### PRELIMINARY CLOSE OUT REPORT STATE MARINE SUPERFUND SITE PORT ARTHUR, TEXAS



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# CONCURRENCES PRELIMINARY CLOSE OUT REPORT FOR THE STATE MADINE SUBERFUND SITE

#### STATE MARINE SUPERFUND SITE EPA ID# TXD099801102

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#### PRELIMINARY CLOSE OUT REPORT STATE MARINE SUPERFUND SITE PORT ARTHUR, JEFFERSON COUNTY, TEXAS

#### I. INTRODUCTION

This Preliminary Close Out Report (PCOR) documents that the U. S. Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) have completed cleanup activities for the State Marine Superfund Site in accordance with Close Out Procedures for National Priorities List Sites (OSWER Directive 9320.2-09A-P). The EPA completed a Time Critical Removal Action in August 2001 that removed contaminants from the site that pose a risk to human health and the environment. Following the removal action, EPA conducted a remedial investigation in 2001 and a Supplemental Remedial Investigation in 2006 which confirmed that contaminants above industrial human health levels are no longer present at the site. Based on this determination, EPA signed a No Further Action Necessary Record of Decision for the site on April 18, 2007. By letter dated April 9, 2007, TCEQ concurred with the No Further Action Necessary Record of Decision.

#### II. SUMMARY OF SITE CONDITIONS

#### Site History and Background

The State Marine 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 mouth of the Neches River. Overall, the Site encompasses approximately 17 acres and is bounded to the north by the Palmer Barge Line Site (PBLS), to the west by Old Yacht Club Road, to the south by undeveloped property, and to the east by Sabine Lake. There is very little topographical relief to the Site. The Site is located approximately 0.5 mile southwest of the confluence of the Neches River and the Sabine Neches Barge Canal.

Pleasure Islet is a manmade landmass consisting of dredge spoils generated during the construction and maintenance of the Sabine-Neches Canal, also called the Intercoastal Waterway. The canal was constructed between 1898 and approximately 1920 in the vicinity of Sabine Lake and the Neches River, between the current site location and the mainland. Between 1955 and 1957, a portion of the canal along the western side of Pleasure Islet was abandoned, and a new canal was cut along the eastern and southern sides of Pleasure Islet. Pleasure Islet was created when a land bridge was constructed across the abandoned portions of the canal, between the northern tip of Pleasure Island and the mainland. Vehicle access to the Site is limited to a single dirt road starting at the western site border along Old Yacht Club Road.

Ownership of Pleasure Islet was transferred from the State of Texas to the City of Port

Arthur, Texas, in 1955. Development of the islet and the Site began after 1957, following construction of the land bridge across the abandoned portions of the Sabine-Neches Canal. In approximately 1963, the City of Port Arthur began municipal landfill operations on the northern and central portions of the islet. Initially, the landfill consisted of a burn pit in which wastes were incinerated. By December 1969, burn operations were discontinued, and the landfill was used solely for disposal of wastes. Between 1969 and 1972, landfill disposal operations expanded to include the central and northern portions of the Site and the property north of the Site. Between 1972 and 1974, disposal activities were generally concentrated in the northern parts of the islet. In December 1974, the City of Port Arthur closed the landfill in accordance with Texas Department of Health (TDH) regulations, which required covering the entire landfill with approximately 2 feet of fine-grained fill material. The cover material is believed to be dredge spoils that originated on the islet.

Site operations began about 1973 under the names of State Welding and Marine Works and the Golden Triangle Shipyard. The construction of wastewater impoundments in the northwestern portion of the Site was also reported. The impoundments were reportedly unlined, earthen diked areas approximately two (2) acres in size used to store oil and wastewater from barge-cleaning operations. Inspection reports indicate that wastewater from barge-cleaning operations was directed to two Above Ground Storage Tanks (AST) and then pumped to the wastewater impoundments. Some of the oil from the tanks was diverted to an old ship (on land) that was used as an oil/water separator. Oil from the separator was collected for reuse, potentially on-site. The Site included the locations of the former wastewater impoundments, tar burn area, distillation column, and the former location of the Lauren Refining Company (LRC) Tank Farm.

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

In 1995, the Texas Natural Resource Conservation Commission (TNRCC), now the Texas Commission on Environmental Quality (TCEQ), initiated an Expanded Site Inspection (ESI) at the Site. The objective of the TNRCC ESI was to collect sufficient data to develop an understanding of the Site contaminants and to identify the potential migration pathways, primary contaminant sources, exposure pathways, and presence of potential human health and ecological receptors. The following reports were completed as a result of the data obtained from the field work during the ESI:

- 1996 Expanded Site Investigation Report (TNRCC).
- 1997 Hazardous Ranking System Documentation Report (TNRCC).
- 1999 Technical Memorandum (CH2M HILL).

Other Investigations Adjacent to the Site included a Preliminary Assessment (PA), a Screening Site Inspection (SSI), and an ESI that were conducted immediately adjacent to the Site at the PBLS. The PBLS is located on Pleasure Islet immediately north of the Site. These investigations did not involve collecting soil, sediment, or ground water directly from the Site;

however, some sediment data obtained from the PBLS at near-shore and offshore locations were used in the human health and ecological screening risk assessment.

In 2001, a remedial investigation was conducted for the State Marine Site to determine the nature and extent of contamination present at the site.

In May and June 2006, EPA conducted a Supplemental Remedial Investigation to determine if the former surface impoundments were a continuing source of contamination to the Sabine Lake sediments by movement through the shallow ground water. The Supplemental RI, included the completion of seven (7) soil borings and the collection of soil samples at seventeen (17) locations from those borings. Five (5) of the soil borings were completed within the area of the former wastewater impoundments to determine if waste materials were still present that could potentially be a source of contamination to the Sabine Lake sediments. Two (2) borings were installed downgradient of the former wastewater impoundments and completed as monitor wells. In addition, sediment samples were collected at eight (8) site locations and one (1) background location. Results of the Supplemental Remedial Investigation confirmed that contaminants above industrial human health levels are no longer present at the site

#### **National Priorities List**

The EPA published a proposed rule on March 6, 1998, to add the State Marine Site to the National Priorities List (NPL) of Superfund sites. The Site was added to the NPL in a final rule published on July 28, 1998 [Federal Register Listing (FRL-6130-9), Volume 63, Number 144, Pages 40182 - 40188].

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

On October 29, 1998, EPA issue Special Notice Letters to potentially responsible parties (PRP) for the PRPs to conduct the remedial investigation and feasibility study. The EPA did not receive positive responses to the Special Notice Letters. In February 1999, EPA sent 104(e) information request letters regarding the State Marine Site. As a result of the 104(e) letters, the EPA received admissions and denials.

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

The EPA completed a Time Critical Removal Action in August 2001 to remove source materials stored on-site. Activities included waste removal, water treatment, oil/water separation, and sludge stabilization.

#### **Construction Activities**

As part of the removal action activities, the following items were identified at the site:

- Twenty-two (22) above ground storage tanks of varying sizes;
- Several oil pits;
- . 27 drums; and
- Debris materials scattered throughout the size.

Materials removed and disposed off-site from the State Marine site included 26,000 gallons of waste oil, water and diesel fuel and kerosene, 3,800 gallons of heavy sludge, 27 drums, 28 compressed gas cylinders, and 14 batteries. After disposing of liquids and sludge materials from the above ground storage tanks, the tanks were decontaminated utilizing a degreaser solution and a pressure washer. The decontamination rinse water was disposed off site.

#### Future Work

As part of the selected remedy in the Record of Decision for the site, institutional controls will be required to ensure that the site current and future use remains for industrial or commercial use purposes. The No Further Action Necessary remedy selection is based on an industrial/commercial land use scenario. The EPA will be responsible for obtaining a restrictive covenant from the landowner and filing it in the appropriate property records for the site such that the future use of the property is restricted to commercial/industrial purposes.

Since no future ground water monitoring will be required for the site, EPA will plug the ground water wells that were installed as part of the remedial investigation for the site. There are eight (8) monitor wells that will be plugged for the site.

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

Through EPA's removal program, the Corps of Engineers implemented the Time-Critical Removal Action for the State Marine Site. Through the Corps of Engineers, Roy F. Weston conducted the field construction activities at the site.

During the removal activities, samples collected from the above ground storage tanks and drums were field screen using the HazCat<sub>R</sub> Chemical Identification System. Tank contents were sampled using the Bacon Bomb Sampler which allows for discrete collection of liquid from various levels.

Throughout the removal action activities, Health and Safety air monitoring was conducted with Rae Systems Multi Raes and SUMMA canisters. The Multi Rae analyzed the air for volatile organic compounds (VOCs), carbon monoxide, lower explosive limits, hydrogen sulfide, and oxygen levels. The SUMMA canister samples were analyzed for VOCs by laboratory methods.

The EPA On-Scene Coordinator and the Corps of Engineers conducted field oversight

throughout the removal action activities to ensure that the removal action met quality assurance and quality controls and was consistent with the Action Memorandum for the site.

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

Task	Estimated Completion	Responsibility
Institutional Controls	September 2008	Owner/EPA
1 <sup>st</sup> 5-Year Review	June 2012	EPA
Plug remedial investigation wells	September 2008	EPA
Deletion of the Site From NPL	To Be Determined	EPA

#### V. SUMMARY OF REMEDIATION COSTS

EPA's Time-Critical Removal Action was conducted at a cost of \$872,000.00. Since this response action addressed site contaminants that posed a risk to human health and the environment, EPA signed a No Further Action Necessary Record of Decision on April 18, 2007. Therefore, no further remedial actions are planned for the site.

#### VI. FIVE-YEAR REVIEW

Hazardous substances will remain at the State Marine Superfund Site above levels that allow unlimited use and unrestricted exposure after completion of the Time Critical Removal Action. Therefore, a policy review will be conducted within five years of the signing of the No Further Action Necessary Record of Decision to ensure that the remedy is, or will be, protective of human health and the environment. Pursuant to CERCLA section 121(c), 42 U.S.C. § 9621(c), and as provided in the current guidance on Five-Year Reviews: EPA 540-R-01-007, OSWER No. 9355.7-03B-P, Comprehensive Five-Year Review Guidance, June 2001, EPA will conduct a policy five-year review for the State Marine Site by June 2012, five years after signing the Preliminary Close Out Report for the site.

Samuel Coleman, P.E.

Director Superfund Division