

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, and UltraRAEs 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), 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	Other Notes/Observations
Wednesday, November 27, 2019										
11/27/2019	87 near Rainbow Bridge, Port Arthur, TX	6:23 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	87 Taft 1 Proctor, Port Arthur, TX	6:38 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Smell of moderate plastics into neighborhood; light in neighborhood; smell of light plastics on 87; no odors down Proctor
11/27/2019	S. 105/Old Mansfield Ferry Rd., South Vidor, TX	6:49 AM	UltraRAE/MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	7200 Royal Meadow St., Port Arthur, TX	6:53 AM	AreaRAE/MultiRAE	0%	0-1.5 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	Steelman Rd./Pecos St., Port Arthur, TX	6:55 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Royal Meadows Circle/Royal Meadows St., Port Arthur, TX	7:01 AM	AreaRAE/MultiRAE	0%	0-2.1 ppm	0 ppm	0 ppm	20.9%		Very light burnt rubber odor for less than 2 minutes
11/27/2019	Lewis St., Port Arthur, TX	7:01 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	9th Ave./15th St., Port Arthur, TX	7:05 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Very light burnt odor
11/27/2019	Royal Meadows Blvd./Ninth Ave., Port Arthur, TX	7:10 AM	AreaRAE/MultiRAE	0%	0-2 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	15th Ave./Gulfway, Port Arthur, TX	7:12 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Light burnt odor can see plume
11/27/2019	Thomas Jefferson Middle School, Port Arthur, TX	7:13 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	3412 - 3504 Jimmy Johnson Blvd., Port Arthur, TX	7:15 AM	AreaRAE/MultiRAE	0%	0-3.9 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	Hwy. 73 on North Side of Neches River, Bridge City, TX	7:18 AM	UltraRAE/MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	25th St./Main Ave., Port Arthur, TX	7:21 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	2940 Jimmy Johnson Blvd., Port Arthur, TX	7:28 AM	AreaRAE/MultiRAE	50%	1.4-3.8 ppm	0 ppm	0 ppm	20.9%		No odor

Date	Location	Time (Approx.)	Instrument	LEL	VOC	H2S	CO	O2	SO2	Other Notes/ Observations
Wednesday, November 27, 2019										
11/27/2019	7611 Golfhill Dr., Port Arthur, TX	7:40 AM	AreaRAE/MultiRAE	0%	3.3 - 5.3 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	Main Ave., Port Arthur, TX	7:40 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	E. Parkway/32nd St., Port Arthur, TX	7:41 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Twin City Highway/32nd St., Port Arthur, TX	7:43 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Green Hill and Golf Hill, Port Arthur, TX	7:50 AM	AreaRAE/MultiRAE	0%	3.2-6.2 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	Bob Hope Elementary, 32nd St./Woodrow Dr., Port Arthur, TX	7:52 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	9th Ave./32nd St., Port Arthur, TX	7:55 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	281/Star Hair and Nail, Port Arthur, TX	8:01 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Brazos Ave./Jimmy Johnson, Port Arthur, TX	8:03 AM	AreaRAE/MultiRAE	0%	3.4-5.8 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	281/33 St./34 St., Port Arthur, TX	8:05 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	30th to 36th St. to 281 Memorial, Port Arthur, TX	8:10 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	281 Memorial to 39th St., Port Arthur, TX	8:16 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Lansing St./39th, Port Arthur, TX	8:18 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	6801 Ninth Ave., Port Arthur, TX	8:20 AM	AreaRAE/MultiRAE	0%	3-3.8 ppm	0 ppm	0 ppm	20.9%		Sweet odor, light, less than 1 minute
11/27/2019	Memorial to 21st St./Lansing and 42nd St., Port Arthur, TX	8:20 AM	MultiRAE/QRAE	0%	1 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	60th St./9th Sr., Port Arthur, TX	8:25 AM	AreaRAE/MultiRAE	0%	1.4-5.6 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	Hwy. 215 Spur/West 73	8:35 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Light burnt odor on Shreveport St. (no reading detected)
11/27/2019	Hwy. 347/60th St., Port Arthur, TX	8:36 AM	AreaRAE/MultiRAE	0%	2.4-5.9 ppm	0 ppm	0 ppm	20.9%		No odor
11/27/2019	Ft. Worth St./W 73, Port Arthur, TX	8:42 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	2701 SH 136 Spur	8:47 AM	AreaRAE/MultiRAE	0%	0-5.9 ppm	0 ppm	0 ppm	20.9%		No odor

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Wednesday, November 27, 2019										
11/27/2019	Linkwood/Diamond St.; Terrace Ave. to 53rd St., Port Arthur, TX	8:50 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Roosevelt St. to Maple St. to Pine St.	8:55 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	60 St. to West Port Arthur Rd.	9:00 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	365 and 277, Port Arthur, TX	9:24 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Jack Brooks Airport	9:30 AM	UltraRAE/MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Helene Ave., Port Arthur, TX	10:03 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	W. 12th St., Port Arthur, TX	10:10 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Very light burnt odor smell
11/27/2019	N. 12th St./Nederland Ave., Port Arthur, TX	10:13 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	South 12th St. to Ave. I, Port Arthur, TX	10:15 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	South Ave. B to South Ave. 9th, Port Arthur, TX	10:19 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Very light chemical odor, lasted a few seconds
11/27/2019	5th St. and Texas Ave., Port Arthur, TX	10:33 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Ave. D/South 6th St., Port Arthur, TX	10:38 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	Light burnt odors
11/27/2019	Nederland Ave./Twin City Highway, Port Arthur, TX	10:41 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Twin City Hwy., Port Arthur, TX	10:45 AM	MultiRAE/QRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	Staging Area, Spur 136	11:10 AM	UltraRAE/MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor
11/27/2019	347 Saba Ln.	11:15 AM	UltraRAE/MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm	No odor