

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 (H₂S), carbon monoxide (CO), sulfur dioxide (SO₂), 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
Monday, December 2, 2019												
12/2/2019	301 Grigsby Ave., Port Neches, TX	6:00 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	1401 Merriman St., Port Neches, TX	6:35 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	3701 Pure Atlantic Rd., Groves, TX	6:43 PM	VRAE/ MiniRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	No odors
12/2/2019	2102 TX-136 Spur, Port Neches, TX	7:00 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	Hwy. 366/Hogaboom Rd., Groves, TX	7:09 PM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	516 Orchard Ave., Port Neches, TX	7:10 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/2/2019	Magnolia (366)/Hwy-136 Spur, Port Neches, TX	7:15 PM	VRAE/ MiniRAE	0%	0 ppm		0 ppm	20.9%	0 ppm		0 ppm	Very light burnt rubber odor.
12/2/2019	8071 S. Twin City Hwy., Port Arthur, TX	7:34 PM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	2102 TX-136 Spur, Port Neches, TX	7:35 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				Light odor
12/2/2019	585-693 Pine St., Port Neches, TX	7:35 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.3%				No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	7:38 PM	VRAE/ MiniRAE	0%	0.1 ppm		0 ppm	20.9%	0 ppm		0 ppm	Light odor - burnt rubber
12/2/2019	332 A. 12th St., Nederland, TX	7:51 PM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	7:55 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	Hogaboom Rd./Main Ave., Groves, TX	8:08 PM	VRAE/ MiniRAE	0%	0 ppm		0 ppm	Invalid	0 ppm		1 ppm	VRAE oxygen reading went up to 30% and alarmed. Left area. Appears to be a faulty sensor.
12/2/2019	SH-136 Spur/366, Port Neches, TX	8:10 PM	MultiRAE/ UltraRAE	0%	5.0 ppm	0 ppm	0 ppm	20.9%		0.35 ppm		Slight odor (butadiene) in restricted area.
12/2/2019	4554 75th St., Port Arthur, TX	8:10 PM	MultiRAE/ UltraRAE	0%	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
Monday, December 2, 2019												
12/2/2019	1004 Merriman St., Port Neches, TX	8:19 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	8:25 PM	MultiRAE/ UltraRAE	0%	1.0 ppm	0 ppm	0 ppm	20.9%		0.53 ppm		Slight odor (butadiene) in restricted area.
12/2/2019	SH-136 Spur/366, Port Neches, TX	8:36 PM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			Very light metal burning odor for 4 min. then very light natural gas odor.
12/2/2019	1208 Port Neches Ave., Port Neches, TX	8:45 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	8:45 PM	MultiRAE/ UltraRAE	0%	6.0 ppm	0 ppm	0 ppm	20.9%		1.28 ppm		Strong odor (butadiene) in restricted area.
12/2/2019	Grist Dr./Saba Ln., Port Neches, TX	8:54 PM	MiniRAE		0.9 ppm							Very light burnt rubber odor.
12/2/2019	702 Sierra Dr., Port Neches, TX	8:59 PM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	9:00 PM	MultiRAE/ UltraRAE	0%	8.0 ppm	0 ppm	0 ppm	20.9%		4.21 ppm		Strong odor (butadiene) in restricted area.
12/2/2019	685 Meadow Green Dr., Port Neches, TX	9:12 PM	MultiRAE/ UltraRAE	0%	0.2 ppm	0 ppm		20.9%	0 ppm			Light, intermittent cleaning odor.
12/2/2019	2213 Earle St., Port Neches, TX	9:14 PM	MiniRAE		0.3 ppm							Very light burnt rubber odor.
12/2/2019	1125 Wilson St., Port Neches, TX	9:17 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	701-813 E. Port Neches Ave., Port Neches, TX	9:20 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	3105 Galewood Ln., Port Neches, TX	9:31 PM	MultiRAE/ UltraRAE	0%	0.475 ppm	0 ppm		20.9%	0 ppm			Very light, intermittent burning metal odor.
12/2/2019	1425 Nall St., Port Neches, TX	9:35 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	2301 Saybrook Ln., Port Neches, TX	9:35 PM	MiniRAE		0.3 ppm							No odors
12/2/2019	101 E. Port Neches Ave., Port Neches, TX	9:45 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
Monday, December 2, 2019												
12/2/2019	491 Meadowgreen Dr., Port Neches, TX	9:45 PM	MultiRAE/ UltraRAE	0%	0.075 ppm	0 ppm		20.9%	0 ppm			Very light burning wood odor.
12/2/2019	2227 Nall St., Port Neches, TX	10:03 PM	MiniRAE		0 ppm							No odors
12/2/2019	101-121 Port Neches Ave., Port Neches, TX	10:05 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/2/2019	690 E. Kitchen Dr., Port Neches, TX	10:12 PM	MultiRAE/ UltraRAE	0%	0.875 ppm	0 ppm		20.9%	0 ppm			Very light sweet odor, intermittent.
12/2/2019	864 Magnolia Ave., Port Neches, TX	10:15 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	2370 Nall St., Port Neches, TX	10:22 PM	MiniRAE		0 ppm							No odors
12/2/2019	124 Pecan St., Port Neches, TX	10:25 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/2/2019	606 Thomas Haven Dr., Port Neches, TX	10:30 PM	MultiRAE/ UltraRAE	0%	0.7 ppm	0 ppm		20.9%	0 ppm			No odors
12/2/2019	2202 Earle St., Port Neches, TX	10:42 PM	MultiRAE/ UltraRAE	0%	2.7 ppm	0 ppm		20.9%	0 ppm			Light, sweet, rubber odor, continuous.
12/2/2019	876 South Ave., Port Neches, TX	10:43 PM	MiniRAE		0.1 ppm							No odors
12/2/2019	2001 Nall St., Port Neches, TX	10:45 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	622 E. Port Neches Ave., Port Neches, TX	10:45 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	2305 Earle St., Port Neches, TX	11:01 PM	MultiRAE/ UltraRAE	0%	0.325 ppm	0 ppm		20.9%	0 ppm			Very light sweet rubber odor, continuous.
12/2/2019	8071 S. Twin City Hwy., Port Arthur, TX	11:02 PM	MiniRAE		0 ppm							No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	11:05 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/2/2019	1613 Dallas St., Port Neches, TX	11:25 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	11:25 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/2/2019	SH-136 Spur/366, Port Neches, TX	11:45 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
Tuesday, December 3, 2019												
12/3/2019	Orchard Ave./366, Port Neches, TX	12:05 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	749 Central Dr., Port Neches, TX	12:08 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm	0 ppm	19.6%		0.1 ppm		Light odor
12/3/2019	4605 Jerry Ware Dr., Beaumont, TX	12:20 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	Port Neches Atlantic Rd./Orchard Ave., Port Neches, TX	12:25 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	8585 Memorial Blvd., Port Arthur, TX	12:25 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	Helena Park Elementary, 2800 Helena Ave., Nederland, TX	12:40 AM	MultiRAE/ UltraRAE	0%	0.75 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	2440 FM 365, Port Arthur, TX	12:44 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	426 Second St., Port Neches, TX	12:45 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	301 Grigsby Ave., Port Neches, TX	12:48 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	Hillcrest Elementary School, 2611 Ave. H, Nederland, TX	12:54 AM	MultiRAE/ UltraRAE	0%	0.05 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	402 E. First St., Port Neches, TX	1:05 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	Ridgewood Elementary, 2820 Merriman St., Port Neches, TX	1:10 AM	MultiRAE/ UltraRAE	0%	0.2 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	749 Central Dr., Port Neches, TX	1:23 AM	MultiRAE/ UltraRAE	0%	0.125 ppm	0 ppm		20.9%	0 ppm			Waxy sweet odor (cooling tower water), Paint
12/3/2019	301 Ave. C, Port Neches, TX	1:25 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	125 Pine St., Port Neches, TX	1:30 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	1515 Lake Shore Dr., Port Arthur, TX	1:32 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	No odors

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Butadiene	HCN	Other Notes/ Observations
Tuesday, December 3, 2019												
12/3/2019	Port Neches-Groves High School, 1665-1601 Merriman St, Port Neches, TX	1:45 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	660-698 Main Ave., Port Arthur, TX	1:53 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	303 Ave. E, Port Neches, TX	1:55 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	402 E. Port Neches Ave., Port Neches, TX	1:55 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	301 Grigsby Ave., Port Neches, TX	2:00 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	Near 002 Levee Rd., Port Arthur, TX	2:10 AM	MiniRAE/ MultiRAE	0%	0 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	SH-136 Spur/366, Port Neches, TX	2:25 AM	MultiRAE/ UltraRAE	0%	0.1 ppm	0 ppm	0 ppm	20.9%		0.08 ppm		Slight odor (butadiene) in restricted area.
12/3/2019	4301 32nd St., Port Arthur, TX	2:25 AM	MultiRAE/ UltraRAE	0%	0.025 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	3324 Pure Atlantic Rd., Groves, TX	2:28 AM	MiniRAE/ MultiRAE	0%	0 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	2020 Llano St., Port Neches, TX	2:30 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	SH-136 Spur/366, Port Neches, TX	2:45 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	6001 FM-366, Groves, TX	2:45 AM	MiniRAE/ MultiRAE	0%	0 ppm			20.9%	0 ppm		0 ppm	Pine-like odors detected.
12/3/2019	746 Central Dr., Port Neches, TX	3:00 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	606 Magnolia Ave., Port Neches, TX	3:05 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	Van Buren Elementary School, 6400 Van Buren St., Groves, TX	3:10 AM	MultiRAE/ UltraRAE	0%	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
Tuesday, December 3, 2019												
12/3/2019	SH-136 Spur/366, Port Neches, TX	3:17 AM	MiniRAE/ MultiRAE	0%	0.8 ppm			20.9%	0 ppm		0.5 ppm	Odors associated to elevated HCN and VOC readings. One investigator experienced dry throat. Moderate pine-like/chemical odor on arrival.
12/3/2019	749 Central Dr., Port Neches, TX	3:30 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm		No odors
12/3/2019	Ridgewood Elementary, 2820 Merriman St., Port Neches, TX	3:32 AM	MultiRAE/ UltraRAE	0%	0.05 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	Earle St./Magnolia Ave., Port Neches, TX	3:35 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	Port Neches-Groves High School, 1665-1601 Merriman St, Port Neches, TX	3:44 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	Woodcrest Elementary School, 1522 Heisler St., Port Neches, TX	3:57 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	2210 Earle St., Port Neches, TX	3:58 AM	MiniRAE/ MultiRAE	0%	0.2 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	2061 Nall St., Port Neches, TX	4:05 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odors
12/3/2019	2194-2198 Park St., Port Neches, TX	4:10 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/3/2019	Highland Park Elementary School, 200 S. 6th St., Nederland, TX	4:12 AM	MultiRAE/ UltraRAE	0%	0.05 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	300 Avenue J, Port Neches, TX	4:13 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	Merriam St./Central Dr., Port Neches, TX	4:26 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	702 Hess St., Port Neches, TX	4:30 AM	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
Tuesday, December 3, 2019												
12/3/2019	Nederland High School, 2108 N. 18th St., Nederland, TX	4:30 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	Langham Elementary School, 800 S. 12th St., Nederland, TX	4:40 AM	MultiRAE/ UltraRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odors
12/3/2019	Orchard Ave./366, Port Neches, TX	4:45 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	21.2%				No odors
12/3/2019	4401 Jimmy Johnson Blvd., Port Arthur, TX	4:55 AM	MiniRAE/ MultiRAE	0%	0.2 ppm			20.9%	0 ppm		0 ppm	No odors
12/3/2019	1300 US 69, Nederland, TX	5:09 AM	MiniRAE/ MultiRAE	0%	0.1 ppm			20.9%	0 ppm		0 ppm	Slight burnt brush or wood odor detected.