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. Eleven (11) samples were collected from April 11 through April 12, 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 11, 2019 at 11:00 AM	Gate 13 Ditch on April 11, 2019 at 1:00 PM	Gate 13 Ditch on April 11, 2019 at 3:00 PM	Gate 13 Ditch on April 11, 2019 at 5:00 PM	Gate 13 Ditch on April 11, 2019 at 7:00 PM	Gate 13 Ditch on April 11, 2019 at 9:00 PM	Gate 13 Ditch on April 11, 2019 at 11:00 PM
Number of Constituents	117	117	117	117	117	117	117
Number of constituents analyzed but not detected (not detected above the method detection limit or quantitation limit)	107	107	107	107	106	107	107
Number of constituents detected above the method detection limit or quantitation limit	10	10	10	10	11	10	10
Number of constituents detected but below their known PCLs	7	7	7	7	7	6	7
Number of constituents that exceeded their known PCLs	3	3	3	3	4	4	3
Number of constituents that are still pending further TCEQ evaluation	0	0	0	0	0	0	0
Number of constituents that do not have a PCL or are assessed with other constituents	0	0	0	0	0	0	0

Table 1 continued. Assessment of Final Laboratory Results

	Gate 13 Ditch on April 12, 2019 at 1:00 AM	Gate 13 Ditch on April 12, 2019 at 3:00 AM	Gate 13 Ditch on April 12, 2019 at 5:00 AM	Gate 13 Ditch on April 12, 2019 at 7:00 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)	107	107	107	107
Number of constituents detected above the method detection limit or quantitation limit	10	10	10	10
Number of constituents detected but below their known PCLs	5	5	4	4
Number of constituents that exceeded their known PCLs	5	5	6	6
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 11, 2019 at 11:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	5800	850
Benzene	3600	581
Toluene	1500	1000

Table 3. Summary of Constituents Exceeding PCLs for April 11, 2019 at 1:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	5800	850
Benzene	4600	581
Toluene	1600	1000

Table 4. Summary of Constituents Exceeding PCLs for April 11, 2019 at 3:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	5500	850
Benzene	5000	581
Toluene	1500	1000

Table 5. Summary of Constituents Exceeding PCLs for April 11, 2019 at 5:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	5600	850
Benzene	5300	581
Toluene	1500	1000

Table 6. Summary of Constituents Exceeding PCLs for April 11, 2019 at 7:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	6900	850
Benzene	6200	581
Toluene	1900	1000
2,6-Dinitrotoluene	140	30

Table 7. Summary of Constituents Exceeding PCLs for April 11, 2019 at 9:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	8000	850
Benzene	7100	581
Toluene	2100	1000
Styrene	490	455

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

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	7300	850
Benzene	6600	581
Toluene	1900	1000

Table 9. Summary of Constituents Exceeding PCLs for April 12, 2019 at 1:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	7900	850
Benzene	6900	581
Toluene	1900	1000
Styrene	490	455
COD	160000	150000*

Table 10. Summary of Constituents Exceeding PCLs for April 12, 2019 at 3:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	7200	850
Benzene	6300	581
Toluene	1800	1000
Naphthalene	690	125
COD	156000	150000*

Table 11. Summary of Constituents Exceeding PCLs for April 12, 2019 at 5:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	8000	850
Benzene	7000	581
Toluene	2000	1000
Naphthalene	590	125
Styrene	470	455
COD	170000	150000*

Table 12. Summary of Constituents Exceeding PCLs for April 12, 2019 at 7:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Xylenes, Total	8600	850
Benzene	8100	581
Toluene	2200	1000
Naphthalene	660	125
Styrene	500	455
COD	178000	150000*

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.