

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), benzene, 1,3 butadiene, 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	Benzene	Other Notes/ Observations
Wednesday, November 27, 2019												
11/27/2019	9th St./Hwy. 73, Port Arthur, TX	9:22 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	9th St./57th St., Port Arthur, TX	9:31 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm		No odor
11/27/2019	Greenway Pointe Dr./Pleasant Hill Ct., Port Arthur, TX	9:37 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm		No odor
11/27/2019	Royal Meadows Cir./Royal Meadows St., Port Arthur, TX	9:54 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%			0 ppm	No odor
11/27/2019	Royal Meadows Cir./Royal Meadows St., Port Arthur, TX	10:14 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%			0 ppm	No odor
11/27/2019	HO Mills Hwy./W Port Arthur Rd., Port Arthur, TX	10:45 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%			0 ppm	No odor
11/27/2019	5700 TX-93 Spur, Port Arthur, TX	10:52 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odor
11/27/2019	1129 60th St., Port Arthur, TX	11:20 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odor
11/27/2019	Jimmy Johnson Blvd./Honeywood Dr., Port	11:43 AM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.1%		0 ppm		No odor
11/27/2019	6100 TX 93 Spur, Port Arthur, TX	11:50 AM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odor
11/27/2019	Jimmy Johnson Blvd./Brazos Ave., Port Arthur, TX	11:56 AM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	Jimmy Johnson Blvd./9th Ave., Port Arthur, TX	12:06 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	6245 W. Port Arthur Rd., Port Arthur, TX	12:10 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odor
11/27/2019	Hwy. 93, North of 63rd St., Port Arthur, TX	12:25 PM	MultiRAE	0%	0 ppm	0 ppm	0 ppm	20.9%				No odor
11/27/2019	Seawall Dr., Port Arthur, TX	12:45 PM	UltraRAE/VRAE	0%	0 ppm	0 ppm		20.9% - 21.2%	0 ppm			No odor
11/27/2019	6001 60th St., Port Arthur, TX	12:50 PM	MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			Very light odor
11/27/2019	4430 Jimmy Johnson Blvd., Port Arthur, TX	1:19 PM	MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			Very light odor to no odor
11/27/2019	James Gamble Blvd./Roosevelt Ave., Port Arthur, TX	1:25 PM	UltraRAE/VRAE	0%	0 ppm	0 ppm		21.3% - 21.4%	0 ppm			No odor
11/27/2019	7610 North Twin City Hwy., Port Arthur, TX	1:52 PM	MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			Very light burning odor to no odor
11/27/2019	HEB S. Hwy. 347, Port Arthur, TX	1:58 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	Having problems with MultiRAE, may need to calibrate; Use UltraRAE to read butadiene
11/27/2019	Ridgewood Elementary, 2820 Merriman St., Port Neches, TX	1:59 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.2%		0 ppm		Minor odor, burning smell
11/27/2019	1033 Nederland Ave., Port Arthur, TX	2:12 PM	MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			No odor

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Wednesday, November 27, 2019												
11/27/2019	604 Thomas Haven Dr., Port Neches, TX	2:14 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.2%		0 ppm		Minor odor, burning smell
11/27/2019	706 Magnolia Ave., Port Neches, TX	2:23 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		Minor odor, burning smell
11/27/2019	2875 Jimmy Johnson Blvd., Port Arthur, TX	2:33 PM	UltraRAE/VRAE	0%	0.05 ppm	0 ppm		20.9%-21.3%	0 ppm			No odor
11/27/2019	2239 Nall St., Port Neches, TX	2:35 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		No odor
11/27/2019	8103 Twin City Hwy., Port Arthur, TX	2:35 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	10607 US 69, Port Arthur, TX	2:36 PM	MultiRAE	0%	0 ppm	0 ppm		20.9%	0 ppm			Very light to no odor
11/27/2019	Hwy. 347/Rice Rd., Port Arthur, TX	2:43 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	2606 Nall St., Port Neches, TX	2:45 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		Exhaust fumes from passing cars
11/27/2019	11th/Goodwin, Port Neches, TX	2:56 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		No odor
11/27/2019	7621 Hwy. 347, Port Arthur, TX	2:56 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	H O Mills Blvd., north of Shreveport Blvd., Port Arthur, TX	3:03 PM	UltraRAE/VRAE	0%	0.025 ppm	0 ppm		21.2%	0 ppm			No odor
11/27/2019	Goodwin Ave., Port Neches, TX	3:04 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		No odor
11/27/2019	Louisiana Ave./W FM 36 S, Port Arthur, TX	3:30 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	8500-8542 Texas Ave., Port Arthur, TX	3:41 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	Hwy. 73 and 93, Port Arthur, TX	3:41 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	Dorsey St./Texas Ave., Port Arthur, TX	3:50 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	8123 Alabama Ave., Port Arthur, TX	3:57 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	5799 TX-93 Spur, Port Arthur, TX	3:58 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	Access Rd. at Port Acres Bulk Substation, Port Arthur, TX	4:08 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm	0 ppm	No odor
11/27/2019	Hall St./Mississippi Ave., Port Arthur, TX	4:09 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor
11/27/2019	5933 Pine Ave., Port Arthur, TX	4:18 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm	0 ppm	No odor
11/27/2019	6109 Willow Ave., Port Arthur, TX	4:29 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm	0 ppm	No odor

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Wednesday, November 27, 2019												
11/27/2019	610 Hall St., Port Arthur, TX	4:31 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		No odor
11/27/2019	Hwy 93/Dorsey St., Port Arthur, TX	4:37 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.3%		0 ppm		Light odor (smoke)
11/27/2019	Cherry Ave./60th St., Port Arthur, TX	4:38 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	Cherry/Maple, Port Arthur, TX	4:44 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	Daisy/Danny, Port Arthur, TX	4:53 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	Barbara Ln/Roosevelt Ave., Port Arthur, TX	5:00 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	20.9%		0 ppm	0 ppm	No odor
11/27/2019	6599 W. Port Arthur Rd., Port Arthur, TX	5:00 PM	MultiRAE/UltraRAE	0%	0 ppm	0 ppm	0 ppm	21.4%		0 ppm		No odor