

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

The Texas Commission on Environmental Quality (TCEQ) assessed final water quality data for up to 117 constituents at one site. Seventeen (17) samples were collected from April 8 through April 9, 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 8, 2019 at 1:00 AM	Gate 13 Ditch on April 8, 2019 at 3:00 AM	Gate 13 Ditch on April 8, 2019 at 5:00 AM	Gate 13 Ditch on April 8, 2019 at 7:00 AM	Gate 13 Ditch on April 8, 2019 at 9:00 AM	Gate 13 Ditch on April 8, 2019 at 11:00 AM	Gate 13 Ditch on April 8, 2019 at 1:00 PM
Number of Constituents	52	117	117	117	117	117	117
Number of constituents analyzed but not detected (not detected above the method detection limit or quantitation limit)	44	109	108	108	108	108	109
Number of constituents detected above the method detection limit or quantitation limit	8	8	9	9	9	9	8
Number of constituents detected but below their known PCLs	6	5	5	4	5	6	5
Number of constituents that exceeded their known PCLs	2	3	4	5	4	3	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 8, 2019 at 3:00 PM	Gate 13 Ditch on April 8, 2019 at 5:00 PM	Gate 13 Ditch on April 8, 2019 at 7:00 PM	Gate 13 Ditch on April 8, 2019 at 9:00 PM	Gate 13 Ditch on April 8, 2019 at 11:00 PM	Gate 13 Ditch on April 9, 2019 at 1:00 AM	Gate 13 Ditch on April 9, 2019 at 3:00 AM
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)	109	109	109	109	109	109	109
Number of constituents detected above the method detection limit or quantitation limit	8	8	8	8	8	8	8
Number of constituents detected but below their known PCLs	5	6	6	5	6	5	5
Number of constituents that exceeded their known PCLs	3	2	2	3	2	3	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 9, 2019 at 5:00 AM	Gate 13 Ditch on April 9, 2019 at 7:00 AM	Gate 13 Ditch on April 9, 2019 at 9:00 AM
Number of Constituents	117	117	117
Number of constituents analyzed but not detected (not detected above the method detection limit or quantitation limit)	109	109	108
Number of constituents detected above the method detection limit or quantitation limit	8	8	9
Number of constituents detected but below their known PCLs	6	6	5
Number of constituents that exceeded their known PCLs	2	2	4
Number of constituents that are still pending further TCEQ evaluation	0	0	0
Number of constituents that do not have a PCL or are assessed with other constituents	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 8, 2019 at 1:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1500	581
Xylenes, Total	9400	850

Table 3. Summary of Constituents Exceeding PCLs for April 8, 2019 at 3:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1800	581
Toluene	1300	1000
Xylenes, Total	14000	850

Table 4. Summary of Constituents Exceeding PCLs for April 8, 2019 at 5:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	2800	581
Ethylbenzene	2800	1867
Toluene	2100	1000
Xylenes, Total	28000	850

Table 5. Summary of Constituents Exceeding PCLs for April 8, 2019 at 7:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	3500	581
Ethylbenzene	3500	1867
Styrene	510	455
Toluene	2500	1000
Xylenes, Total	25000	850

Table 6. Summary of Constituents Exceeding PCLs for April 8, 2019 at 9:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	3000	581
Ethylbenzene	2000	1867
Toluene	1700	1000
Xylenes, Total	20000	850

Table 7. Summary of Constituents Exceeding PCLs for April 8, 2019 at 11:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	3900	581
Toluene	1800	1000
Xylenes, Total	15000	850

Table 8. Summary of Constituents Exceeding PCLs for April 8, 2019 at 1:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	3600	581
Toluene	1400	1000
Xylenes, Total	9900	850

Table 9. Summary of Constituents Exceeding PCLs for April 8, 2019 at 3:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	3000	581
Toluene	1200	1000
Xylenes, Total	7300	850

Table 10. Summary of Constituents Exceeding PCLs for April 8, 2019 at 5:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1700	581
Xylenes, Total	3600	850

Table 11. Summary of Constituents Exceeding PCLs for April 8, 2019 at 7:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1400	581
Xylenes, Total	2700	850

Table 12. Summary of Constituents Exceeding PCLs for April 8, 2019 at 9:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1200	581
2,6-Dinitrotoluene	140	30
Xylenes, Total	2300	850

Table 13. Summary of Constituents Exceeding PCLs for April 8, 2019 at 11:00 PM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1600	581
Xylenes, Total	3700	850

Table 14. Summary of Constituents Exceeding PCLs for April 9, 2019 at 1:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	2700	581
Toluene	1100	1000
Xylenes, Total	4500	850

Table 15. Summary of Constituents Exceeding PCLs for April 9, 2019 at 3:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	2800	581
Toluene	1200	1000
Xylenes, Total	4900	850

Table 16. Summary of Constituents Exceeding PCLs for April 9, 2019 at 5:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	2100	581
Xylenes, Total	3200	850

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

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	1800	581
Xylenes, Total	2700	850

Table 18. Summary of Constituents Exceeding PCLs for April 9, 2019 at 9:00 AM Sample

Constituent	Maximum (micrograms/L)	PCL (micrograms/L)
Benzene	2800	581
2,6-Dinitrotoluene	150	30
Toluene	1100	1000
Xylenes, Total	3300	850