

**FIRST FIVE-YEAR REVIEW REPORT FOR
PALMER BARGE LINE SUPERFUND SITE
JEFFERSON COUNTY, TEXAS**

September 2012



Prepared by

**U.S. Environmental Protection Agency
Region 6
Dallas, Texas**

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LIST OF ACRONYMS

AST	Aboveground storage tanks
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
COC	Chemical of concern
COPC	Contaminants of potential concern
yd ³	Cubic yard
EA	EA Engineering, Science, and Technology, Inc.
Eco SSL	Ecological Soil Screening Level
EPA	U.S. Environmental Protection Agency Region 6
FS	Feasibility study
ft	Feet
ft ²	Square feet
gal	Gallon
IUR	Chronic inhalation unit risk
kg	Kilogram
LOAEL	Lowest observable adverse effect level
m ³	Cubic meter
µg	Microgram(s)
mg	Milligram(s)
NBI	New Birmingham Inc.
NBR	New Birmingham Resources Maritime II, LLC
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NOAEL	No observed adverse effect level
NPL	National Priorities List
O&M	Operation and Maintenance
OSWER	Office of Solid Waste and Emergency Response
PBL	Palmer Barge Line
PCB	Polychlorinated biphenyls
PCOR	Preliminary Closeout Report
PRP	Potentially Responsible Party
RA	Remedial Action
RAO	Remedial action objective
RCRA	Resource Conservation and Recovery Act
RfD _i	Chronic inhalation reference dose
RfD _o	Chronic oral reference dose
RI	Remedial investigation
ROD	Record of Decision
SARA	Superfund Amendments and Reauthorization Act
SFO	Oral slope factor
Site	Palmer Barge Line Superfund Site
SLERA	Screening-Level Ecological Risk Assessment
State Marine site	State Marine Superfund Site

SVOC	Semi-volatile organic compounds
TBC	To Be Considered
TCEQ	Texas Commission on Environmental Quality
TCLP	Toxicity Characterization Leaching Procedure
TNRCC	Texas Natural Resource Conservation Commission
TPH	Total petroleum hydrocarbons
TRRP	Texas Risk Reduction Program
TRV	Toxicity Reference Value
UAO	Unilateral Administrative Order
URS	URS Corporation
VOC	Volatile organic compounds

EXECUTIVE SUMMARY

The U.S. Environmental Protection Agency Region 6 (EPA) has conducted the first Five-Year Review of the Remedial Action (RA) implemented at the Palmer Barge Line (PBL) Superfund Site (site) in Port Arthur, Jefferson County, Texas. The purpose of a five-year review is to determine whether the remedy at a site remains protective of human health and the environment and to document the methods, findings, and conclusions of the five-year review process in a five-year review report. Five-year review reports identify issues found during each review, if any, and make recommendations to address the issues. This First Five-Year Review Report documents the results of the review for the PBL site, which was conducted in accordance with EPA guidance (EPA 2001) on five-year reviews.

The PBL site is located approximately 4.5 miles east-northeast of the City of Port Arthur, in Jefferson County, Texas, on Old Yacht Club Road on Pleasure Islet, a peninsula located approximately 0.5-mile southwest of the confluence of the Neches River and the Sabine Neches Barge Canal. 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 (State Marine site), and to the east by Sabine Lake.

In 1955, the State of Texas transferred ownership of Pleasure Islet to the City of Port Arthur. The site, along with adjacent properties to the north and south, were used as a municipal solid waste landfill by the City of Port Arthur beginning in 1964. The landfill was closed sometime between 1974 and 1987. 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. Primary operations at the facility included cleaning, degassing, maintenance, and inspection of barges and other marine equipment. In October 1994, Wrangler Capital assumed all claims from the Palmer Barge Line, Inc. In July 1997, Wrangler Capital purchased Palmer Barge Line, Inc. from receivership, and the company ceased operations on the property. The current owner is New Birmingham Resources Maritime II, LLC (NBR) and the site is currently used for industrial purposes.

Regulatory and enforcement history of the site began in December 1996 when the Texas Natural Resource Conservation Commission (TNRCC, now the Texas Commission on Environmental Quality [TCEQ]), Region 10 Field Office personnel conducted a multi-media investigation for

the purpose of determining the compliance status of the facility. In March 1998, TCEQ conducted an investigation to identify potential sources and to sample soil and sediment. Sample results indicated the presence of metals, semi-volatile organic compounds (SVOCs), and pesticides in on-site soil. Metals and SVOCs were detected in offshore sediment adjacent to the site. In July 1999, TCEQ sampled above ground storage tanks (ASTs), roll-off boxes, and “slop” tanks to characterize stored materials.

In October 1999, EPA Region 6 conducted an Expanded Site Inspection (ESI) of the site 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. Six areas of concern were identified:

- Wastewater ASTs
- Boiler House ASTs
- Open Slop Tanks
- Horizontal ASTs in southeast portion of the site
- Twelve ASTs in eastern portion of the site
- Flare.

Results of the inspection identified the presence of volatile organic compounds (VOCs), SVOCs, pesticides, polychlorinated biphenyls (PCBs), and metals.

On 27 July 2000, the site was added to the National Priorities List. From 4 September 2000 to 3 January 2001, EPA Region 6 conducted a Time Critical Removal Action that included waste removal, water treatment, oil/water separation, sludge stabilization, and the removal of all ASTs except for a large AST on the northern portion of the site that contained sludge.

On 30 September 2002, EPA Region 6 issued an Administrative Order on Consent to conduct a remedial investigation (RI) and feasibility study (FS) for the site. URS Corporation (URS Corp), on behalf of the PRPs, conducted a RI at the site from July 2003 through February 2004 to characterize the nature and extent of constituents present in environmental media at the site and in adjacent Sabine Lake surface water and sediments. The RI Report was completed on 2 July 2004, and the FS Report was completed on 22 July 2005. EPA published a notice of the completion of the FS and of the proposed plan for RA on 27 July 2005, and provided opportunity for public comment on the proposed RA.

The chemicals of concern (COCs) identified in surface soils (0 to 2 feet below ground surface) which posed a human health risk included aldrin, benzo(a)pyrene, benzo(a)anthracene, dieldrin, heptachlor epoxide, naphthalene, pentachlorophenol, and lead. The COCs identified in surface soils which posed ecological risks included butyl-benzyl-phthalate, 4,4-DDD, 4,4-DDE, 4,4-DDT, methoxychlor, and lead.

The results of the Screening Level Ecological Risk Assessment indicated that the contaminants of potential concern in the Sabine Lake surface water and sediment did not pose risks which would require remedial action (EPA 2005).

The Record of Decision (ROD) was signed on 30 September 2005. The selected remedy for the site was excavation and off-site disposal, confirmation sampling of excavated areas, plug and abandonment of on-site monitoring wells, AST sludge removal, tank decontamination and demolition, and institutional control. On 6 June 2007, EPA approved the Remedial Design/RA Work Plans, and under EPA supervision, the PRP's subcontractor conducted the RA from August to September 2007, with final waste disposal activities completed in March 2008.

Responses to the site survey questionnaires were generally favorable. No complaints or concerns were noted. All returned surveys are attached to this report.

Issues noted during this five year review include the following:

- 1. Revised toxicity factors** — In 2005, risk-based cleanup levels were developed for the PBL site. As a result, a data review of toxicity factors was conducted, and revisions were identified for the following site-specific COCs: aldrin, benzene, benzo(a)pyrene, benzo(a)anthracene, naphthalene, pentachlorophenol, and arsenic.
- 2. On-site placement of dredge material on site surface** — In 2011, the tenants leasing the property at the State Marine site dredged materials from along the shoreline of the State Marine site. Approximately 16,000 cubic yards of dredge material have been placed directly on the ground surface of the PBL site in various locations. This material covers an area of 128,500 square feet (ft²; approximately 3.0 acres) of the PBL site. This dredge material is not part of the selected remedy and should not be considered in determining whether the implemented remedy selected in the ROD is protective. This material will be considered separately and a determination will be made concerning whether it presents a new risk to human health and/or ecological receptors.
- 3. Excavation along the eastern shoreline** — On the north end of the PBL site and along the east shoreline, evidence of excavation activities from behind steel pilings at the edge of the Sabine Lake were observed during the site inspection. The excavated material

appears to be stockpiled on the edge of the excavation directly on the ground surface. This material covers an area of 128,500 square feet (ft²; approximately 3.0 acres) of the PBL site. This dredge material is not part of the selected remedy and should not be considered in determining whether the implemented remedy selected in the ROD is protective. This material will be considered separately and a determination will be made concerning whether it presents a new risk to human health and/or ecological receptors.

Recommendations and follow up actions are listed below and are included on Table 5 and include party responsible and milestone date:

- 1. Revised toxicity factors** — The site-specific COCs identified during the data review should be evaluated using the revised toxicity data to verify target cleanup levels remain protective of human health.
- 2. On-site placement of dredge material on site surface** — The dredge material is not part of the selected remedy and will be considered separately. Representative samples of the dredge material on the PBL site should be collected and analyzed to determine if this surface material presents a new unacceptable risk to human health and/or ecological receptors.
- 3. Excavation along the eastern shoreline** — The dredge material is not part of the selected remedy and will be considered separately. Representative samples of the dredge material on the PBL site should be collected and analyzed to determine if this surface material presents a new unacceptable risk to human health and/or ecological receptors.

Determinations

Based on the information available during the first five-year review, the selected remedy for the Palmer Barge Line Superfund Site appears to be performing as intended and is protective of human health and the environment.

Pamela Phillips

10

9/11/12

Date

Pamela Phillips
Acting Director
Superfund Division, Region 6
U.S. Environmental Protection Agency

Lead agency: EPA	
If "Other Federal Agency" was selected above, enter Agency Name:	
Author name (Federal or State Project Manager):	
Author affiliation: EPA	
Review period: August 2011 - December 2011	
Date of site inspection: November 10, 2011	
Type of review: Interim	
Review number: 1	
Triggering action date: September 4, 2007	
Five year anniversary after triggering action date: September 4, 2012	

Five-Year Review Summary Form

SITE IDENTIFICATION

Site Name: Palmer Barge Line Superfund Site (PBL site)

EPA ID: TXD068104561

Region: 6

State: TX

City/County: Port Arthur/Jefferson County

SITE STATUS

NPL Status: Final

Multiple OUs?

No

Has the site achieved construction completion?

Yes

REVIEW STATUS

Lead agency: EPA

If "Other Federal Agency" was selected above, enter Agency name:

Author name (Federal or State Project Manager): Rafael Casanova

Author affiliation: EPA

Review period: August 2011 – December 2011

Date of site inspection: November 10, 2011

Type of review: Statutory

Review number: 1

Triggering action date: September 4, 2007

Due date (*five years after triggering action date*): September 4, 2012

Five-Year Review Summary Form (continued)

Issues/Recommendations

OU(s) without Issues/Recommendations Identified in the Five-Year Review:
 None.

Issues and Recommendations Identified in the Five-Year Review:

OU(s): Site	Issue Category: Remedy Performance			
	Issue: 1. Revised toxicity factors—In 2005, risk-based cleanup levels were developed for the Palmer Barge Line (PBL) site. As a result, a data review of toxicity factors was conducted, and revisions were identified for the following site-specific chemicals of concern (COCs): aldrin, benzene, benzo(a)pyrene, benzo(a)anthracene, naphthalene, pentachlorophenol, and arsenic.			
	Recommendation: 1. The site-specific COCs identified during the data review should be evaluated using the revised toxicity data to verify target cleanup levels remain protective of human health.			
Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date
Cannot be determined at this time	Cannot be determined at this time	PRP/Owner	EPA/State	September 2013

OU(s): Site	Issue Category: Changed Site Conditions			
	Issue: 2. On-site placement of dredge material on site surface—In 2011, the tenants leasing the property at the State Marine site dredged materials from along the shoreline of the State Marine site. Approximately 16,000 cubic yards of dredge material, have been placed directly on the ground surface of the PBL site in various locations. This material covers an area of 128,500 square feet (approximately 3.0 acres) of the PBL site.			
	Recommendation: 2. The dredge material is not part of the selected remedy and should not be considered in determining whether the implemented remedy selected in the ROD is protective. This material will be considered separately. Representative samples of the dredge material on the PBL site should be collected and analyzed to determine if this surface material presents a new unacceptable risk to human health and/or ecological receptors.			
Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date

No See Section 7.4	No See Section 7.4	Owner	EPA/State	September 2013
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OU(s): Site	Issue Category: Changed Site Conditions			
	Issue: 3.Excavation along the eastern shoreline—On the north end of the PBL site and along the eastern shoreline, evidence of excavation activities from behind steel pilings at the edge of the Sabine Lake were observed during the site inspection. The excavated material appears to be stockpiled on the edge of the excavation directly on the ground surface.			
	Recommendation: 3. The dredge material is not part of the selected remedy and should not be considered in determining whether the implemented remedy selected in the ROD is protective. This material will be considered separately. Representative samples of the dredge material on the PBL site should be collected and analyzed to determine if this surface material presents a new unacceptable risk to human health and/or ecological receptors.			
Affect Current Protectiveness	Affect Future Protectiveness	Implementing Party	Oversight Party	Milestone Date
No See Section 7.4	No See Section 7.4	Owner	EPA/State	September 2013

Protectiveness Statement(s)

<i>Operable Unit: Site</i>	<i>Protectiveness Determination: Protective</i>	<i>Addendum Due Date (if applicable): Click here to enter date.</i>
<i>Protectiveness Statement:</i>		
Based on the information available during the first five-year review, the selected remedy for the Palmer Barge Line Superfund Site appears to be performing as intended and is protective of human health and the environment (See Section 7.4).		

Sitewide Protectiveness Statement (if applicable)	
<i>Protectiveness Determination: Protective</i>	<i>Addendum Due Date (if applicable): Click here to enter date.</i>

Protectiveness Statement:

Based on the information available during the first five-year review, the selected remedy for the Palmer Barge Line Superfund Site appears to be performing as intended and is protective of human health and the environment (See Section 7.4).

1.0 INTRODUCTION

The U.S. Environmental Protection Agency (EPA) Region 6 has conducted a five-year review of the Remedial Action (RA) implemented at the Palmer Barge Line (PBL) Superfund Site (site), located in Port Arthur, Jefferson County, Texas. The purpose of a five-year review is to determine whether the remedy at a site remains protective of human health and the environment, and to document the methods, findings, and conclusions of the five-year review in a five-year review report. Five-year review reports identify issues found during each review, if any, and make recommendations to address the issues. This First Five-Year Review Report documents the results of the review for the PBL site, conducted in accordance with EPA guidance (EPA 2001) on five-year reviews.

The five-year review process is required by federal statute. EPA must implement five-year reviews consistent with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). CERCLA Section 121(c), 42 U.S.C. § 9621(c), states the following:

“If the President selects a remedial action that results in any hazardous substances, pollutants, or contaminants remaining at the site, the President shall review such remedial action no less often than each five years after the initiation of such remedial action to assure that human health and the environment are being protected by the remedial action being implemented.”

NCP Section 300.430(f)(4)(ii) states the following:

“If a remedial action is selected that results in hazardous substances, pollutants, or contaminants remaining at the site above levels that allow for unlimited use and unrestricted exposure, the lead agency shall review such action no less often than every five years after the initiation of the selected remedial action.”

The EPA five-year review guidance further states that a five-year review should be conducted for the following types of actions:

- A pre-Superfund Amendments and Reauthorization Act (SARA) Remedial Action (RA) that leaves hazardous substances, pollutants, or contaminants on-site above levels that allow for unlimited use and unrestricted exposure.
- A pre- or post-SARA RA that, once completed, will not leave hazardous substances, pollutants, or contaminants on-site above levels that allow for unlimited use and unrestricted exposure but will require more than five years to complete.
- A removal-only site on the National Priorities List (NPL) where the removal action leaves hazardous substances, pollutants, or contaminants on-site above levels that allow for unlimited use and unrestricted exposure and no RA has or will be conducted.

Because hazardous substances, pollutants, or contaminants remain at the PBL site above levels that allow for unlimited use and unrestricted exposure, a five-year review is required.

This is the first five-year review for the PBL Superfund site. The first five-year review was conducted from August through December 2011, and its methods, findings, conclusions, and recommendations are documented in this report.

The summary of issues and recommendations, and a summary of all required protectiveness determinations discussed in this report are presented in the Five-Year Review Summary Form, included before Section 1.0 of this report.

This report documents the five-year review for the PBL Superfund site by providing the following information: Five-Year Review Summary Form (precedes Section 1.0), site chronology (Section 2.0), background information (Section 3.0), overview of the RA (Section 4.0), progress since the previous five-year review (Section 5.0), discussion of the first five-year review process (Section 6.0), technical assessment of the site (Section 7.0), institutional controls (Section 8.0), issues (Section 9.0), recommendations and follow-up activities (Section 10.0), protectiveness statement (Section 11.0), and discussion of the next review (Section 12.0). Attachment 1 provides the site location map and site layout map. Attachment 2 provides a copy of the Five-Year Review Public Notice. Attachment 3 is a list of documents reviewed. Attachment 4 provides analytical data reports. Attachment 5 provides a permit for dredging activities. Attachment 6 contains Applicable or Relevant and Appropriate Requirements (ARARs) presented in the Record of Decision (ROD). Attachment 7 provides the Site

Inspection Checklist. Attachment 8 provides the site inspection photographs. Attachment 9 provides the interview records. Attachment 10 provides a copy of the Restrictive Covenants associated with the PBL site.

2.0 SITE CHRONOLOGY

A chronology of site events for the PBL site is provided in Table 1. Additional historical information for the site is available online at

<http://www.epa.gov/earth1r6/6sf/pdf/files/0605212.pdf> (EPA 2011).

**TABLE 1
CHRONOLOGY OF SITE EVENTS**

Date	Event
1964 – between 1974 and 1987	Site operated as a municipal landfill by the City of Port Arthur
April 1982	Palmer Barge Line, Inc. purchased 17 acres from the City of Port Arthur
July 1983	Lien placed on Palmer Barge Line, Inc. property by trustee of Jefferson County
October 1994	Wrangler Capital assumed all claims from Palmer Barge Line, Inc.
December 1996	The Texas Natural Resource Conservation Commission (TNRCC, now Texas Commission on Environmental Quality [TCEQ]) conducted a multi-media investigation
July 1997	Wrangler Capital purchased Palmer Barge Line, Inc. from receivership, and the company ceased operations on the site
March 1998	TNRCC conducted soil and sediment site investigation
July 1999	TNRCC conducted site storage tanks and roll-off boxes sampling
October 1999	EPA conducted Expanded Site Inspection
July 27, 2000	EPA placed site on National Priorities List (NPL)
September 4, 2000 – January 3, 2001	EPA conducted Time Critical Removal Action of materials stored on site
September 30, 2002	EPA issued an Administrative Order on Consent to conduct a remedial investigation (RI)/feasibility study (FS)
May 2003	Final RI/FS Work Plan completed

July 2003 – February 2004	Implementation of the RI
July 2, 2004	RI Report completed
July 22, 2005	FS Report completed
August 11, 2005	EPA and the TCEQ conducted formal public meeting on proposed remedy
September 30, 2005	EPA Record of Decision signed
May 7, 2007	EPA issued Unilateral Administrative Order (UAO) for remedial design (RD)/Remedial Action (RA) work plan
June 6, 2007	UAO for RD/RA became effective
August 1, 2007	Final RD/RA Work Plan completed
August 2, 2007	EPA approved Final RD/RA Work Plan
September 5 – September 28, 2007	Implementation of the RA
September 28, 2007	EPA completed Preliminary Close Out Report for RA
June 11, 2008	RA Report completed
March 3, 2011 and March 18, 2011	Institutional control (three Restrictive Covenants) filed with Jefferson County Clerk's office
March 22, 2011	EPA completes NPL Site Deletion Data Collection Form
Notes: EPA U.S. Environmental Protection Agency FS Feasibility study TCEQ Texas Commission on Environmental Quality TNRCC Texas Natural Resource Conservation Commission NPL National Priorities List PBL Palmer Barge Line RA Remedial action RD Remedial design RI Remedial investigation UAO Unilateral Administrative Order URS URS Corporation	

3.0 BACKGROUND

This section discusses the site's physical characteristics, land and resource use near the site, history of site contamination, initial response to the site, and the basis for the response.

3.1 PHYSICAL CHARACTERISTICS

The PBL site is located approximately 4.5 miles east-northeast of the City of Port Arthur, in Jefferson County, Texas, on Old Yacht Club Road on Pleasure Islet, a peninsula located approximately 0.5-mile southwest of the confluence of the Neches River and the Sabine Neches Barge Canal. 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 (State Marine site), and to the east by Sabine Lake.

3.2 LAND AND RESOURCE USE

In 1955, the State of Texas transferred ownership of Pleasure Islet to the City of Port Arthur. The site, along with adjacent properties to the north and south, were used as a municipal solid waste landfill by the City of Port Arthur beginning in 1964. The landfill was closed sometime between 1974 and 1987. 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. Primary operations at the facility included cleaning, degassing, maintenance, and inspection of barges and other marine equipment. In October 1994, Wrangler Capital assumed all claims from Palmer Barge Line, Inc. In July 1997, Wrangler Capital purchased Palmer Barge Line, Inc. from receivership, and the company ceased operations on the property. The current owner is New Birmingham Resources Maritime II, LLC (NBR; also known as New Birmingham Inc. [NBI]). At present, the site is used for industrial purposes. A site location map (Figure 1) and site layout map (Figure 2) are provided in Attachment 1.

3.3 HISTORY OF CONTAMINATION

As previously stated, the site was a former municipal landfill and a vessel and barge cleaning facility. Although disposal at the landfill ceased when it was closed in 1974, and the landfill contents were covered during closure activities, the contents (i.e., municipal solid wastes) are still present on the site in the subsurface soils. During the operation of the Palmer Barge Line,

Inc. facilities, 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 sludges were removed. Degassing activities involved the removal of explosive vapors from vessel hold using nitrogen or boiler exhaust. A flare was located on-site to burn excess gases and liquids produced during facility operations.

3.4 INITIAL RESPONSE

In December 1996, the Texas Natural Resource Conservation Commission (TNRCC; now Texas Commission on Environmental Quality [TCEQ]) Region 10 Field Office conducted an investigation to determine the compliance status of the facility. From March 1998 through October 1999, TCEQ and the EPA conducted a series of investigations and determined that volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), pesticides, polychlorinated biphenyls (PCBs), and metals were present on and adjacent to the site. The site was promulgated on the NPL on 27 July 2000.

On 4 September 2000, EPA's contractor mobilized to the PBL and the adjacent State Marine site to perform a Time Critical Removal Action (Weston 2001). Activities for both sites consisted of the removal and disposal of all liquids in aboveground storage tanks (AST) and other vessels on site, as well as the decontamination of the ASTs and other vessels. All ASTs and vessels on the PBL site were emptied and decontaminated with the exception of one 25,000-gallon (gal) AST containing a mixture of oil and styrene. Heavy oils and styrene were removed from the tank but approximately 6 feet (ft) of a thick sludge and styrene mixture was left in the tank after multiple attempts to remove the material failed. EPA and the U.S. Army Corp of Engineers determined that the material in the 25,000-gal tank would remain in place pending the remediation phase of the site (Weston 2001). A total of 189,564 gal of recyclable oil was sent for fuel blending. A total of 61,111 gal of material consisting of 35,000 gal of styrene, 5,361 gal of oil, and 20,750 gal of hazardous oil/water mixed with solids was sent for incineration. A total of 265,987 gal of water, collected and treated during the removal action, was transported off site for disposal by means of deep well injection. A total of 330 cubic yards (yd³) of solidified sludge was disposed

of by means of incineration. All wastes were shipped off site by January 2, 2001. Following the completion of the Time Critical Removal Action, the site was restored back to its original state (Weston 2001).

3.5 BASIS FOR TAKING ACTION

On 2 July 2004, the RI report was completed and on 22 July 2005, the FS report was completed. The RI/FS indicated that surface soils were residually contaminated on and near the on-site sources. A number of metals, SVOCs, pesticides, and VOCs were detected. Several surface soil sample locations had concentrations exceeding preliminary remediation goals (PRGs) and were identified as “hot spots.” Remedial action which addressed these identified “hot spots” would result in a reduced level of risk such that surface soils at the site would be within the acceptable risk range.

A formal public meeting was conducted on August 11, 2005, regarding proposed EPA and TCEQ remedies to address the proposed plan and receive comments from the community. Following the formal public comment period, the ROD for the site was signed on 30 September 2005. The ROD selected soil excavation and off-site disposal, confirmation sampling of each response area, abandonment of site monitoring wells, AST sludge removal, tank decontamination for removal/reuse as scrap metal, and institutional control for the site remedy.

4.0 REMEDIAL ACTIONS

This section discusses the selected remedy and remedy implementation.

4.1 SELECTED REMEDY

The remedial action objectives (RAOs) as stated in the ROD are as follows:

- Prevent direct contact, ingestion, and inhalation of surface soils that exceed human health based levels, based on the industrial worker scenario, for the COCs.
- Prevent off-site migration of COCs to Sabine Lake sediments that exceed human and ecological based levels for the COCs.
- Prevent exposure to site soils that may pose a risk to ecological receptors.

The major components of the selected remedy included:

- Excavation of approximately 1,204 yd³ of the upper 2 ft of soil that exceed risk-based levels at each of the response areas.
- Confirmation sampling at each of the response areas. Confirmation samples will be collected from each response area and analyzed for COCs.
- Backfilling of excavated areas that exceed risk-based levels 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 existing monitoring wells at the site will be abandoned.
- Wastewater AST demolition and sludge removal. Sludge contained within one remaining wastewater AST will be removed and disposed of off-site. The tank will be decontaminated and reused as scrap metal by the site owner.

4.2 REMEDY IMPLEMENTATION

On 7 May 2007, EPA issued a Unilateral Administrative Order (UAO) to the Potentially Responsible Party's (PRP) for implementation of the selected remedy. The UAO went into effect on 6 June 2007. The RD/RA Work Plan was submitted on 1 August 2007 and approved by EPA on 2 August 2007. The RA was initiated on 5 September 2007. The RA construction activities were completed on 28 September 2007. The major components of the RA included the following:

- **Soil Excavation** – Excavation of soil from risk-based areas began on 7 September 2007 and was completed on 26 September 2007. Some areas of excavation were limited to as shallow as one foot in depth due to encountering underlying landfill materials. A total of 181 tons of soil was excavated and disposed of at an off-site disposal facility. The excavated areas were restored to original grade with a clayey backfill material.
- **Confirmation Sampling** – Confirmation samples consisting of three-point composite samples were collected from the bottom of each human health risk area and analyzed to provide information concerning remaining concentration levels in support of the institutional control documentation. Two areas of contaminants left in place were identified in Figure 6 of the Final Remedial Action Report (URS 2008). The sample results for lead concentrations in the two areas were above the cleanup level of 800 milligrams (mg) per kilogram (kg), with a maximum concentration of 1,560 mg/kg.
- **AST Sludge and Tank Removal** – Sludge from the wastewater AST was removed and disposed of at off-site disposal facilities. A total of 31,180 pounds (lbs) of oil was skimmed and recycled by fuel blending, 854,886 lbs of sludge was incinerated, and 10,160 lbs consisting of a heating-coil and internal tank supports were microencapsulated. In addition, 21,715 lbs of solids were removed from one roll-off bin, and 15 drums containing personal protective equipment weighing a total of 710 lbs were shipped off-site for incineration. The last shipment of hazardous waste was removed from the site on 19 December 2007, and incineration of the final load of hazardous sludge was completed on 14 March 2008.
- **Monitoring Well Plugging and Abandonment** – On 20 September 2007, the five existing on-site monitoring wells were plugged and abandoned. State of Texas Plugging Reports were filed with the Texas Water Development Board.

The Pre-Final Inspection was conducted on 28 September 2007. Representatives from the EPA, TCEQ, and URS met on-site and confirmed that the following elements of the RA had been achieved:

- Excavation of affected soils from human health and ecological risk areas
- Confirmation samples at each of the soil excavation areas
- Bottom samples from the human health risk areas
- Backfill of soil excavation areas with clean soils
- Plugging and abandonment of five monitoring wells
- Removal of tank contents and decontamination of tank.

The Final Inspection was conducted on 17 January 2008. EPA conducted the inspection and attended by the property owner, the project coordinator for the PRPs, and the supervising contractor.

Since the completion of RA construction activities, implementation of institutional control to restrict future land use to industrial purposes only has been conducted. Three Restrictive Covenants associated with the PBL site were filed with the Jefferson County Clerk's Office:

- Restrictive Covenant for 24.178 Acre Tract– File No. 2011010068, Official Public Records filed and recorded on 25 March 2011 at 10:44 a.m. with Carolyn L. Guidry, County Clerk, Jefferson County, Texas.
- Restrictive Covenant for 1.395 Acre Tract– File No. 2011010069, Official Public Records filed and recorded on 25 March 2011 at 10:44 a.m. with Carolyn L. Guidry, County Clerk, Jefferson County, Texas.
- Restrictive Covenant for 8.926 Acre Tract– File No. 2011010070, Official Public Records filed and recorded on 25 March 2011 at 10:44 a.m. with Carolyn L. Guidry, County Clerk, Jefferson County, Texas.

The acreage identified above is greater than the original 17 acres historically identified for the PBL site. This is due to the current property owner, NBR, filing for restrictive covenants which cover not only the PBL property, but also the State Marine property and the property located to the north of the PBL site.

4.3 OPERATION AND MAINTENANCE

The operation and maintenance (O&M) activities at the PBL site include monitoring effectiveness of institutional controls to ensure land use remains industrial/commercial.

4.4 OPERATION AND MAINTENANCE COST

No O&M costs from 2007 through 2011 were identified for the PBL site because there were no ongoing O&M activities.

The only other costs identified during the five-year review period consists of filing fees associated with implementing institutional control (i.e., Restrictive Covenants). Individual charges of \$36.00 each were identified for File No. 2011010068 and File No. 2011010069, while a charge of \$32.00 was identified for File No. 2011010070.

5.0 PROGRESS SINCE THE PREVIOUS FIVE-YEAR REVIEW

This is the first five-year review for the PBL site.

6.0 FIVE-YEAR REVIEW PROCESS

This section presents the process and findings of the five-year review including the document review, data review, ARAR review, site inspection, and interviews.

6.1 ADMINISTRATIVE COMPONENTS

This first five-year review was lead by Mr. Rafael Casanova, EPA Remedial Project Manager for the PBL site. TCEQ, NBI, and EA personnel assisted in the review process. Representatives from TCEQ were Ms. Olga Salinas, Region 10 Superfund Project Manager and Mr. Derek Eades, Region 10 Waste Site Manager. NBI team members included Mr. Rick Bailey, NBI Manager, and Mr. Wes Penn, Site Manager. EA's team members included Mr. Stan Wallace, Ms. April Ballweg, and Ms. Sheena Styger.

In August 2011, the review team established the review schedule, which included the following components:

- Document review
- Community involvement
- Site inspection
- Interviews
- ARARs review
- Data review
- Five-year review report development and review.

6.2 COMMUNITY INVOLVEMENT

A public notice announcing the initiation of the five-year review was published in the local newspaper, *The Port Arthur News* on 29 September 2011. A copy of the Public Notice and the affidavit of publication are provided in Attachment 2.

Upon signature, a copy of the First Five-Year Review Report will be available online at <http://www.epa.gov/superfund/cleanup/postconstruction/5yr.htm> and at the following information repositories: (1) EPA Region 6, 1445 Ross Avenue, Dallas, Texas, 75202; and (2) Port Arthur Public Library repository, 4615 9th Avenue, Port Arthur, Texas 77642.

6.3 DOCUMENT REVIEW

The five-year review included a review of relevant decision documents, implementation documents, remedy performance documents, and legal documents. The review included, the (1) RI/FS Reports, (2) ROD, (3) Final RA Report; (4) Preliminary Close Out Report, and (5) Restrictive Covenants. Complete references for all the documents reviewed are provided in Attachment 3.

6.4 DATA REVIEW

Human Health Toxicity Factors

In consultation with TCEQ, EPA chose a risk-based target cleanup level of 10^{-5} for human health at the PBL site based on exposure to contaminants that exceed those levels at surface soils (0 to 2 feet below ground surface; EPA 2005). The risks factors provided in the Human Health Risk

Assessment (HHRA; URS 2005a) which were used to develop site-specific target cleanup levels, were reviewed to identify whether toxicity or other contaminant characteristics had changed during this five-year review period.

Toxicity factors for COCs at the site were reviewed to evaluate changes in oral slope factors (SFO), chronic inhalation unit risks (IUR), chronic oral reference doses (RfD_o), and chronic inhalation reference doses (RfC_i). Results of this review identified human health risk factor variances for the following site-specific COCs.

Aldrin

- SFO not identified in HHRA (URS 2005a); current SFO 1.7×10^1 (mg/kg/day)⁻¹
- IUR not identified in HHRA (URS 2005a); current IUR 4.9×10^{-3} ([microgram per cubic meter])⁻¹ [$\mu\text{g}/\text{m}^3$]⁻¹
- RfD_o not identified in HHRA (URS 2005a); current RfD_o 3.0×10^{-5} mg/kg/day

Benzene

- In 2005, IUR of 8.3×10^{-6} ($\mu\text{g}/\text{m}^3$)⁻¹; current IUR of 7.8×10^{-6} ($\mu\text{g}/\text{m}^3$)⁻¹

Pentachlorophenol

- In 2005, SFO of 1.2×10^{-1} (mg/kg-day)⁻¹; current SFO of 4.0×10^{-1} (mg/kg/day)⁻¹
- IUR not available in 2005; current IUR of 5.1×10^{-6} ($\mu\text{g}/\text{m}^3$)⁻¹
- In 2005, RfD_o of 3.0×10^{-2} mg/kg-day; current RfD_o of 5.0×10^{-3} mg/kg/day

Naphthalene

- IUR not available in 2005; current IUR of 3.4×10^{-5} ($\mu\text{g}/\text{m}^3$)⁻¹
- RfD_o not available in 2005; current RfD_o of 2.0×10^{-2} mg/kg/day
- RfC_i not available in 2005; current RfC_i of 3.0×10^{-3} mg/m³

Benzo(a)pyrene

- In 2005, IUR of 9.0×10^{-4} ($\mu\text{g}/\text{m}^3$)⁻¹; current IUR of 1.1×10^{-3} ($\mu\text{g}/\text{m}^3$)⁻¹

Benzo(a)anthracene

- IUR not available in 2005; current IUR of 1.1×10^{-4} ($\mu\text{g}/\text{m}^3$)⁻¹

Arsenic

- RfC_i not available in 2005; current RfC_i of 1.5×10^{-5} mg/m³

Ecological Toxicity Factors

As part of the five-year review, the ecological target cleanup levels for the six COCs identified in the ROD were evaluated to determine whether updated benchmarks are available. Ecological target levels were selected based on Screening-Level Ecological Risk Assessment (SLERA) safe soil concentrations identified in the SLERA and FS (URS2005a, 2005b). These safe soil concentrations were based on wildlife exposure models for the American robin, which back-calculate a soil concentrations from a toxicity reference value (TRV) selected in the SLERA. The TRV selected in the SLERA is the lowest observable adverse effect level (LOAEL). LOAELs for the six chemicals identified as COCs were all derived from studies by Sample et al. (1996). EPA published an Ecological Soil Screening Level (Eco SSL) for lead in March 2005, which includes identification of a no observed adverse effect level (NOAEL) for birds (EPA 2005); however, this source does not identify a specific LOAEL which could be used to update wildlife models. There have also been studies of the toxicity of methoxychlor, DDT/DDE/DDD, and butyl benzyl phthalate to wildlife; however, the study performed Sample et al. (1996) represents the most comprehensive available effort. The study is commonly used as a standard source for risk assessment because it was designed to compile toxicity information and select a specific LOAEL recommended for use in wildlife exposure modeling. Therefore, changes to these values are not recommended, but they should be re-evaluated in future five-year reviews.

Other Data Reviewed

In early 2011, Tubal-Cain Marine Services (current tenant at the State Marine site), dredged offshore of the State Marine site located south of PBL. These dredging activities were conducted under the Palmer Barge Line, Inc. Department of the Army Permit with an effective date of 28 December 1977 (provided in Attachment 4). The dredge material removed from the Sabine Lake was placed upon both sites (Figure 2 of Attachment 1). Three samples of dredge material placed on the State Marine site were collected and analyzed for total petroleum hydrocarbons (TPH), Resource Conservation and Recovery Act (RCRA) metals, and Toxicity Characterization Leaching Procedure (TCLP) metals. The analytical data report is included in Attachment 5. Tables 2 and 3 provide a summary of the analytical results of the tested dredge material to

RCRA metals, TPH, and TCLP. The lead concentrations were below the cleanup criteria for the PBL site. None of the other PBL COCs were analyzed.

TABLE 2
RCRA METALS/TPH ANALYTICAL RESULTS OF DREDGE MATERIAL

Analyte	Tubal-Cain Dredge Material Samples (Chemtex 2011)		
	#1 Soil (mg/kg)	#2 Soil (mg/kg)	#3 Soil (mg/kg)
Arsenic	4.0	3.7	3.2
Barium	65	65	65
Cadmium	<2.5	<2.5	<2.5
Chromium	11	7.6	9.6
Lead	64	37	78
Selenium	<2.5	<2.5	<2.5
Silver	<2.5	<2.5	<2.5
Mercury	<0.2	<0.2	<0.2
TPH C6-C12	<50	<50	<50
TPH>C12-C28	<50	96	<50
TPH>C28-C35	<50	<50	<50
TPH C6-C35	<50	121	<50
Notes: ¹ 40 CFR 261, Appendix II, 1993, as amended by 58 FR 46040 EPA = U.S. Environmental Protection Agency mg/kg = milligram per kilogram TPH = Total petroleum hydrocarbons			

TABLE 3
TCLP ANALYTICAL RESULTS OF DREDGE MATERIAL

Analyte	Tubal-Cain Dredge Material Samples (Chemtex 2011)			Toxicity Characteristic Leaching Procedure Results (mg/L)
	#1 Soil (mg/L)	#2 Soil (mg/L)	#3 Soil (mg/L)	
TCLP Arsenic	<0.05	<0.05	<0.05	5.0
TCLP Barium	<0.17	0.2	<0.17	100.0
TCLP Cadmium	<0.05	<0.05	<0.05	1.0
TCLP Chromium	<0.05	<0.05	<0.05	5.0
TCLP Lead	<0.05	<0.05	<0.05	5.0

TCLP Selenium	<0.06	<0.06	<0.06	1.0
TCLP Silver	<0.05	<0.05	<0.05	5.0
TCLP Mercury	<0.002	<0.002	<0.002	0.2
Notes: ¹ 40 CFR 261, Appendix II, 1993, as amended by 58 FR 46040 EPA = U.S. Environmental Protection Agency mg/L = milligram per liter TCLP = Toxicity Characteristic Leaching Procedure				

6.5 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENT REVIEW

As part of this five-year review, Applicable or Relevant and Appropriate Requirements (ARARs) identified in the ROD (EPA 2005) were reviewed to determine if any newly promulgated or modified requirements of federal and state environmental laws have significantly changed the protectiveness of the remedies implemented.

The ROD divided ARARs pertaining to remedial activities for the site into chemical-, location-, and action-specific categories. Attachment 6 provides a summary table for site ARARs as presented in the ROD, along with comments and analysis resulting from the review.

6.5.1 Chemical-Specific Applicable or Relevant and Appropriate Requirements

Chemical-specific ARARs are usually health or risk-based numerical values or methodologies used to determine acceptable concentrations of chemicals that may be found in or discharged to the environment. RFDs were identified as a chemical specific ARAR in the ROD. As discussed in section 6.4 new RFDs are available for some of the site COCs.

6.5.2 Action-Specific Applicable or Relevant and Appropriate Requirements

Action-specific ARARs are usually technology- or activity-based requirements or limitations on actions or conditions involving specific substances. These requirements are triggered by the particular remedial activities that are selected to accomplish the remedy. No action-specific ARARs were identified during this review.

6.5.3 Location-Specific Applicable or Relevant and Appropriate Requirements

Location-specific ARARs restrict actions or contaminant concentrations in certain environmentally sensitive areas. Examples of areas regulated under various federal regulations include floodplains, wetlands, and locations where endangered species or historically significant cultural resources are present. No location-specific ARARs were identified in the ROD, and no additional location-specific ARARs were identified during this review.

In summary, it appears that no new laws or regulations have been promulgated or enacted that would call into question the effectiveness of the remedy at the site to protect human health and the environment. EPA will continue to monitor this site and any future changes in ARARs will be reported in the next five-year review.

6.6 SITE INSPECTION

A site inspection was conducted on November 10, 2011, to assess the condition of the site and the measures employed to protect human health and the environment from the COCs still present at the site. Attendees included: (1) Rafael Casanova (EPA); (2) Olga Salinas (TCEQ); (3) Derek Eades (TCEQ); (4) Rick Bailey (NBI); (5) Wes Penn (NBI); (6) April Ballweg (EA); and (7) Sheena Styger (EA). The site inspection checklist, including the inspection team roster, is provided as Attachment 7. The site inspection photographs are included in Attachment 8. Site survey forms (interview records) are provided in Attachment 9.

The inspection team investigated the site within the boundary of the fence, as well as the area immediately adjacent to the site. The inspection team observed that dredge material was covering a significant portion of the site (Photograph No. 2 in Attachment 8). The dredge material was void of vegetative growth, and had appeared to have been placed directly upon the ground surface of the PBL site.

Evidence of trespassing was observed with a folding chair located at the water's edge of the site, and fishing nets and ropes in multiple locations near the shoreline. Additional evidence of trespassing was observed with construction debris piles consisting of brick, wood, panels of fiberglass, and insulation foam in multiple areas on the north side of the site and along the eastern shoreline.

The team observed newly excavated holes behind metal shore pilings (Photograph No. 7 in Attachment 8) with the excavated material placed upon the ground surface directly behind the excavated area. Evidence of equipment maintenance (i.e., stained soils) and storage of industrial supplies (i.e., compressed gas cylinders, gas-powered generator, tires, and rusting equipment) were observed near the south end of the site. In addition, multiple compressed gas cylinders were stacked by the concrete footer of the former horizontal ASTs.

The fence located between the State Marine site and the PBL site has been partially removed, and the fencing along Old Yacht Club Road was observed to be down in some locations. The exact condition of the perimeter fencing along the road was difficult to determine due to heavy vegetation. No fencing was observed along the north or east sides of the PBL site.

6.7 SITE INTERVIEWS

In accordance with the community involvement requirements of the five-year review process, key individuals to be surveyed were identified by EPA. Completed survey forms for the following individuals are included in Attachment 9:

- Rafael Casanova, EPA Remedial Project Manager
- Olga Salinas, TCEQ Project Manager
- David Durret, NBI President/CEO.

Previous Trustees for the site were contacted but did not return the survey forms.

Overall, the received responses were positive. Responding interviewees indicated they were not aware of any trespassing or vandalism, they did not know of any negative impacts on the community, and they all considered themselves well informed.

7.0 TECHNICAL ASSESSMENT

The conclusions presented in this section support the determination that the selected remedy for the PBL site is currently protective of human health and the environment. EPA Guidance indicates that to assess the protectiveness of a remedy, three questions (Questions A, B, and C) shall be answered.

7.1 QUESTION A: IS THE REMEDY FUNCTIONING AS INTENDED BY THE DECISION DOCUMENTS? YES.

- **RA performance**—Based on the review of documents, ARARs, and the results of the site inspection, the selected remedy for the PBL site is functioning as intended by the ROD (EPA 2005). All RA construction activities were completed September 2007, with disposal activities completed by December 2007.
- **System operations/O&M**—There are no ongoing system operations associated with the remedy implemented at the PBL site. The O&M activities include monitoring effectiveness of institutional controls to ensure land use remains industrial/commercial.
- **Implementation of Institutional Controls and other measures**—Implementation of institutional controls at the site included three Restrictive Covenants which were filed and recorded with the Jefferson County Clerk's office in March 2011. Copies of the filed documents are included in Attachment 10.
- **Monitoring activities**—There are no ongoing monitoring activities associated with the remedy.
- **Early indicators of potential remedy failure**—There are no indications of potential remedy failure.

7.2 QUESTION B: ARE THE ASSUMPTIONS USED AT THE TIME OF REMEDY SELECTION STILL VALID? NO.

- **Changes in standards, newly promulgated standards, and To Be Considered**—No new laws or regulations have been promulgated or enacted that would call into question the effectiveness of the remedy at the site to protect human health and the environment.

RFDs were identified as To Be Considered (TBC) requirements in the ROD. Changes to the RFDs were discussed in Section 6.4.

- **Changes in toxicity factors**—Toxicity factors for some of the site-specific COCs have changed since the 2005 ROD. Changes were discussed in Section 6.4 for aldrin, benzene, benzo(a)pyrene, benzo(a)anthracene, naphthalene, pentachlorophenol, and arsenic. The risks from these chemicals should be evaluated using the revised toxicity data to verify that the target cleanup levels remain protective of human health.
- **Changes in exposure pathways**—There have been changes in the physical site conditions such that the protectiveness may be affected. Dredge material has been placed directly on the ground surface of the site in various locations. This material covers an area of approximately 128,500 square feet (ft²; or 3.0 acres) and has a total estimated volume of 16,000 yd³. As identified in Section 6.4, limited analytical testing has been conducted. This dredge material is not part of the selected remedy and will be considered separately (See Section 7.4).
- **Changes in land use**—There have been no changes in land use on or near the site that bear on the protectiveness of the selected remedy.
- **Expected Progress Towards Meeting RAOs**—The RAOs of the selected remedy have been met based on the 2005 ROD.

7.3 QUESTION C: HAS ANY OTHER INFORMATION COME TO LIGHT THAT COULD CALL INTO QUESTION THE PROTECTIVENESS OF THE REMEDY? NO.

No other information has come to light as part of this first five-year review for the site that would call into question the protectiveness of the site remedy.

7.4 TECHNICAL ASSESSMENT SUMMARY

Identified TBCs (i.e., reference doses and slope factors) used to determine the human health risk based cleanup levels at the site have been updated. The site-specific COCs identified with changes to toxicity factors include aldrin, benzene, benzo(a)pyrene, benzo(a)anthracene, naphthalene, pentachlorophenol, and arsenic. These chemicals should be evaluated using the revised toxicity data to verify site-specific, risk-based cleanup values remain protective of human health.

There have been changes in the physical site conditions such that the protectiveness may be affected. Dredge material, resulting from activities at the State Marine site in 2011, has been placed directly on the ground surface of the site in various locations. This material covers an area of approximately 128,500 ft² (or 3.0 acres) and has a total estimated volume of 16,000 yd³. Limited analytical testing has been conducted; therefore, representative samples of the dredge material should be collected and analyzed to determine if this material presents an unacceptable risk to human health and/or ecological receptors. The dredge material is not part of the selected remedy and should not be considered in determining whether the implemented remedy selected in the ROD is protective. The dredge material will be considered separately and a determination made concerning whether this material presents a new risk to human health and/or ecological receptors.

According to documents and data reviewed, the site inspection, and interviews, the remedy appears to be functioning as intended by the 2005 ROD. There are no ongoing system operations associated with the remedy implemented at the PBL site. O&M activities include monitoring effectiveness of institutional controls to ensure land use remains industrial/commercial. No new ARARs have been found that would call into question the protectiveness of the remedy.

No change to the standardized risk assessment methodology was identified that could affect the protectiveness of the remedy. There is no other information that calls into question the protectiveness of the remedy.

8.0 INSTITUTIONAL CONTROLS

Institutional controls are generally defined as non-engineered instruments such as administrative and legal tools that do not involve construction or physically changing the site and that help minimize the potential for human exposure to contamination and/or protect the integrity of a remedy by limiting land and/or resource use (EPA 2005). Institutional controls can be used for many reasons including restriction of site use, modifying behavior, and providing information to individuals (EPA 2000). Institutional controls may include easements, covenants, restrictions or other conditions on deeds, and/or groundwater and/or land use restriction documents (EPA 2001). The following sections describe the institutional controls implemented at the site, the potential effect of future land use plans on institutional controls, and any plans for changes to site contamination status.

8.1 TYPES OF INSTITUTIONAL CONTROLS IN PLACE AT THE SITE

Three Restrictive Covenants associated with the PBL site were filed and recorded with the Jefferson County Clerk's office. These documents provide information concerning certain environmental conditions and use limitation pursuant to the TCEQ Texas Risk Reduction Program (TRRP) Rule found at 30 Texas Administrative Code Chapter 350 for the PBL site property. Specifically, "Portions of the soils and groundwater of the Property contain certain identified chemicals of concern causing the Property to be considered an Affected Property as that term is defined in the TRRP...The Property currently meets TRRP standards for commercial/industrial use...No further remediation is required by the TCEQ as long as the Property is not to be used for residential purposes." Copies of the filed documents are provided in Attachment 10.

8.2 EFFECT OF FUTURE LAND USE PLANS ON INSTITUTIONAL CONTROLS

The land is currently not in use, although during the site inspection, heavy equipment (i.e., an excavator) was observed crossing the site and suspect areas of vehicle maintenance (surficial stains, compressed gas cylinders, etc.) were observed. No future land uses have been formally

established for the site that would require an adjustment to the institutional controls currently being implemented. Furthermore, should future land use change, then an assessment should be conducted with respect to whether additional institutional controls and/or access controls are needed to ensure that the site and the selected remedy remains protective of human health and the environment.

8.3 PLANS FOR CHANGES TO SITE CONTAMINATION STATUS

No changes to the status of the contamination at the site are anticipated.

9.0 ISSUES

Based on this first five-year review, it appears that the remedy at the PBL site has been implemented as planned and is functioning in accordance with the requirements stated in the ROD (EPA 2005).

During this first five-year review, the following issues are noted:

**TABLE 4
ISSUES IDENTIFIED**

Issues	Affects Current Protectiveness (Yes/No)	Affects Future Protectiveness (Yes/No)
Revised toxicity factors—In 2005, risk-based cleanup levels were developed for the PBL site. As a result, a data review of toxicity factors was conducted, and revisions were identified for following site-specific COCs: aldrin, benzene, benzo(a)pyrene, benzo(a)anthracene, naphthalene, pentachlorophenol, and arsenic.	Unknown at this time	Unknown at this time
On-site Placement of Dredge Material on Site Surface—In 2011, the tenants leasing the property at the State Marine site dredged materials from along the shoreline of the PBL and State Marine sites. Approximately 16,000 cubic yards of dredge material has been placed directly on the ground surface of the PBL site in various locations. This material	No (See Section 7.4)	No (See Section 7.4)

Issues	Affects Current Protectiveness (Yes/No)	Affects Future Protectiveness (Yes/No)
covers an area of 128,500 square feet (approximately 3.0 acres) of the PBL site. This material is not part of the selected remedy and will be considered separately.		
Excavation along the Eastern Shoreline—On the north end of the PBL site and along the east shoreline, evidence of excavation activities from behind steel pilings at the edge of the Sabine Lake were observed during the site inspection. The excavated material appears to be stockpiled on the edge of the excavation directly on the ground surface. This material is not part of the selected remedy and will be considered separately.	No (See Section 7.4)	No (See Section 7.4)

10.0 RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Table 5 summarizes the recommendations and follow-up actions for the PBL site.

TABLE 5
RECOMMENDATIONS AND FOLLOW-UP ACTIONS

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Yes/No)	
					Current	Future
Revised toxicity factors	The site-specific COCs identified during the data review should be evaluated using the revised toxicity data to verify target cleanup levels remain protective of human health.	PRP/Owner	TCEQ/EPA	September 2013	Unknown at this time.	Unknown at this time.
On-site Placement of Dredge Material	Representative samples of the dredge material on the PBL site should	Owner	TCEQ/EPA	September 2013	No (See Section 7.4)	No (See Section 7.4)

Issue	Recommendations and Follow-up Actions	Party Responsible	Oversight Agency	Milestone Date	Affects Protectiveness (Yes/No)	
					Current	Future
on Site Surface	be collected and analyzed to determine if this surface material presents an unacceptable risk to human health and/or ecological receptors. This material is not part of the selected remedy and will be considered separately.					
Excavation along the Eastern Shoreline	The material excavated along the shoreline should be sampled and analyzed to determine if this material presents an unacceptable risk to human health and/or ecological receptors. This material is not part of the selected remedy and will be considered separately.	Owner	TCEQ/EPA	September 2013	No (See Section 7.4)	No (See Section 7.4)

11.0 PROTECTIVENESS STATEMENT

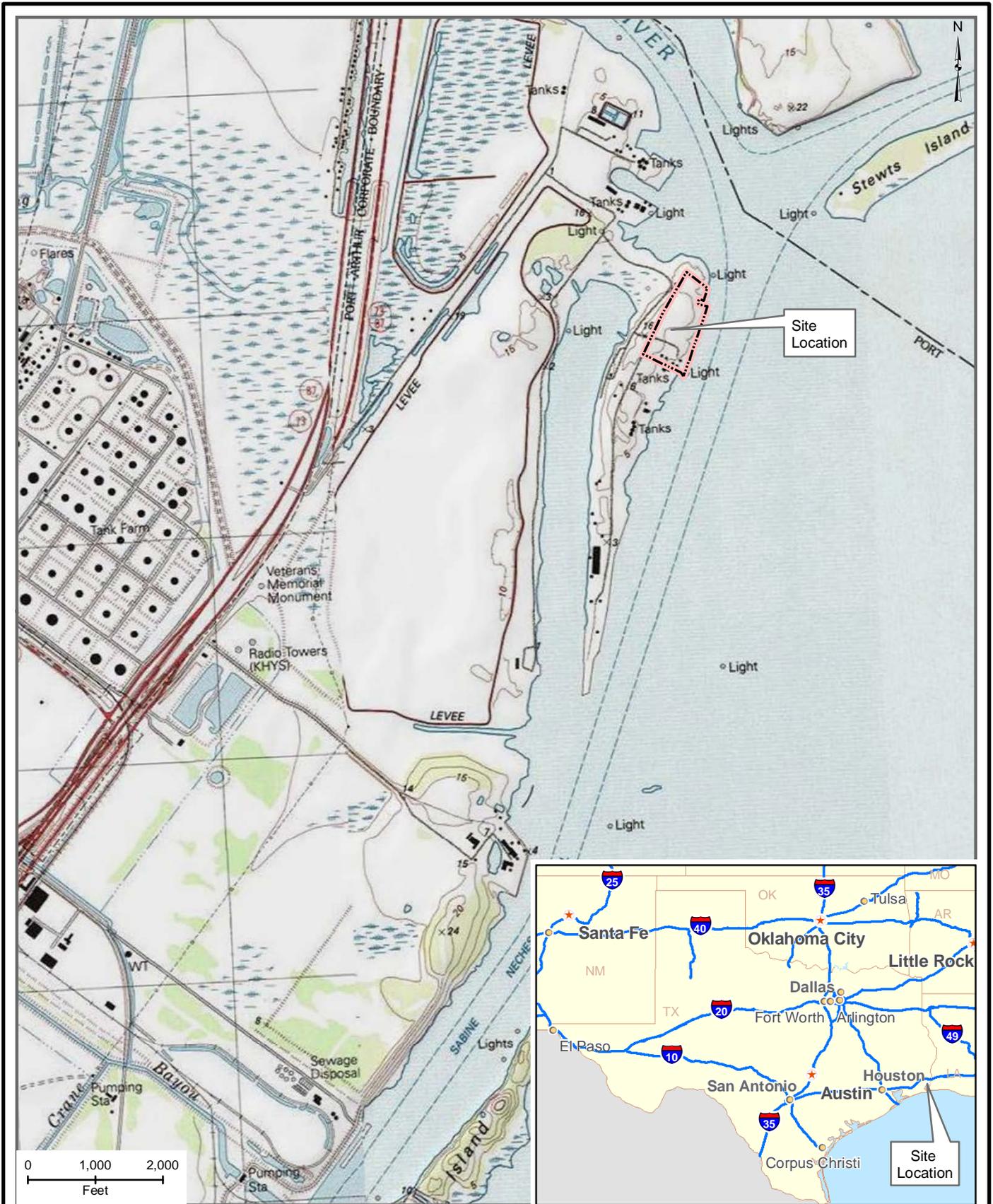
Based on the information available during the first five-year review, the selected remedy for the Palmer Barge Line Superfund Site appears to be performing as intended and is protective of human health and the environment.

12.0 NEXT REVIEW

The PBL site requires ongoing five-year reviews. The next, or second five-year review, shall be conducted no later than five years from the date of the Superfund Division Director's signature of this First Five-Year Review Report.

ATTACHMENT 1

SITE LOCATION MAP AND SITE LAYOUT MAP



Source: ESRI ArcGIS Online and data partners including USGS and © 2007 National Geographic Society, 2009 Redlands, CA: Environmental Systems Research Institute



First Five-Year Review Report
 Palmer Barge Line Superfund Site
 Port Arthur, Jefferson County, Texas

Figure 1
 Site Overview and
 Location Map



ATTACHMENT 2

ANNOUNCEMENT OF THE FIRST FIVE-YEAR REVIEW



**PALMER BARGE LINE SUPERFUND SITE
PUBLIC NOTICE
U.S. Environmental Protection Agency Region 6
First Five-Year Review of Site Remedy
September 2011**

The U.S. Environmental Protection Agency Region 6 (EPA) has begun the first Five-Year Review of the remedy for the Palmer Barge Line Superfund Site. The review will confirm if the remedy performed is still protecting human health and the environment. The site is located on Pleasure Islet, near Port Arthur, Texas. Once completed, the results of the Five-Year Review will be made available to the public on the internet at www.epa.gov and at the following information repository:

Port Arthur Public Library
4615 9th Avenue
Port Arthur, Texas 77642
(409) 985-8838
Monday-Friday (8:00 a.m. to 4:30 p.m.)

Information about the Site is also available on the internet at:

<http://www.epa.gov/region6/6sf/pdffiles/0605212.pdf>

For more information about the Site, contact:

Rafael A. Casanova, P.G.,
EPA Remedial Project Manager
(214) 665-7437
or 1-800-533-3508 (toll free)
or by e-mail at casanova.rafael@epa.gov

All media inquiries should be directed to the EPA Press Office at (214) 665-2200.

The Port Arthur News
A Division of Newspaper Holdings, Inc.
Port Arthur, Texas

AFFIDAVIT OF PUBLICATION

The State of Texas
County of Jefferson,
City of Port Arthur

Tara Ford, being duly sworn deposes and says:

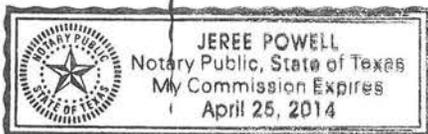
That she is a resident citizen of Jefferson County, Texas and that she is of lawful age; that she is the Classified Representative of the PORT ARTHUR NEWS, a division of Newspaper Holdings, Inc., same being a newspaper published and having a general circulation in the City of Port Arthur, Jefferson County, Texas; that said newspaper has been continuously and regularly published for a period of more than one year in Jefferson County, Texas, and that the advertising of E.A. Engineering - Palmer Barge Ad# 09285P was published in said newspaper in the issue of September 29th, 2011 which were the regular publication days of said issues; and that said issues were actually published, circulated and distributed.

Tara Ford

SUBSCRIBED AND sworn to before me,
this the 17th day of October, A.D. 2011

Jeree Powell

Notary Public in and for Jefferson County, Texas



BUY IT SELL IT FIND IT IN THE CLASSIFIEDS

Public Notices Public Notices Public Notices Public Notices



PALMER BARGE LINE SUPERFUND SITE PUBLIC NOTICE
U.S. Environmental Protection Agency Region 6
First Five-Year Review of Site Remedy
September 2011

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 or by e-mail at casanova.rafael@epa.gov

All media inquiries should be directed to the EPA Press Office at (214) 665-2200.

Public Notices

N. 17th Street, Nederland, Texas

The purpose of this meeting is to discuss Nederland Independent School District's rating on the State's financial accountability system.

Special Notices

PUBLISHER'S NOTICE!

All real estate advertised herein is subject to the Federal Fair Housing Act, which makes it illegal to advertise any preference, limitation or discrimination based on race, color, religion, sex, handicap, familial status or national origin, or intention to make any such preferences, limitations or discrimination. We will not knowingly accept any advertising for real estate which is in violation of the law. All persons are hereby informed that all dwellings advertised are available on an equal opportunity basis.

Win A \$Million! Big Money Bingo. Bingo Bus Trip to Lafayette, LA. 466-2235 Denise



General Help Wanted

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General Help Wanted

Now Hiring Bollinger Calcasieu, L.L.C
 Join Our Team
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Must have 7 years of supervisory experience in a shipyard or fabrication setting. Also, must be able to perform dry-docking operations in addition to being knowledgeable performing repair projects (i.e. welding, fitting, shafts, and wheels). A strong focus on quality, production, safety and environmental is needed.

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 8086 Global Drive
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 337-583-7383
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 "Bollinger encourages veterans, females, and minorities to apply"

General Help Wanted

General Help Wanted

Laborer Needed!!!
 Must have TWIC, Valid ID, Current DISA Hair Drug Test. Must pass background check. Hinds Fence 409-962-3801

Asst. Mgr. \$34k +bonus +benefits Apply at 2590 W MacArthur Dr. Orange Tx 77630 or email region905@talleyrents.com

Thibodeaux Ag. Group seeks 6 farm workers for temporary position on rice/crawfish farms in Midland and Morse, LA. Work includes harvesting rice crop, flooding fields, making, fixing, setting, repairing, crawfish traps, tractor driving, field prep, water maint., fertilizing, planting, manual shovel work, hoeing, spot spraying, equipment and levee maint., loading, unloading trucks.
 Needed from 10/18/2011 -

08/17/2012. \$9.10/hour w/ work guaranteed at least 3/4ths of employment period. No min. education requirement; 3 months similar farm experience required. Tools, supplies, equipment, housing, transportation, subsistence provided at no cost. Contact: 337-788-1009, 151 Blackbird, Midland, LA 70559. Job Order: LA392619. May also contact: Alien Labor Certification Unit, TWC Building, 101 East 15th Street, Room 120T Austin, TX 78778-0001 Ph: (512) 436-6297; Fax (512) 463-3055.

MERCHANDISE

Cemetery Lots

ATTACHMENT 3
DOCUMENTS REVIEWED

DOCUMENTS REVIEWED

- U.S. Environmental Protection Agency (EPA). 2000. Institutional Controls: A Site Manager's Guide to Identifying, Evaluating and Selecting Institutional Controls at Superfund and RCRA Corrective Action Cleanups. EPA 540-F-00-005. September.
- EPA. 2001. Comprehensive Five-Year Review Guidance. EPA 540-R-01-007. June.
- EPA. 2002. CERCLA Docket No. 06-05-02, Administrative Order on Consent for RI/FS. September 30.
- EPA. 2005a. Institutional Controls: A Citizen's Guide to Understanding Institutional Controls at Superfund, Brownfields, Federal Facilities, Underground Storage Tank, and Resource Conservation and Recovery Act Cleanups. EPA-540-R-04-003. February.
- EPA. 2005b. Proposed Plan for Palmer Barge Line Superfund Site, Port Arthur, Texas. July 27.
- EPA. 2005c. Superfund Record of Decision, Palmer Barge Line Superfund Site, Port Arthur, Jefferson County, Texas. September 30.
- EPA. 2007. CERCLA Docket No. 06-12-07, Unilateral Administrative Order for Remedial Design and Remedial Action. May 7.
- EPA. 2007. Preliminary Close Out Report, Palmer Barge Superfund Site, Port Arthur, Texas. September 28.
- EPA. 2011a. NPL Site Deletion Date Collection Form, Palmer Barge Line Superfund Site, CERCLIS ID#: TXD068104561. Names of Deleted Portion: All Areas and Media Within the Palmer Barge Line Superfund Site. Region: 6. State: Texas. March 22.
- EPA. 2011b. Recommended Evaluation of Institutional Control: Supplement to the "Comprehensive Five-Year Review Guidance." OSWER Directive 9355.7-18. September 13.
- EPA. 2011c. Updated Five-Year Review Summary Form. OSWER – 9200.2-105. December 9.
- EPA. 2011d. "ECOTOX Database". On-line Address: http://cfpub.epa.gov/ecotox/quick_query.htm. Accessed December 19.
- Roy F. Weston, Inc. (Weston). 2001. Removal Action Report, Palmer Barge/State Marine Superfund Site, Port Arthur, Jefferson County, Texas, EPA CERCLA I.D. No.: TXD068104561, TXD099801102. February.
- URS Diamond (URS Diamond). 2004. Remedial Investigation Report for Palmer Barge Line Superfund Site. July 2.
- URS Corporation (URS). 2005a. Baseline Human Health Risk Assessment, Palmer Barge Line Superfund Site, Port Arthur, Texas. June.
- URS. 2005b. Screening-Level Ecological Risk Assessment, Palmer Barge Line Superfund Site, Port Arthur, Texas. June.

DOCUMENTS REVIEWED (Continued)

URS. 2005c. Final Feasibility Study, Palmer Barge Line Superfund Site, Port Arthur, Texas. July.

URS. 2008. Final Remedial Action Report, Palmer Barge Line Superfund Site. June 11.

ATTACHMENT 4
ANALYTICAL DATA REPORTS



Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642 • (409) 983-4575 FAX (409) 982-1522
5544 Leopard Street, Corpus Christi, Texas 78408 • (361) 299-9900 FAX (361) 299-1155
138 S. Cities Service Hwy., Sulphur, Louisiana 70663 • (337) 626-2121 FAX (337) 626-2126
December 3, 2011

Mr. Randy Cooper
Tubal-Cain Industries
P. O. Box 2393
Beaumont, TX 77704

Ref: Project No. 2-1-8320, Environmental, Soil/Solid Samples, Received 1/6/2011

Dear Mr. Cooper:

I am writing this letter as a follow up to our telephonic conversation. The three soil samples (#1 Soil, #2 Soil, #3 Soil) received from you on January 6, 2011 were analyzed for: TPH, TCLP-Metals, and Total RCRA Metals as per your request on the chain of custody. We have sent you the report on January 17, 2011.

TPH:

As you can see from the attached report, TPH was not detected (below reporting limit) in Soil #1 and Soil #3. Whereas, Soil #2 contained a total TPH of 121 mg/kg which is very low in my opinion and should not be of much concern.

Total RCRA Metals:

The results of analyses show that except for Lead, all other RCRA Metals are either not detected (below reporting limit) or present in very low concentration (below the levels present in virgin background soil samples). Lead concentrations in all the soil samples (64 mg/kg in Soil #1; 37 mg/kg in Soil #2 & 78 mg/kg in Soil #3) are above background concentration (see attached Table 3, Texas-Specific Background Concentration).

TCLP-Metals:

All the TCLP (Toxicity Characteristic Leaching Procedure) Metals are not detected (below reporting limit) and are below regulatory limit and should not be of concern.

We appreciate your business and free to call us if you have further questions and can be of further service to you.

Sincerely,

Dr. C. N. Reddy, PH.D, CIH, ASP
Director

Client: Tubal-Cain Industries
 P.O. Box 2393
 Beaumont, TX 77704

Attn: Mr. Randy Cooper
 Phone: 786-1783 ext. 128; Fax: 786-2756
 Email: safety@tubal.cain.com, cade@tcmarineservices.com

Reporting Date: 01/17/11
 Sample Matrix: Solid
 Date Collected: 01/06/11
 Time Collected: See Below
 Collected by: Randy Cooper
 Date Received: 01/06/11
 Time Received: 4:20pm
 CHEMTEX File #: P11010177

RESULTS OF ANALYSIS

PROJECT NO: 2-1-8320

PROJECT: Environmental

SITE/LOCATION: 8700 Yacht Club Rd.

CHEMTEX ID	Sample ID	Parameter	Units	Results	RL	Qual
P11010177	#1 Soil (15:00)	Total Metals*				
		Total Arsenic	mg/kg	4	2.5	
		Total Barium	mg/kg	65	2.5	
		Total Cadmium	mg/kg	<2.5	2.5	
		Total Chromium	mg/kg	11	2.5	
		Total Lead	mg/kg	64	2.5	
		Total Selenium	mg/kg	<2.5	2.5	
		Total Silver	mg/kg	<2.5	2.5	
		Total Mercury	mg/kg	<0.2	0.2	
		T P H C ₆ -C ₁₂	mg/kg	<50	--	
		T P H >C ₁₂ -C ₂₈	mg/kg	<50	--	
		T P H >C ₂₈ -C ₃₅	mg/kg	<50	--	
		T P H C ₆ -C ₃₅	mg/kg	<50	50	
P11010178	#2 Soil (15:05)	Total Metals*				
		Total Arsenic	mg/kg	3.7	2.5	
		Total Barium	mg/kg	65	2.5	
		Total Cadmium	mg/kg	<2.5	2.5	
		Total Chromium	mg/kg	7.6	2.5	
		Total Lead	mg/kg	37	2.5	
		Total Selenium	mg/kg	<2.5	2.5	
		Total Silver	mg/kg	<2.5	2.5	
		Total Mercury	mg/kg	<0.2	0.2	
		T P H C ₆ -C ₁₂	mg/kg	<50	--	
		T P H >C ₁₂ -C ₂₈	mg/kg	96	--	
		T P H >C ₂₈ -C ₃₅	mg/kg	<50	--	
		T P H C ₆ -C ₃₅	mg/kg	121	50	

RL: Reporting Limit.

Analysis performed and report generated at CHEMTEX, Port Arthur, TX.

*Analysis performed at CHEMTEX, Sulphur, LA and report is generated at CHEMTEX, Port Arthur, TX.

Qualifier Definition:

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138 S. Cities Service Hwy., Sulphur, Louisiana 70663 • (337) 626-2121 FAX (337) 626-2126

Client: Tubal-Cain Industries
P.O. Box 2393
Beaumont, TX 77704

Attn: Mr. Randy Cooper
Phone: 786-1783 ext. 128; Fax: 786-2756
Email: safety@tubal.cain.com, cade@tcmarineservices.com

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Sample Matrix: Solid
Date Collected: 01/06/11
Time Collected: See Below
Collected by: Randy Cooper
Date Received: 01/06/11
Time Received: 4:20pm
CHEMTEX File #: P11010177

RESULTS OF ANALYSIS

PROJECT NO: 2-1-8320

PROJECT: Environmental

SITE/LOCATION: 8700 Yacht Club Rd.

CHEMTEX ID	Sample ID	Parameter	Units	Results	RL	Qual
P11010179	#3 Soil (15:10)	Total Metals*				
		Total Arsenic	mg/kg	3.2	2.5	
		Total Barium	mg/kg	65	2.5	
		Total Cadmium	mg/kg	<2.5	2.5	
		Total Chromium	mg/kg	9.6	2.5	
		Total Lead	mg/kg	78	2.5	
		Total Selenium	mg/kg	<2.5	2.5	
		Total Silver	mg/kg	<2.5	2.5	
		Total Mercury	mg/kg	<0.2	0.2	
		TPH C ₆ -C ₁₂	mg/kg	<50	--	
		TPH >C ₁₂ -C ₂₈	mg/kg	<50	--	
		TPH >C ₂₈ -C ₃₅	mg/kg	<50	--	
		TPH C ₆ -C ₃₅	mg/kg	<50	50	

RL: Reporting Limit.

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Client: Tubal-Cain Industries
 P.O. Box 2393
 Beaumont, TX 77704

Reporting Date: 01/17/11
 Sample Matrix: Solid
 Date Collected: 01/06/11
 Time Collected: 15:00
 Collected by: Randy Cooper
 Date Received: 01/06/11
 Time Received: 4:20pm
 CHEMTEX File #: P11010177

Attn: Mr. Randy Cooper
 Phone: 786-1783 ext. 128; Fax: 786-2756
 Email: safety@tubal.cain.com, cade@tcmarineservices.com

RESULTS OF ANALYSIS
 PROJECT NO: 2-1-8320
 PROJECT: Environmental
 SITE/LOCATION: 8700 Yacht Club Rd.
 SAMPLE ID: #1 Soil
 CHEMTEX #: P11010177

Test Method	Parameter	Units	Results	RL	Reg Limit	Qual
EPA 1311/6010B	TCLP Arsenic	mg/L	<0.05	0.05	5.0	
	TCLP Barium	mg/L	<0.17	0.17	100.0	
	TCLP Cadmium	mg/L	<0.05	0.05	1.0	
	TCLP Chromium	mg/L	<0.05	0.05	5.0	
	TCLP Lead	mg/L	<0.05	0.05	5.0	
	TCLP Selenium	mg/L	<0.06	0.06	1.0	
	TCLP Silver	mg/L	<0.05	0.05	5.0	
EPA 1311/7470A	TCLP Mercury	mg/L	<0.002	0.002	0.2	

RL: Reporting Limit.
 Analysis performed and report generated at CHEMTEX, Port Arthur, TX.

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Client: Tubal-Cain Industries
P.O. Box 2393
Beaumont, TX 77704

Reporting Date: 01/17/11
Sample Matrix: Solid
Date Collected: 01/06/11
Time Collected: 15:05
Collected by: Randy Cooper
Date Received: 01/06/11
Time Received: 4:20pm
CHEMTEX File #: P11010177

Attn: Mr. Randy Cooper
Phone: 786-1783 ext. 128; Fax: 786-2756
Email: safety@tubal.cain.com, cade@tcmarineservices.com

RESULTS OF ANALYSIS

PROJECT NO: 2-1-8320
PROJECT: Environmental
SITE/LOCATION: 8700 Yacht Club Rd.
SAMPLE ID: #2 Soil
CHEMTEX #: P11010178

Test Method	Parameter	Units	Results	RL	Reg Limit	Qual
EPA 1311/6010B	TCLP Arsenic	mg/L	<0.05	0.05	5.0	
	TCLP Barium	mg/L	0.20	0.17	100.0	
	TCLP Cadmium	mg/L	<0.05	0.05	1.0	
	TCLP Chromium	mg/L	<0.05	0.05	5.0	
	TCLP Lead	mg/L	<0.05	0.05	5.0	
	TCLP Selenium	mg/L	<0.06	0.06	1.0	
	TCLP Silver	mg/L	<0.05	0.05	5.0	
EPA 1311/7470A	TCLP Mercury	mg/L	<0.002	0.002	0.2	

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Email: safety@tubal.cain.com, cade@tcmarineservices.com

Reporting Date: 01/17/11
Sample Matrix: Solid
Date Collected: 01/06/11
Time Collected: 15:10
Collected by: Randy Cooper
Date Received: 01/06/11
Time Received: 4:20pm
CHEMTEX File #: P11010177

RESULTS OF ANALYSIS

PROJECT NO: 2-1-8320
PROJECT: Environmental
SITE/LOCATION: 8700 Yacht Club Rd.
SAMPLE ID: #3 Soil
CHEMTEX #: P11010179

Test Method	Parameter	Units	Results	RL	Reg Limit	Qual
EPA 1311/6010B	TCLP Arsenic	mg/L	<0.05	0.05	5.0	
	TCLP Barium	mg/L	<0.17	0.17	100.0	
	TCLP Cadmium	mg/L	<0.05	0.05	1.0	
	TCLP Chromium	mg/L	<0.05	0.05	5.0	
	TCLP Lead	mg/L	<0.05	0.05	5.0	
	TCLP Selenium	mg/L	<0.06	0.06	1.0	
	TCLP Silver	mg/L	<0.05	0.05	5.0	
EPA 1311/7470A	TCLP Mercury	mg/L	<0.002	0.002	0.2	

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Client: Tubal-Cain Industries
 P.O. Box 2393
 Beaumont, TX 77704

Reporting Date: 01/17/11
 CHEMTEX File #: P11010177

LABORATORY QUALITY CONTROL DATA

Method Blank (mg/kg)

QC Batch ID	Parameter	CAS #	Result	RL	Qual
Qb TPH 011011	T P H C ₈ -C ₃₅		<50	50	
QbMC011711	Arsenic	7440-38-2	<2.50	2.50	
	Barium	7440-39-3	<2.50	2.50	
	Cadmium	7440-43-9	<2.50	2.50	
	Chromium	7440-47-3	<2.50	2.50	
	Lead	7439-92-1	<2.50	2.50	
	Selenium	7782-49-2	<2.50	2.50	
	Silver	7440-22-4	<2.50	2.50	
QbHgC011311-1	Mercury	7439-97-6	<0.20	0.20	

Duplicate (mg/kg)

QC Batch ID	QC Sample ID	Parameter	Sample Result	Sample Dup Result	RPD	RPD Limit	Qual
Qb TPH 011011	P11010178	T P H C ₈ -C ₁₂	9	8	6	20	
		T P H >C ₁₂ -C ₂₈	96	75	25	20	R5
		T P H >C ₂₈ -C ₃₅	16	16	0	20	
		T P H C ₈ -C ₃₅	121	99	20	20	
QbMC011711	P11010178	Arsenic	3.7	4	7.2	20	
		Barium	65	65	0	20	
		Cadmium	<2.5	<2.5	--	20	R8
		Chromium	7.6	7.6	0	20	
		Lead	37	37	0	20	
		Selenium	<2.5	<2.5	--	20	R8
		Silver	<2.5	<2.5	--	20	R8
QbHgC011311-1	P11010179	Mercury	<0.2	<0.2	--	20	R8

Qualifier Definition:

R5: Sample RPD exceeds control limits.

R8: RPD not calculated due to division by zero.

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Client: Tubal-Cain Industries
 P.O. Box 2393
 Beaumont, TX 77704

Reporting Date: 01/17/11
 CHEMTEX File #: P11010177

LABORATORY QUALITY CONTROL DATA

QC Batch ID	Parameter	Spk Added	LCS and LCSD (mg/kg)				RPD	RPD Limit	% Rec Limit	Qual
			LCS Result	LCS % Rec	LCSD Result	LCSD % Rec				
Qb TPH 011011	T P H C ₆ -C35	250	232	93	244	98	5	20	75-125	
QbMC011711	Arsenic	50.00	50.4	101	---	---	---	---	80-120	
	Barium	50.00	53.3	107	---	---	---	---	80-120	
	Cadmium	50.00	51.0	102	---	---	---	---	80-120	
	Chromium	50.00	50.3	101	---	---	---	---	80-120	
	Lead	50.00	50.5	101	---	---	---	---	80-120	
	Selenium	50.00	50.6	101	---	---	---	---	80-120	
	Silver	50.00	52.4	105	---	---	---	---	80-120	
QbHgC011311-1	Mercury	0.50	0.51	103	---	---	---	---	83-117	

Parameter	Sample Result	MS Spk Added	MS and MSD (mg/kg)				RPD	RPD Limit	% Rec Limit	Qual
			MS Result	MS % Rec	MSD Result	MSD % Rec				
QCBatch ID: QbMC011711										
QC Sample ID: P11010178										
Arsenic	3.7	100	86	86	---	---	---	---	70-130	
Barium	65	100	153	88	---	---	---	---	70-130	
Cadmium	<2.5	100	83	83	---	---	---	---	70-130	
Chromium	7.6	100	88	80	---	---	---	---	70-130	
Lead	37	100	112	75	---	---	---	---	70-130	
Selenium	<2.5	100	80	80	---	---	---	---	70-130	
Silver	<2.5	100	76	76	---	---	---	---	70-130	
QCBatch ID: QbHgC011311-1										
QC Sample ID: P1101079										
Mercury	<0.2	0.50	0.42	85	---	---	---	---	80-120	
QCBatch ID: Qb TPH 011011										
QC Sample ID: P11010179										
T P H C ₆ -C35	5	250	288	115	---	---	---	---	75-125	

Qualifier Definition:

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Client: Tubal-Cain Industries
 P.O. Box 2393
 Beaumont, TX 77704

Reporting Date: 01/17/11
 CHEMTEX File #: P11010177

LABORATORY QUALITY CONTROL DATA

QC Batch ID	Parameter	Method Blank (mg/L)		RL	Qual
		CAS#	Result		
QbM07A0101711	TCLP Metals				
	Arsenic	7440-38-2	<0.05	0.05	
	Barium	7440-39-3	<0.17	0.17	
	Cadmium	7440-43-9	<0.05	0.05	
	Chromium	7440-47-3	<0.05	0.05	
	Lead	7439-92-1	<0.05	0.05	
	Selenium	7782-49-2	<0.06	0.06	
QbHgC011211	Silver	7440-22-4	<0.05	0.05	
	Mercury	7439-97-6	<0.002	0.002	

QC Batch ID	QC Sample ID	Duplicate (mg/L)		Sample Dup Result	RPD	RPD Limit	Qual
		Parameter	Sample Result				
QbM07A0101711	P11010180	TCLP Metals					
		Arsenic	<0.05	<0.05	---	20	R8
		Barium	<0.17	<0.17	---	20	R8
		Cadmium	<0.05	<0.05	---	20	R8
		Chromium	<0.05	<0.05	---	20	R8
		Lead	<0.05	<0.05	---	20	R8
		Selenium	<0.06	<0.06	---	20	R8
QbHgC011211	P11010179	Silver	<0.05	<0.05	---	20	R8
		Mercury	<0.002	<0.002	---	20	R8

QC Batch ID	Parameter	Spk Added	LCS and LCSD (mg/L)			LCSD % Rec	RPD	RPD Limit	% Rec Limit	Qual
			LCS Result	LCS % Rec	LCSD Result					
QbM07A0101711	TCLP Metals									
	Arsenic	0.500	0.518	104	---	---	---	87-113		
	Barium	0.500	0.480	96	---	---	---	90-110		
	Cadmium	0.500	0.535	107	---	---	---	88-112		
	Chromium	0.500	0.538	108	---	---	---	83-117		
	Lead	0.500	0.530	106	---	---	---	85-115		
	Selenium	0.500	0.447	89	---	---	---	88-112		
QbHgC011211	Silver	0.500	0.521	104	---	---	---	92-108		
	Mercury	0.0050	0.0045	91	---	---	---	83-117		

Qualifier Definition:

R8: RPD not calculated due to division by zero.

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Client: Tubal-Cain Industries
 P.O. Box 2393
 Beaumont, TX 77704

Reporting Date: 01/17/11
 CHEMTEX File #: P11010177

LABORATORY QUALITY CONTROL DATA

TCLP Metals

MS and MSD (mg/L)

Parameter	Sample Result	MS Spk Added	MS Result	MS % Rec	MSD Result	MSD % Rec	RPD	RPD Limit	% Rec Limit	Qual
QCBatch ID: QbM07A0101711										
QC Sample ID: P11010180										
Arsenic	<0.05	1.000	0.837	84	--	--	--	--	70-130	
Barium	<0.17	1.000	0.705	70	--	--	--	--	70-130	
Cadmium	<0.05	1.000	0.746	75	--	--	--	--	70-130	
Chromium	<0.05	1.000	0.767	77	--	--	--	--	70-130	
Lead	<0.05	1.000	0.747	75	--	--	--	--	70-130	
Selenium	<0.06	1.000	0.860	86	--	--	--	--	70-130	
Silver	<0.05	1.000	0.736	74	--	--	--	--	70-130	
QCBatch ID: QbHgC011211										
QC Sample ID: P11010179										
Mercury	<0.002	0.005	0.0043	85	--	--	--	--	70-130	

Qualifier Definition:

M2: Matrix Spike recovery is below control limits due to matrix interference.

Method References/Analysis Dates & Analysts

Parameter	Method Reference	Date Analyzed/Analyzed By
T P H C ₆ -C ₃₅	TNRCC Method 1005 (Rev. 03)	01/10/11 TRS
TCLP Metals	EPA 1311/6010B	01/17/11 RS
TCLP Mercury	EPA 1311/7470A	01/12/11 RS
Total Metals		
Total Arsenic	EPA Method 6010B	01/17/11 SS
Total Cadmium	EPA Method 6010B	01/17/11 SS
Total Chromium	EPA Method 6010B	01/17/11 SS
Total Copper	EPA Method 6010B	01/17/11 SS
Total Nickel	EPA Method 6010B	01/17/11 SS
Total Lead	EPA Method 6010B	01/17/11 SS
Total Zinc	EPA Method 6010B	01/17/11 SS
Total Mercury	EPA Method 7471A	01/13/11 RS



 Dr. C. N. Reddy, Ph.D., CIH, ASP
 Director

amd/kmi*/CNR

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CHEMTEX

Environmental & Industrial Hygiene Services
 3082 25th Street, Port Arthur, TX 77642
 Phone: (409) 983-4575, Fax: (409) 982-1522
 E-mail: chemtexpa@sbcglobal.net

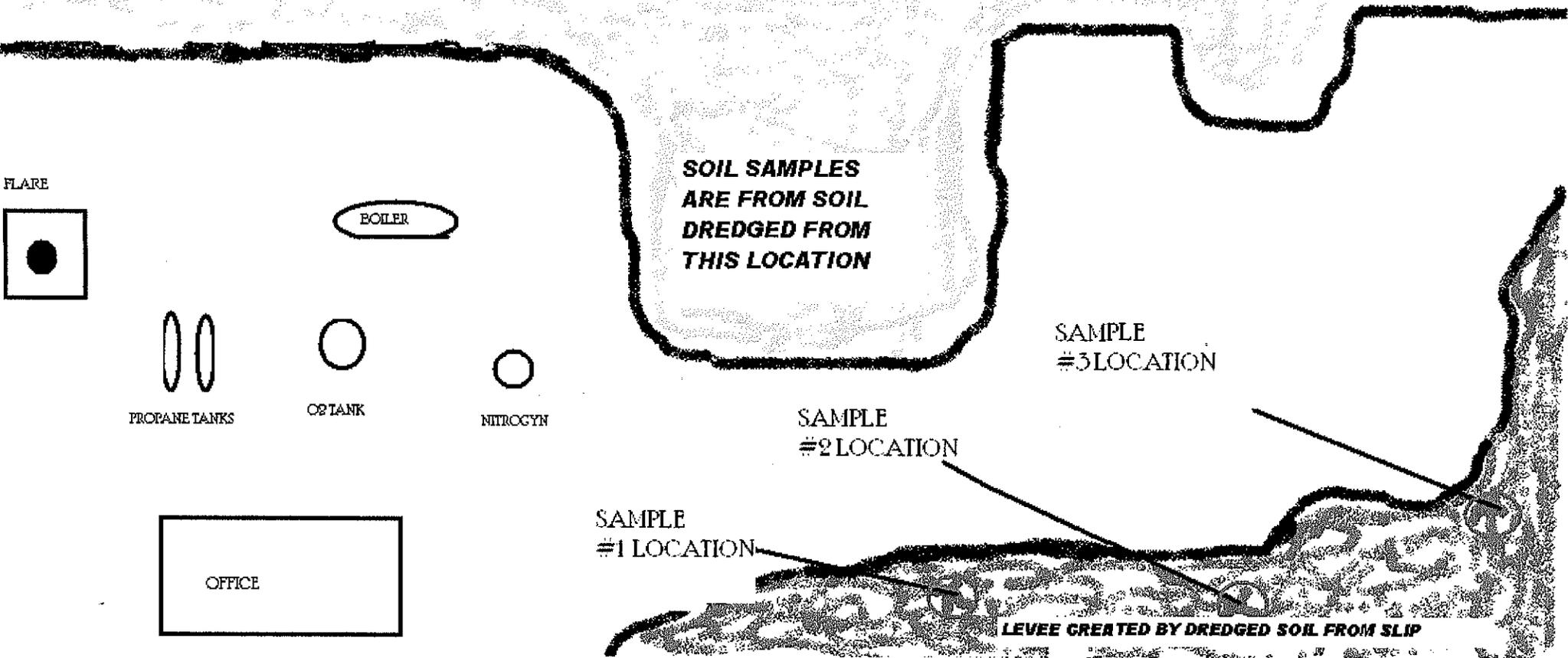
CHAIN OF CUSTODY RECORD ENVIRONMENTAL ANALYTICAL SERVICES REQUEST

CLIENT: Tubal-Cain Industries ATTN: Randy Cooper		ADDRESS: P.O. Box 2393 Beaumont, TX 77704			Phone: (409) 786-1783 ext. 128 Fax: (409) 786-2756 Email: safety@tubal.cain.com							
BILLING CONTACT/ADDRESS: (If different from above)		P. O. #: 40341	PROJECT NO: 2-1-8320	PROJECT: ENVIRONMENTAL		SITE/LOCATION: 8700 YACHT CLUB RD						
SAMPLE(S) COLLECTED BY (PRINT NAME): KANDY COOPER		Expected Turnaround Time 2-4 hr Rush _____ 24 hr Rush _____ 48 hr Rush _____ 7-14days _____			REQUESTED ANALYSES							
Sample Matrix Codes: Drinking Water: DW; Groundwater: GW; Liquid Waste: LW; Oil(s): O; Paint Chips: PC; Sand: Sn; Sludge: Sl; Soil/Solid: S; Solid Waste: SW; Trip Blank: TB; Water: W; Wipes: WP; Wastewater: WW												
CHEMTEX #	SAMPLE IDENTIFICATION	COLLECTION		Sample Matrix	Composite/Grab	Chemical Preservative	Sample Containers			PH	METALS	METALS
		Date	Time				No.	Size (oz.)	Type (Glass/Plastic)			
P11010177	#1 SOIL	1-6-11	1500	Solid	GRAB	N/A	1		G		X	X
P11010178	#2 SOIL	1-6-11	1505	Solid	GRAB	N/A	21		G		X	X
P11010179	#3 SOIL	1-6-11	1510	Solid	GRAB	N/A	31		G		X	X
Remarks: Samples must be preserved on ice after sample collection and transported in ice chest.							Regulatory	<input checked="" type="checkbox"/>	Non-Regulatory			
Relinquished By: <i>Randy Cooper</i>		Date/Time: 1-6-11 1620		Received By: <i>Messie Jurgens</i>			Date/Time: 01/06/10 4:20pm					
Relinquished By:		Date/Time:		Received By:			Date/Time:					

Facilities also available at: 5544 Leopard St., Corpus Christi, TX 78408; (361)299-9900 chemtexcc@sbcglobal.net and 138 S. Cities Service Hwy., Sulphur, LA 70663 (337) 626-2121 chemtexlc@sbcglobal.net

NOTICE / DISCLAIMER: Client has asked Chemtex to perform the analyses listed above, on the samples described herein. Any analytical results, opinions or interpretations which may be provided to Client are based upon the information and material supplied by Client, for whose exclusive and confidential use a report will be made. No person or entity other than Client may rely on any such report. Any such reliance will be unjustified. Any person, other than Client, that reads or relies on any such report, does so at his or her own risk. Chemtex makes no warranty or representation, express or implied, of any type, and expressly disclaims same. Any report provided by Chemtex shall not be reproduced, in whole or in part, without the written approval of Chemtex. In no event shall Chemtex be responsible for any damage greater than the amount that it received for performing some or all of the analyses listed above.

8700 YACHT CLUB ROAD SOIL SAMPLE LOCATIONS 1-6-2011



**SOIL SAMPLES
ARE FROM SOIL
DREDGED FROM
THIS LOCATION**

**SAMPLE
#3 LOCATION**

**SAMPLE
#2 LOCATION**

**SAMPLE
#1 LOCATION**

LEVEE CREATED BY DREDGED SOIL FROM SLIP

OFFICE

BOILER

PROPANE TANKS

O2 TANK

NITROGEN

FLARE



Environmental & Industrial Hygiene Services

3082 25th Street, Port Arthur, Texas 77642 • (409) 983-4575 FAX (409) 982-1522
5544 Leopard Street, Corpus Christi, Texas 78408 • (361) 299-9900 FAX (361) 299-1155
138 S. Cities Service Hwy., Sulphur, Louisiana 70663 • (337) 626-2121 FAX (337) 626-2126

INVOICE

DATE	INVOICE #
1/18/2011	142397

Bill To:

Tubal-Cain Industries
c/o Randy Cooper/Accts Payable
P. O. Box 2393
Beaumont, TX 77704

*Entered
1-19-11*

Mail Payment To:

CHEMTEX
P. O. Box 3922
Port Arthur, TX 77643

P.O. NO.	Terms	Due Date	Today's Date	CHEMTEX DATA NO:
40341	Net 30 Days	2/17/2011	1/18/2011	P11010177-179
Quantity	Description		Rate	Amount
	Project No: 2-1-8320 Project: Environmental Site/Location: 8700 Yacht Club Rd. Sample IDs: #1 to #3 Soil Received 01/06/11 for Mr. Randy Cooper & Analyzed for:			
3	Total Metals (As,Ba,Cd,Cr,Pb,Hg,Se&Ag)		225.00	675.00
3	T P H		75.00	225.00
3	TCLP Metals Including Extraction		275.00	825.00
Thank you for your business. Please remit payment to the above address.			Total	\$1,725.00

Finance Charge of 1 1/2% per month if full amount is not received within 30 days of invoice date. Client agrees to pay attorneys fees if legal collection is necessary.
"We Provide Best Quality Service At A Very Reasonable Price"

Tubal-Cain Marine Services, Inc.
Vendor: CHEMTEX

Check Date: February 16, 2011 **32731**

INVOICE DATE	INVOICE NO	DESCRIPTION	INV. AMOUNT	DISCNT TAKEN	BALANCE
1-18-11	142397	40341	1725.00	.00	1725.00

Chk. Date	2-16-11	Chk. No.	32731	Totals	1725.00	.00	1725.00
-----------	---------	----------	-------	--------	---------	-----	---------

Tubal-Cain Marine Services, Inc.
Operating Account
P.O. Box 2364
Beaumont, TX 77704

Wachovia Bank
4175 Phelan Blvd
Beaumont, TX 77707

32731

Date February 16, 2011
Amount \$1,725.00

→ PAY ONLY **1,725.00** CENTS

PAY *****One thousand seven hundred twenty-five dollars and no cents

TO THE ORDER OF CHEMTEX
PO BOX 3922
PORT ARTHUR, TX 77643

**** COPY ****

Tubal-Cain Marine Services, Inc.
Vendor: CHEMTEX

Check Date: February 16, 2011 **32731**

INVOICE DATE	INVOICE NO	DESCRIPTION	INV. AMOUNT	DISCNT TAKEN	BALANCE
1-18-11	142397	40341	1725.00	.00	1725.00

Chk. Date	2-16-11	Chk. No.	32731	Totals	1725.00	.00	1725.00
-----------	---------	----------	-------	--------	---------	-----	---------

Tubal-Cain Marine Services, Inc.
Operating Account
P.O. Box 2364
Beaumont, TX 77704

Wachovia Bank
4175 Phelan Blvd
Beaumont, TX 77707

32731

Date February 16, 2011
Amount \$1,725.00

→ PAY ONLY **1,725.00** CENTS

PAY *****One thousand seven hundred twenty-five dollars and no cents

TO THE ORDER OF CHEMTEX
PO BOX 3922
PORT ARTHUR, TX 77643

Deborah Van Housen



Determining Which Releases are Subject to TRRP

Purpose and Applicability

This document describes a process to help clarify when a release is subject to the Texas Risk Reduction Program (TRRP) rule (30 TAC Chapter 350). This process applies to releases that occur under the jurisdiction of a TCEQ Remediation Division program. The intention of TRRP is to focus on releases that threaten or affect water resources (groundwater, surface water/sediment) and/or those releases that necessitate a decontamination or control remedy. This document sets forth the procedure to help persons make this determination.

If any other rule, permit, or enforcement order applies and is more stringent, then the requirements of the other rule, permit, or enforcement order must be met. Release determinations do not apply to situations where materials or products are used as intended, such as lawful application of chemical pesticides and agricultural chemicals, paved parking lots or roads, or treated utility poles and railroad ties. This document replaces the August 27, 2002 memo entitled *Remediation Division Report Requirements for a Release Investigation*.

Assumptions

Use of this determination process assumes:

- The person has notified the agency of the release in accordance with the Texas Water Code and applicable program rules.
- All source areas are adequately identified.
- Properly collected samples are analyzed for all target chemicals of concern (COCs) using method quantitation limits that are at or below the applicable action levels (unless the action level is lower than the lowest MQL for the most sensitive standard available analytical method).
- Groundwater sampling, when required, is sufficient to characterize COC concentrations in the uppermost saturated zone at all source areas (not intending to include tank hold water).

If any of these assumptions are invalid for a particular release, use of the process in this document is prohibited and the release will be subject to TRRP. This document does not cover current spills handled under 30 TAC Chapter 327.

Definitions

Release

The terms "release" and "discharge" are defined by statute (Texas Health and Safety Code §361.003 and the Texas Water Code §26.001 and §26.121) and in rule (30 TAC 334.7, 335.1, and 350.4).

Report releases within 24 hours of occurrence or discovery to the appropriate part of the agency as listed below:

Table 1. Release Reporting Contacts

Releases from:	Report Release to:	Phone number
Underground and above-ground storage tanks containing regulated petroleum substances and hazardous substances	Responsible Party Remediation Section	512-239-2200 (phone) 512-239-2216 (fax) pstrpr@tceq.state.tx.us (email)
Industrial solid waste and municipal hazardous waste facilities, spills, or other releases	Region Office	See http://www.tnrcc.state.tx.us/admin/topdoc/gi/002.pdf for locations and phone numbers

Action Levels

For the purpose of determining which releases are subject to TRRP, action levels are defined as the lowest applicable Tier 1 residential protective concentration level (PCL) for a given COC, assuming a 0.5-acre source area and Class 1 groundwater. Table 2 identifies the applicable human health exposure pathways for determining action levels for surface soils, subsurface soils, and groundwater.

Table 2 – Exposure Pathways for Action Levels						
Media	Exposure Pathways					Background/MQL
	^{Soil} Comb (0-15 ft)	^{GW} Soil _{ing}	^{Air} Soil _{inh-v} (>15 ft)	^{GW} GW _{ing}	^{Air} GW _{inh-v}	
Surface Soil	X	X				X
Subsurface Soil		X	X			X
Groundwater				X	X	X

If background or the method quantitation limit (MQL) is a higher concentration than the action level, then the higher of background or MQL is the action level. Tier 1 PCL tables may be found at <http://www.tnrcc.state.tx.us/permitting/trrp.htm> and background concentrations for metals are shown in Table 3.

Table 3. Texas-Specific Background Concentration

Metal	Median Background Concentration (mg/kg)	Metal	Median Background Concentration (mg/kg)
Aluminum	30,000	Manganese	300
Antimony	1	Mercury	0.04
Arsenic	5.9	Nickel	10
Barium	300	Selenium	0.3
Beryllium	1.5	Strontium	100
Boron	30	Tin	0.9
Total Chromium	30	Titanium	2,000
Cobalt	7	Thallium	0.7
Copper	15	Thorium	9.3
Fluorine	190	Vanadium	50
Iron	15,000	Zinc	30
Lead	15		

Determining Applicability to TRRP

Conduct an investigation when there is evidence that there may have been a release, or when there is another voluntary or mandatory reason for investigation (such as commercial real estate transactions, closure of a solid waste management unit, or permanent removal from service of an underground storage tank). The results of the investigation may result in one of three scenarios:

1. COC concentrations are below background or the MQLs.
2. COC concentrations are above background or MQLs but below action levels, as defined previously in this document.
3. COC concentrations are above action levels.

The associated procedures to be followed for these three situations are discussed in the following sections. Figure 1 illustrates the general process for determining when a release is subject to TRRP. If

any of the answers are still unknown following completion of the investigation, the release is subject to TRRP. Refer to the text for detailed information.

COC Concentrations Less Than MQL or at Background (Scenario 1)

TRRP is not applicable and a report to the agency is not required (unless required by rule) when:

- the COC concentrations are not detected above the higher of the MQL or background,
- there is no other evidence of a release, and
- response actions were not required to achieve MQLs or background.

A report to the agency may be required by a program area to meet other regulations such as for closure of a waste management unit or permanent removal from service of an underground storage tank system. Background can be either site specific (following the requirements that would be applicable under Chapter 350) or from Table 3 above.

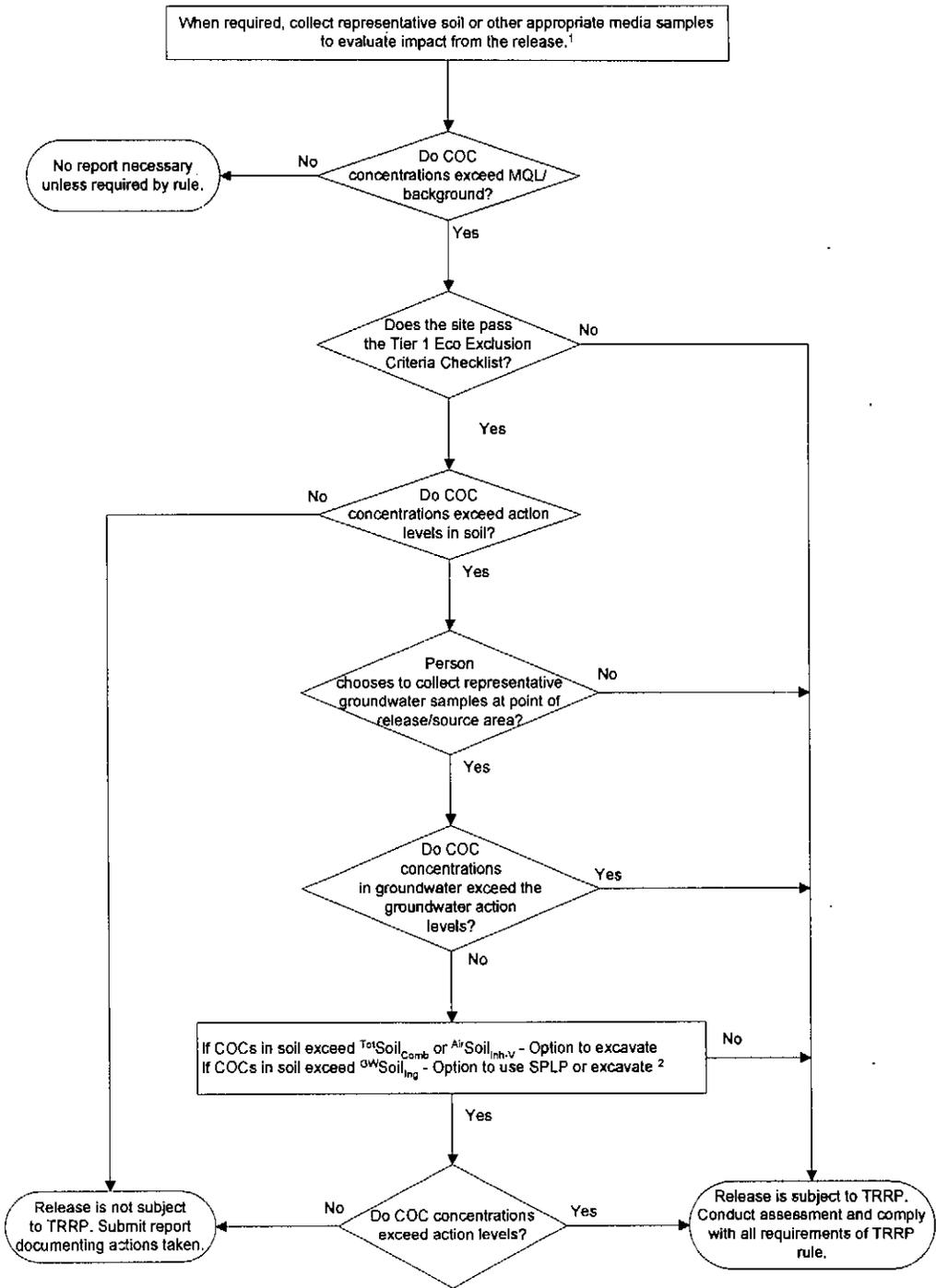
COC Concentrations Greater than MQL/Background (Scenarios 2 and 3)

When COC concentrations exceed MQL or background, both ecological and human health exposure pathways must be considered. Complete the Tier 1 Ecological Exclusion Criteria Checklist to determine if ecological exposure pathways may be of concern. If the site fails the checklist, or if water resources (groundwater, surface water/ sediment) are threatened or affected, the release is subject to TRRP. If the site passes the ecological checklist, evaluate the human health exposure pathways by comparing the analytical results to the action levels defined in Table 2. If the concentrations do not exceed the soil action levels and there is no evidence of other affected or threatened media, the release is not subject to TRRP (Figure 1). Submit a report that documents the investigation and provides justification for no further action. If the agency concurs with the conclusions, a no further action letter will be issued. Otherwise the release is subject to TRRP, unless the person can determine another basis in this document by which TRRP is not applicable.

If the concentrations exceed soil action levels, the release is subject to TRRP unless the person elects to evaluate the groundwater exposure pathway. Collect a representative groundwater sample from each source area to document whether groundwater is affected above action levels. Conduct the sampling in a manner that will prevent COCs from migrating to the groundwater during the drilling or sampling process. Compare the results to the groundwater action level. If COC concentrations exceed the groundwater action levels, the release is subject to TRRP.

Note: Groundwater sampling is always required in conjunction with exercising the excavation or SPLP option to attempt to resolve matters prior to triggering TRRP applicability.

If representative COC concentrations in groundwater do not exceed the action levels, the person can choose a course of action based on which soil action levels are exceeded. For any action level exceeded, excavation and proper disposal of affected soil can be conducted if the affected soil is located on site, entirely in the vadose zone, and can be removed within 60 days from the date the release was reported to the agency. Collect discrete samples to verify the COC concentrations after excavation. If only the ^{GW}Soil_{ing} action level is exceeded, the person may choose to collect samples from the areas of highest concentrations for Synthetic Precipitation Leaching Procedure (SPLP) analysis to determine COC leachability. This process can be done before, after, or in lieu of excavation. When the SPLP analytical results are greater than the ^{GW}GW_{ing} action level, the release is subject to TRRP unless further excavation is completed within the 60-day timeframe, followed by additional analysis. If the final soil and/or SPLP leachate analytical results do not exceed ^{GW}Soil_{ing} or ^{GW}GW_{ing}, respectively, the release will not be subject to TRRP. Submit a report documenting the actions taken and justification for no further action. If the agency concurs with the conclusions, a no further action letter will be issued. Conversely, if the final soil and/or SPLP leachate analytical results do exceed ^{GW}Soil_{ing} or ^{GW}GW_{ing}, respectively, the release will be subject to TRRP.



1. This flowchart cannot be used by itself. Refer to the text for detailed information on this process.
 2. Use of SPLP test is not an option if to address exceedance of $TotSoil_{comb}$ or $AirSoil_{inh-v}$ action levels.

Figure 1. Generalized Process to Determine if a Release is Subject to TRRP

ATTACHMENT 5
DREDGE PERMIT

Application No. 12226

Name of Applicant Palmer Barge Line, Inc.

Effective Date 28 DEC 1977

Expiration Date (If applicable) 31 December 1980

DEPARTMENT OF THE ARMY
PERMIT

Referring to written request dated 27 June 1977 for a permit to:

Perform work in or affecting navigable waters of the United States, upon the recommendation of the Chief of Engineers, pursuant to Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 U.S.C. 403);

Discharge dredged or fill material into navigable waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 404 of the Federal Water Pollution Control Act (86 Stat. 816, P.L. 92-500);

Transport dredged material for the purpose of dumping it into ocean waters upon the issuance of a permit from the Secretary of the Army acting through the Chief of Engineers pursuant to Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (86 Stat. 1052; P.L. 92-532);

◀ (Here insert the full name and address of the permittee)

**Palmer Barge Line, Inc.
P. O. Drawer 1363
Nederland, Texas 77627**

is hereby authorized by the Secretary of the Army:

to **dredge an area and construct a
bulkhead for a barge docking facility**

◀ (Here describe the proposed structure or activity, and its intended use. In the case of an application for a fill permit, describe the structures, if any, proposed to be erected on the fill. In the case of an application for the discharge of dredged or fill material into navigable waters or the transportation for discharge in ocean waters of dredged material, describe the type and quantity of material to be discharged.)

in **the Neches River**

◀ (Here to be named the ocean, river, harbor, or waterway concerned.)

**at the permittee's facility at Corps of
Engineers Station 0+00 on the Neches
River Channel, approximately 5 miles
northeast from Groves, Texas,**

◀ (Here to be named the nearest well-known locality—preferably a town or city—and the distance in miles and tenths from some definite point in the name, stating whether above or below or giving direction by points of compass.)

in accordance with the plans and drawings attached hereto which are incorporated in and made a part of this permit (on drawings: give file number or other definite identification marks):

**in two sheets, sheet 1 of which is entitled
"PROPOSED DOCK WITH DREDGING AND DISPOSAL IN NECHES RIVER AND SABINE NECHES
CHANNEL AT P.C. STATION 0+00 NECHES RIVER CHANNEL PORT ARTHUR, TEXAS,
COUNTY OF JEFFERSON STATE OF TEXAS,"**

subject to the following conditions:

I. General Condition:

a. That all activities identified and authorized herein shall be consistent with the terms and conditions of this permit; and that any activities not specifically identified and authorized herein shall constitute a violation of the terms and conditions of this permit which may result in the modification, suspension or revocation of this permit, in whole or in part, as set forth more specifically in General Conditions j or k hereto, and in the institution of such legal proceedings as the United States Government may consider appropriate, whether or not this permit has been previously modified, suspended or revoked in whole or in part.

b. That all activities authorized herein shall, if they involve a discharge or deposit into navigable waters or ocean waters, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, and pretreatment standards established pursuant to Sections 301, 302, 306 and 307 of the Federal Water Pollution Control Act of 1972 (P.L. 92-500; 86 Stat. 816), or pursuant to applicable State and local law.

c. That when the activity authorized herein involves a discharge or deposit of dredged or fill material into navigable waters, the authorized activity shall, if applicable water quality standards are revised or modified during the term of this permit, be modified, if necessary, to conform with such revised or modified water quality standards within 6 months of the effective date of any revision or modification of water quality standards, or as directed by an implementation plan contained in such revised or modified standards, or within such longer period of time as the District Engineer, in consultation with the Regional Administrator of the Environmental Protection Agency, may determine to be reasonable under the circumstances.

d. That the permittee agrees to make every reasonable effort to prosecute the work authorized herein in a manner so as to minimize any adverse impact of the work on fish, wildlife and natural environmental values.

e. That the permittee agrees to prosecute the work authorized herein in a manner so as to minimize any degradation of water quality.

f. That the permittee shall permit the District Engineer or his authorized representative(s) or designee(s) to make periodic inspections at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein.

g. That the permittee shall maintain the structure or work authorized herein in good condition and in accordance with the plans and drawings attached hereto.

h. That this permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and that it does not authorize any injury to property or invasion of rights or any infringement of Federal, State, or local laws or regulations, nor does it obviate the requirement to obtain State or local assent required by law for the activity authorized herein.

i. That this permit does not authorize the interference with any existing or proposed Federal project and that the permittee shall not be entitled to compensation for damage or injury to the structures or work authorized herein which may be caused by or result from existing or future operations undertaken by the United States in the public interest.

j. That this permit may be summarily suspended, in whole or in part, upon a finding by the District Engineer that immediate suspension of the activity authorized herein would be in the general public interest. Such suspension shall be effective upon receipt by the permittee of a written notice thereof which shall indicate (1) the extent of the suspension, (2) the reasons for this action, and (3) any corrective or preventative measures to be taken by the permittee which are deemed necessary by the District Engineer to abate imminent hazards to the general public interest. The permittee shall take immediate action to comply with the provisions of this notice. Within ten days following receipt of this notice of suspension, the permittee may request a hearing in order to present information relevant to a decision as to whether his permit should be reinstated, modified or revoked. If a hearing is requested, it shall be conducted pursuant to procedures prescribed by the Chief of Engineers. After completion of the hearing, or within a reasonable time after issuance of the suspension notice to the permittee if no hearing is requested, the permit will either be reinstated, modified or revoked.

k. That this permit may be either modified, suspended or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest. Any such modification, suspension, or revocation shall become effective 30 days after receipt by the permittee of written notice of such action which shall specify the facts or conduct warranting same unless (1) within the 30-day period the permittee is able to satisfactorily demonstrate that (a) the alleged violation of the terms and the conditions of this permit did not, in fact, occur or (b) the alleged violation was accidental, and the permittee has been operating in compliance with the terms and conditions of the permit and is able to provide satisfactory assurances that future operations shall be in full compliance with the terms and conditions of this permit; or (2) within the aforesaid 30-day period, the permittee requests that a public hearing be held to present oral and written evidence concerning the proposed modification, suspension or revocation. The conduct of this hearing and the procedures for making a final decision either to modify, suspend or revoke this permit in whole or in part shall be pursuant to procedures prescribed by the Chief of Engineers.

l. That in issuing this permit, the Government has relied on the information and data which the permittee has provided in connection with his permit application. If, subsequent to the issuance of this permit, such information and data prove to be false, incomplete or inaccurate, this permit may be modified, suspended or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

m. That any modification, suspension, or revocation of this permit shall not be the basis for any claim for damages against the United States.

n. That the permittee shall notify the District Engineer at what time the activity authorized herein will be commenced, as far in advance of the time of commencement as the District Engineer may specify, and of any suspension of work, if for a period of more than one week, resumption of work and its completion.

o. That if the activity authorized herein is not started on or before the first day of July, 1980 (one year from the date of issuance of this permit unless otherwise specified) and is not completed on or before thirty-first day of December, 1980 (three years from the date of issuance of this permit unless otherwise specified) this permit, if not previously revoked or specifically extended, shall automatically expire.

p. That no attempt shall be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the activity authorized by this permit.

q. That if the display of lights and signals on any structure or work authorized herein is not otherwise provided for by law, such lights and signals as may be prescribed by the United States Coast Guard shall be installed and maintained by and at the expense of the permittee.

r. That this permit does not authorize or approve the construction of particular structures, the authorization or approval of which may require authorization by the Congress or other agencies of the Federal Government.

s. That if and when the permittee desires to abandon the activity authorized herein, unless such abandonment is part of a transfer procedure by which the permittee is transferring his interests herein to a third party pursuant to General Condition v hereof, he must restore the area to a condition satisfactory to the District Engineer.

t. That if the recording of this permit is possible under applicable State or local law, the permittee shall take such action as may be necessary to record this permit with the Register of Deeds or other appropriate official charged with the responsibility for maintaining records of title to and interests in real property.

u. That there shall be no unreasonable interference with navigation by the existence or use of the activity authorized herein.

v. That this permit may not be transferred to a third party without prior written notice to the District Engineer, either by the transferee's written agreement to comply with all terms and condition of this permit or by the transferee subscribing to this permit in the space provided below and thereby agreeing to comply with all terms and conditions of this permit. In addition, if the permittee transfers the interests authorized herein by conveyance of realty, the deed shall reference this permit and the terms and conditions specified herein and this permit shall be recorded along with the deed with the Register of Deeds or other appropriate official.

The following Special Conditions will be applicable when appropriate:

STRUCTURES FOR SMALL BOATS: That permittee hereby recognizes the possibility that the structure permitted herein may be subject to damage by wave wash from passing vessels. The issuance of this permit does not relieve the permittee from taking all proper steps to insure the integrity of the structure permitted herein and the safety of boats moored thereto from damage by wave wash and the permittee shall not hold the United States liable for any such damage.

DISCHARGE OF DREDGED MATERIAL INTO OCEAN WATERS: That the permittee shall place a copy of this permit in a conspicuous place in the vessel to be used for the transportation and/or dumping of the dredged material as authorized herein.

ERECTION OF STRUCTURE IN OR OVER NAVIGABLE WATERS: That the permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the authorized structure or work, shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. If the permittee fails to comply with the direction of the Secretary of the Army or his authorized representative, the Secretary or his designee may restore the waterway to its former condition, by contract or otherwise, and recover the cost thereof from the permittee.

MAINTENANCE DREDGING: (1) That when the work authorized herein includes periodic maintenance dredging, it may be performed under this permit for 3 years from the date of issuance of this permit (ten years unless otherwise indicated); and (2) That the permittee will advise the District Engineer in writing at least two weeks before he intends to undertake any maintenance dredging.

II. Special Conditions (Here list conditions relating specifically to the proposed structure or work authorized by this permit):

This permit shall become effective on the date of the District Engineer's signature.

Permittee hereby accepts and agrees to comply with the terms and conditions of this permit.

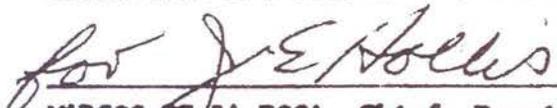


PERMITTEE

December 19, 1977

DATE

PALMER BARGE LINE, INC.
BY AUTHORITY OF THE SECRETARY OF THE ARMY:



MARCOS DE LA ROSA, Chief, Permit Branch
FOR COLONEL JOHN C. VANDEN BOSCH
DISTRICT ENGINEER,
U.S. ARMY, CORPS OF ENGINEERS

28 DEC 1977

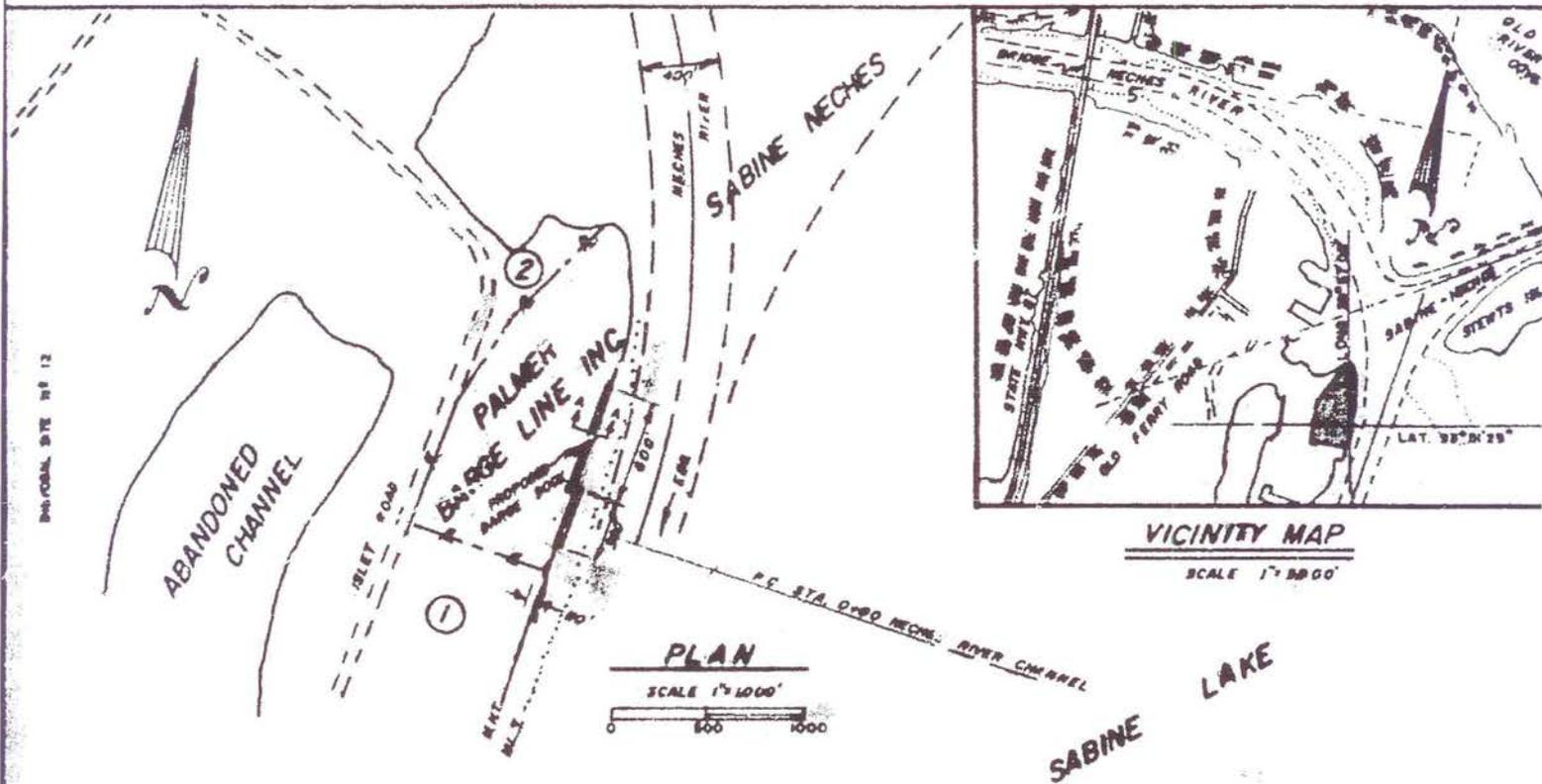
DATE

Transferee hereby agrees to comply with the terms and conditions of this permit.

TRANSFEEE

DATE

13226

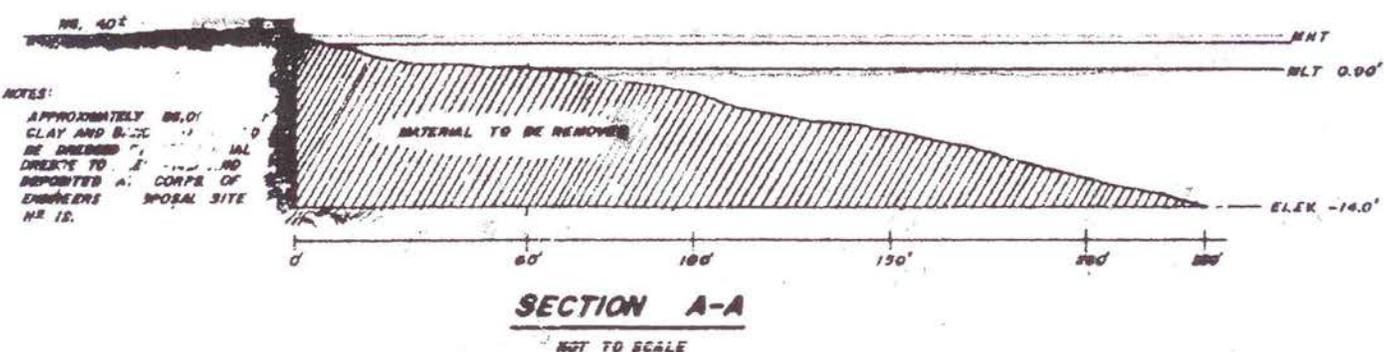


DISPOSAL SITE NO. 12

VICINITY MAP
SCALE 1" = 5000'

PLAN

SCALE 1" = 1000'



NOTES:
 APPROXIMATELY 85,000
 CUBIC YARDS OF
 CLAY AND SILT
 WILL BE DREDGED
 FROM THE CHANNEL
 DREDGINGS TO BE
 REPORTED TO THE
 U.S. ARMY CORPS OF
 ENGINEERS DISPOSAL SITE
 NO. 12.

SECTION A-A

NOT TO SCALE

PURPOSE: BARGE DOCKING FACILITY

PROPOSED DOCK WITH DREDGING AND DISPOSAL

DATUM: MEAN LOW TIDE
ADJACENT PROPERTY OWNERS

IN NECHES RIVER AND SABINE NECHES CHANNEL

- ① STATE MARINE SERVICE
- ② CITY OF PORT ARTHUR

AT P.C. STATION 0+00 NECHES RIVER CHANNEL PORT ARTHUR, TEXAS
 COUNTY OF JEFFERSON STATE OF TEXAS
 APPLICATION BY: PALMER BARGE LINE



DEPARTMENT OF THE ARMY
GALVESTON DISTRICT, CORPS OF ENGINEERS
P.O. BOX 1229
GALVESTON, TEXAS 77553

REPLY TO
ATTENTION OF:

BWGCO-RP

SUBJECT: PERMIT-12226 (01)

2 5 AUG 1981

Palmer Barge Line
P.O. Drawer 1363
Nederland, Texas 77627

Gentlemen:

In accordance with your written request dated 13 May 1981 the authorization granted by the Secretary of the Army, in letter dated 28 December 1977, from the Commander at Galveston, Texas, to "dredge an area and construct a bulkhead for a barge docking facility in the Neches River at the permittee's facility at Corps of Engineers Station 0+00 on the Neches River Channel, approximately 5 miles northeast from Groves, Texas," is hereby specifically extended to 31 December 1984.

The conditions to which the authorization is made subject remain in full force and effect with the exception of the time limit for completion and the addition of the special conditions which read as follows:

a. That if the permittee, during prosecution of the work authorized herein, encounters a previously unidentified archeological or other cultural resource that might be eligible for listing in the National Register of Historic Places, he shall immediately notify the Commander.

b. That during prosecution of the work authorized herein, periodic inspections will be made by the Permit Branch archeologist to assure that the activity being performed is not infringing on archeological sites.

Copies furnished:
See Page 2

SMGCO-RP

SUBJECT: PERMIT-12226 (01)

Palmer Barge Line

If the structure and work authorized is not completed on or before the date herein specified, the authorization, if not previously revoked or specifically further extended, will cease and become null and void.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:

FOR COLONEL JAMES M. SIGLER, COMMANDING


MARCUS DE LA ROSA
Chief, Permit Branch

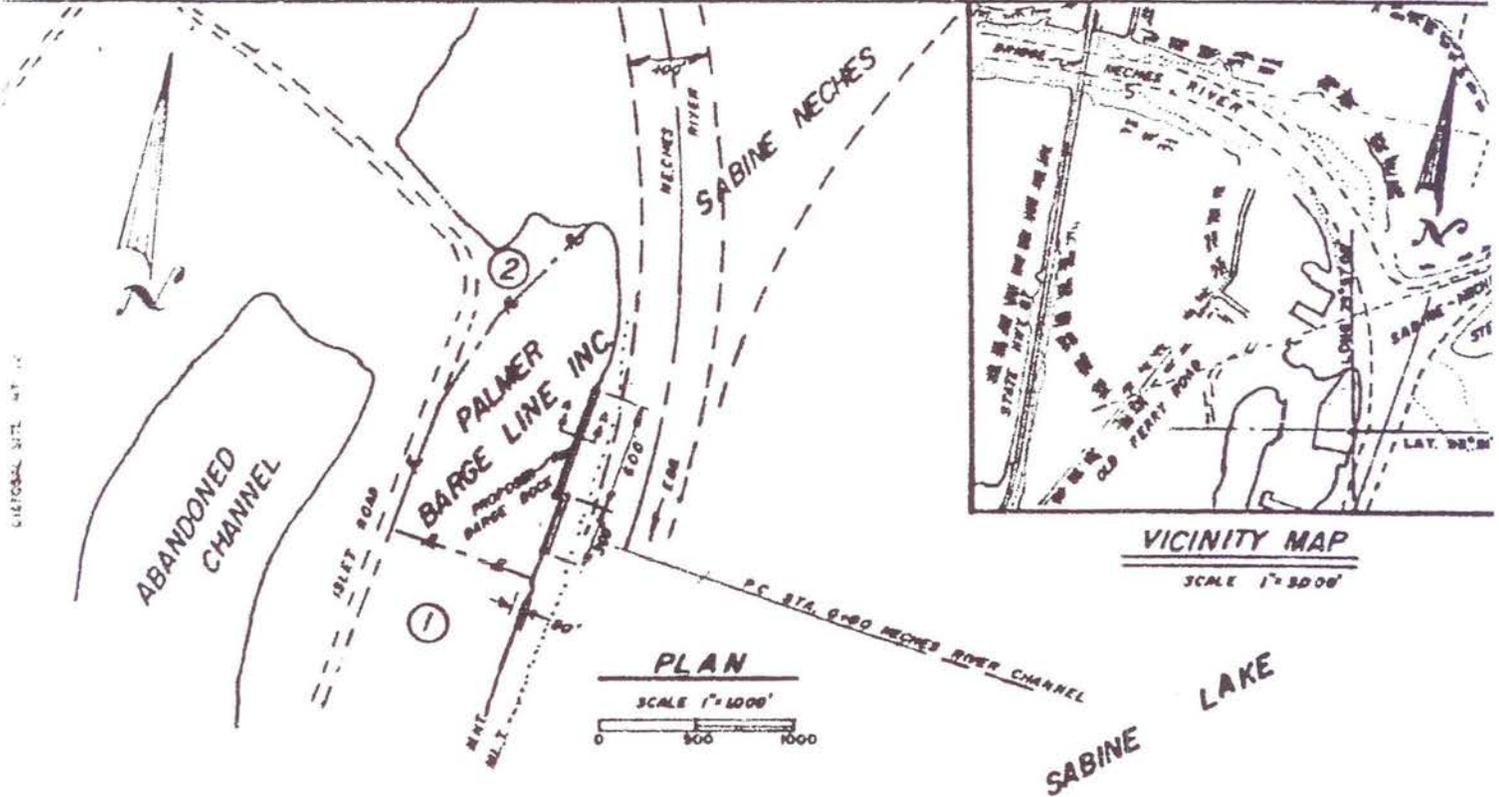
Copies furnished:

Commander, Eighth Coast Guard District, Hale Boggs Federal Building, Room 1330, 500 Camp Street, New Orleans, Louisiana 70130

Director, Atlantic Marine Center, National Ocean Survey, ATTN: CAM04, 439 West York Street, Norfolk, Virginia 23510

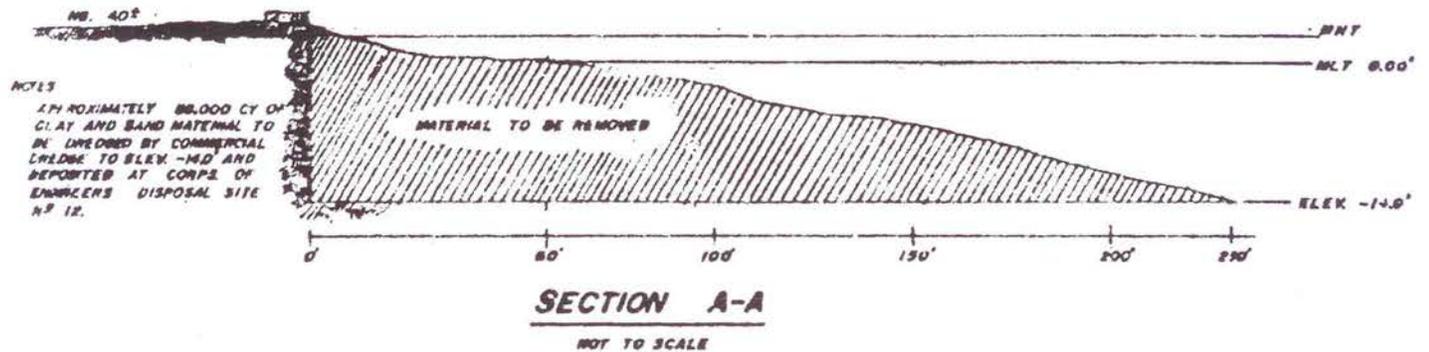
Area Engineer, Port Arthur Area Office, P.O. Box 157, Port Arthur, Texas 77640

#1222610



PLAN
SCALE 1" = 1000'

VICINITY MAP
SCALE 1" = 2000'



SECTION A-A
NOT TO SCALE

PURPOSE: BARGE DOCKING FACILITY

PROPOSED DOCK WITH DREDGING AND DISPOSAL

DATUM: MEAN LOW TIDE
ADJACENT PROPERTY OWNERS

IN NECHES RIVER AND SABINE NECHES CHANNEL

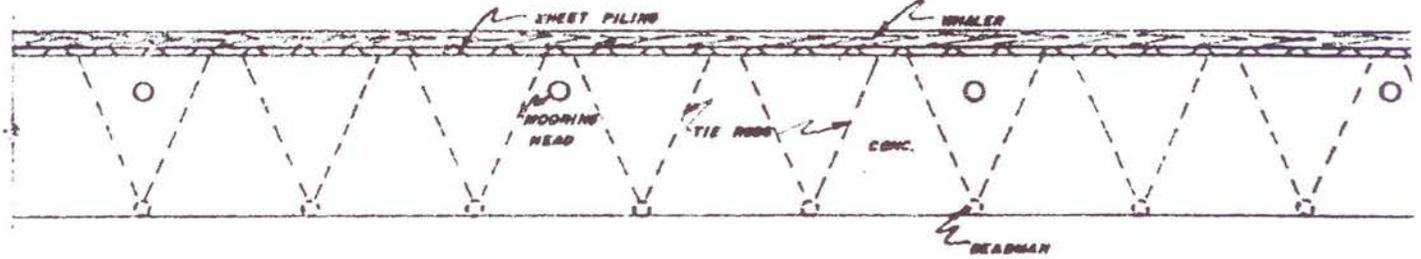
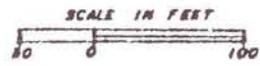
- ① STATE MARINE SERVICE
- ② CITY OF PORT ARTHUR

AT P.C. STATION 0+00 NECHES RIVER CHANNEL PORT ARTHUR, TEXAS
COUNTY OF JEFFERSON STATE OF TEXAS
APPLICATION BY: PALMER BARGE LINE

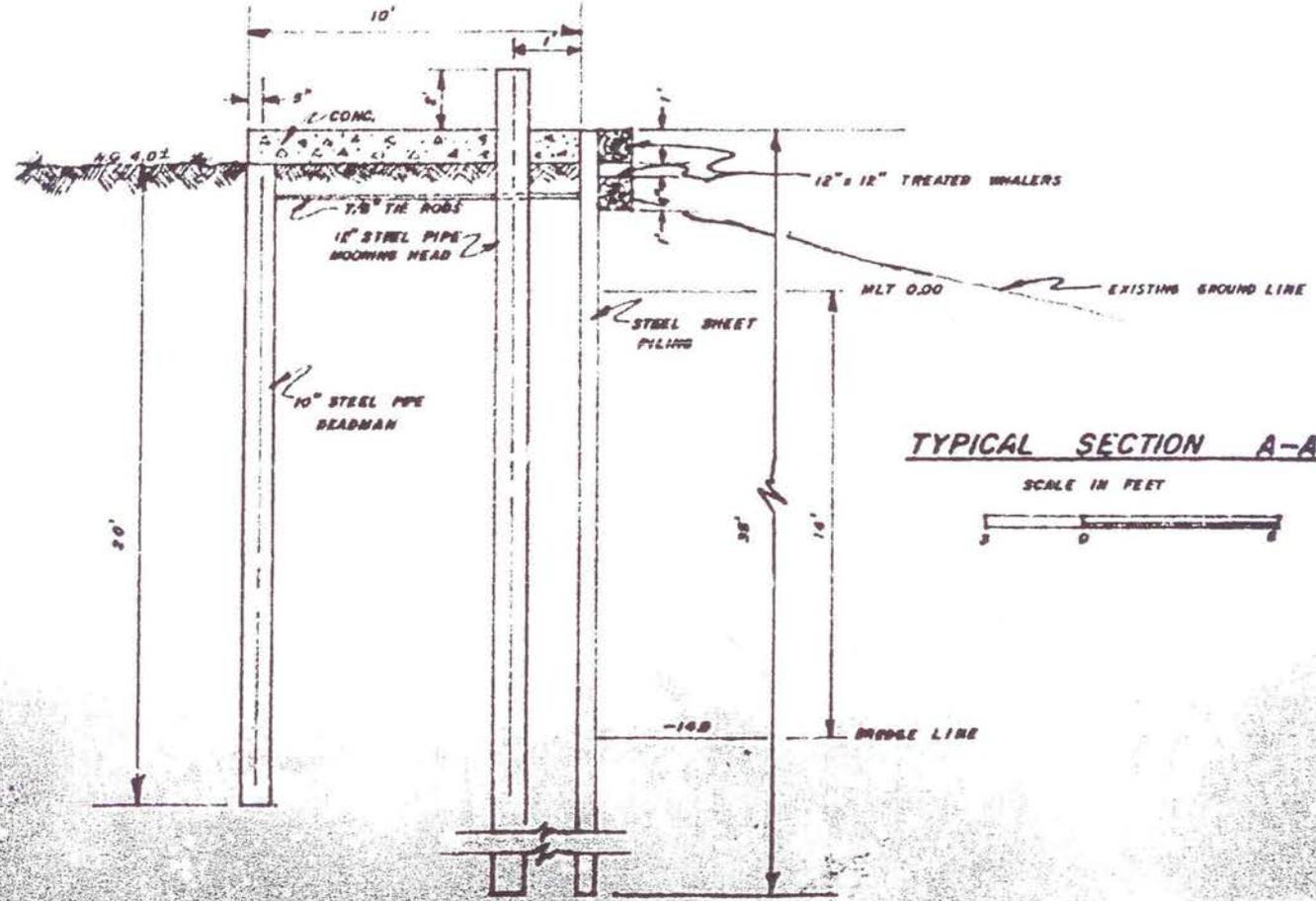
122



PLAN



PLAN SECTION B-B



ATTACHMENT 6

APPLICABLE OR RELEVANT AND APPROPRIATE REQUIRMENTS

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Storm Water Regulations	40 CFR Parts 122 and 125	National Pollution Discharge Elimination System (NPDES) permits are addressed relative to storm water discharges associated with industrial activity. These regulations require the development and implementation of a storm water pollution prevention plan or a storm water best management plan. Monitoring and reporting requirements for a variety of facilities are outlined.	Applicable	This action specific Applicable or Relevant and Appropriate Requirements (ARAR) pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Permits and Enforcement	CERCLA Section 121(e)	This section specifies that no federal, state, or local permit shall be required for any portion of a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) remedial action that is conducted on the site of the facility being remediated. This includes exemption from the Resource Conservation and Recovery Act (RCRA) permitting process.	Not Applicable	This regulation refers to the overall CERCLA program management. This regulation is current.
Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities	40 CFR Part 264 Subparts B, C, D and G	Subparts B, C, and D establish minimum standards that define the acceptable management of hazardous waste for owners and operators of facilities that treat, store, or dispose of hazardous waste. Subpart G establishes standards for closure and post closure care for site design and operation.	Applicable	Reference is current and procedures employed at the site listed are consistent with those in the regulation.
National Contingency Plan	40 CFR Part 300.430	Evaluates baseline human health risk as a result of current and potential future site exposures, and establishes contaminant levels in environmental media for protection of public health. Also provides guidelines and requirements for conducting remedial investigation/feasibility study and Record of Decision (ROD).	Not Applicable	This regulation refers to the overall program management. This regulation is current.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Exceptions to ARAR Rules	CERCLA 121 (d) (4)	Allows EPA to waive compliance with ARARs in six circumstances: (1) The selected action is only part of a total remedial action that will comply with the ARAR requirements when completed. (2) Compliance with the ARAR requirements would present greater health/environmental risks than alternative options. (3) Compliance with the ARAR requirements is technically impracticable from an engineering perspective. (4) The selected remedy will attain a standard of performance that is equivalent to an ARAR required standard through use of another method or approach. (5) With respect to a state requirement, the state has not demonstrated consistent application of the requirement in similar circumstances. (6) Where the remedy is to be fund financed (as opposed to private-party financed), meeting the ARAR standard would not provide balance between the need for cleanup at the site in question considering the amount of fund resources that must be used at other sites in need of cleanup.	Not Applicable	This regulation refers to the overall CERCLA program management. This regulation is current.
Permits and Enforcement	CERCLA Section 121 (e)	This section specifies that no federal, state, or local permit shall be required for any portion of a CERCLA remedial action that is conducted on the site of the facility being remediated. This includes exemption from the RCRA permitting process.	Not Applicable	This regulation refers to the overall CERCLA program management. This regulation is current.
Use and Management of Containers Tank Systems	40 CFR Part 264 Subparts I and J	Subpart I sets operating and performance standards for container storage of hazardous waste. These requirements would be relevant and appropriate to the Site for containers used for storage of liquids, soil, or other wastes as part of the remedial action. Subpart J outlines similar standards but applies to tanks rather than containers.	Applicable	Reference is current and procedures employed at the site listed are consistent with those in the regulation.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Standards for Waste Piles and Landfills	40 CFR Part 264 Subparts L and N	Subpart L sets design and operating requirements for the storage or treatment of wastes in piles. If the waste piles are closed with wastes left in place, Subpart N requirements must be met. Subpart N establishes construction, design, performance, closure, and operation requirements pertaining to hazardous waste landfills. If treatment, storage, or disposal of RCRA waste in piles is included as part of the remedial action, Subpart L and/or N would be relevant and appropriate to the Site. Subpart N would be applicable to the site in the event that hazardous wastes are identified at the site.	Not Applicable	Waste piles were not used during the remedial action. This regulation is current.
Miscellaneous Units	40 CFR Part 264 Subpart X	Relates to "miscellaneous" units that treat, store, or dispose of hazardous wastes. Provides general performance standards for location, design, construction, operation, monitoring, and closure/post closure.	Relevant and Appropriate	Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Land Disposal Restrictions (LDRs)	40 CFR Part 268 Subpart C, Prohibitions on Land Disposal; Subpart D, Treatment Standards	40 CFR Part 268 establishes restrictions on land disposal unless treatment standards are met or a "no migration exemption" is granted. LDRs establish prohibitions, treatment standards, and storage limitations before disposal for certain wastes as set forth in Subparts C and D. Treatment standards are expressed as either concentration-based performance standards or as specific treatment methods. Wastes must be treated according to the appropriate standard before wastes or the treatment residuals of wastes may be disposed in or on the land. The Universal Treatment Standards (UTS) establish a concentration limit for 300 regulated constituents in soil regardless of waste type.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Requirements for Identification and Listing of Hazardous Wastes	40 CFR Part 261	These regulations establish the requirements for the identification and listing of hazardous wastes.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Standards Applicable to Generators and Transporters of Hazardous Waste	40 CFR Part 262 and Part 263	Part 262 establishes the record keeping requirements and manifesting requirements for the transport of hazardous wastes. Part 263 establishes requirements for the transport of hazardous wastes. These requirements would be applicable to the Site if hazardous wastes are identified and shipped offsite for disposal.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Department of Transportation Requirements Governing the Transportation of Hazardous Materials	49 CFR Parts 107 and 171-179	Establishes the requirements for the transportation of hazardous materials as defined by the U. S. Department of Transportation. These requirements would be applicable to the Site if the hazardous wastes are identified and transported offsite for disposal.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
TPDES Construction Stormwater Permit	30 TAC 205	Requires submission of Notice of Intent (NOI) for coverage under the general permit for storm water discharges resulting from construction occurring on sites greater than 1 acre in size. This requirement will be applicable to the Site during the site remedial construction.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Spill Prevention and Control	30 TAC 327	Requires that releases of reportable quantities of listed materials be reported to the agency (TCEQ) within 24 hours. The responsible person shall submit written information, such as a letter, describing the details of the discharge or spill and supporting the adequacy of the response action, to the appropriate TCEQ regional manager within 30 working days of the discovery of the reportable discharge or spill. The regional manager has the discretion to extend the deadline. The rule is applicable to the site if during remedial activities a release greater than the documented reportable quantity of a listed material occurs.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Control of Air Pollution from Visible Emissions and Particulate Matter	30 TAC 111	Requires that all reasonable precautions shall be taken to prevent particulate matter from becoming airborne, including use of water or chemicals for control of dust in the construction operations, clearing of land, and on dirt roads or stockpiles. Applicable during excavation and transport of soils, or any other activity that may generate airborne particulate matter at the Site.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Texas Industrial Solid Waste and Municipal Solid Waste Regulations	30 TAC 335	Guidelines for generators to determine if a solid waste is a hazardous waste. Requires adherence to record keeping and shipping requirements. Applicable to the soils and wastes to be removed at the Site, which may or may not be hazardous.	Applicable	This action specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
American Conference of Governmental Industrial Hygienists-Threshold Limit Values (TLV)		TLVs are based on the development of a time weighted average (TWA) exposure to an airborne contaminant over an 8-hour work day or a 40-hour work week. TLVs identify levels of airborne contaminants at which health risks may be associated.	To be considered	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Clean Air Act (CAA)	40 CFR Part 61	The CAA is the primary federal legislation protecting air quality. National Primary and Secondary Ambient Air Quality Standards (NAAQS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and the New Source Performance Standards (NSPS) are promulgated by EPA under the CAA.	Relevant and Appropriate	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
National Primary and Secondary Air Quality Standards (NAAQS)	40 CFR Part 50	The NAAQS specify the maximum concentration of a federally regulated air pollutant (i.e., SO ₂ , particulate matter (PM ₁₀), NO ₂ , CO, ozone, and lead) in an area resulting from all sources of that pollutant. No new construction or modification of a facility, structure or installation may emit an amount of any criteria pollutant that will interfere with the attainment or maintenance of a NAAQS (see 40 CFR' 51.160). For the federal NAAQS standards, all measurements of air quality are corrected to a reference temperature of 25EC and to a reference pressure of 760 mm Hg (1,013.2 millibars).	Applicable	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
American Conference of Governmental Industrial Hygienists Estimated Limit Values (ELV)		ELVs are based on TLVs and converted to reflect exposure to contaminants on a 24-hour per day basis. The calculation of an ELV does not take into consideration the additive and synergistic effects of contaminants and additional exposures from media other than air. ELVs are not expected to be completely protective of the potential effects of exposures to contaminants; however, they do provide some indication of airborne contaminant levels at which adverse health effects could occur.	Relevant and Appropriate	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Safe Drinking Water Act	40 USC 399 Primary Drinking Water Standards (Maximum Contaminant Levels [MCLs]); 40 CFR Part 141	Establishes MCLs for drinking water. Surface water near the site is not designated for public or private water supply, but may be used for recreational purposes. The shallow ground water at the site is not considered as a drinking water supply source.	Not Applicable	This regulation was determined to be not applicable by the remedial design.
Maximum Contaminant Level Goals (MCLG)	40 CFR Part 141.50	These levels do not take into account cost or feasibility, and are fully protective of human health. They are only enforceable under CERCLA under specific community water system provisions that are not applicable or relevant and appropriate to the Site.	Not Applicable	This regulation was determined to be not applicable by the remedial design.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Federal Clean Water Act (CWA) Water Quality Criteria	40 CFR Part 131; U.S. EPA Quality Criteria for Water, 1976, 1980, and 1986	These criteria (ambient water quality criteria) apply to water classified as a fisheries resource. These requirements are relevant and appropriate to the surface water in Sabine Neches Channel. These criteria are contained in Clean Water Act (CWA) 303 and 304. As non-enforceable criteria, these criteria are included as to be considered only.	Not Applicable	This regulation was determined to be not applicable by the remedial design.
Hazardous Substances	40 CFR Part 116.3 and 116.4	Establishes reporting requirements for certain discharges of reportable quantities of hazardous substances. Creates no substantive clean up requirement. May be relevant and appropriate to the Site based on the chosen remedial alternative and if discharges of reportable quantities of hazardous substances occur during implementation of the remedy.	Not Applicable	This regulation was determined to be not applicable by the remedial design.
Solid Waste Disposal Act Subtitle C Requirement	40 CFR, Part 264, Subpart F	Governs the maximum concentration of constituents released to ground water from solid waste management units (SWMU). Applicable to the Site if the chosen remedy includes onsite disposal and ground water is adversely affected.	Not Applicable	This regulation was determined to be not applicable by the remedial design.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Designation of Hazardous Substances	40 CFR, Part 302.4	This section provides tables of the following substances: (a) Listed hazardous substances. The elements and compounds and hazardous wastes appearing in Table 302.4 are designated as hazardous substances under Section 102(a) of CERCLA. (b) Unlisted hazardous substances. A solid waste, as defined in 40 CFR 261.2, which is not excluded from regulation as a hazardous waste under 40 CFR 261.4(b), is a hazardous substance under Section 101(14) of CERCLA if it exhibits any of the characteristics identified in 40 CFR 261.20 through 261.24. These requirements are applicable to the site because solid/hazardous wastes were previously disposed at the site and hazardous substances are present in soil and sediment.	Applicable	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Texas Surface Water Quality Standards	30 TAC 307	Establishes limits for constituents for the protection of surface water quality. Requires the maintenance of the quality of water in the state consistent with public health and enjoyment, propagation and protection of terrestrial and aquatic life, operation of existing industries, and economic development of the state. These requirements are applicable for release of COCs from the site into the Sabine-Neches Channel.	Applicable	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Hazardous Metals	30 TAC 319, General Regulations Incorporated into Permits, Subchapter B	Establishes allowable concentrations for discharge of hazardous metals to inland waters (319.22). These requirements are potentially applicable for the Site as hazardous metals have been detected in soil and sediment samples collected from the Site and the hazardous metals may be discharged to waters of the state.	Applicable	This chemical specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Waste Classification	30 TAC 335, Subchapter R	Establish numerical criteria for designating a waste as a hazardous waste or as one of three classes of solid waste.	Applicable	Reference is current and procedures employed at the site listed are consistent with those in the regulation.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Floodplain	Executive Order 11988	Not applicable at site; site not identified as a floodplain.	Not Applicable	This regulation was determined to be not applicable in the ROD. The regulatory requirement for the protection of floodplains and wetlands is Executive Order 11988 and has been added for reference.
Fish and Wildlife Coordination Act	16 USC 661 et seq. 16 USC'742 a 16 USC'2901	Requires consultation when a modification of a stream or other water body is proposed or authorized and requires adequate provision for protection of fish and wildlife resources. Requirements for the removal of contaminated sediment from the Sabine Lake if the remedy requires contaminated sediment to be removed.	Relevant and Appropriate	This location specific ARAR pertains to the remedial action which has been completed. Reference is current and procedures employed at the site listed are consistent with those in the regulation.
Endangered Species Act	16 USC 1531 50 CFR 402	Not applicable at site; no endangered species present	Not Applicable	This regulation was determined to be not applicable in the ROD. The regulatory requirement for the protection of endangered species is 16 USC 1531 (50 CFR 402) has been included for reference.
References Doses (RfDs), EPA Office of Research and Development		The EPA Office of Research and Development provides non enforceable toxicity data for specific chemicals for use in public health assessments. This data is used to assess the risks associated with contaminated media at the site.	To be considered	Reference is current and data in the reference was used in health assessments and during the data review.

**SUMMARY OF
APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS REVIEW
PALMER BARGE LINE SUPERFUND SITE-FIVE YEAR REVIEW**

ARAR/TBC	Citation or Reference	Requirements	Applicability	Comments and Analysis
Risk Specific Doses (RSDs), EPA Carcinogen Assessment Group and EPA Environmental Criteria and Assessment Office		RSDs represent the dose of a chemical in mg/kg of body weight per day associated with a specific risk level (i.e., 10 ⁻⁶). RSDs are determined by dividing the selected risk level by the cancer potency factor (slope factor). This standard is used to assess the risks associated with contaminated media at the site.	To be considered	Reference is current and data in the reference was used in health assessments and during the data review.
Texas Risk Reduction Rule	30 TAC 350	TRRP establishes the TCEQ's minimum remediation standards for present and past uncontrolled constituent releases. TRRP uses risk evaluation to determine if corrective action is necessary for the protection of human health and the environment and to identify acceptable constituent levels in the impacted media. TRRP defines the land use categories, ground water classifications, requirements for plume management zone, soil reuse issues, and tiered risk evaluation for affected sites. This state regulation is not applicable for the Federal superfund sites but should be considered at the site.	To be considered	Reference is current and procedures employed at the site listed are consistent with those in the regulation.
<p>Notes:</p> <p>ARAR Applicable or Relevant and Appropriate Requirement CERCLA Comprehensive Environmental Response, Compensation, and Liability Act CFR Code of Federal Regulations MCL Maximum Contaminant Limit mg/kg Milligram per kilogram RCRA Resource Conservation and Recovery Act RfDs References Doses RSDs Risk Specific Doses TAC Texas Administrative Code TBC To be considered TCEQ Texas Commission on Environmental Quality TCLP Toxicity Characteristic Leaching Procedure TPDES Texas Pollutant Discharge Elimination System TRRP Texas Risk Reduction Program</p>				

ATTACHMENT 7
SITE VISIT CHECKLIST

FIVE-YEAR REVIEW SITE VISIT CHECKLIST

I. SITE INFORMATION			
Site Name: Palmer Barge Line Superfund Site	Date of Inspection: 10 November 2011		
Location and Region: Pleasure Islet, Port Arthur, Reg. 6	EPA ID: TXD068104561		
Agency, office, or company leading the five-year review: U.S. Environmental Protection Agency, Region 6	Weather/temperature: Clear with NNE winds at 10 mph and gusts up to 23 mph/temperature of 59°F.		
Remedy Includes: (Check all that apply)			
<input type="checkbox"/> Landfill cover/containment	<input type="checkbox"/> Ground water pump and treatment		
<input type="checkbox"/> Access controls	<input type="checkbox"/> Surface water collection and treatment		
<input checked="" type="checkbox"/> Institutional controls	<input type="checkbox"/> Other (Monitored natural attenuation)		
Attachments: <input checked="" type="checkbox"/> Inspection team roster attached <input type="checkbox"/> Site map attached (Figure 2 of report)			
II. INTERVIEWS (Check all that apply)			
1. O&M Site Manager <u>Wes Penn</u> <u>New Birmingham Site Manager</u>			
Name	Title	Date	
Interviewed: <input type="checkbox"/> by e-mail <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. <u>903-780-9594</u>			
Problems, suggestions: <input type="checkbox"/> Report attached			
2. O&M Staff <u>N/A</u>			
Name	Title	Date	
Interviewed: <input type="checkbox"/> by mail <input type="checkbox"/> at office <input type="checkbox"/> by phone Phone no. _____			
Problems, suggestions: <input type="checkbox"/> Report attached			
3. Local regulatory authorities and response agencies (i.e.; State and Tribal offices, emergency response office, police department, office of public health or environmental health, zoning office, recorder of deeds, or other city and county offices, etc.). Fill in all that apply.			
Agency <u>Texas Commission on Environmental Quality</u>			
Contact <u>Olga Salinas</u>	<u>Project Manager</u>	<u>11/10/2011</u>	<u>(713-767-3721)</u>
Name	Title	Date	Phone no.
Problems, suggestions: <input type="checkbox"/> Report attached <u>See Site Survey Form</u>			
Agency _____			
Contact _____	_____	_____	(_____) _____
Name	Title	Date	Phone no.
Problems, suggestions: <input type="checkbox"/> Report attached _____			

4. Other interviews (optional): Report attached to Five-Year Review Report

III. ON-SITE DOCUMENTS & RECORDS VERIFIED (Check all that apply)

1. O&M Documents

- | | | | |
|---|--|-------------------------------------|---|
| <input type="checkbox"/> O&M manual (long term monitoring plan) | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> As-built drawings | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> Maintenance logs | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |

Remarks: _____

2. Site-Specific Health and Safety Plan

- | | | | |
|---|--|-------------------------------------|---|
| <input type="checkbox"/> Site-Specific Health and Safety Plan | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> Contingency plan/emergency response plan | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |

Remarks: _____

3. O&M and OSHA Training Records

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
|--|-------------------------------------|---|

Remarks: _____

4. Permits and Service Agreements

- | | | | |
|---|--|-------------------------------------|---|
| <input type="checkbox"/> Air discharge permit | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> Effluent discharge | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> Waste disposal, POTW | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> Other permits _____ | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |

Remarks: _____

5. Gas Generation Records

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
|--|-------------------------------------|---|

6. Settlement Monument Records

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
|--|-------------------------------------|---|

7. Ground Water Monitoring Records

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
|--|-------------------------------------|---|

8. Leachate Extraction Records

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
|--|-------------------------------------|---|

9. Discharge Compliance Records

- | | | | |
|---|--|-------------------------------------|---|
| <input type="checkbox"/> Air | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
| <input type="checkbox"/> Water (effluent) | <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |

Remarks: _____

10. Daily Access/Security Logs

- | | | |
|--|-------------------------------------|---|
| <input type="checkbox"/> Readily available | <input type="checkbox"/> Up to date | <input checked="" type="checkbox"/> N/A |
|--|-------------------------------------|---|

Remarks: _____

IV. O&M COSTS

1. O&M Organization

- State in-house Contractor for State PRP in-house
 Contractor for PRP Other No O&M ongoing

2. O&M Cost Records N/A

- Readily available Up to date Funding mechanism/agreement in place
 Original O&M cost estimate Breakdown attached

Total annual cost by year for review period, if available

<u>Date</u>	<u>Date</u>	<u>Total Cost</u>		
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached
From _____	to _____	_____	-	<input type="checkbox"/> Breakdown attached

3. Unanticipated or Unusually High O&M Costs During Review Period

N/A

V. ACCESS AND INSTITUTIONAL CONTROLS Applicable N/A

A. Fencing

- 1. Fencing damaged** Location shown on site map Gates secured N/A

Remarks: Gates limited to bar gates, fencing down along Old Ferry Road, no fence on north or west sides, and only partial fence on south side

B. Other Access Restrictions

- 1. Signs and other security measures** Location shown on site map N/A

Remarks: No signs on gate or along fencing.

C. Institutional Controls

1. Implementation and enforcement

Site conditions imply ICs not properly implemented Yes No N/A

Site conditions imply ICs not being fully enforced Yes No N/A

Type of monitoring (e.g., self-reporting, drive by) _____ None _____

Frequency _____ N/A _____

Responsible party/agency _____

Contact _____

Name	Title	Date	Phone no.
------	-------	------	-----------

Reporting is up-to-date Yes No N/A

Reports are verified by the lead agency Yes No N/A

Specific requirements in deed or decision documents have been met Yes No N/A

Violations have been reported Yes No N/A

Other problems or suggestions: Report attached

2. Adequacy ICs are adequate ICs are inadequate N/A

Remarks: _____

D. General

1. Vandalism/trespassing Location shown on site map No vandalism evident

Remarks: Trespassing by people fishing in the evenings reported by property owner representative.
Fishing nets and ropes, and chair on property near eastern shore.

2. Land use changes onsite N/A

Remarks: Dredging sediments from State Marine property placed in various locations on the Palmer Barge site.

3. Land use changes offsite N/A

Remarks: Dredging sediments from State Marine property placed on property north of Palmer Barge site.

VI. GENERAL SITE CONDITIONS

A. Roads Applicable N/A

1. Roads damaged Location shown on site map Roads adequate N/A

Remarks: _____

B. Other Site Conditions

Remarks: Unauthorized dumping appears to be occurring at the site; construction waste, bricks, wood, fiberglass panels, insulating foam, etc. Pilings along the shoreline are rusted and the shore is becoming exposed. Oil stains, compress cylinders of gas and other equipment around the site.

VII. LANDFILL COVERS		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
A. Landfill Surface			
1.	Settlement (Low spots)	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Settlement not evident
	Areal extent _____	Depth _____	
	Remarks: _____		
2.	Cracks	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Cracking not evident
	Lengths _____	Widths _____	Depths _____
	Remarks: _____		
3.	Erosion	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident
	Areal extent _____	Depth _____	
	Remarks: _____		
4.	Holes	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Holes not evident
	Areal extent _____	Depth _____	
	Remarks: _____		
5.	Vegetative Cover	<input type="checkbox"/> Grass	<input type="checkbox"/> Cover properly established
		<input type="checkbox"/> Trees/Shrubs (indicate size and locations on a diagram)	<input type="checkbox"/> No signs of stress
	Remarks: _____		
6.	Alternative Cover (armored rock, concrete, etc.)	<input type="checkbox"/> N/A	
	Remarks: _____		
7.	Bulges	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Bulges not evident
	Areal extent _____	Depth _____	
	Remarks: _____		
8.	Wet Areas/Water Damage	<input type="checkbox"/> Wet areas/water damage not evident	
	<input type="checkbox"/> Wet areas	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Areal extent _____
	<input type="checkbox"/> Ponding	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Areal extent _____
	<input type="checkbox"/> Seeps	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Areal extent _____
	<input type="checkbox"/> Soft subgrade	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Areal extent _____
	Remarks: _____		
9.	Slope Instability	<input type="checkbox"/> Slides	<input type="checkbox"/> Location shown on site map
	<input type="checkbox"/> No evidence of slope instability	Areal extent _____	
	Remarks: _____		

B. Benches	<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
<small>(Horizontally constructed mounds of earth placed across a steep landfill side slope to interrupt the slope in order to slow down the velocity of surface runoff and intercept and convey the runoff to a lined channel.)</small>			
1. Flows Bypass Bench	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay	
Remarks: _____ _____			
2. Bench Breached	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay	
Remarks: _____ _____			
3. Bench Overtopped	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A or okay	
Remarks: _____ _____			
C. Letdown Channels	<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
<small>(Channel lined with erosion control mats, rip rap, grout bags, or gabions that descend down the steep side slope of the cover and will allow the runoff water collected by the benches to move off of the landfill cover without creating erosion gullies.)</small>			
1. Settlement	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of settlement	
Areal extent _____		Depth _____	
Remarks: _____ _____			
2. Material Degradation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of degradation	
Material type _____		Areal extent _____	
Remarks: _____ _____			
3. Erosion	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of erosion	
Areal extent _____		Depth _____	
Remarks: _____ _____			
4. Undercutting	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> No evidence of undercutting	
Areal extent _____		Depth _____	
Remarks: _____ _____			
5. Obstructions	Type _____	<input type="checkbox"/> No obstructions	<input type="checkbox"/> Location shown on site map
Areal extent _____		Size _____	
Remarks: _____ _____			
6. Excessive Vegetative Growth	Type _____	<input type="checkbox"/> No evidence of excessive growth	<input type="checkbox"/> Vegetation in channels does not obstruct flow
<input type="checkbox"/> Location shown on site map		Areal extent _____	
Remarks: _____ _____			

D. Cover Penetrations <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1. Gas Vents <input type="checkbox"/> Active <input type="checkbox"/> Passive			
<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled	<input type="checkbox"/> Good condition
<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A
Remarks: _____			
2. Gas Monitoring Probes			
<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled	<input type="checkbox"/> Good condition
<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A
Remarks: _____			
3. Monitoring Wells (within surface area of landfill)			
<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A
Remarks: _____			
4. Leachate Extraction Wells			
<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled	<input type="checkbox"/> Good condition
<input type="checkbox"/> Evidence of leakage at penetration		<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A
Remarks: _____			
5. Settlement Monuments <input type="checkbox"/> Located <input type="checkbox"/> Routinely surveyed <input type="checkbox"/> N/A			
Remarks: _____			
E. Gas Collection and Treatment <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1. Gas Treatment Facilities			
<input type="checkbox"/> Flaring	<input type="checkbox"/> Thermal destruction	<input type="checkbox"/> Collection for reuse	
<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M		
Remarks: _____			
2. Gas Collection Wells, Manifolds, and Piping <input type="checkbox"/> Good condition <input type="checkbox"/> Needs O&M			
Remarks: _____			
3. Gas Monitoring Facilities (e.g., gas monitoring of adjacent homes or buildings)			
<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A	
Remarks: _____			
F. Cover Drainage Layer <input type="checkbox"/> Applicable <input checked="" type="checkbox"/> N/A			
1. Outlet Pipes Inspected <input type="checkbox"/> Functioning <input type="checkbox"/> N/A			
Remarks: _____			
2. Outlet Rock Inspected <input type="checkbox"/> Functioning <input type="checkbox"/> N/A			
Remarks: _____			

G. Detention/Sedimentation Ponds		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1. Siltation	Areal extent _____	Size _____	
<input type="checkbox"/> N/A	<input type="checkbox"/> Siltation not evident		
Remarks: _____			

2. Erosion	Areal extent _____	Depth _____	
<input type="checkbox"/> Erosion not evident			
Remarks: _____			

3. Outlet Works	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
Remarks: _____			

4. Dam	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
Remarks: _____			

H. Retaining Walls		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1. Deformations	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Deformation not evident	
Horizontal displacement _____	Vertical displacement _____		
Rotational displacement _____			
Remarks: _____			

2. Degradation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Degradation not evident	
Remarks: _____			

I. Perimeter Ditches/Off-Site Discharge		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1. Siltation	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Siltation not evident	
Areal extent _____	Depth _____		
Remarks: _____			

2. Vegetative Growth	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> N/A	
<input type="checkbox"/> Vegetation does not impede flow			
Areal extent _____	Type _____		
Remarks: _____			

3. Erosion	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Erosion not evident	
Areal extent _____	Depth _____		
Remarks: _____			

4. Discharge Structure	<input type="checkbox"/> Functioning	<input type="checkbox"/> N/A	
Remarks: _____			

VIII. VERTICAL BARRIER WALLS		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1. Settlement	<input type="checkbox"/> Location shown on site map	<input type="checkbox"/> Settlement not evident	
Areal extent _____		Depth _____	
Remarks: _____			
2. Performance Monitoring	Type of monitoring _____		
<input type="checkbox"/> Performance not monitored	Frequency _____	<input type="checkbox"/> Evidence of breaching	
Head differential _____			
Remarks: _____			
IX. GROUND WATER/SURFACE WATER REMEDIES		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
A. Ground Water Extraction Wells, Pumps, and Pipelines		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1. Pumps, Wellhead Plumbing, and Electrical			
<input type="checkbox"/> Good condition	<input type="checkbox"/> All required wells located	<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A
Remarks: _____			
2. Extraction System Pipelines, Valves, Valve Boxes, and Other Appurtenances			
<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M		
Remarks: _____			
3. Spare Parts and Equipment			
<input type="checkbox"/> Readily available	<input type="checkbox"/> Good condition	<input type="checkbox"/> Requires upgrade	<input type="checkbox"/> Needs to be provided
Remarks: _____			
B. Surface Water Collection Structures, Pumps, and Pipelines		<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A
1. Collection Structures, Pumps, and Electrical			
<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M		
Remarks: _____			
2. Surface Water Collection System Pipelines, Valves, Valve Boxes, and Other Appurtenances			
<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M		
Remarks: _____			
3. Spare Parts and Equipment			
<input type="checkbox"/> Readily available	<input type="checkbox"/> Good condition	<input type="checkbox"/> Requires upgrade	<input type="checkbox"/> Needs to be provided
Remarks: _____			

C. Treatment System	<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
1. Treatment Train (Check components that apply)			
<input type="checkbox"/> Metals removal	<input type="checkbox"/> Oil/water separation	<input type="checkbox"/> Bioremediation	
<input type="checkbox"/> Air stripping	<input type="checkbox"/> Carbon absorbers		
<input type="checkbox"/> Filters _____			
<input type="checkbox"/> Additive (e.g., chelation agent, flocculent) _____			
<input type="checkbox"/> Others _____			
<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M		
<input type="checkbox"/> Sampling ports properly marked and functional			
<input type="checkbox"/> Sampling/maintenance log displayed and up to date			
<input type="checkbox"/> Equipment properly identified			
<input type="checkbox"/> Quantity of ground water treated annually _____			
<input type="checkbox"/> Quantity of surface water treated annually _____			
Remarks: _____			

2. Electrical Enclosures and Panels (Properly rated and functional)			
<input type="checkbox"/> N/A	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M	
Remarks: _____			

3. Tanks, Vaults, Storage Vessels			
<input type="checkbox"/> N/A	<input type="checkbox"/> Good condition	<input type="checkbox"/> Proper secondary containment	<input type="checkbox"/> Needs O&M
Remarks: _____			

4. Discharge Structure and Appurtenances			
<input type="checkbox"/> N/A	<input type="checkbox"/> Good condition	<input type="checkbox"/> Needs O&M	
Remarks: _____			

5. Treatment Building(s)			
<input type="checkbox"/> N/A	<input type="checkbox"/> Good condition (esp. roof and doorways)	<input type="checkbox"/> Needs repair	
<input type="checkbox"/> Chemicals and equipment properly stored			
Remarks: _____			

6. Monitoring Wells (Pump and treatment remedy)			
<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled	<input type="checkbox"/> Good condition
<input type="checkbox"/> All required wells located	<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A	
Remarks: _____			

D. Monitored Natural Attenuation			
	<input type="checkbox"/> Applicable	<input checked="" type="checkbox"/> N/A	
1. Monitoring Wells (Natural attenuation remedy)			
<input type="checkbox"/> Properly secured/locked	<input type="checkbox"/> Functioning	<input type="checkbox"/> Routinely sampled (quarterly)	<input type="checkbox"/> Good condition
<input type="checkbox"/> All required wells located	<input type="checkbox"/> Needs O&M	<input type="checkbox"/> N/A	
Remarks: _____			

X. OTHER REMEDIES

If there are remedies applied at the site that are not covered above, attach an inspection sheet describing the physical nature and condition of any facility associated with the remedy. An example would be soil vapor extraction.

XI. OVERALL OBSERVATIONS

A. Implementation of the Remedy

Describe issues and observations relating to whether the remedy is effective and functioning as designed. Begin with a brief statement of what the remedy is to accomplish (i.e., to contain contaminant plume, minimize infiltration and gas emission, etc.).

Sediment from the adjacent to the State Marine Superfund site was dredged from the Sabine Lake and placed on the Palmer Barge site and the site north of Palmer Barge. The pilings along the Palmer Barge shoreline are rusted and becoming compromised. The fencing Old Ferry Road is down at various locations. There is no fencing on the north or east sides of the site and only a partial fence on the south side. The gate at the road entrance is not sufficient to keep recreational trespassers (i.e., people fishing) off the site.

B. Adequacy of O&M

Deed restrictions (restrictive covenants) preventing residential use of the property is in place and there are no residences on the property.

C. Early Indicators of Potential Remedy Failure

A potential remedy failure is the placement of sediment from the State Marine site on to the Palmer Barge site. This sediment needs to be tested to verify contaminants of concern are below the site cleanup levels or if it presents a risk to human health and/or the environment.

D. Opportunities for Optimization

Describe possible opportunities for optimization in monitoring tasks or the operation of the remedy.
None.

ATTACHMENT 8
SITE INSPECTION PHOTOGRAPHS

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 1 Site: Palmer Barge Line Superfund Site
Description: View of closed bar gate at entrance facing northeast (outside fence).
Date: November 10, 2011



Photograph No. 2 Site: Palmer Barge Line Superfund Site
Description: View of site facing west; dredged sediment in various locations on-site.
Date: November 10, 2011

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 7

Site: Palmer Barge Line Superfund Site

Description: View facing east, metal and concrete debris on shore line, recently excavated holes filled with water.

Date: November 10, 2011



Photograph No. 8

Site: Palmer Barge Line Superfund Site

Description: View facing west of dredged sediment on site.

Date: November 10, 2011

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 11 Site: Palmer Barge Line Superfund Site
Description: South side of site facing west. Compressed gas tanks, tires, and parts staged on-site. Surficial staining observed in the vicinity.
Date: November 10, 2011



Photograph No. 12 Site: Palmer Barge Line Superfund Site
Description: Area south of compressed gas cylinders; view of debris, tires and dredged sediment.
Date: November 10, 2011

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 13 Site: Palmer Barge Line Superfund Site
Description: Additional view of dredged sediment on south side of site.
Date: November 10, 2011



Photograph No. 14 Site: Palmer Barge Line Superfund Site
Description: View facing southeast of southern side of site; dredged sediment, wood
tires, and debris observed.
Date: November 10, 2011

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 17 Site: Palmer Barge Line Superfund Site
Description: Dredged sediment and fishing nets and ropes on east side of site; view facing east.
Date: November 10, 2011



Photograph No. 18 Site: Palmer Barge Line Superfund Site
Description: Fishing/nets and ropes and wood debris on east side of site; view to the north/northwest.
Date: November 10, 2011

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 19 Site: Palmer Barge Line Superfund Site
Description: Vegetation on north side of site; view facing north.
Date: November 10, 2011



Photograph No. 20 Site: Palmer Barge Line Superfund Site
Description: View of construction debris due north of the site.
Date: November 10, 2011

Site Inspection Photographs
Palmer Barge Line Superfund Site Five-Year Review



Photograph No. 21 Site: Palmer Barge Line Superfund Site
Description: Damaged fencing with heavy vegetation long Old Yacht Club Road.
Date: November 10, 2011



Photograph No. 22 Site: Palmer Barge Line Superfund Site
Description: Fencing along Old Yacht Club Road along the south side of site.
Date: November 10, 2011

ATTACHMENT 9

INTERVIEW RECORDS – SITE SURVEYS

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: 11/10/11

Contact Made By:

Name: Rafael Casanova

Title: Remedial Project Manager

Organization: U.S. EPA

Telephone No.: (214) 665-7437

E-Mail: Casanova.Rafael@epa.gov

Street Address: 1445 Ross Avenue, Suite 1200

City, State, Zip: Dallas, Texas 75202

Name: Stan Wallace

Title: Project Manager

Organization: EA Engineering, Science, and Technology, Inc.

Telephone No.: (972) 315-3922

E-Mail: swallace@eaest.com

Street Address: 405 S. Highway 121, Building C, Suite 100

City, State, Zip: Lewisville, Texas 75067

Individual Contacted:

Name: Rafael Casanova

Title: Remedial Project Manager

Organization: U.S. EPA

Telephone No.: (214) 665-7437

E-Mail Address:
casanova.rafael@epa.gov

Street Address: 1445 Ross Avenue, Suite 1200

City, State, Zip: Dallas, Tx, 75202

Survey Questions

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the first five-year review for the Palmer Barge Line Superfund Site. The scope of the review is from September 2007 to present.

1. What is your general impression of the work conducted at the site during this review period?

The work meets the requirements of the EPA's Record of Decision.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: 11/10/11

2. From your perspective, what effects have site operations had on the surrounding community?
I did not observe any effects.

Survey Questions (Continued)

3. During this review period, are you aware of any community concerns regarding the site or its operation and administration? Yes.

If so, please provide details.

The previous owner of the Site has expressed concerns about the recontamination of the Site by the current operator.

4. Are you aware of any events, incidents, or activities at the site during this review period, such as vandalism, trespassing, or emergency responses from local authorities? No.

If so, please provide details.

5. Do you feel well informed about the site's activities and progress? Yes.

If not, please indicate how you would like to be informed about the site activities – for example, by e-mail, regular mail, fact sheets, meetings, etc.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: 11/10/11

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operation? No.

Survey Questions (Continued)

7. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? Yes.

If so, please describe the purpose and results.

This site inspection was performed as a part of the Five-Year Review process.

8. Have there been any complaints, violations, or other incidents related to the site that required a response by your office? No.

If so, please summarize the events and results.

9. Are you aware of any problems or difficulties encountered which impacted the effectiveness of the remedial action or caused a change in operation and maintenance procedures?

A significant amount of fill material was observed to have been deposited onto the surface of the ground during the site inspection.

If so, please describe changes and impacts.

Any impacts will be determined during the Five-Year Review process.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: 11/10/11

10. Have there been any changes in state or federal environmental standards which may call into question the protectiveness or effectiveness of the remedial action? None that I am aware of.

Survey Questions (Continued)

11. Do you know of opportunities to optimize the operation, maintenance, or sampling efforts at the site? No.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: 11/10/11

Please add any other comments in the space below.

This survey was filled as a result of my participation during the Five-Year Review site inspection and recent appointment as the EPA's Remedial Project Manager for the Site.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site	EPA ID No.: TXD068104561
Location: Port Arthur, Jefferson County, Texas 77640	Date:

Contact Made By:

Name: Rafael Casanova	Title: Remedial Project Manager	Organization: U.S. EPA
Telephone No.: (214) 665-7437 E-Mail: Casanova.Rafael@epa.gov	Street Address: 1445 Ross Avenue, Suite 1200 City, State, Zip: Dallas, Texas 75202	
Name: Stan Wallace	Title: Project Manager	Organization: EA Engineering, Science, and Technology, Inc.
Telephone No.: (972) 315-3922 E-Mail: swallace@eaest.com	Street Address: 405 S. Highway 121, Building C, Suite 100 City, State, Zip: Lewisville, Texas 75067	

Individual Contacted:

Name: David Durrett	Title: President/CEO	Organization: New Birmingham, Inc.
Telephone No.: (903) 683-4900 E-Mail Address:	Street Address: 12977 U.S. Highway 84 W City, State, Zip: Rusk, TX 75785	

Survey Questions

The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the first five-year review for the Palmer Barge Line Superfund Site. Should you choose to respond, please return your survey form to Stan Wallace at EA Engineering, Science, and Technology, Inc. via e-mail or U.S. Postal Service by 14 November 2011. The scope of the review is from September 2007 to present.

1. What is your general impression of the work conducted at the site during this review period?

Good, the site has been cleaned and in the past 12 months a new tenant has built a new facility and begun operations.

2. From your perspective, what effects have site operations had on the surrounding community?

Positive, the site is much cleaner and clear of debris

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date:

Survey Questions (Continued)

3. During this review period, are you aware of any community concerns regarding the site or its operation and administration? If so, please provide details.

No

4. Are you aware of any events, incidents, or activities at the site during this review period, such as vandalism, trespassing, or emergency responses from local authorities? If so, please provide details.

No

5. Do you feel well informed about the site's activities and progress? If not, please indicate how you would like to be informed about the site activities – for example, by e-mail, regular mail, fact sheets, meetings, etc.

Yes

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operation?

No

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date:

Survey Questions (Continued)

7. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe the purpose and results.

We have been in constant contact with our new tenant who has begun operations in the past 12 months. Prior to that, our company was on site more often cleaning the site and clearing debris.

8. Have there been any complaints, violations, or other incidents related to the site that required a response by your office? If so, please summarize the events and results.

No

9. Are you aware of any problems or difficulties encountered which impacted the effectiveness of the remedial action or caused a change in operation and maintenance procedures? If so, please describe changes and impacts.

No

10. Have there been any changes in state or federal environmental standards which may call into question the protectiveness or effectiveness of the remedial action?

No

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date:

Survey Questions (Continued)

11. Do you know of opportunities to optimize the operation, maintenance, or sampling efforts at the site?

No

Please add any other comments in the space below.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site	EPA ID No.: TXD068104561
Location: Port Arthur, Jefferson County, Texas 77640	Date: December 6, 2011

Contact Made By:

Name: Rafael Casanova	Title: Remedial Project Manager	Organization: U.S. EPA
Telephone No.: (214) 665-7437 E-Mail: Casanova.Rafael@epa.gov	Street Address: 1445 Ross Avenue, Suite 1200 City, State, Zip: Dallas, Texas 75202	
Name: Stan Wallace	Title: Project Manager	Organization: EA Engineering, Science, and Technology, Inc.
Telephone No.: (972) 315-3922 E-Mail: swallace@eaest.com	Street Address: 405 S. Highway 121, Building C, Suite 100 City, State, Zip: Lewisville, Texas 75067	

Individual Contacted:

Name: Olga Salinas	Title: Superfund Project Mgr.	Organization: TCEQ
Telephone No.: (713) 767-3721 E-Mail Address: Olga.Salinas@tceq.texas.gov	Street Address: 12100 Park 35 Circle City, State, Zip: Austin, TX 78753	

Survey Questions

*The purpose of the five-year review is to evaluate the implementation and performance of the remedy, and to confirm that human health and the environment continue to be protected by the remedial actions that have been performed at the site. This interview is being conducted as a part of the first five-year review for the Palmer Barge Line Superfund Site. **Should you choose to respond, please return your survey form to Stan Wallace at EA Engineering, Science, and Technology, Inc. via e-mail or U.S. Postal Service by 14 November 2011. The scope of the review is from September 2007 to present.***

1. What is your general impression of the work conducted at the site during this review period?
Response: As the Texas Commission on Environmental Quality (TCEQ) project manager for the site, I have only been involved in the Five-Year Review of the site conducted on November 10, 2011. The site was recently transferred to me on November 1, 2011. The TCEQ is satisfied with the overall work conducted at the site, since all the tanks and buildings were removed from the site from the last site visit conducted by the previous TCEQ Project Manager (Luda Voskov).

2. From your perspective, what effects have site operations had on the surrounding community?
Response: The TCEQ is not aware of any site operations which effected the surrounding community.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: December 6, 2011

Survey Questions (Continued)

3. During this review period, are you aware of any community concerns regarding the site or its operation and administration? If so, please provide details.

Response: The TCEQ is not aware of any community concerns regarding the site or its operation and administration.

4. Are you aware of any events, incidents, or activities at the site during this review period, such as vandalism, trespassing, or emergency responses from local authorities? If so, please provide details.

Response: In 2008 the entire site was submerged during the storm surge of Hurricane Ike. At the time TCEQ and EPA inspectors visited the site it was covered with piles of vegetation debris and they did not consider it safe to walk through the thick vegetation on the site, so a more detailed report of the site's condition was not available. From their observations, Hurricane Ike did not cause a release of hazardous substances from the site.

5. Do you feel well informed about the site's activities and progress? If not, please indicate how you would like to be informed about the site activities – for example, by e-mail, regular mail, fact sheets, meetings, etc.

Response: The TCEQ is well informed about the site's activities and progress. TCEQ wishes to be notified of any activities at the site where TCEQ needs to be present. The TCEQ requires a week's notice via email to prepare travel arrangements and travel approval.

6. Do you have any comments, suggestions, or recommendations regarding the site's management or operation?

Response: The TCEQ has no comments, suggestions, or recommendations regarding the site's management or operation.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: December 6, 2011

Survey Questions (Continued)

7. Have there been routine communications or activities (site visits, inspections, reporting activities, etc.) conducted by your office regarding the site? If so, please describe the purpose and results.

Response: The TCEQ made a site visit to the site on May 2010 to inspect the site due to an I2 Project. The purpose of the I2 Project was to make site visits to all Superfund sites and report any concerns regarding the site which may pose a threat to the community and the environment. The I2 Project also was used to update project managers of the current condition of the site (fence condition, vandalism, evidence of trespassing, condition of vegetation and security of site). On May 2010, TCEQ attempted to inspect the site; however, TCEQ staff could not enter the site due to the site being locked. From outside the fence, TCEQ could not see any major concerns or threats at the site.

8. Have there been any complaints, violations, or other incidents related to the site that required a response by your office? If so, please summarize the events and results.

Response: The TCEQ is not aware of any complaints, violations, or other incidents related to the site.

9. Are you aware of any problems or difficulties encountered which impacted the effectiveness of the remedial action or caused a change in operation and maintenance procedures? If so, please describe changes and impacts.

Response: The TCEQ is not aware of any problem or difficulties encountered which would have impacted the effectiveness of the remedial action or cause a change in operation and maintenance procedures.

10. Have there been any changes in state or federal environmental standards which may call into question the protectiveness or effectiveness of the remedial action?

Response: No. TCEQ is not aware of any changes in state or federal environmental standards which may call in question the protectiveness or effectiveness of the remedial action.

SUPERFUND FIVE-YEAR REVIEW SITE SURVEY

Site Name: Palmer Barge Line Superfund Site

EPA ID No.: TXD068104561

Location: Port Arthur, Jefferson County, Texas 77640

Date: December 6, 2011

Survey Questions (Continued)

11. Do you know of opportunities to optimize the operation, maintenance, or sampling efforts at the site?

Response: No. All cleanup work has been successfully completed at Palmer Barge. The TCEQ is informed that the EPA is in the process of deleting Palmer Barge from the NPL list.

Please add any other comments in the space below.

Response: During the Five-Year Review site visit conducted on November 10, 2011, EPA, TCEQ, EA Engineering, and current property owner observed illegal dumping at the site. The illegal dumping of the unknown material was located at the edge of Sabine Lake. It was concluded that people may be entering the site from the Sabine Lake by boat and dumping material at the site. Other materials and small equipment was also observed throughout the site.

ATTACHMENT 10

INSTITUTIONAL CONTROLS – RESTRICTIVE COVENANTS



RESTRICTIVE COVENANT

STATE OF TEXAS §
 §
COUNTY OF JEFFERSON §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit A, attached hereto and incorporated herein by reference, being the 1.395 acre tract of land, more or less, described in the General Warranty Deed from Andrew Michael Slay Trust, et al., to NBR Maritime II, LLC, recorded on July 15, 2010, as File No. 2010026005, Official Public Records, County Clerk, Jefferson County, Texas.

Portions of the soils and groundwater of the Property contain certain identified chemicals of concern causing the Property to be considered an Affected Property as that term is defined in the TRRP.

This Restrictive Covenant is required for the following reasons:

The Property currently meets TRRP standards for commercial / industrial use. Based on the reports, the chemicals of concern pose no significant present or future risk to humans or the environment based on commercial / industrial land use. No further remediation of the Property is required by the TCEQ as long as the Property is not to be used for residential purposes. If any person desires in the future to use the Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the Property may be used for residential purposes. Persons contemplating a change in land use for the Property are encouraged to review the definitions for commercial / industrial and residential land use contained in TRRP as the definition of residential land use is broad.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is NBR Maritime II, LLC (Owner) with an address of 12977 US Highway 84 West, Rusk, Texas 75785.

In consideration of the Response Actions by NBR Maritime II, LLC (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. The Property shall not be used for any purposes other than commercial / industrial uses, as defined in 30 Texas Administrative Code, Chapter 350, Section 350.4(a)(13).
2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ	Mail: TCEQ - MC 199
Central Records	
12100 Park 35 Circle,	P O Box 13087
Building E	
Austin, Texas 78753	Austin, Texas 78711-3087

TCEQ Program and Identifier Nos.:

1. Superfund SUP036 - State Marine of Port Arthur
2. Superfund SUP133 - Palmer Barge Lines

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 3rd day of March, 2011.

NBR Maritime II, LLC

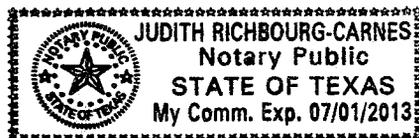
By: 
 David Durrett, Manager of
 New Birmingham Resources, LLC,
 Manager of NBR Maritime II, LLC

STATE OF TEXAS

COUNTY OF CHEROKEE

BEFORE ME, on this the 3rd day of March, 2011, personally appeared David Durrett, Manager of New Birmingham Resources, LLC, Manager of NBR Maritime II, LLC, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 3rd day of March, 2011.



Judith Richbourg-Carnes
 Notary Public, State of Texas
 My Commission Expires: 7/01/2013

Accepted as Third Party Beneficiary this 18 day of March, 2011.

Texas Commission on Environmental Quality

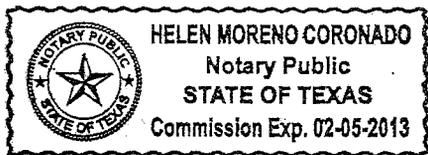
By: [Signature]
Name: Brent Wade
Title: Director, Remediation Division

STATE OF TEXAS

COUNTY OF TRAVIS

BEFORE ME, on this the 18th day of March, 2011, personally appeared Brent Wade, Director of the Remediation Division of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 18th day of March, 2011.



Notary without Bond

[Signature]
Notary Public, State of Texas
My Commission Expires: 02-05-2013

After Recording Return a Certified Copy To:

TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

EXHIBIT A TO RESTRICTIVE COVENANT - Page 1 of 3
1.395 ACRE TRACT

BEING 1.395 acres of land and water out of and a part of what is commonly referred to as Pleasure Islet; being part of Tract 2, 3, and 6 out of that certain (Called 92.563) acre tract of land conveyed to Pleasure Islet Associates, duly authorized by Resolution No. 81-188 dated July 13, 1981, of the City Council, City of Port Arthur; and being out of that certain (Called 1877.94) acre tract of land conveyed to the City of Port Arthur, Texas, by patent recorded in Volume 1014, Page 476, Deed Records, Jefferson County, Texas; said 1.395 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a MAG nail found for a common corner of Tracts 6 and 7 on the apparent centerline of an improved, unrestricted public used roadway known as Old Yacht Club Road; said MAG nail being the Northwest corner of a tract of land conveyed to Pleasure Islet, LLC, recorded in File No. 9533086, Official Public Records, Jefferson County, Texas, and the Southwest corner of a (Called 24.178) acre tract of land and water conveyed to NBR Maritime II, LLC, recorded in File No. 2008020974, Official Public Records, Jefferson County, Texas;

THENCE, South 88 deg., 31 min., 53 sec., East, on the common line of said Tracts 6 and 7 and the South line of the (Called 24.178) acre tract, a distance of 30.00' passing a ½" steel rod found on the apparent East right of way line of said Old Yacht Club Road, having a State Plane Coordinate of North: 13931816.83, East: 3595015.36; continuing a distance of 280.41' passing a ½" steel rod, capped and marked "SOUTEX", found for reference point; continuing for a total distance of 380.41' to a point in the waters of Sabine Neches Ship Channel; said point being an angle point on the South line of the (Called 24.178) acre tract;

THENCE, North 48 deg., 39 min., 56 sec., East, continuing on the South line of the (Called 24.178) acre tract, a distance of 226.84' to a point for corner in the water for the **POINT OF BEGINNING**; said point for corner being the most Southerly corner of the herein described tract;

THENCE, the following calls on the East line of the (Called 24.178) acre tract:

North 19 deg., 33 min., 53 sec., West, a distance of 119.00' to a point for corner;

North 06 deg., 44 min., 20 sec., East, a distance of 265.15 to a point for corner;

North 20 deg., 44 min., 06 sec., East, a distance of 305.71' to a point for corner;

North 40 deg., 05 min., 02 sec., East, a distance of 434.26' to a point for corner;

North 82 deg., 27 min., 12 sec., East, a distance of 75.04' to a point for corner;

North 20 deg., 55 min., 14 sec., East, a distance of 31.42' to a point for corner;

EXHIBIT A TO RESTRICTIVE COVENANT - Page 2 of 3
1.395 ACRE TRACT (CONTINUED)

North 18 deg., 23 min., 58 sec., East 430.85, to a point for corner being the Northeast corner of the (Called 24.178) acre tract; said point for corner being the Southeast corner of a (Called 8.926) acre tract of land conveyed to NBR Maritime I, LLC, recorded in File No. 2008020973, Official Public Records, Jefferson County, Texas; also being the most Northerly corner of the herein described tract;

THENCE, South 40 deg., 34 min., 10 sec., East, a distance of 36.26' to a point for corner in the water of said Sabine Neches Ship Channel;

THENCE, South 11 deg., 36 min., 28 sec., West, a distance of 186.34' to a point for corner in the water;

THENCE, South 21 deg., 07 min., 59 sec., West, a distance of 283.19' to a point for corner in the water;

THENCE, South 82 deg., 40 min., 07 sec., West, a distance of 75.06' to a point for corner in the water;

THENCE, South 40 deg., 17 min., 41 sec., West, a distance of 434.25' to a point for corner;

THENCE, South 20 deg., 59 min., 40 sec., West, a distance of 316.32' to a point for corner in the water of said Sabine Neches Ship Channel;

THENCE, South 12 deg., 56 min., 01 sec., West, a distance of 229.32' to a point for corner in the water;

THENCE, South 18 deg., 02 min., 07 sec., East, a distance of 113.13' to the **POINT OF BEGINNING** and containing 1.395 acres of land and water.

Note: Bearings, distances, and acreage are based on State Plane Coordinate Grid System Texas South-Central Zone, NAD 83, scale factor = 0.999922310, convergence = 2 degrees, 31 min., 01 sec.

This Description and Survey prepared by Anthony M. Leger, Registered Professional Land Surveyor No. 5481, on March 29, 2010.

1.395 ACRES OF LAND AND WATER
PART OF PLEASURE ISLET,
CITY OF PORT ARTHUR,
JEFFERSON COUNTY, TEXAS

BEING 1.395 acres of land and water out of and a part of what is commonly referred to as Pleasure Islet; being part of Tract 2, 3, and 6 out of that certain (Called 22,563) acre tract of land conveyed to Pleasure Islet Associates, duly authorized by Resolution No. 81-188 dated July 12, 1981, of the City Council, City of Port Arthur, Texas, and being out of that certain (Called 1877-88) acre tract of land conveyed to the City of Port Arthur, Texas, by patent recorded in Volume 1014, Page 478, Deed Records, Jefferson County, Texas; said 1.395 acre tract being more fully described by metes and bounds as follows, to-wit:

BEGINNING at a MAG nail found for a common corner of Tracts 6 and 7 on the apparent centerline of an improved, unrestricted public used roadway known as Old Yacht Club Road; said MAG nail being the Northwest corner of a tract of land conveyed to Pleasure Islet, L.L.C. recorded in File No. 2008020974, Official Public Records, Jefferson County, Texas; and the Southwest corner of a (Called 24,178) acre tract of land and water conveyed to NBR Maritime II, L.L.C. recorded in File No. 2008020974, Official Public Records, Jefferson County, Texas;

THENCE South 88 deg., 31 min., 53 sec., East, on the common line of said Tracts 6 and 7 and the South line of the (Called 24,178) acre tract, a distance of 30.00' passing a 1/2" steel rod found on the apparent East right of way line of said Old Yacht Club Road, having a State Plane Coordinate of Northing: 13831818.53, East: 3525013.36; continuing a distance of 289.41' passing a 1/2" steel rod, capped and marked "SOUTEX", found for reference point, continuing for a total distance of 380.41' to a point in the waters of Sabine Neches Ship Channel; said point being an angle point on the South line of the (Called 24,178) acre tract;

THENCE North 48 deg., 39 min., 56 sec., East, continuing on the South line of the (Called 24,178) acre tract, a distance of 228.84' to a point for corner in the water for the POINT OF BEGINNING, said point for corner being the most Southerly corner of the herein described tract;

THENCE, the following calls on the East line of the (Called 24,178) acre tract:

North 19 deg., 33 min., 53 sec., West, a distance of 119.00' to a point for corner;

North 06 deg., 44 min., 20 sec., East, a distance of 285.15 to a point for corner;

North 20 deg., 44 min., 05 sec., East, a distance of 305.71' to a point for corner;

North 40 deg., 05 min., 02 sec., East, a distance of 434.26' to a point for corner;

North 82 deg., 27 min., 12 sec., East, a distance of 75.04' to a point for corner;

North 20 deg., 55 min., 14 sec., East, a distance of 31.42' to a point for corner being the Northeast corner of the (Called 24,178) acre tract; said point for corner being the Southeast corner of a (Called 8320) acre tract of land conveyed to NBR Maritime II, L.L.C. recorded in File No. 2008020974, Official Public Records, Jefferson County, Texas; also being the most Northerly corner of the herein described tract;

THENCE South 40 deg., 34 min., 10 sec., East, a distance of 38.28' to a point for corner in the water of said Sabine Neches Ship Channel;

THENCE South 11 deg., 36 min., 28 sec., West, a distance of 186.34' to a point for corner in the water;

THENCE South 21 deg., 07 min., 59 sec., West, a distance of 283.19' to a point for corner in the water;

THENCE South 82 deg., 40 min., 07 sec., West, a distance of 75.06' to a point for corner in the water;

THENCE South 40 deg., 17 min., 41 sec., West, a distance of 434.25' to a point for corner;

THENCE South 20 deg., 59 min., 40 sec., West, a distance of 316.32' to a point for corner in the water of said Sabine Neches Ship Channel;

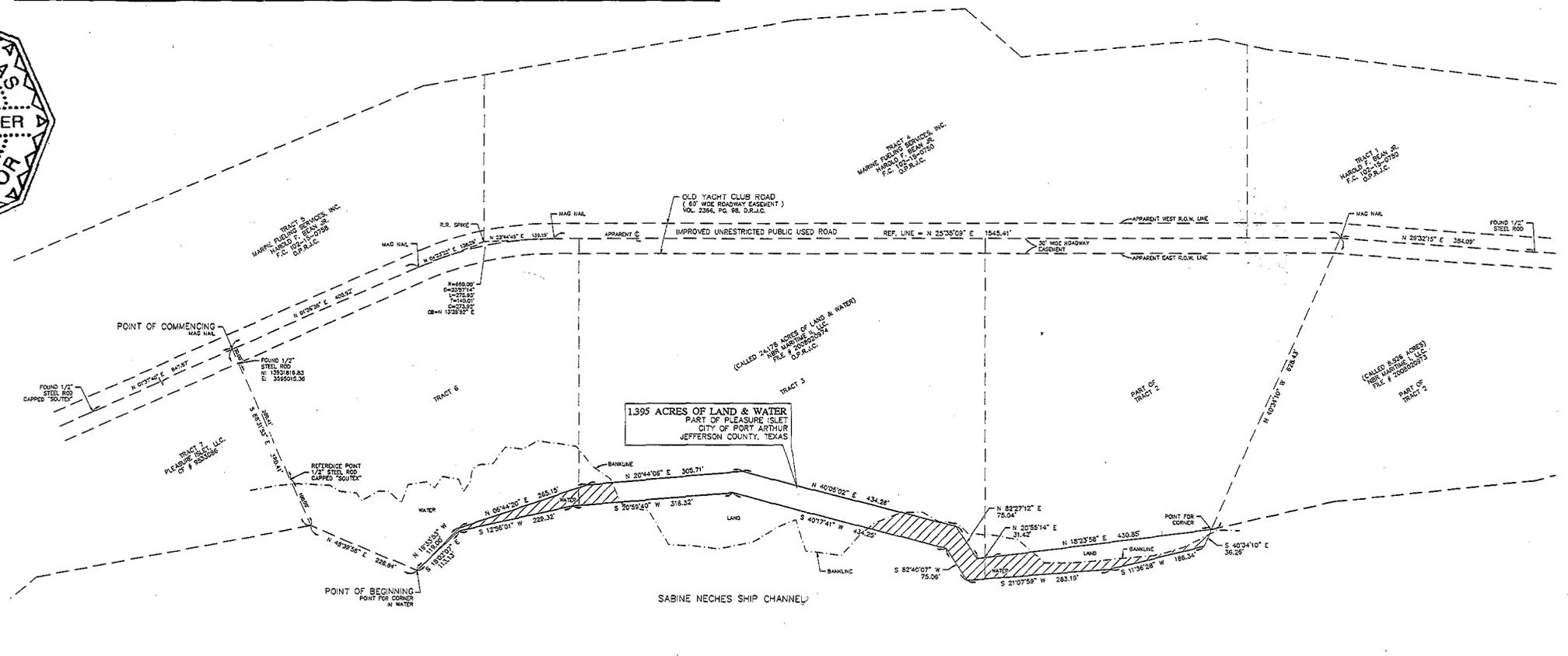
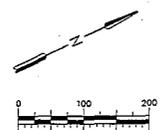
THENCE South 12 deg., 55 min., 01 sec., West, a distance of 229.32' to a point for corner in the water;

THENCE South 18 deg., 02 min., 07 sec., East, a distance of 113.13' to the POINT OF BEGINNING and containing 1.395 acres of land and water.

Note: Bearings, distances, and acreage are based on State Plane Coordinate Grid System Texas South-Central Zone, NAD 83, scale factor = 0.999922310, convergence = 2 degrees, 31 min., 01 sec.

This Description and Survey prepared by Anthony M. Leger, Registered Professional Land Surveyor No. 5481, on March 29, 2010.

NBR Maritime II
 LS-10-0153A



EX. A TO RESTRICTIVE COVENANT
 1.395 ACRE TRACT
 PAGE 3 OF 3

DESCRIPTION OF SERVICES: **PLAT AND DESCRIPTION**

The undersigned does hereby certify that this survey was made by Anthony M. Leger made of the property fully described herein and is correct, and that said property hereafter to and from a dedicated roadway and survey is certified for state registration only; it is to be noted that said property has been used as an improved unrestricted public used roadway. This survey is certified for the transaction only; it is not transferable to additional institutions or subsequent owners.

ANTHONY M. LEGER
 REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5481

NOTES

1. BEARINGS, DISTANCES, AND ACREAGE SHOWN ARE BASED ON STATE PLANE COORDINATE GRID SYSTEM, TEXAS SOUTH-CENTRAL ZONE, NAD83
 SCALE FACTOR = 0.999922310
 CONVERGENCE = 2° 31' 01"



3737 Doctors Drive
 Port Arthur, Texas 77642
 Tel. 409.983.2004
 Fax 409.983.2005
 soutexsurveyors.com

SHEET TITLE
 1.395 ACRES OF LAND AND WATER
 PART OF PLEASURE ISLET, CITY OF PORT ARTHUR
 RECORDED IN VOL. 1014, PG. 476, DEED RECORDS
 JEFFERSON COUNTY, TEXAS

PROJECT
 NBR MARITIME II
 OLD YACHT CLUB ROAD
 PORT ARTHUR, TEXAS 77642

PROJ. NO: 10-0153A
 SCALE: 1" = 100'
 PRINT DATE: 31MAR2010
 DRAWN BY: R. COLLIER
 CHECKED BY: BL
 APPROVED BY: AML

SHEET 1 OF 1

PROJECT LOCATION: V:\PROJECTS\10-0153A\10-0153A.DWG
 DATE: 03/29/10
 TIME: 10:51 AM
 USER: ANTHONY.M.LEGER

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Carolyn L. Guidry

2011 Mar 25, 10:44 AM

2011010069

PEVETO: \$36.00

CAROLYN L. GUIDRY, COUNTY CLERK

JEFFERSON COUNTY, TEXAS

PART OF FOREGOING
INSTRUMENT ILLEGIBLE
AT TIME OF FILING



RESTRICTIVE COVENANT

STATE OF TEXAS §
 §
COUNTY OF JEFFERSON §

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit A, attached hereto and incorporated herein by reference, being the same 8.926 acre tract of land, more or less, described in the Deed Without Warranty from Birch Trust to Golden Triangle Maritime, LLC (n/k/a NBR Maritime I, LLC), recorded on January 17, 2007, as instrument number 2007002282, Official Public Records, County Clerk, Jefferson County, Texas.

Portions of the soils and groundwater of the Property contain certain identified chemicals of concern causing the Property to be considered an Affected Property as that term is defined in the TRRP.

This Restrictive Covenant is required for the following reasons:

The Property currently meets TRRP standards for commercial / industrial use. Based on the reports, the chemicals of concern pose no significant present or future risk to humans or the environment based on commercial / industrial land use. No further remediation of the Property is required by the TCEQ as long as the Property is not to be used for residential purposes. If any person desires in the future to use the Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the Property may be used for residential purposes. Persons contemplating a change in land use for the Property are encouraged to review the definitions for commercial / industrial and residential land use contained in TRRP as the definition of residential land use is broad.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is NBR Maritime I, LLC (f/k/a Golden Triangle Maritime, LLC) (Owner) with an address of 12977 US Highway 84 West, Rusk, Texas 75785.

In consideration of the Response Actions by NBR Maritime I, LLC (f/k/a Golden Triangle Maritime, LLC) (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. The Property shall not be used for any purposes other than commercial / industrial uses, as defined in 30 Texas Administrative Code, Chapter 350, Section 350.4(a)(13).
2. These restrictions shall be a covenant running with the land.

For additional information, contact:

TCEQ
Central Records
12100 Park 35 Circle,
Building E
Austin, Texas 78753

Mail: TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

TCEQ Program and Identifier Nos.: Superfund SUP133 - Palmer Barge Lines.

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 3rd day of March, 2011.

NBR Maritime I, LLC

By:



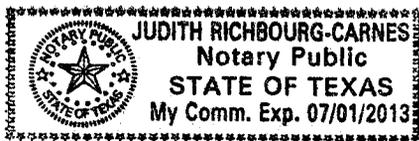
David Durrett, Manager of
New Birmingham Resources, LLC,
Manager of NBR Maritime I, LLC

STATE OF TEXAS

COUNTY OF CHEROKEE

BEFORE ME, on this the 3rd day of March, 2011, personally appeared David Durrett, Manager of New Birmingham Resources, LLC, Manager of NBR Maritime I, LLC, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 3rd day of March, 2011.



Judith Richbourg-Carnes
Notary Public, State of Texas
My Commission Expires: 7/01/2013

Accepted as Third Party Beneficiary this 18 day of March, 2011.

Texas Commission on Environmental Quality

By: Brent Wade

Name: Brent Wade

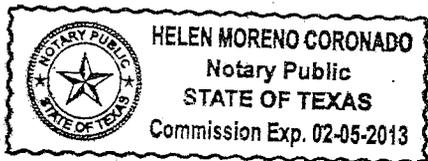
Title: Director, Remediation Division

STATE OF TEXAS

COUNTY OF TRAVIS

BEFORE ME, on this the 18th day of March, 2011, personally appeared Brent Wade, Director of the Remediation Division of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 18th day of March, 2011.



Notary without Bond

Helen Moreno Coronado
Notary Public, State of Texas
My Commission Expires: 02-05-2013

After Recording Return a Certified Copy To:

TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

EXHIBIT A TO RESTRICTIVE COVENANT
8.926 ACRE TRACT

BEING 8.926 (Called 8.902) acres of land and water out of and a part of what is commonly referred to as Pleasure Islet and being part of Tract 2, out of that certain (Called 92.563) acre tract of land conveyed to Pleasure Islet Associates, duly authorized by Resolution No. 81-188, dated July 13, 1981, of the City Council of the City of Port Arthur, and being out of that certain (Called 1877.94) acre tract of land conveyed to the City of Port Arthur, Texas, by patent, recorded in Volume 1014, Page 476, Deed Records, Jefferson County, Texas; being the same tract of land and water described in Correction Deed of Trust, recorded in File No. 2004048756, Official Public Records of Real Property, Jefferson County, Texas; said 8.926 acre tract being more fully described by metes and bounds as follows, to wit:

COMMENCING at a "MAG" nail set for the Southwest corner of Tract 3 of the (Called 92.563) acre tract;

THENCE, North 27 deg., 46 min., 52 sec., East, a distance of 800.00' to a "MAG" nail set for a common corner of said Tracts 2 and 3; continuing for a total distance of 1502.39' to a "MAG" nail set for the **POINT OF BEGINNING** and Southwest corner of the herein described tract; from which a ½" steel rod found for reference point, bears North 62 deg., 13 min., 00 sec., West, a distance of 30.00'

THENCE, North 32 deg., 07 min., 44 sec., East, a distance of 382.80' passing a ½" steel rod found for reference point; continuing for a total distance of 677.37' (Called 674.42') to a ½" steel rod found for the Northwest corner of said Tract 2 and the Northwest corner of the herein described tract;

THENCE, South 50 deg., 52 min., 58 sec., East, on the North line of said Tract 2, a distance of 396.02' to a ½" steel rod set, capped, and marked "SOUTEX" for the Northeast corner of said Tract 2 and the Northeast corner of the herein described tract;

THENCE, South 20 deg., 40 min., 04 sec., West, a distance of 196.56' to a ½" steel rod set, capped, and marked "SOUTEX" for corner;

THENCE, North 71 deg., 35 min., 34 sec., West, a distance of 73.64' (Called 72.68') to a ½" steel rod set, capped, and marked "SOUTEX" for corner;

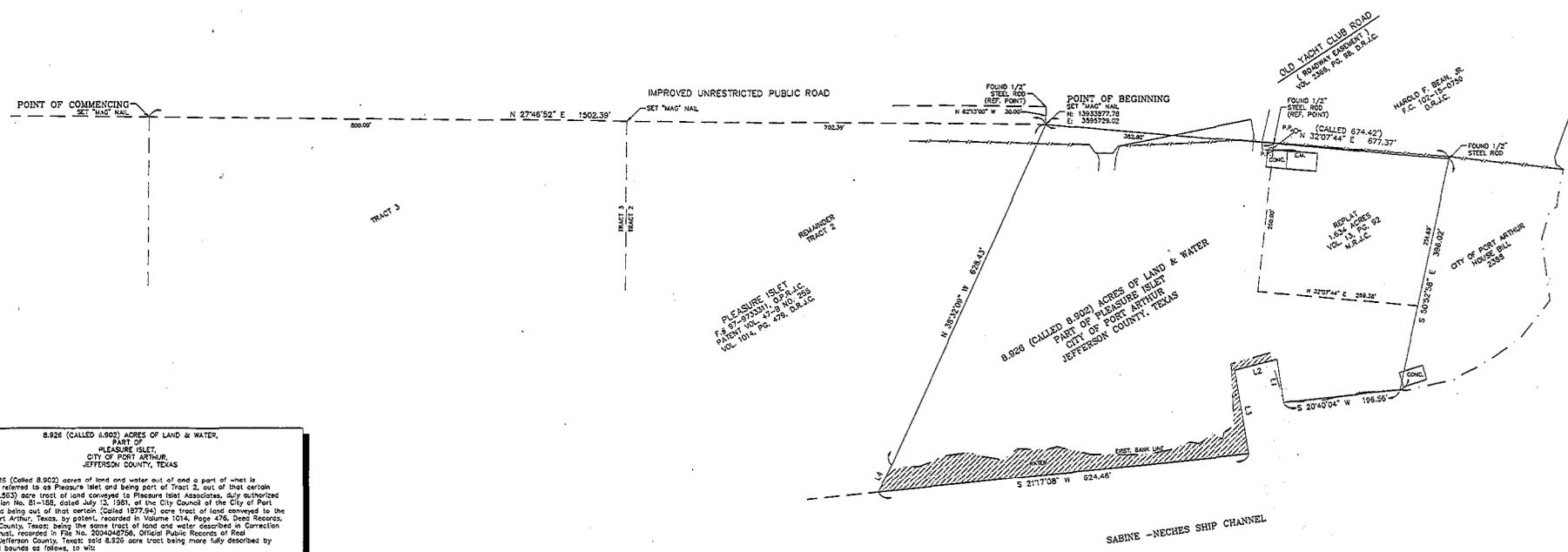
THENCE, South 13 deg., 04 min., 15 sec., West, a distance of 73.10' (Called 70.27") to a point for corner in the water;

THENCE, South 72 deg., 32 min., 42 sec., East, a distance of 143.67' to a point for corner in the water;

THENCE, South 21 deg., 17 min., 08 sec., West, a distance of 624.46' to a point for corner in the water; said point for corner being the Southeast corner of the herein described tract;

THENCE, North 36 deg., 24 min., 07 sec., West, a distance of 51.53' to a ½" steel rod set, capped, and marked "SOUTEX" for an angle point on the South line of the herein described tract;

THENCE, North 38 deg., 32 min., 09 sec., West, a distance of 628.43' to the **POINT OF BEGINNING** and containing 8.926 acres of land, more or less.



8.926 (CALLED 8.902) ACRES OF LAND & WATER, PART OF PLEASURE ISLET, CITY OF PORT ARTHUR, JEFFERSON COUNTY, TEXAS

BEING 8.926 (Called 8.902) acres of land and water out of and a part of what is commonly referred to as Pleasure Islet and being part of Tract 2, out of that certain (Called 22.583) acre tract of land conveyed to Pleasure Islet Associates, duly authorized by Resolution No. 81-188, dated July 13, 1981, of the City Council of the City of Port Arthur, and being out of that certain (Called 1877.04) acre tract of land conveyed to the City of Port Arthur, Texas, by petition, recorded in Volume 1014, Page 476, Deed Records, Jefferson County, Texas; being the same tract of land and water described in Correction Deed of Trust, recorded in File No. 200904276, Official Public Records of Real Property, Jefferson County, Texas; said 8.926 acre tract being more fully described by metes and bounds as follows, to-wit:

COMMENCING at a "MAG" nail set for the Southwest corner of Tract 3 of the (Called 92.583) acre tract;

THENCE, North 27 deg., 46 min., 52 sec., East, a distance of 800.00' to a "MAG" nail set for a common corner of said Tracts 2 and 3; continuing for a total distance of 1502.39' to a "MAG" nail set for the POINT OF BEGINNING and Southwest corner of the herein described tract; from which a 1/2" steel rod found for reference point, bears North 82 deg., 13 min., 00 sec., West, a distance of 30.00';

THENCE, North 32 deg., 07 min., 44 sec., East, a distance of 382.80' passing a 1/2" steel rod found for reference point, continuing for a total distance of 877.37' (Called 874.42') to a 1/2" steel rod found for the Northwest corner of said Tract 2 and the Northwest corner of the herein described tract;

THENCE, South 50 deg., 52 min., 55 sec., East, on the North line of said Tract 2, a distance of 306.02' to a 1/2" steel rod set, capped, and marked "SOUTEX" for the Northeast corner of said Tract 2 and the Northeast corner of the herein described tract;

THENCE, South 20 deg., 40 min., 24 sec., West, a distance of 196.56' to a 1/2" steel rod set, capped, and marked "SOUTEX" for corner;

THENCE, North 71 deg., 35 min., 34 sec., West, a distance of 73.64' (Called 72.89') to a 1/2" steel rod set, capped, and marked "SOUTEX" for corner;

THENCE, South 13 deg., 04 min., 15 sec., West, a distance of 73.10' (Called 70.27') to a point for corner in the water;

THENCE, South 72 deg., 32 min., 42 sec., East, a distance of 143.67' to a point for corner in the water;

THENCE, South 21 deg., 17 min., 08 sec., West, a distance of 624.40' to a point for corner in the water; said point for corner being the Southeast corner of the herein described tract;

THENCE, North 35 deg., 24 min., 07 sec., West, a distance of 81.53' to a 1/2" steel rod set, capped, and marked "SOUTEX" for an angle point on the South line of the herein described tract;

THENCE, North 38 deg., 32 min., 09 sec., West, a distance of 628.43' to the POINT OF BEGINNING and containing 8.926 acres of land, more or less.

This description is based on the Land Title Survey made by Anthony M. Leger, Registered Professional Land Surveyor No. 5481, on October 9, 2006.

LS-06-1295



LINE	BEARING	DISTANCE	CALLED
L1	N 71°35'34" W	73.64'	72.86'
L2	S 13°24'15" W	73.10'	70.27'
L3	S 72°32'42" E	143.67'	-
L4	N 36°24'07" W	81.53'	-

EX. A TO RESTRICTIVE COVENANT
8.926 ACRE TRACT
PAGE 2 OF 2

<p>DESCRIPTION OF SERVICE: LOCATE, CORNER AND SHOW IMPROVEMENTS</p> <p>DATE: 10/24/06</p> <p>REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5481</p>	<p>FEMA Flood Zone: <u>AR</u></p> <p>Community Panel No.: <u>485499-0020-E</u></p> <p>Panel Date: <u>4/17/84</u></p>	<p>SOUTEX SURVEYORS INC.</p> <p>3737 DOCTORS DRIVE PORT ARTHUR, TEXAS 77642 (409) 983-2004 (409) 983-2005</p>	<p>SURVEYORS NOTES</p> <p>1. BEARINGS, DISTANCES, AND ACREAGE SHOWN ARE BASED ON STATE PLANE COORDINATE GRID SYSTEM, TEXAS SOUTH-CENTRAL ZONE, NAD83 SCALE FACTOR = 0.999922310 CONVERGENCE: 2' 31" 01"</p>	<p>SHEET TITLE</p> <p>8.926 (CALLED 8.902) ACRES OF LAND AND WATER PART OF PLEASURE ISLET, CITY OF PORT ARTHUR VOL. 1014, PG. 476, DEED RECORDS JEFFERSON COUNTY, TEXAS</p> <p>PROJECT</p> <p>GOLDEN TRIANGLE MARITIME, LLC.</p>	<p>PROJECT NO: 06-1295</p> <p>SCALE: 1" = 100'</p> <p>PRINT DATE: 10/4/06</p> <p>DRAWN BY: JQH</p> <p>CHECKED BY: BL</p> <p>APPROVED BY: AML</p> <p>SHEET 1 OF 1</p>
--	--	--	--	--	--

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Carolyn L Guidry

2011 Mar 25, 10:44 AM

2011010070

PEVETO: \$32.00

CAROLYN L. GUIDRY, COUNTY CLERK

JEFFERSON COUNTY, TEXAS

PART OF FOREGOING
INSTRUMENT ILLEGIBLE
AT TIME OF FILING

RESTRICTIVE COVENANT

STATE OF TEXAS §
 §
COUNTY OF JEFFERSON §



COV
7 PGS

2011010058

This Restrictive Covenant is filed to provide information concerning certain environmental conditions and use limitations pursuant to the Texas Commission on Environmental Quality (TCEQ) Texas Risk Reduction Program Rule (TRRP) found at 30 Texas Administrative Code (TAC), Chapter 350, and affects the real property (Property) described in Exhibit A, attached hereto and incorporated herein by reference, being the 24.178 acre tract of land, more or less, described in the General Warranty Deed with Vendor's Lien from Andrew Michael Slay Trust, et al., to NBR Maritime II, LLC, recorded on June 11, 2008, as File No. 2008020974, Official Public Records, County Clerk, Jefferson County, Texas.

Portions of the soils and groundwater of the Property contain certain identified chemicals of concern causing the Property to be considered an Affected Property as that term is defined in the TRRP.

This Restrictive Covenant is required for the following reasons:

The Property currently meets TRRP standards for commercial / industrial use. Based on the reports, the chemicals of concern pose no significant present or future risk to humans or the environment based on commercial / industrial land use. No further remediation of the Property is required by the TCEQ as long as the Property is not to be used for residential purposes. If any person desires in the future to use the Property for residential purposes, the TCEQ must be notified at least 60 days in advance of such use and additional response actions may be necessary before the Property may be used for residential purposes. Persons contemplating a change in land use for the Property are encouraged to review the definitions for commercial / industrial and residential land use contained in TRRP as the definition of residential land use is broad.

As of the date of this Restrictive Covenant, the record owner of fee title to the Property is NBR Maritime II, LLC (Owner) with an address of 12977 US Highway 84 West, Rusk, Texas 75785.

In consideration of the Response Actions by NBR Maritime II, LLC (Responder), approval of the Response Action Completion Report, and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the Owner has agreed to place the following restrictions on the Property in favor of the TCEQ and the State of Texas, to-wit:

1. The Property shall not be used for any purposes other than commercial / industrial uses, as defined in 30 Texas Administrative Code, Chapter 350, Section 350.4(a)(13).
2. These restrictions shall be a covenant running with the land.

RECEIVED

NOV 20 2011

COUNTY CLERK JEFFERSON COUNTY TEXAS

For additional information, contact:

TCEQ	Mail: TCEQ - MC 199
Central Records	
12100 Park 35 Circle,	P O Box 13087
Building E	
Austin, Texas 78753	Austin, Texas 78711-3087

TCEQ Program and Identifier Nos.:

1. Superfund SUP036 - State Marine of Port Arthur
2. Superfund SUP133 - Palmer Barge Lines

This Restrictive Covenant may be rendered of no further force or effect only by a release executed by the TCEQ or its successor agencies and filed in the same Real Property Records as those in which this Restrictive Covenant is filed.

Executed this 3rd day of March, 2011.

NBR Maritime II, LLC

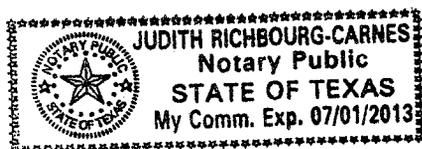
By: 
 David Durrett, Manager of
 New Birmingham Resources, LLC,
 Manager of NBR Maritime II, LLC

STATE OF TEXAS

COUNTY OF CHEROKEE

BEFORE ME, on this the 3rd day of March, 2011, personally appeared David Durrett, Manager of New Birmingham Resources, LLC, Manager of NBR Maritime II, LLC, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and consideration therein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 3rd day of March, 2011.



Judith Richbourg-Carnes
 Notary Public, State of Texas
 My Commission Expires: 7/01/2013

Accepted as Third Party Beneficiary this 18 day of March, 2011.

Texas Commission on Environmental Quality

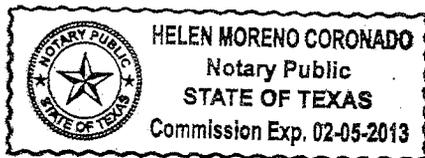
By: [Signature]
Name: Brent Wade
Title: Director, Remediation Division

STATE OF TEXAS

COUNTY OF TRAVIS

BEFORE ME, on this the 18th day of March, 2011, personally appeared Brent Wade, Director of Remediation Division of the Texas Commission on Environmental Quality, known to me to be the person whose name is subscribed to the foregoing instrument, and they acknowledged to me that they executed the same for the purposes and in the capacity herein expressed.

GIVEN UNDER MY HAND AND SEAL OF OFFICE, this the 18th day of March, 2011.



Notary without Bond

[Signature]
Notary Public, State of Texas
My Commission Expires: 02-05-2013

After Recording Return a Certified Copy To:

TCEQ - MC 199
P O Box 13087
Austin, Texas 78711-3087

EXHIBIT A TO RESTRICTIVE COVENANT - Page 1 of 3
24.178 ACRE TRACT

BEING 24.178 acres of land and water out of and a part of what is commonly referred to as Pleasure Islet; being part of Tracts 2, 3, and 6 out of that certain (Called 92.563) acre tract of land conveyed to Pleasure Islet Associates, duly authorized by Resolution No. 81-188, dated July 13, 1981 of the City Council of the City of Port Arthur and being out of that certain (Called 1877.94) acre tract of land conveyed to the City of Port Arthur, Texas by Patent, recorded in Volume 1014, Page 476, Deed Records, Jefferson County, Texas; said 24.178 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a MAG nail set for a common corner of Tracts 6 and 7 on the apparent centerline of an improved, unrestricted, public used roadway known as Old Yacht Club Road; said MAG nail being the Northwest corner of a tract of land conveyed to Pleasure Islet, L.L.C., recorded in File No. 9533086, Official Public Records, Jefferson County, Texas; also being the Southwest corner of the herein described tract;

THENCE, North 01 deg., 36 min., 36 sec., East, on the apparent centerline of said Old Yacht Club Road, a distance of 400.92' to a MAG nail set for point of curvature;

THENCE, continuing on the apparent centerline of said Old Yacht Club Road, on the arc of a curve to the right having a radius of 660.00', an arc length of 275.94', a chord bearing of North 13 deg., 35 min., 53 sec., East, a chord distance of 273.93' to a MAG nail set for point of tangency;

THENCE, North 25 deg., 35 min., 09 sec., East, continuing on the apparent centerline of said Old Yacht Club Road, a distance of 1545.41' to a MAG nail set for the Southwest corner of a tract of land conveyed to Golden Triangle Maritime, LLC, recorded in File No. 2007002282, Official Public Records, Jefferson County, Texas; said MAG nail being the Northwest corner of the herein described tract;

THENCE, South 40 deg., 34 min., 10 sec., East, on the Southerly line of said Golden Triangle Maritime, LLC tract, a distance of 628.43' to a point for corner on the Westerly line of the Sabine-Neches Ship Channel; said point for corner being the Southeast corner of said Golden Triangle Maritime, LLC tract and the Northeast corner of the herein described tract;

THENCE, the following calls on the Westerly line of said Sabine-Neches Ship Channel:

South 18 deg., 23 min., 58 sec., West, a distance of 432.92' to a point for corner;

South 20 deg., 55 min., 14 sec., West, a distance of 31.42' to a point for corner;

South 82 deg., 27 min., 12 sec., West, a distance of 75.04' to a point for corner;

EXHIBIT A TO RESTRICTIVE COVENANT - Page 2 of 3
24.178 ACRE TRACT (CONTINUED)

South 40 deg., 05 min., 02 sec., West, a distance of 434.26' to a point for corner;

South 20 deg., 44 min., 06 sec., West, a distance of 305.71' to a point for corner;

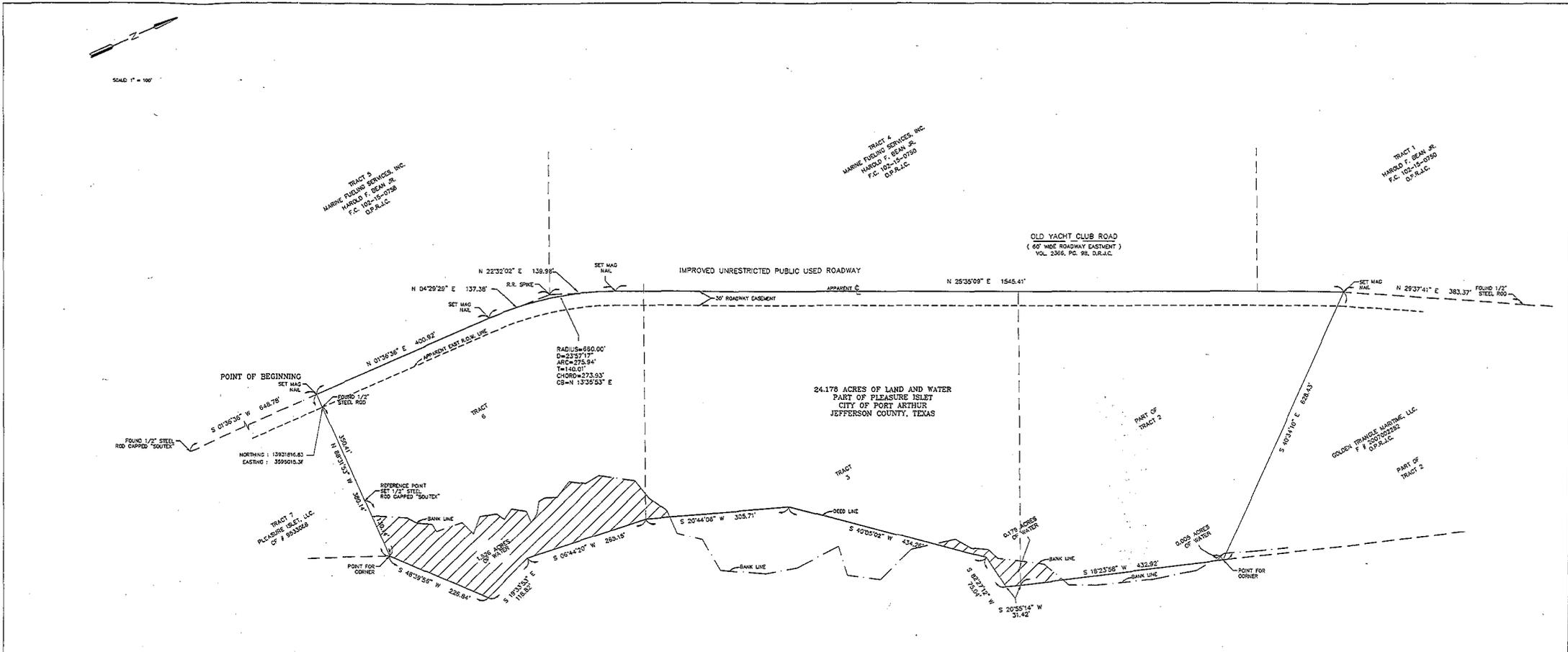
South 06 deg., 44 min., 20 sec., West, a distance of 265.15' to a point for corner;

South 19 deg., 33 min. 53 sec., East, a distance of 118.82' to a point for corner;

South 48 deg., 39 min. 56 sec., West, a distance of 226.84' to a point for corner on the common line of said Tracts 6 and 7; said point for corner being the Southeast corner of the herein described tract;

THENCE, North 88 deg., 31 min., 53 sec., West, on the common line of said Tracts 6 and 7, leaving the Westerly line of said Sabine-Neches Ship Channel, a distance of 130.14' passing a ½" steel rod set, capped, and marked "SOUTEX" for reference point; continuing for a distance of 350.41' passing a ½" steel rod found on the apparent East right of way line of said Old Yacht Club Road; continuing for a total distance of 380.14' to the **POINT OF BEGINNING** and containing 24.178 acres of land and water, more or less.

Note: Bearings, distances, and acreage are based on State Plane Coordinate Grid System, Texas South-Central Zone, NAD 3. Scale Factor = 0.999921866



24.178 ACRES OF LAND AND WATER,
PART OF PLEASURE ISLET,
CITY OF PORT ARTHUR,
JEFFERSON COUNTY, TEXAS

BEING 24.178 acres of land and water out of and a part of what is commonly referred to as Pleasure Islet; being part of Tracts 2, 3, and 4 out of that certain (Called 82-263) acre tract of land conveyed to Pleasure Islet Associates, duly authorized by Resolution No. 81-188, dated July 13, 1981 of the City Council of the City of Port Arthur and being out of that certain (Called 1877-94) acre tract of land conveyed to the City of Port Arthur, Texas by Pollard, recorded in Volume 1014, Page 476, Deed Records, Jefferson County, Texas; said 24.178 acre tract being more fully described by metes and bounds as follows, to wit:

BEGINNING at a MAG nail set for a common corner of Tracts 6 and 7 on the apparent centerline of an improved, unrestricted, public used roadway known as Old Yacht Club Road; said MAG nail being the Northwest corner of a tract of land conveyed to Pleasure Islet, L.L.C., recorded in File No. 2833268, Official Public Records, Jefferson County, Texas; also being the Southwest corner of the herein described tract;

THENCE, North 01 deg., 36 min., 38 sec., East, on the apparent centerline of said Old Yacht Club Road, a distance of 400.92' to a MAG nail set for point of curvature;

THENCE, continuing on the apparent centerline of said Old Yacht Club Road, on the arc of a curve to the right having a radius of 860.00', an arc length of 273.84', a chord bearing of North 13 deg., 35 min., 53 sec., East, a chord distance of 273.83' to a MAG nail set for point of tangency;

THENCE, North 25 deg., 35 min., 09 sec., East, continuing on the apparent centerline of said Old Yacht Club Road, a distance of 1845.41' to a MAG nail set for the Southwest corner of a tract of land conveyed to Golden Triangle Maritime, LLC, recorded in File No. 200700229, Official Public Records, Jefferson County, Texas; said MAG nail being the Northwest corner of the herein described tract;

THENCE, South 40 deg., 34 min., 10 sec., East, on the Southerly line of said Golden Triangle Maritime, LLC Tract a distance of 628.93' to a point for corner on the Westerly line of the Sabine-Neches Ship Channel; said point for corner being the Southeast corner of said Golden Triangle Maritime, LLC tract and the Northeast corner of the herein described tract;

THENCE, the following calls on the Westerly line of said Sabine-Neches Ship Channel:
 South 18 deg., 23 min., 58 sec., West, a distance of 432.92' to a point for corner;
 South 20 deg., 55 min., 14 sec., West, a distance of 31.42' to a point for corner;
 South 82 deg., 27 min., 12 sec., West, a distance of 75.04' to a point for corner;
 South 40 deg., 05 min., 02 sec., West, a distance of 434.25' to a point for corner;
 South 20 deg., 44 min., 06 sec., West, a distance of 305.71' to a point for corner;
 South 06 deg., 44 min., 20 sec., West, a distance of 265.15' to a point for corner;
 South 19 deg., 33 min., 53 sec., East, a distance of 118.82' to a point for corner;
 South 48 deg., 39 min., 56 sec., West, a distance of 225.84' to a point for corner on the common line of said Tracts 6 and 7; said point for corner being the Southeast corner of the herein described tract;

THENCE, North 88 deg., 31 min., 53 sec., West, on the common line of said Tracts 6 and 7, leaving the Westerly line of said Sabine-Neches Ship Channel, a distance of 130.14' passing a 1/2" steel rod set, capped, and marked "SOUTEX" for reference point; continuing for a distance of 350.41' passing a 1/2" steel rod found on the apparent East, right of way line of said Old Yacht Club Road; continuing for a total distance of 350.14' to the POINT OF BEGINNING and containing 24.178 acres of land and water, more or less.

Note: Bearings, distances, and acreage are based on State Plane Coordinate Grid System, Texas South-Central Zone, NAD 83. Scale Factor = 0.99991666

This description is based on the Land Survey made by Anthony M. Leger, Registered Professional Land Surveyor No. 5481, on January 16, 2008.

NBR Maritime II
 LS-07-1340

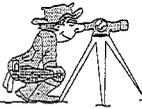


DATE OF SURVEY: _____ LOCATE CORNERS AND SHOW IMPROVEMENTS _____
 SURVEYOR'S CERTIFICATION:

I, the undersigned, do hereby certify that this survey was by day _____ made on the ground of the property herein described herein and is correct, and that there are no discrepancies, conflicts, objections of any kind, boundary line conflicts, encroachments, overlapping or improvements, easements or right of way, except as shown hereon, and that said property has been surveyed and improved in accordance with the laws of this State and that the same is in full compliance with the laws of this State and that the same is in full compliance with the laws of this State and that the same is in full compliance with the laws of this State.

ANTHONY M. LEGER
 REGISTERED PROFESSIONAL LAND SURVEYOR NO. 5481

FEMA Flood Zone: AB
 Community Panel No.: 485499-0020-5
 Panel Date: 4/17/84



SOUTEX
SURVEYORS INC.
 3737 DOCTORS DRIVE
 PORT ARTHUR, TEXAS 77642
 (409) 983-2004 (409) 983-2005

SURVEYOR'S NOTES
 1. BEARINGS, DISTANCES, AND ACREAGE SHOWN ARE BASED ON STATE PLANE COORDINATE GRID SYSTEM, TEXAS SOUTH-CENTRAL ZONE, NAD83
 SCALE FACTOR = 0.999922310
 CONVERGENCE: 2' 31" 01"

SHEET TITLE
 24.178 ACRES OF LAND AND WATER
 PART OF PLEASURE ISLET, CITY OF PORT ARTHUR
 RECORDED IN VOL. 1014, PG. 476, DEED RECORDS
 JEFFERSON COUNTY, TEXAS

PROJECT
 NBR MARITIME II
 OLD YACHT CLUB ROAD
 PORT ARTHUR, TEXAS 77642

PROJECT NO: 07-1340
 SCALE: 1" = 100'
 PRINT DATE: 1/16/08
 DRAWN BY: S. LEGER
 CHECKED BY: BL
 APPROVED BY: AML
 SHEET 1 OF 1

FILED AND RECORDED

OFFICIAL PUBLIC RECORDS

Carolyn L Guidry

2011 Mar 25, 10:44 AM

2011010068

PEVETO: \$36.00

CAROLYN L. GUIDRY, COUNTY CLERK

JEFFERSON COUNTY, TEXAS

PART OF FOREGOING
INSTRUMENT ILLEGIBLE
AT TIME OF FILING

