

TCEQ Analysis of ITC Water Quality Sampling Data (Final Lab Results)

The Texas Commission on Environmental Quality (TCEQ) assessed final water quality data for 117 constituents at one site. Eight (8) samples were collected from April 17 through April 18, 2019 by Intercontinental Terminal Company (ITC). The constituents consist of organics, chemical oxygen demand (COD), and oil and grease in water. The sampling site was the following:

- Gate 13 Ditch

This assessment is based on final results received from the laboratory. As 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. PCLs are very conservative and below levels where we would expect any health impacts. 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.

Table 1. Assessment of Final Laboratory Results

	Gate 13 Ditch on April 17, 2019 at 11:00 AM	Gate 13 Ditch on April 17, 2019 at 1:00 PM	Gate 13 Ditch on April 17, 2019 at 3:00 PM	Gate 13 Ditch on April 17, 2019 at 5:00 PM
Number of Constituents	117	117	117	117
Number of constituents analyzed but not detected (not detected above the method detection limit or quantitation limit)	107	108	107	108
Number of constituents detected above the method detection limit or quantitation limit	10	9	10	9
Number of constituents detected but below their known PCLs	6	5	6	5
Number of constituents that exceeded their known PCLs	4	4	4	4
Number of constituents that are still pending further TCEQ evaluation	0	0	0	0
Number of constituents that do not have a PCL or are assessed with other constituents	0	0	0	0

Table 1 continued. Assessment of Final Laboratory Results

	Gate 13 Ditch on April 17, 2019 at 7:00 PM	Gate 13 Ditch on April 17, 2019 at 9:00 PM	Gate 13 Ditch on April 17, 2019 at 11:00 PM	Gate 13 Ditch on April 18, 2019 at 7:45 AM
Number of Constituents	117	117	117	117
Number of constituents analyzed but not detected (not detected above the method detection limit or quantitation limit)	108	108	109	110
Number of constituents detected above the method detection limit or quantitation limit	9	9	8	7
Number of constituents detected but below their known PCLs	5	5	5	5
Number of constituents that exceeded their known PCLs	4	4	3	2
Number of constituents that are still pending further TCEQ evaluation	0	0	0	0
Number of constituents that do not have a PCL or are assessed with other constituents	0	0	0	0

Below are tables of constituents that exceeded their known PCLs at each of the sampling times.

Table 2. Summary of Constituents Exceeding PCLs for April 17, 2019 at 11:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	4300	581
Toluene	1400	1000
Xylenes, Total	2700	850
COD	235000	150000*

Table 3. Summary of Constituents Exceeding PCLs for April 17, 2019 at 1:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	4000	581
Toluene	1400	1000
Xylenes, Total	2700	850
COD	215000	150000*

Table 4. Summary of Constituents Exceeding PCLs for April 17, 2019 at 3:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	4000	581
Toluene	1400	1000
Xylenes, Total	2800	850
COD	190000	150000*

Table 5. Summary of Constituents Exceeding PCLs for April 17, 2019 at 5:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	5100	581
Toluene	1700	1000
Xylenes, Total	3200	850
COD	190000	150000*

Table 6. Summary of Constituents Exceeding PCLs for April 17, 2019 at 7:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	4100	581
Toluene	1600	1000
Xylenes, Total	3300	850
COD	180000	150000*

Table 7. Summary of Constituents Exceeding PCLs for April 17, 2019 at 9:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	4300	581
Toluene	1600	1000
Xylenes, Total	3300	850
COD	170000	150000*

Table 8. Summary of Constituents Exceeding PCLs for April 17, 2019 at 11:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	3800	581
Toluene	1400	1000
Xylenes, Total	3000	850

Table 9. Summary of Constituents Exceeding PCLs for April 18, 2019 at 7:45 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	2400	581
Xylenes, Total	2000	850

Footnote:

*COD is a measure of the oxygen demand exerted by chemical constituents in water. There was not a known PCL for COD, therefore the permitted technology-based limit was used for comparison purposes. Although COD levels for treated process wastewater vary 150000 micrograms/L for noncontact stormwater was provided for comparison purposes.