GULF STATES UTILITIES
LOUISIANA

EPA ID# LAD985169317

EPA REGION 6
Congressional District 07
Calcasieu Parish
Other Names: North Ryan Street Utilities Yard

Updated: August 12, 2002

Site Description

Location: 303 North Ryan Street, Lake Charles, Louisiana.
Population: 56,120 in Lake Charles, Louisiana.
4,988 in Westlake, Louisiana.

Setting: Situated on the south bank of the Calcasieu River, just south of the River Road and North Ryan Street intersection, the site consists of east and west service yards separated by North Ryan Street. A six acre wetlands area was included as part of the site due to landfill activities associated with historical site operations.
The site is currently operated as the Lake Charles Division Service Center of Entergy Corporation (Entergy). Gulf States Utilities Company (GSU) merged with Entergy in 1994.
The east service yard is 3 to 4 acres and the west service yard is approximately 16 acres in size. The area east of North Ryan Street was originally leased by GSU for storage; however, it is no longer used. The west service yard is used as a storage area and a repair center associated with Lake Charles Service Center operations. The former wetlands area which had been used as a landfill is located in the west service yard and is covered with shells and soil.
The site is bounded to the south by commercial business, to the west by city of Lake Charles property (water and sewage treatment, animal control) to the southwest by the Greater Lake Charles Water Company and the wastewater treatment plant, and to the east by light industrial and residential areas.

Present Status and Issues

The In-situ thermal desorption (ISTD) work began in February 2001 with installation of the heater and vacuum wells. A small area on the site was tested, however, the groundwater system was unable to lower the water table enough to allow the technology to be implemented. The contingency alternative of excavation and off-site disposal was implemented starting in May 2002.
The on-site excavation and off-site disposal was completed in July 2002. A final cover will be installed after settlement of the backfill has occurred.

**Wastes and Volumes**

Principal Pollutants:
- Polycyclic Aromatic Hydrocarbons (PAHs) associated with coal gasification process.
- Polychlorinated Biphenyls (PCBs) associated with landfill activities.
- Volatile Organic Analytes (VOAs) associated with a former underground storage tank area.

**Site Assessment and Ranking**

![NPL Listing History](image)

**Site Map and Diagram**

![Site Map](image)
The Remediation Process

Site History:

Gas production at the North Ryan Street Site appears to have begun around 1916 by the Lake Charles Gas Company. The Lake Charles Gas Company operated the plant until 1924. The plant was operated by the Lake Charles Electric Company in 1925, and by the Louisiana Electric Company, Inc. in 1926. GSU operated the plant between 1927 and 1932, when manufactured gas production ceased at the facility, and the property was reportedly sold to United Gas Public Service Company.

The annual production of gas during the years of operation at the North Ryan Street Site ranged from approximately 50 to 85 million cubic feet. Manufactured gas was phased out in 1932 when natural gas service became available to the city of Lake Charles. GSU/Entergy currently operates and maintains the service center at the site.

The coal tar by-products generated during gas plant activities were reportedly disposed of into marshlands west of the gas plant. The size of the wetlands area was approximately six acres. After the gas plant ceased operation, the wetlands area was used as a landfill for the disposal of electrical equipment and poles, appliances, and other debris. Transformers, capacitors, and drums containing used transformer oil were also reported to have been disposed of in this area. By 1980, the area was at its capacity and was filled and covered with shells and soil. This area is now used as an equipment storage area. An area of exposed coal tar, referred to as the tar outcropping (approximately 8 feet by 8 feet), has been identified at the northern portion of this former wetlands area. GSU has placed an aluminum covering over this seep area.

The manufactured gas plant (MGP) structures have been dismantled; however, remnants of the gas plant foundation are still present on site and the area is currently used for storage. The crude oil storage tanks were reportedly filled in by 1990 and the gas holder foundation is still visible on site (4-foot high structure).

Evidence of potential on-site contamination was first identified in 1988 during an inspection conducted by the Louisiana Department of Environmental Quality (LDEQ). In September 1988, LDEQ issued a compliance order to GSU to conduct remedial activities at the GSU-North Ryan Street site. GSU conducted phased investigative work required under this order beginning in December 1988 and continuing through October 1990.

In response to concerns over the quality of investigative work being conducted, EPA conducted a site inspection (SI) at the site which included sampling activities during the week of October 1, 1990, and the completion of an SI report in September 1992.

Samples collected during SI field activities from Calcasieu River sediments revealed that contaminants attributable to the GSU-North Ryan Street facility were being released to the Calcasieu River.

In 1992, EPA began informal negotiations with GSU on site remedial strategy. However, these negotiations were not concluded due to GSU's unwillingness to proceed without deferment on the NPL ranking process.

The Site was proposed to the NPL on February 13, 1995. GSU, EPA, and LDEQ have agreed informally upon a site strategy which includes an Engineering Evaluation and Cost Analysis (EE/CA) in support of a non-time-critical removal action and a Remedial Investigation and Feasibility Study for any concerns not addressed as part of the EE/CA (e.g., ground water connection to river, etc.).

In April 1996, the PRP submitted a work plan and sampling and analysis plan to conduct an Engineering Evaluation/Cost Analysis (EE/CA) to evaluate the nature and extent of site contamination.
A Remedial Investigation/Feasibility Study (RI/FS) would be performed concurrently to address the nature and extent of ground water issues as well as a baseline risk assessment.

In November 1996, the PRP submitted a revised work plan and sampling and analysis plan based on comments from the Agency. The Agency provided final written comments on January 28, 1997. The Administrative Order on Consent (AOC) for clean-up actions was mailed to the PRP on February 7, 1997. The work plan and sampling and analysis plan will be incorporated by reference in the AOC.

The PRP began and completed sampling in February 1997. The sampling consisted of soil borings, sediment, and ground water sampling.

The PRP signed the AOC on February 28, 1997. The Federal Register notice of the proposed AOC was published on May 5, 1997, in order to give the public an opportunity to comment on the cost recovery section of the AOC. The public comment period ended June 4, 1997.

The EPA initiated an Interagency Agreement (IAG) with the U.S. Army Corps of Engineers (USACE) for oversight assistance on the North Ryan site. The USACE accompanied EPA on May 21, 1997, on a site tour and discussed the streamline and baseline risk assessment goals.

The Louisiana Office of Public Health (LOPH) is completing a health assessment on the North Ryan site. EPA accompanied LOPH on the site tour on May 21, 1997.

No public comments were received on the Federal Register notice for the AOC. The EPA signed and finalized the AOC on July 7, 1997. This AOC documents the agreement between EPA, the State (LDEQ) and the PRP (Entergy) to conduct an EE/CA in support of a non-time critical removal action and a RI/FS for groundwater.

The PRP submitted the first interim deliverable (data use memorandum) for the human health and ecological risk assessment in July and August 1997, respectively. A conference call was held August 13, 1997 to discuss comments on the two deliverables. Written comments were sent to the PRP on August 18, 1997.

A meeting was held on October 7, 1997 in order to further discuss the written risk assessment comments submitted on August 18, 1997. The PRP has revised the deliverables and incorporated comments by the EPA toxicologists.

The RI/FS and EE/CA investigations are being conducted concurrently. Documents related to the EE/CA have been completed including the EE/CA investigation report and the streamline risk assessment which has been incorporated into a draft EE/CA report, submitted April 1998.

EPA solicited comments on the draft EE/CA from other stakeholders including the National Oceanic and Atmospheric Administration (NOAA), U.S. Fish and Wildlife Service and the State of Louisiana. These comments were presented to the PRP during the week of July 6, 1998.

EPA, NOAA, and Fish and Wildlife met with Entergy and their consultants on August 6, 1998 to review the findings of the Screening Level Ecological Risk Assessment. The results define the area of contaminated sediment along the river bank which parallels River Road. The PRP agreed to finalize this document and to incorporate the findings into the proposed alternatives for the EE/CA.

Ground water sampling was conducted at the site during the week of August 10.

The EE/CA was finalized on October 1998 and was presented to the community during an Open House meeting on November 18, 1998.

On December 29, 1998, two sets of warning signs were posted along the bank of the Calcasieu River located north of the facility boundary. The signs read as follows: “WARNING Contaminated sediments: No recreational activity recommended between these signs. Clean up pending. For more information, contact U.S. EPA at: 1(800)533-3508.” They can be read from either the road or the river. The signs define the area of contaminated sediment that has been identified during the investigative work conducted to develop the Engineering Evaluation/Cost Analysis (EE/CA) document.
Due to an extension request made by the community, the public comment period on the EE/CA was extended to January 28, 1999.

A Public Meeting was conducted on January 19, 1999 in order to receive verbal comments from the community on the EE/CA.

EPA received from the PRP a revised baseline risk assessment and the first addendum to the RI/FS and EE/CA Investigation Report on March 1.

EPA finalized its review of public comments and incorporated its responses in a responsiveness summary which appears as an appendix to the signed Action Memorandum. The Action Memorandum was signed by EPA on June 4, 1999 and documents the decision for the removal of on-site soils from the marshland and sediment in the Calcasieu River. The Action Memorandum appears on the EPA Region 6 Web Site (http://www.epa.gov/region6/6sf/pdffiles/nryanam.pdf).

During the week of April 12, 1999, EPA sampled 21 private water wells in the River Road neighborhood located northwest of the site. These drinking water samples were submitted to laboratories to be analyzed for volatile organics, semi-volatile organics, pesticides, PCBs, metals, cyanide and dioxin. Laboratory results were received in late May. Reports were prepared and sent to the residents in early June 1999. The most significant findings were exceedences of iron and manganese above secondary drinking water standards. These secondary standards are non-enforceable guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water. The EPA recommends secondary standards to water systems but does not require systems to comply.

The EPA met with Entergy Gulf States, Inc., the Potentially Responsible Party (PRP), on June 29, 1999 to open up the negotiations to do the removal action work at the site. The PRP had been provided with the signed Action Memorandum, a draft Administrative Order on Consent and a draft Statement of Work. The discussions were mainly focused on some technical issues relating to the Action Memorandum, including the action level goals and verification sampling, air monitoring requirements, and sediment dewatering.

The EPA signed and finalized the Administrative Order on Consent (AOC) on October 25, 1999. This AOC documents the agreement among EPA, the State (LDEQ) and the PRP (Entergy) to conduct a removal response action based upon the Action Memorandum and Statement of Work.

Received the draft Feasibility Study for groundwater in October 1999.

EPA opens a Calcasieu Estuary Community Outreach Office in Lake Charles on November 8, 1999. It is located at 110 West Prien Lake Road.

The Removal Work Plan and Sampling and Analysis Plan were received in early December 1999 and approved by EPA.

Some initial work began on the removal action in January 2000. This included sampling of Calcasieu River sediment and surface water to assist in design of the dewatering system for the dredging phase of the cleanup, collection of source material in the west service yard to do treatability studies for the thermal treatment and conduct of a side scan sonar study to determine the location of the sunken ship in the river channel.

The Proposed Plan for the Ground Water Operable Unit was released to the public on June 9, 2000. The Public Comment period ended on July 12, 2000 and a Public Meeting was held on July 6, 2000. The comments were mostly supportive of the preferred remedy of Monitored Natural Attenuation with Institutional Controls.

Much of the dredging of the Calcasieu River sediment and restoration of the river bank along river road was completed in July 2000. Contaminated sediments were removed from the drainage ditch located along the western property boundary.
The Record of Decision for the Ground Water Operable Unit became final on September 27, 2000 when it was signed by the Acting Regional Administrator for Region 6.

The site work for the removal action began on May 22, 2000. The first phase of the removal involved dredging and dewatering river sediments. This was completed in July 2000.

The ROD for the Ground Water Operable Unit was signed on September 27, 2000.

The Storm Sewer removal work plan was submitted in December and the work began in early January 2001. The work was completed in February 2001.

Health Considerations:

- Potential direct contact threat for on site workers and trespassers with surficial coal tar residue in soils and sediments on site.
- Potential migration of contaminants into ground water and/or surface water increases potential risk of exposure for off site receptors.
- The Calcasieu River, a recreational fishery, is within 60 feet directly north of the GSU-North Ryan Street facility.
- Lake Charles and Prien Lake are within 15 miles of the site in the Calcasieu surface water system and are also recreational fisheries.

Other Environmental Risks:

- The Calcasieu River, Lake Charles, and Prien Lake are estuarine in nature and have designated uses of primary and secondary contact recreation and the propagation of fish and wildlife.
- Wetland areas contiguous to surface water downstream of the site are abundant.

Record of Decision

ACTION MEMORANDUM
06/04/99
ROD for OU1
09/27/00

Community Involvement

  EPA signs Groundwater ROD 10/00
- Fact Sheet: Removal Action Activities Continue at the Site December, 2001
- Fact Sheet: June 2001/Info TAG GRANT AWARDED
- Open House: Proposed Plan of Action which addresses ground water.....June 8, 2000
Fact Sheet EPA/Entergy Plan Removal Action for late 5/00
Fact Sheet 10/99 EPA/Entergy sign Administrative Order on Consent
Fact Sheet: Decision Finalized for Non-Time Critical Removal 6/10/99
Community Involvement Plan: November 1998
Community Interviews: July 1998
Open houses and workshops: City Officials briefing March 1995; EE/CA November 1998
Public Meetings: For the EE/CA on January 19, 1999 6:30 p.m. until 8:30 p.m. at the Community Meeting Room Carnegie Memorial Library, 411 Pujo Street, Lake Charles, Louisiana—6:30 p.m. until 8:30 p.m.. For Proposed Plan on Ground Water, July 6, 2000, at the Carnegie Memorial Library, 411 Pujo Street - 7:00 p.m. until 9:00 p.m..
EE/CA Public Comment Period: November 18, 1998 through January 28, 1999
Proposed Plan Public Comment Period: June 9, 2000 through July 12, 2000
Milestone Fact Sheets: NPL Proposal February 1995; EE/CA November 1998
Citizens on site mailing list: 176 August 1998
Constituency Interest: High
Site Repository: Central Calcasieu Parish Library, 301 West Claude Street, Lake Charles, LA 70605

Technical Assistance Grant

Availability Notice: Community Advisory Group - 11/17/98, 1/19/99, 10/13-14/99, 6/8/00, 6/11/00,
Letters of Intent (LOI) Received:
   1) 12/16/98 - Calcasieu League for Environmental Action Now (CLEAN)
      No application received - clock stopped on LOI.
   2) 10/7/99 - Calcasieu League for Environmental Action Now (CLEAN)
      No application received - clock stopped on LOI on 1/19/00.
   3) 10/12.99 - The Chamber/Southwest Louisiana
      No application received - clock stopped on LOI on 1/19/00.
   4) 5/30/00 - CLEAN - application received: July 11, 2000
Final Application Received: 10/00
Grant Award: TAG award 02/24/01
Current Status: Active TAG, Technical Advisor not yet selected.

Contacts

Remedial Project Manager: John Meyer, 214/665-6742, EPA (6SF-LP)
State Contact: Rich Johnson, 225/765-0487
Community Involvement Coordinator: Janetta Coats, 214/665-7308, EPA (6SF-PO)
Attorney: Ed Quinones, 214/665-8035, EPA (6RC-S)
State Coordinator (EPA): Kathy Ketcher, 214/665-7196, EPA (6SF-LP)
Prime Contractor: For Oversight-U.S. Army Corps of Engineers, Gary Brouse, 504/862-2707
EPA Ombudsman: Arnold Ondarza, 800-533-3508
Enforcement

! General Notice/104(e) letters issued in 1991 to Stone & Webster to obtain information about its involvement at the Site.
! Special Notice Letter issued on July 25, 1995 to Entergy Corporation, parent corporation to GSU. GSU provides a good faith offer via correspondence dated July 31, 1995.
! Administrative Order on Consent (AOC) whereby Entergy agrees to perform a RI/FS and develop an EE/CA with an effective date of July 7, 1997.
! An Administrative Order on Consent (AOC) and associated Statement of Work (SOW) was signed by EPA and Entergy on October 25, 1999 to perform the removal action as stated in the signed Action Memorandum.
! The EPA is currently negotiating with the PRP to have them perform the Remedial Action work for sitewide groundwater which is monitored natural attenuation with institutional controls.

Benefits

! Implementation of the remedy will protect the Calcasieu River, a recreational fishery, and reduce possible contamination of a six acre wetland located adjacent to the site.