice Letters to the potentially responsible parties in 1989, requesting that these parties accept responsibility for conducting an investigation of site contamination and cleanup methods. Later that year, the EPA and two parties signed an Administrative Order on Consent to conduct the investigative study. One of the parties, CenTrust Bank, has been taken over by Federal regulators and now is administered by the Resolution Trust Corporation. This takeover slowed the site investigation process, and the regulators indicated that they would not comply with the Administrative Order. Therefore, the EPA took over responsibility for the site in July 1991 and completed the site investigation.

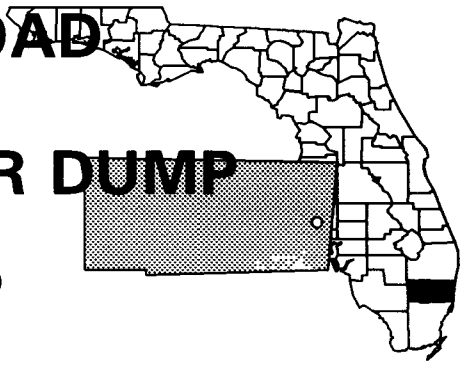
## Environmental Progress

The EPA performed intensive investigations of the site and determined that there are no significant threats posed by the site to the surrounding community. One year of groundwater monitoring took place at the Wilson Concepts of Florida, Inc. site to ensure that the site remained safe.

## Site Repository

Broward County Library, Government Document Department, 100 South Andrews Avenue, Fort Lauderdale, FL 33301

# WINGATE ROAD MUNICIPAL INCINERATOR DUMP
## FLORIDA
EPA ID# FLD981021470



**EPA REGION 4**
Broward County
Fort Lauderdale

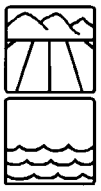
## Site Description

The Wingate Road Municipal Incinerator Dump covers 61 acres in Fort Lauderdale. The site includes an incinerator, offices, and a 40-acre disposal area, all owned and operated by the City of Fort Lauderdale. The incinerator and disposal areas were used from 1955 to 1978. Residential wastes, commercial wastes, and incinerator residue were disposed of at the dump. The facility received 480 tons of waste a day and operated seven days a week. Cooling water was pumped into the incinerator from on-site wells and then was discharged into an unlined lagoon in the southeastern corner of the facility. Ash residues mixed with sludge material from the lagoon were spread onto the ground in the disposal area. According to a resident of the area, hazardous waste may have been dumped on the site. In 1981, a resident reported to the Broward County Health Department that 100 steel drums had been buried from 1955 to 1958 under a dirt road. The EPA conducted tests in 1985 at the site and found pesticides in the surface and subsurface soil in the dump area. Approximately 44,000 people reside within a mile of the site, and an estimated 353,000 people draw drinking water from four municipal wellfields within 3 miles of the site. Land use in the area is a combination of residential, commercial, and industrial.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 10/04/89

## Threats and Contaminants



The soil and subsurface soil are contaminated with pesticides including DDT, aldrin, dieldrin, chlordane, and dioxins from former waste disposal practices at the site. Direct contact with or accidental ingestion of the contaminated soil from the area of the hazardous substances pose a potential health threat. Elevated pesticide concentrations also were reported in sediments from Rock Pit Lake, which is used for recreational activities. The lake intersects the Biscayne Aquifer, presenting a threat of contaminants entering the drinking water supply.

## Cleanup Approach

The site is being addressed in a long-term remedial phase directed at cleanup of the entire site.

### Response Action Status

**Entire Site:** While preparing for site cleanup activities, the EPA conducted a search for potentially responsible parties that have contributed to site contamination. The EPA began a comprehensive investigation in 1991 of site activities and will study various cleanup strategies. Once the study is completed, expected in the spring of 1995, a final remedy selection will be made.

## Environmental Progress

After placing the Wingate Road Municipal Incinerator Dump site on the NPL, the EPA determined that the site does not pose an immediate threat to public health or the environment while the site is undergoing intensive investigations.

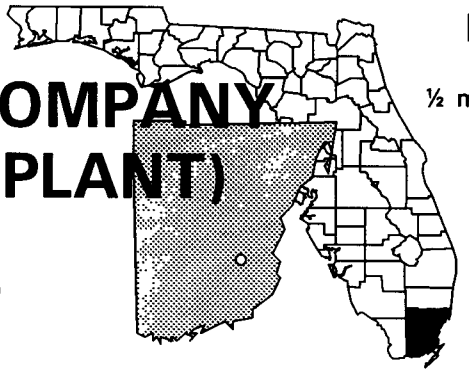
## Site Repository

Broward County Main Library, Government Documents, 100 S. Andrews Avenue, Fort Lauderdale, Florida 33301. (305)357-7438

# WOODBURY CHEMICAL COMPANY (PRINCETON PLANT)

## FLORIDA

EPA ID# FLD004146346



**EPA REGION 4**

Dade County

½ mile southwest of Princeton

## Site Description

Since 1975, the Woodbury Chemical Company has blended technical-grade materials in 50-gallon vats to produce pesticides and fertilizers on a 3-acre site. The site consists of six buildings including an office, warehouses, and production buildings, as well as several aboveground storage tanks, the majority of which are diked. Most of the facility grounds are paved, and the entire site is fenced. In 1985, the EPA identified various pesticides in four surface soil samples from the site. An estimated 17,600 people live within 3 miles of the site. These residents depend on the Biscayne Aquifer underlying the site for their drinking water. The EPA has designated the aquifer as the sole source of drinking water for Dade County. Three wellfields and several private wells are located within 3 miles of the site. A canal that flows into Biscayne Bay is located approximately 2,350 feet northeast of the site.

**Site Responsibility:** This site was addressed through Federal and potentially responsible parties' actions.

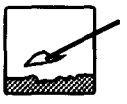
**NPL LISTING HISTORY**
Proposed Date: 06/24/88
Final Date: 08/30/90

## Threats and Contaminants

The soil was contaminated with pesticides including aldrin, dieldrin, toxiphene, and chlordane from former site operations. Direct contact with the contaminated soil may have been a health threat. Due to the proximity of the Biscayne Aquifer, there was the potential for off-site groundwater contamination. According to the Florida Marine Patrol, manatees, which are designated as an endangered species by the U.S. Fish and Wildlife Service, were frequently seen in a nearby canal.

## Cleanup Approach

### Response Action Status



**Immediate Actions:** Contaminated soil was removed from the site by the parties potentially responsible for site contamination in 1990. The soil was taken to an off-site facility for proper disposal.

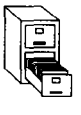

**Entire Site:** In 1992, the EPA completed investigations of the site to determine the nature and extent of contamination. Based on the results of this investigation, the EPA has determined that the site poses no risk to the public or environment. The immediate actions taken at the site have removed all contamination; therefore, no further cleanup actions are required. The EPA has monitored the site to ensure that the site is safe. In 1995, a notice will be placed in the *Federal Register* announcing the proposed deletion of this site from the NPL. After the 30 day public comment period, the EPA will delete the site from the NPL.

**Site Facts:** Notice Letters were sent in 1990 to the parties potentially responsible for the contamination of the site. The EPA decided to complete site investigations on its own after receiving an unacceptable offer to investigate site contamination from the potentially responsible parties.

## Environmental Progress

The removal of contaminated soil at the Woodbury Chemical Company site has eliminated all hazardous materials. Therefore, the EPA has concluded that no further actions are required at the site. Monitoring of the site by the EPA has been completed and has ensured the future safety of the site.

## Site Repository

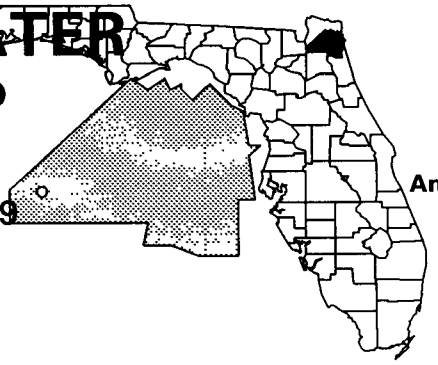


South Dade Regional Library, 10750 SW 211th Street, Cutler Ridge, FL 33189

# YELLOW WATER ROAD DUMP

## FLORIDA

EPA ID# FLD980844179



**EPA REGION 4**

Duval County
1 mile south of Baldwin

**Other Names:**
American Environmental Energy Co.

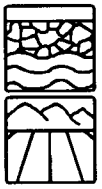
## Site Description

Prior to commercial development, the 14-acre Yellow Water Road Dump site was part of a dairy farm. The site was purchased in the late 1940s; however, it was not until 1981, with the formation of American Environmental Energy Corporation (AEEC), that the site was developed for commercial uses. The AEEC was formed on the premise that insulation fluids contaminated with polychlorinated biphenyls (PCBs) could be removed from transformers, and the transformers could then be salvaged. AEEC planned, through a joint venture with American Electric Corporation (AEC), to dispose of the PCB-contaminated fluids in an on-site incinerator. From 1981 to 1984, transformers, tanks, and drums filled with PCBs, waste oils, and solvents were transported to the site for disposal. Incineration of PCBs never occurred, as neither AEEC nor AEC were issued permits to conduct on-site incineration. The operation ended when the property was rezoned. By that time, approximately 63,000 gallons of oil and transformer fluid containing PCBs had leaked from containers, drums, and tanks, according to the EPA. Two residences with private wells are located on the Yellow Water Road site property. A trailer park with 100 residents using private wells is located approximately ¼ mile to the east of the site.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 09/18/85
Final Date: 06/10/86

## Threats and Contaminants



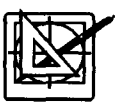
PCBs, iron, and lead from former site operations have been found in the groundwater. PCBs, hexachlorobenzene, and arochlor were detected in the soil samples taken from the site. Accidental ingestion of contaminated groundwater and direct contact with contaminated soil and groundwater may pose health threats.

## Cleanup Approach

The site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on cleanup of soil and groundwater.

### Response Action Status

**Immediate Actions:** In 1984, the EPA removed drums from the site, empty drums were crushed, and full drums were staged for sampling. Six tanks and a nearby pond were sampled. Transformers were sampled, opened, decontaminated, and removed from the site; the contaminated soil from the area was excavated. In 1985, a water treatment system was set up for the water used in the cleanup and for the water in the pond. After the cleanup was completed, the site was closed and public access was denied. In 1988, an on-site warehouse was demolished and disposed of, contaminated soil was stockpiled off site, approximately 79,000 gallons of PCB-contaminated liquids were incinerated and 700 transformers and 18,700 pounds of capacitors were disposed of off site.



**Soil:** In 1990, the EPA selected a remedy for cleanup of the soil which includes the excavation of PCB-contaminated soil and sediments, treatment by stabilization/solidification, and the placement of these soils in the former operations area. Excavated areas will be backfilled and revegetated. In addition, the site will be fenced to restrict access, and groundwater monitoring will continue. A treatability study was performed in the fall of 1991 to verify the effectiveness of the stabilization and solidification process. Design of the selected cleanup alternatives began in early 1991 and was completed in late 1992. Cleanup activities are expected to begin in 1995.


**Groundwater:** In early 1991, the parties potentially responsible for site contamination began additional investigations into the nature and extent of groundwater contamination at the site. These studies were undertaken to determine the full extent of migration of PCB contamination in the upper water table and to determine if the lower water table was affected by the contamination. Results from the additional investigations revealed decreasing PCB concentrations in the monitoring wells on site. In mid-1992, the EPA selected long term monitoring as the remedy with a contingent pump and treat remedy. The contingent remedy would be triggered by the spread of PCBs within the aquifer.

**Site Facts:** In 1985, the EPA secured a court order that prevented the owner of the site from removing transformers from the site without the EPA's approval. The potentially responsible parties have completed the designs of the selected soil cleanup under a Unilateral Administrative Order issued in March 1991.

## Environmental Progress

The immediate actions taken to remove contaminated drums and to decommission transformers on the site have significantly reduced the potential for exposure to hazardous materials at the Yellow Water Road Dump site while the chosen permanent cleanup solutions are being implemented.

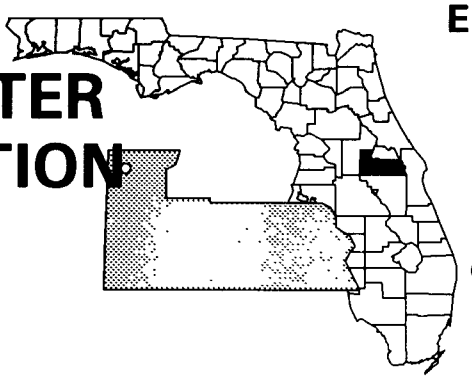
## Site Repository

Baldwin Town Hall, 10 U.S. Highway 90, West Baldwin, FL 32234

# ZELLWOOD GROUND WATER CONTAMINATION

## FLORIDA

EPA ID# FLD049985302



**EPA REGION 4**

Orange County
½ mile west of the
Town of Zellwood

**Other Names:**
**Drum Service Company of Florida**

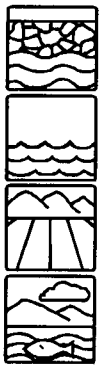
## Site Description

The Zellwood Ground Water Contamination site covers 57 acres near Zellwood and is occupied by four industries. Between 1963 and 1971, Drum Service Company of Florida, a drum recycling facility, operated a wastewater disposal system without a regulatory permit, treating and disposing of wastewater in two unlined on-site ponds. In 1980, the company eliminated the use of these ponds and drained and removed contaminated sediments from them. Douglas Fertilizer and Chemical Company and Southern Liquid Fertilizer discharged wastewater from their production process into three unlined lagoons. Additionally, from 1960 to 1983, the Zellwin Farms Company facility, a vegetable washing and packing plant, discharged wastewater from the vegetable washing process into a ditch. Approximately 300 homes are located within a 1-mile radius of the site and depend on private wells as their sole source of drinking water. The Town of Zellwood is ½ mile away, and about 5,000 of its residents use ground water for drinking water. A portion of the site is a vegetated wetland.

**Site Responsibility:** This site is being addressed through Federal and potentially responsible parties' actions.

**NPL LISTING HISTORY**
Proposed Date: 10/23/81
Final Date: 09/08/83

## Threats and Contaminants



The ground water, sediments, soil, and sludges are contaminated with organics including polycyclic aromatic hydrocarbons (PAHs), pesticides, and heavy metals including chromium and lead from former waste disposal practices at the site. People who use contaminated ground water as their source of drinking water may be at risk. Those who come in direct contact with or accidentally ingest contaminated soil, sludges, or sediments may be harmed. If contaminants have leached from the lagoon areas into the on-site wetland, wildlife may be adversely affected.

## Cleanup Approach

This site is being addressed in three stages: immediate actions and two long-term remedial phases focusing on soil and ground water cleanup.

### Response Action Status

**Immediate Actions:** During an EPA inspection in 1982, an abandoned drum area was discovered. Under EPA supervision, the party potentially responsible for the drums, NAPA Properties, paid for their removal.

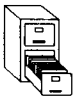
**Soil:** In 1987, the EPA selected two remedies to clean up the soil. In 1990, the EPA amended the earlier remedy to include excavation of contaminated soil, followed by solidification and fixation on site. If necessary, pond sediments will be similarly treated. The EPA prepared the technical design for cleaning up the soil in 1991. Excavation of soils was performed in 1992 and solidification was performed in 1993. The EPA currently is conducting confirmatory tests on the solidified mass to ensure that it is protective of human health and the environment.

**Ground Water:** EPA began an investigation into the nature and extent of ground water contamination in early 1993. This investigation is expected to be completed in the fall of 1995, at which time the EPA will evaluate the alternatives for cleanup.

## Environmental Progress

The removal of drums has eliminated immediate threats to the public at the Zellwood Ground Water Contamination site. The excavation of soil has eliminated the potential for contamination above cleanup levels to move from the soil to the ground water, thereby reducing the threat to public drinking water while further ground water investigation activities continue.

## Site Repository



Zellwood Elementary School, 3551 East Washington Street, Zellwood, FL 32798



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