



# RAILROAD COMMISSION OF TEXAS

## OIL AND GAS DIVISION

November 8, 2018

Mr. Quan Tran  
ExxonMobil Environmental Services Company  
22777 Springwoods Village Pkwy  
Spring, TX 77389

Re: No Further Action  
ExxonMobil Environmental Services Company (EMES)  
Flour Bluff Oil Field North Parcel (Site)  
Nueces County, Texas  
Operator Cleanup Program (OCP) No. 04-3534

Dear Mr. Tran:

Railroad Commission of Texas Site Remediation Section (RRC) staff reviewed the OCP file for the ExxonMobil Flour Bluff Oil Field North Parcel located on Graham Road, approximately one-half mile east of the intersection of Waldron Road and Graham Road in Nueces County, Texas. The parcel is bordered by a drainage canal to the north, a drainage canal and Wranosky Park to the west, Graham Road to the south, and the former Texas Crude Energy, Inc. Central Tank Battery property to the east. The North Parcel is more specifically located at latitude 27.66060 and longitude -97.28080 (WGS 84).

### Site History

The North Parcel totals an area of 21.13 acres consisting primarily of undeveloped coastal lands, which includes oak groves, grass and brush; however, the Site has historically been used for oil and natural gas exploration, production and processing operations. No buildings are located at the Site and the surrounding area consists primarily of undeveloped land with a small number of single-family residential properties to the north and south. The Laguna Madre is located approximately 0.2 miles to the east-southeast of the property.

### Investigation

In 2008, Arcadis U.S., Inc (Arcadis) conducted a Phase I Environmental Site Assessment (ESA) at the Site. The results of the Phase I warranted a Phase II ESA, which was performed in April of 2009. Investigation activities performed during the Phase II include the advancement of six soil borings, three of which were converted into temporary monitor wells. Analytical results from one soil sample (FB-TMW03 at 0-2 feet) showed exceedances of benzene, toluene, ethylbenzene, and xylenes (BTEX) above the applicable protective concentration levels (PCLs). Analytical results of

groundwater from FB-TMW03 indicated exceedance of total petroleum hydrocarbon (TPH) above the Class 1/ 2 PCL of 0.98 milligram per liter (mg/L).

In February of 2010, following Phase I and II ESA activities, Arcadis began soil removal activities at the Site. In total, Arcadis removed approximately 78 tons of impacted soils from the Site. Impacted soils were disposed of off Site at the Waste Facilities Inc. at 716 FM 716 in Premont, Texas. Confirmation soil samples collected from the excavation indicated that concentrations of BTEX and TPH were below their applicable PCLs. Excavation backfilling activities were not necessary at the Site because the impacted soils were removed from above grade. The excavation area was regraded to match the existing contours on Site and to minimize ponding or erosion.

In August of 2017, Arcadis installed five monitor wells at the Site. Groundwater was encountered during drilling activities at depths between 16.5 and 17.5 feet below ground surface (bgs). Soils were continuously logged and field screened using a photoionization detector (PID). Elevated PID readings were not observed during drilling activities, therefore soil samples were not collected. Monitor wells NP-MW-01 and NP-MW-02 were screened between five and 15 feet bgs and the remaining monitor wells were screened between 10 and 20 feet bgs.

Gauging and sampling activities were performed on all monitor wells at the Site on September 7 and November 13 of 2017, as well as on February 6, 2018. Light non-aqueous phase liquids were not detected in any monitor well at the Site. TPH and chloride were the only constituents detected above the Class 1/2 groundwater PCL. TPH exceedances were only detected in NP-MW-01 in September of 2017 and subsequent sampling events showed concentrations had decreased below the method quantification limit. Chloride exceedances were detected in all monitor wells at the Site. However, region-wide brackish and saline groundwater is ubiquitous and naturally-occurring in Flour Bluff. Poor yield and high total dissolved solids (TDS) characterize the undifferentiated nearshore deposits and the Beaumont formation that make up the upper 100 feet of the subsurface. Well records from the Texas Water Development Board (TWDB) indicated that stock irrigation wells are installed in these formations, but the deeper Chicot (approximately 150 to 450 feet bgs) and Evangeline (500 to 1,000 feet bgs) Aquifers represent the principal source for significant withdrawal of water. Therefore, EMES requested that groundwater at the Site be designated as Class 3. RRC staff agree with this designation based on the presence of upgradient TDS values greater than 10,000 milligrams per liter (mg/L), non-producing and low yield wells at the Site, and the non-utilization of this groundwater bearing unit as a potable water resource.

#### Monitor Well Plugging

Monitor wells NP-MW-01 through NP-MW-05 were plugged and abandoned on June 28 and August 28, 2018 in accordance with state and federal plugging requirements.

Based on the findings of the Site investigation, the Site Remediation Section of the Oil and Gas Division concurs that the above-referenced Site requires no further action to investigate, assess, control, and cleanup the release subject to OCP No. 04-3534. Based on information available, you may consider remediation issues related to the Site as closed. Please feel free to contact me at 512-475-3089 or by email at [leslie.bruce@rrc.texas.gov](mailto:leslie.bruce@rrc.texas.gov).

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Sincerely,



Leslie Bruce  
Technical Coordinator

  
Inti.

cc: Mr. Leo Guerra, Director, Corpus Christi District Office (via email)  
Mr. Colin Melson, Arcadis (via email)  
OCP E-reading file