

# **TCEQ Handheld Monitoring Equipment Data**

## **TPC Group Fire – November 2019**

Shortly after becoming aware of the fire at TPC Group Port Neches Operations that began on November 27, 2019, TCEQ Regional staff initiated handheld monitoring surveys in the area. MultiRAEs, QRAEs, AreaRAEs, MiniRAEs, UltraRAEs, VRAEs, and Toxic Vapor Analyzers with various sensors were used for all survey activities. These instruments provide instantaneous readings for various compounds that may include the lower explosive limit (LEL), volatile organic compounds (VOC), hydrogen sulfide (H<sub>2</sub>S), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>), benzene, 1,3 butadiene, hydrogen cyanide (HCN), and oxygen.

Sample results from TCEQ's handheld monitoring equipment are listed below, including observations of odor. This incident is causing the release of chemicals called VOCs. Elevated levels of VOCs from this facility are odorous. Short-term exposure to high concentrations of VOCs can cause eye, nose, and throat irritation, shortness of breath, headaches, and nausea. If you experience these health effects leave the area until the situation has resolved.

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Sunday, December 1, 2019</b>												
12/1/2019	Jack Brooks Airport, Beaumont, TX	6:00 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	301 Grigsby Ave., Port Neches, TX	6:00 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	The Medical Center of Southeast Texas, Jimmy Johnson Blvd/ US 69, Port Arthur, TX	6:19 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	First Christian Church, 9th Ave., Port Arthur, TX	6:27 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	3572 75th St., Port Arthur, TX	6:30 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	1004 Merriman St., Port Neches, TX	6:35 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	3901 Jimmy Johnson Blvd., Port Arthur, TX	6:40 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	7750 9th Ave., Port Arthur, TX	6:53 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	3154 Saba Ln., Port Neches, TX	7:05 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	1201 Merriman St., Port Neches, TX	7:05 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	Walgreens, 9th Ave., Port Arthur, TX	7:13 PM	VRAE/ UltraRAE	0%	0 ppm		1 ppm	20.9%	0 ppm		0 ppm	CO fluctuated between zero and one with light odors of car exhaust.
12/1/2019	Orchard St./366, Port Neches, TX	7:15 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	East Side of TPC, FM 136, Port Neches, TX	7:20 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			Light odors, butadiene (VOC), sweet gas smell.
12/1/2019	723 Ave. C, Port Neches, TX	7:32 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	Hillcrest Elementary School, 9th Ave., Nederland, TX	7:37 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.7%	0 ppm		0 ppm	No odors

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Sunday, December 1, 2019</b>												
12/1/2019	South Side of TPC, FM 366, Port Neches, TX	7:40 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			Very light odors, burnt rubber with intermittent butadiene/VOC/sweet gas smell.
12/1/2019	Pine St./366, Port Neches, TX	7:40 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.1%				No odors
12/1/2019	Market Basket, N 27th St., Nederland, TX	7:54 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	Park St./Avenue L, Port Neches, TX	8:00 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	SH-136 Spur/366, Port Neches, TX	8:00 PM	MultiRAE/ UltraRAE	0%	0.11 ppm	0 ppm	0 ppm	21.2%		0.02 ppm		Slight butadiene odor detected in restricted area.
12/1/2019	1106 Ave. B, Port Neches, TX	8:05 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	CO Wilson Middle School, N 27th St., Nederland, TX	8:10 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	2025 Merriman St., Port Neches, TX	8:15 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	585-693 Pine St., Port Neches, TX	8:20 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	1011 Grigsby Ave., Port Neches, TX	8:27 PM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm		No odors
12/1/2019	Nederland High School, 18th St., Nederland, TX	8:29 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.6%	0 ppm		0 ppm	No odors
12/1/2019	Main St./Avenue D, Port Neches, TX	8:35 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	128 Sycamore St., Port Neches, TX	8:40 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	500-630 Grigsby Ave., Port Neches, TX	8:45 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	424 Ave. F, Port Neches, TX	8:50 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	Lee Ave./Wood St., Port Neches, TX	8:55 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Sunday, December 1, 2019</b>												
12/1/2019	SH-136 Spur/366, Port Neches, TX	9:00 PM	MultiRAE/ UltraRAE	0%	0.24 ppm	0 ppm	0 ppm	20.9%		0.1 ppm		Strong butadiene odors in restricted area.
12/1/2019	Dane's Automotive, Twin City Hwy., Nederland, TX	9:07 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	776 Magnolia Ave., Port Neches, TX	9:16 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	Florida Tans, Boston Ave., Nederland, TX	9:22 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	SH-136 Spur/south of 366, Port Neches, TX	9:25 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.1%				No odors
12/1/2019	4721 Pure Atlantic, Groves, TX	9:29 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	301 Ave. C, Port Neches, TX	9:32 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	6001 39th St., Groves, TX	9:38 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	Home Surplus Outlet, Twin City Hwy., Nederland, TX	9:39 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/1/2019	100-120 E. Port Neches Ave., Port Neches, TX	9:40 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.0%				No odors
12/1/2019	6400 Van Buren St., Groves, TX	9:50 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	Anselmo Ave. B/Hogaboom Rd., Groves, TX	9:57 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			Light odors, sweet solvent/VOC odors - different from odors at east and south ends of TPC. Downwind of Huntsman. No readings.
12/1/2019	HEB, Twin City Hwy., Nederland, TX	9:58 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.7%	0 ppm		0 ppm	No odors
12/1/2019	501-599 E. Port Neches, Ave., Port Neches, TX	10:00 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/1/2019	1830 Llano St., Port Neches, TX	10:05 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors

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<b>Sunday, December 1, 2019</b>												
12/1/2019	Reel Cajun, Twin City Hwy., Nederland, TX	10:13 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.6%	0 ppm		0 ppm	No odors
12/1/2019	5601 Twin City Hwy., Port Arthur, TX	10:16 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	SH-136 Spur/366, Groves, TX	10:20 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	350 Twin City Hwy., Port Neches, TX	10:24 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	Twin City Hwy./347 and 53rd St., Nederland, TX	10:31 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.6%	0 ppm		0 ppm	No odors
12/1/2019	Meadowgreen Park, Port Neches, TX	10:32 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	1004 Merriman St., Port Neches, TX	10:35 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	2820 Merriman, Port Neches, TX	10:40 PM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/1/2019	SH-136 Spur/366, Groves, TX	10:40 PM	MultiRAE/ UltraRAE	0%	0.08 ppm	0 ppm	0 ppm	21.2%		0.03 ppm		Slight butadiene odor detected in restricted area.
12/1/2019	Twin City Hwy./347 and 46th St., Nederland, TX	10:49 PM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.6%	0 ppm		0 ppm	No odors
12/1/2019	SH-136 Spur/366, Groves, TX	10:50 PM	MultiRAE/ UltraRAE	0%	0.24 ppm	0 ppm	0 ppm	21.2%		0.19 ppm		Strong butadiene odors with smoke in restricted area.
12/1/2019	903 Ave. B, Port Neches, TX	10:50 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	2107-2115 136 Spur, Port Neches, TX	11:05 PM	MultiRAE/ UltraRAE	0%	0.47 ppm	0 ppm	0 ppm	21.3%		0.34 ppm		Strong butadiene odors with smoke in restricted area.
12/1/2019	1901 Port Neches Ave., Port Neches, TX	11:17 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/1/2019	SH-136 Spur/366, Port Neches, TX	11:20 PM	MultiRAE/ UltraRAE	0%	0.87 ppm	0 ppm	0 ppm	21.2%		0.39 ppm		Strong butadiene odors with smoke in restricted area.
12/1/2019	302 E. First St., Port Neches, TX	11:45 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Monday, December 2, 2019</b>												
12/2/2019	1519 Magnolia Ave., Port Neches, TX	12:01 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	128 Sycamore St., Port Neches, TX	12:05 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.1%				No odors
12/2/2019	1911 Nederland Ave., Nederland, TX	12:18 AM	MultiRAE		0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	100-120 E. Port Neches, Port Neches, TX	12:25 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.0%				No odors
12/2/2019	423 Ave. L, Port Neches, TX	12:27 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	Magnolia Ave./Llano St., Port Neches, TX	12:28 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	910 S. Twin City Hwy., Nederland, TX	12:35 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	203 E. Second St., Port Neches, TX	12:45 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.1%				No odors
12/2/2019	1401 Merriman St., Port Neches, TX	12:48 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	4601 Rice Farm Rd., Port Arthur, TX	12:49 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	Lee Ave./Merriman St., Port Neches, TX	1:01 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	414 Ave. G, Port Neches, TX	1:02 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	3174 Saba Ln., Port Neches, TX	1:02 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	129-153 Orchard St., Port Neches, TX	1:05 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	4749 Twin City Hwy., Port Arthur, TX	1:14 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Monday, December 2, 2019</b>												
12/2/2019	1125 Dallas St., Port Neches, TX	1:24 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	634 Ave. C, Port Neches, TX	1:25 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	1008 E. Port Neches Ave., Port Neches, TX	1:35 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	2425 Nall St., Port Neches, TX	1:36 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	6150 39th St., Groves, TX	1:41 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	315 Ave. D, Port Neches, TX	1:49 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	4800 B FM 365, Port Arthur, TX	1:49 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	601-659 E. Port Neches Ave., Port Neches, TX	1:55 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.1%				No odors
12/2/2019	3701 Pure Atlantic Rd., Groves, TX	1:58 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	7500 Twin City Hwy., Port Arthur, TX	2:00 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	5201 Wilson St., Groves, TX	2:14 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	315 Canal St., Port Neches, TX	2:15 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	315 Ave. D, Port Neches, TX	2:30 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	3400 Jimmy Johnson Blvd., Port Arthur, TX	2:30 AM	VRAE/ UltraRAE	0%	0.05 ppm		0 ppm	20.9%	0 ppm		1 ppm	No odors
12/2/2019	913 Port Neches Ave., Port Neches, TX	2:35 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	5545 Beaumont Ave., Groves, TX	2:41 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			Very light sweet chemical odor.

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Monday, December 2, 2019</b>												
12/2/2019	101 E. Port Neches Ave., Port Neches, TX	2:45 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	Wilson St./Hogaboom Rd., Groves, TX	2:58 AM	VRAE/ UltraRAE	0%	0.125 ppm		0 ppm	20.7%	0 ppm		0 ppm	Sweet chemical odors.
12/2/2019	1216 Port Neches Ave., Port Neches, TX	3:00 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	311 Pine St., Port Neches, TX	3:15 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.1%				No odors
12/2/2019	Pure Atlantic Rd./Hayman St., Port Neches, TX	3:22 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	700 Central Dr., Port Neches, TX	3:28 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	1522 Heigler St., Port Neches, TX	3:30 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	3:40 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.2%		0.46 ppm		Strong butadiene odors without smoke in restricted area.
12/2/2019	1004 Merriman St., Port Neches, TX	3:42 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	1900 Magnolia Ave., Port Neches, TX	3:56 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	721 Hebert Woods Dr., Port Neches, TX	4:00 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	2820 Merriman St., Port Neches, TX	4:02 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.5%	0 ppm		0 ppm	No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	4:05 AM	MultiRAE/ UltraRAE	0%	0.22 ppm	0 ppm	0 ppm	21.2%		0.16 ppm		Slight butadiene odor detected in restricted area.
12/2/2019	1309 Port Neches Ave., Port Neches, TX	4:11 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	2025 Merriman St., Port Neches, TX	4:15 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.6%	0 ppm		0 ppm	No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	4:30 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0.26 ppm		Strong butadiene odor detected in restricted area.



Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
<b>Monday, December 2, 2019</b>												
12/2/2019	776 Magnolia Ave., Port Neches, TX	4:30 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	903 Ave. B, Port Neches, TX	4:38 AM	VRAE/ UltraRAE	0%	0 ppm		0 ppm	20.6%	0 ppm		0 ppm	No odors
12/2/2019	2736 Nall St., Port Neches, TX	4:40 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	2600 FM 365, Nederland, TX	4:51 AM	MultiRAE		0 ppm	0 ppm		20.9%	0 ppm			No odors