

**PRELIMINARY CLOSE OUT REPORT  
PALMER BARGE SUPERFUND SITE  
PORT ARTHUR, TEXAS**



**REGION 6  
SEPTEMBER 2007**

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PORT ARTHUR, JEFFERSON COUNTY, TEXAS**

**I. INTRODUCTION**

This Preliminary Close Out Report (PCOR) documents that the U. S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) have completed construction activities for the Palmer Barge Superfund Site in accordance with Close Out Procedures for National Priorities List Sites (OSWER Directive 9320.2-09A-P). The EPA and TCEQ conducted the Final Construction Inspection on September 28, 2007. The EPA and TCEQ have determined that the contractor for the PRPs has completed the construction activities portion of the Remedial Action in accordance with the Record of Decision (ROD), the Remedial Design and the approved Remedial Action Workplan.

**II. SUMMARY OF SITE CONDITIONS**

**Site History and Background**

The Palmer Barge Line Superfund Site is located on Pleasure Islet on the western shore of Sabine Lake, in Jefferson County, Texas. The site is located approximately 4.5 miles east-northeast of the City of Port Arthur. The Palmer Barge Site encompasses approximately 17 acres and is located on Old Yacht Club Road on the South Industrial Islet. The Site is bounded to the north by vacant property, to the west by Old Yacht Club Road, to the south by the State Marine Superfund Site, and to the east by Sabine Lake. There is very little topographical relief to the Site. The Site is located approximately 0.5 miles southwest of the confluence of the Neches River and the Sabine Neches Barge Canal.

The Site, along with the adjacent properties to the north and south, were used as a Municipal Landfill for the City of Port Arthur from 1956 to 1987. Although disposal at the landfill has long since ceased and the landfill contents have been covered with dredged sediments, the contents are still present on the Site in the subsurface soils.

In April 1982, John Palmer, President of Palmer Barge Line, Inc., purchased approximately 17 acres from the City of Port Arthur, for the purpose of servicing and maintaining barges and marine vessels. In July 1983, Barker Phares, a trustee of Jefferson County, placed a lien on the Palmer Barge Line Property. In October 1994, Wrangler Capital assumed all claims from the Palmer Barge Line, Inc. In July 1997, Wrangler Capital purchased Palmer Barge Line from receivership, and the company ceased operations on the property. The current owner is Mr. Chester Slay. At present, the Site is used by Mr. Slay for industrial purposes. Metal structures on-Site are being salvaged, and the salvaged metal is being used by the current owner to construct marine equipment on the Site.

During barge cleaning operations, the typical activities performed at the Site included cleaning, degassing, maintenance, and inspection of barges and other marine equipment. Cleaning operations included the removal of sludge and other residual material by pressure steaming the vessel holds, engines and boilers. Engines were degreased, and accumulations of sludge materials were removed. Degassing activities involved the removal of explosive vapors from vessel holds using nitrogen or boiler exhaust. Maintenance and inspection activities included the replacement and/or repair of valves, engine repairs, and line leak repairs followed by pressure tests. A flare was located on-site to burn excess gases and liquids produced during facility operations.

### **History of Federal and State Investigations**

Previous investigations of the Site include the following:

- December 1996: Texas Natural Resource Conservation Commission (TNRCC, now named the Texas Commission on Environmental Quality, or TCEQ) Region 10 Field Office personnel conducted a multi-media investigation. The purpose of this study was to determine the compliance status of the facility.
- March 1998: TNRCC Region 10 Field Office with EPA Region 6 conducted an investigation to identify potential sources and to sample soil and sediment. Five areas of stained soil were identified on-site, which included the following: stained soils near sumps, stained soil near the boiler house, stained soil near the flare, stained soil near aboveground storage tanks, and stained soil near wastewater tanks. Sample results indicated the presence of inorganic constituents such as metals, semi-volatile organic constituents (SVOCs), and pesticides in on-site soil. Metals and SVOCs were detected in offshore sediment adjacent to the Site.
- July 1999: TNRCC Region 10 Field Office sampled aboveground storage tanks, roll off-boxes and "slop" tanks to characterize materials stored.
- October 1999: EPA Region 6 conducted an Expanded Site Inspection (ESI; Weston 2000) to determine the presence and nature of constituent occurrence on-site and off-site and to determine migration routes and routes of exposure of site related constituents. Results of the inspection indicated the presence of volatile organic constituents (VOCs), SVOCs, pesticides, polychlorinated biphenyls (PCBs), and metals.
- In 2000, the Site was ranked and was placed on the National Priority List (NPL). The Hazard Ranking concluded that constituents present in Sabine Lake sediments adjacent to the Site were a potential threat to human health primarily via the fish consumption exposure pathway (USEPA, 2000).
- 2003: URS Corporation (URS), on behalf of the Potentially Responsible Parties (PRPs),

conducted a remedial investigation (RI) at the Site in July 2003, which characterized the nature and extent of constituents present in environmental media at the Site and in adjacent Sabine Lake surface water and sediments.

### **History of CERCLA Enforcement Activities**

On September 30, 2002, EPA Region 6 issued an Administrative Order on Consent to conduct the remedial investigation and feasibility study (RI/FS) for the Palmer Barge site. Voluntary respondents to the Order were: E. I. du Pont de Nemours and Company, Chevron/Texaco Inc.; Kirby Inland Marine, LP; Kirby Inland Marine, Inc. of Louisiana; and Ashland Inc.

On May 7, 2007, EPA Region 6 issued a Unilateral Administrative Order (UAO) for Remedial Design and Remedial Action (RD/RA) to a group of potential responsible parties (PRPs). The UAO became effective on June 6, 2007. By letter dated June 15, 2007, a group of four (4) companies agreed to comply with the Order to conduct the RD/RA for the site. The Remedial Design was completed on August 17, 2007. The Remedial Action onsite construction was completed on September 4, 2007. These companies completed the field construction activities portion of the Remedial Action on September 28, 2007.

### **National Priorities List**

The EPA published a proposed rule on May 11, 2000, to add the Palmer Barge Line Site to the National Priorities List (NPL) of Superfund sites. The Site was added to the NPL in a final rule published on July 27, 2000 [Federal Register Listing (FRL-6841-3), Volume 65, Number 145, Pages 46096 - 46104].

### **History of CERCLA Removal Actions**

In August 2001, EPA Region 6 completed a Time-Critical Removal Action to remove source materials stored on-site. Activities included waste removal, water treatment, oil/water separation, and sludge stabilization. Approximately 250,000 gallons of water were treated on site; 330 cubic yards of sludge stabilized; and 100,000 gallons of oil/styrene were separated and removed from the site. All of the above-ground storage tanks were removed except for a 420,000-gallon above ground storage tank (AST) on the northern portion of the site that contains liquid and sludge materials. Several of the concrete AST foundations remain along with gravel throughout the Site.

### **Selected Remedial Action**

The Selected ROD Remedy consisted of the following components:

- Excavation of approximately 1,204 cubic yards of the upper two feet of soil that exceed

human health and ecological risk based levels at each of the response areas;

- Confirmation sampling at each of the response areas. Confirmation samples would be collected from each response area and analyzed for contaminants of potential concern (COPCs).
- Backfilling of excavated areas with clean soil;
- Off-site disposal of the excavated soils at a permitted disposal facility;
- Implementation of Institutional Controls to restrict future land use to industrial purposes only. The Institutional Control shall be a restrictive covenant by the property owner, to the benefit of the State of Texas and the United States Government, recorded in the real property records of Jefferson County, Texas;
- Abandonment of existing monitoring wells - Five (5) existing monitoring wells at the Site will be abandoned; and
- Wastewater AST sludge removal and decontamination - Sludge contained within the remaining Wastewater AST will be removed and disposed of off-site. The tank will be decontaminated and recycled as scrap metal by the property owner.

#### **Implemented Remedial Action Construction Activities**

- Excavated a total of 764.65 tons of the upper two feet of soil that exceeded human health and ecological risk based levels at each of the response areas and backfilled with clean soil. Excavated soils were disposed at a permitted off-site facility.
- Wastewater and sludge materials from the above ground storage tank (AST) were removed and disposed off at a permitted hazardous waste disposal facility. Approximately 520 cubic yards of liquids and sludge materials were removed from the tank. The tank was decontaminated and recycled as scrap metal by the PRPs' contractor for the site owner.
- Five (5) monitoring wells installed during the remedial investigation were plugged and abandoned as part of the remedial action.
- The site was cleaned to industrial standards, and therefore, institutional controls will be implemented by the owner to insure that future use of the site remains for industrial purposes. Additionally, information from confirmation sampling at each of the human health risk response areas will be used to determine if COPCs remain onsite above industrial human health based levels. This information will be used to determine if institutional controls for waste left onsite will be required.

**Future Work**

Institutional Control in the form of restrictive covenant by the property owner, to the benefit of the State of Texas and the United States Government, will be recorded in the real property records of Jefferson County, Texas, to ensure that future site used remains commercial/industrial.

**III. DEMONSTRATION OF CLEANUP ACTIVITY QUALITY ASSURANCE AND QUALITY CONTROL**

The quality assurance/quality control (QA/QC) program for the Palmer Barge Site was conducted in accordance with the workplan prepared to implement the remedial action construction activities. The following project plans were prepared for the remedial action:

- Community Relations Plan
- Site Management Plan
- Health and Safety Plan
- Field Sampling Plan
- Quality Assurance Project Plan
- Data Management Plan
- Pollution Control and Mitigation Plan
- Transportation and Disposal and Waste Management Plan
- Construction Quality Assurance Plan

The plans mentioned above ensured that the cleanup activities met all quality assurance and quality control requirements for the Site. The EPA conducted regular oversight throughout the implementation of the remedial action for the Palmer Barge site. In addition to conducting oversight of the project activities, EPA was in regular contact by phone and e-mails with the project managers during construction activities. The Texas Commission on Environment Quality reviewed and commented on all project plans for the site, participated in the Final Construction Inspection, and reviewed and commented on the draft Preliminary Close Out Report.

**IV. ACTIVITIES AND SCHEDULE FOR SITE COMPLETION**

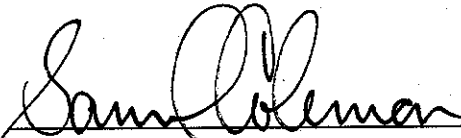
<b>Task</b>	<b>Estimated Completion</b>	<b>Responsibility</b>
Institutional Controls	December 2007	Owner/EPA
Remedial Action Report	December 2007	PRP Group
Final Close Out Report	September 2008	EPA
1 <sup>st</sup> 5-Year Review	September 2012	EPA
Deletion of the Site From NPL	To Be Determined	EPA

**V. SUMMARY OF REMEDIATION COSTS**

The ROD estimate for the selected remedy was \$428,180. The PRPs implemented the selected remedy. Actual cost information was not provided to EPA by the PRPs.

**VI. FIVE-YEAR REVIEW**

Hazardous substances will remain at the Palmer Barge Superfund Site above levels that allow unlimited use and unrestricted exposure after completion of the selected remedial action for the site. Therefore, a statutory review will be conducted within five years of starting remedial action activities at the site to ensure that the remedy is, or will be, protective of human health and the environment. Pursuant to CERCLA section 121(c), 42 U.S.C. § 9621(c), and as provided in the current guidance on Five-Year Reviews: EPA 540-R-01-007, OSWER No. 9355.7-03B-P, *Comprehensive Five-Year Review Guidance*, June 2001, EPA will conduct a statutory five-year review for the Palmer Barge Superfund Site by September 2012, five years after starting remedial action activities at the site.

  
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Samuel Coleman, P.E.  
Director  
Superfund Division

9/28/07  
Date