

TCEQ Analysis of TCEQ Contractor Surface Water Quality Sampling Data 3/25/19 Update 1 (preliminary lab results)

The Texas Commission on Environmental Quality (TCEQ) received preliminary surface water quality data for 118 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, and oil and grease in water. The sampling sites were the following:

- Dow Bridge @ Tucker Bayou
- Tidal Rd. @ Tucker Bayou
- Tidal Rd. @ Gate 13
- 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 an 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's contractor.

The constituents analyzed at the Upstream Tucker Bayou site were detected but did not exceed their known PCLs.

Table 1: Assessment of Preliminary Laboratory Results

	Dow Bridge @ Tucker Bayou	Tidal Rd. @ Tucker Bayou	Tidal Rd. @ Gate 13	Upstream Tucker Bayou
Number of Constituents	118	118	118	118
Number of constituents analyzed but not detected (not detected above the method detection limit or quantitation limit)	97	100	98	114
Number of constituents detected above the method detection limit or quantitation limit	21	18	20	4
Number of constituents detected but below their known protective concentration levels	6	8	8	1
Number of constituents that exceeded their known PCLs	12	10	9	0
Number of constituents that are still pending further TCEQ evaluation	3	0	3	3

Table 2: Dow Bridge @ Tucker Bayou

Constituent	Maximum (ug/L)	PCL (ug/L)
Benzene	11800	581
Total Xylenes	6150	850
Zinc	609	84.2
Copper	17.6	3.6
Toluene	2890	1000
2-Methylnaphthalene	67.1	30
Lead	7.71	3.83
Naphthalene	234	125
Cyanide, Total	7.73	5.6
Oil & Grease, HEM	37700	28000
Arsenic	11.9	10
2-methylphenol	548	510

Table 3: Tidal Rd. @ Tucker Bayou

Constituent	Maximum (ug/L)	PCL (ug/L)
Benzene	9980	581
Zinc	494	84.2
Total Xylenes	3960	850
Copper	15.2	3.6
Toluene	2330	1000
2-Methylnaphthalene	51.3	30
Oil & Grease, HEM	39700	28000
Naphthalene	176	125
Lead	5.28	3.83
Cyanide, Total	6.34	5.6

Table 4: Tidal Rd. @ Gate 13

Constituent	Maximum (ug/L)	PCL (ug/L)
Benzene	11000	581
Zinc	496	84.2
Total Xylenes	4200	850
Copper	13.7	3.6
Toluene	2320	1000
Oil & Grease, HEM	51400	28000
Naphthalene	183	125
Lead	4.43	3.83
Cyanide, Total	6.4	5.6