UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
SUPERFUND SITE STRATEGY RECOMMENDATION - REGION 06

Site Name: Weaver Shipyard **CERCLA ID#:** TXD988083853

Alias Site Name: Jos. A Weaver & Son Ship Yard; Bludworth Marine Orange, North Yard

Address: 1601 S. Childers Rd.

City/County or Parish/State/Zip: Orange/Orange County/Texas/77630

Report Type: Preliminary Assessment **Date:** April 10, 2020 **Author:** TCEQ - Katie Delbecq

RECOMMENDATION:

☐ 1. No Further Remedial Action Planned Under Superfund (NFRAP)

☒ 2. Further Investigation Needed Under Superfund
- ☐ PA ☐ HRS Priority: ☐ High
- ☒ SI ☐ RI/FS ☐ Low
- ☐ ESI ☐ RA
- ☐ Other:

To be performed by: TCEQ

☐ 3. No further assessment (i.e., not a valid CERCLA site)

☐ 4. Action Deferred to: ☐ RCRA ☐ NRC

☐ 5. Site Being Addressed Under the State Voluntary Cleanup Program (VCP): ☐ Yes ☒ No

NOTIFY AUTHORITY:

☐ Removal	☐ RCRA	☐ TSCA	☐ CAA	☐ SMCRA
☐ Remedial	☐ State/Tribe	☐ NPDES	☐ NRC	☐ Resource Trustee:
☐ CERCLA Enforcement	☐ Federal Facility	☐ UIC	☐ SPCC	☐ Other:

SEND SSSR COPIES TO: ☐ SEDAE ☐ WDDG ☐ ATSDR ☒ State Agency ☐ Tribal Agency

DISCUSSION:

The Weaver Shipyard (site) is a 7.76-acre property located approximately 0.4 mile southeast of the Orange, Texas city limits on the west bank of the Sabine River which was the former location of a shipbuilding and repair facility. Immediately northeast of the site lies a vacant property that was Marathon Oil's Phoenix Lake Gas Plant (now in the State's Corrective Action Program), and the Sabine River lies to the East. Bludworth Marine LLC, an active shipbuilder, is located to the south, and a vacant, undeveloped woodland area lies to the west of the site across Childers Road.

Weaver Shipyard began operations in 1897 at the current location under the entity name Joseph Weaver and Son. The company constructed barges for the Galveston Navigation District, and during World War II constructed wooden mine sweepers and submarine chasers. After the war, the company continued building wood and steel shrimp boats and conducted ship repair work. The company and the site property were sold in 1975 and renamed as Weaver Shipyard and Drydock, Inc. Their services included engineering and design, machine and carpentry shops, sandblasting, and painting with two drydocks and a side launchway. In the late 1980s the original owners, the Weaver family, regained ownership and took over shipbuilding operations. Based on historical aerial imagery it appears that the site may have become inactive in early 2017 despite the "in existence" status in the Secretary of State database. During the week of September 1, 2017, the entire site was inundated by floodwaters from Hurricane Harvey.

Common contaminants of concern at shipbuilding and repair facilities include volatile organic compounds (VOCs) such as xylene, n-butyl alcohol, styrene, and methyl ethyl ketone, semi-volatile organic compounds, and a variety of metals including barium, chromium, copper, cyanides, lead, manganese, and nickel. Specifics regarding chemical use and practices at the site are not available.

90042948

Neighboring the site to the north and west is the former Phoenix Lake Gas Plant, owned by Marathon Oil Company, which is currently funding remediation efforts overseen by the Texas Commission on Environmental Quality (TCEQ) Corrective Action program. As part of Marathon Oil Company's compliance with TCEQ Corrective Action requirements, an Affected Property Assessment Report (APAR) was submitted which includes data for groundwater, surface water, soil, and sediment samples obtained between July 2013 and March 2019. A small portion of the sampling scope covered in the APAR included parts of Weaver Shipyard along the Sabine River bank and near the shared Marathon Oil property boundary. Because the focus of sampling was delineation of the extent of contamination from the former Phoenix Lake Gas Plant, sampling at the site was limited to the northern part of the property and riverbank. The most recent sediment samples obtained from the Weaver site in August 2015 revealed that soils adjacent to the metal dock contained elevated levels of chromium, arsenic, zinc, and copper above the corresponding Superfund Chemical Data Matrix (SCDM) benchmark. One monitoring well and two temporary monitor wells were placed on the site for groundwater assessment at the former Phoenix Lake Gas Plant. Samples collected from these wells contained Level I concentrations of antimony and arsenic. Arsenic was detected at a concentration of 0.0789 mg/L, which is above the Maximum Contaminant Level (MCL) value of 0.01 mg/L

There are 118 wells registered with the Texas Water Development Board (TWDB) within the 4-mile target distance limit (TDL), excluding monitoring wells, environmental soil borings, and oil and gas wells. Included in the 118 registered wells in the Groundwater database and the Well Reports database are 32 domestic wells, 31 industrial wells, 7 irrigation wells, 19 public supply wells, and 23 wells categorized as unused. One industrial well is located within 0.25 mile of the site. Five wells are located between 0.25 to 0.5 mile from the site, all of which are labeled as domestic, industrial, or unused. Well depths within the 4-mile TDL range from 10 feet to 990 feet below ground surface and draw from the Chicot and Gulf Coast Aquifers.

Site topography is essentially flat; thus, it is assumed that precipitation soaks directly into the ground or runs off into the Sabine River, directly adjacent to the northeast edge of the site. There are no downstream surface water intake systems within the 15-mile TDL. Subsistence and sport fishing are common in the Sabine River and Sabine Lake. Subsistence fishing occurs more in the coves of Sabine Lake and off the public boat ramp in Orange (located north of the site). However, people have been observed fishing near the deposition areas of the river and chemical plant drains. Commercial fishing in Sabine Lake is currently limited to crabs, but historically included brown shrimp, white shrimp, blue crabs, eastern oysters, black drum, southern flounder, sheepshead, mullet, and freshwater gar. The exact quantities of human food chain organisms caught for human consumption between the most upstream point of potential exposure (PPE) to 15 miles downstream of the site are unknown at this time. However, estimates of annual seafood catch are available for Sabine Lake. Between 1981 and 2003, the annual average commercial seafood production in Sabine Lake was 1,050,512 pounds of shellfish and 5,513 pounds of finfish.

The Sabine National Wildlife Refuge lies at the southern end of the 15-Mile TDL and is bordered on the west by Sabine Lake. The refuge encompasses 125,790 acres which includes 40,503 acres of open water and 85,387 acres of marsh grassland. The refuge contains a wide diversity of favorable habitat for fish, migrating waterfowl, and other wildlife. The Lower Neches Wildlife Management Area (WMA) is also located at the southern end of the 15-Mile TDL at the confluence of the Sabine River and the Neches River where they meet at Sabine Lake, which borders the Lower Neches WMA on the east. It is comprised of 7,998 acres of low coastal plains which are home to a wide variety of wildlife. There are approximately 26 miles of freshwater forested/shrub, freshwater emergent, and estuarian and marine wetlands located along linear frontage of the surface water pathway within the 15-mile TDL.

Based on the historical operations conducted at the site, the limited sample results obtained during the investigation of the former Phoenix Lake Gas Plant located north and west of the site, and the potential surface water receptors associated with the site, it is recommended that a Site Inspection be completed at the site. The State will be provided a copy of this decision document.

APPROVALS:

Report Reviewed by:	Bret Kendrick (Site Assessment Manager)	**Signature:**		**Date:**	04/30/2020
Disposition Approved by:	Brenda Cook (Section Chief - SEDAS)	**Signature:**	Digitally signed by cook.brenda@epa.gov DN: cn=cook.brenda@epa.gov Date: 2020.12.07 10:55:11 -06'00'	**Date:**	