

## **TCEQ Analysis of TCEQ Contractor Surface Water Quality Sampling Data 3/24/19 Update (preliminary lab results)**

The Texas Commission on Environmental Quality (TCEQ) received preliminary surface water quality data for 121 constituents at four (4) different sites. One sample was collected at each site on March 19, 2019 by the TCEQ's contractor. The constituents consist of inorganics, organics, metals, nutrients, chemical oxygen demand (COD), and oil and grease in water. The sampling sites were the following:

- Dow Bridge at Tucker Bayou
- Tidal Rd at Gate 13
- Tidal Rd at Tucker Bayou
- Upstream Tucker Bayou

This assessment is based on preliminary results received from the laboratory. These laboratory results are subject to change once the final report is issued. The TCEQ is providing the assessment of preliminary results in abundance of caution to make this information publicly available as quickly as possible. As sample results are received, or additional water quality sampling is completed, the data will be assessed, and results made available.

The TCEQ used the Texas Water Quality Standards and the Texas Risk Reduction Program as references for determining the known health protective concentration levels (PCLs) in surface water. The TCEQ is using these PCLs to evaluate impacts to aquatic life and human health. No public drinking water system draws its source water from the Houston Ship Channel. This methodology was also used for previously reviewed data from samples collected by ITC and will be used to review samples from the TCEQ contractor. The TCEQ used the PCLs listed in the tables below to assess the surface water quality data.

The TCEQ assessed the following 9 most concerning constituents with known PCLs:

- Xylenes, Total
- Pyrene
- Anthracene
- Benzene
- Ethylbenzene
- Phenanthrene
- Toluene
- Fluoranthene
- 2-Methylnaphthalene

These constituents were analyzed but were not detected (not detected above the method detection limit or quantitation limit) at the Upstream Tucker Bayou Site. Below are tables of the most concerning constituents that exceeded their known PCL at each remaining sampling site.

**Table 1: Dow Bridge at Tucker Bayou**

<b>Constituent</b>	<b>Maximum (micrograms/L)</b>	<b>PCL (micrograms/L)</b>
Xylenes, Total	6150	850
Benzene	11800	581
Toluene	2890	1000
2-Methylnaphthalene	67.1	30

**Table 2: Tidal Rd at Gate 13**

<b>Constituent</b>	<b>Maximum (micrograms/L)</b>	<b>PCL (micrograms/L)</b>
Xylenes, Total	4200	850
Benzene	11000	581
Toluene	2320	1000

**Table 3: Tidal Rd at Tucker Bayou**

<b>Constituent</b>	<b>Maximum (micrograms/L)</b>	<b>PCL (micrograms/L)</b>
Xylenes, Total	3960	850
Benzene	9980	581
Toluene	2330	1000
2-Methylnaphthalene	51.3	30