



TPC GROUP PLANT FIRE – PORT NECHES

Lone Star Legal Aid

December 7, 2019

Photo: U.S. EPA

Unified Command for Response Effort



Photo credits: U.S. EPA



Important Information

Website:

<https://portnechesresponse.com/>

Community Assistance

Helpline / Claims:

(866)-601-5880



@portneches.response.1



@PortNechesUC

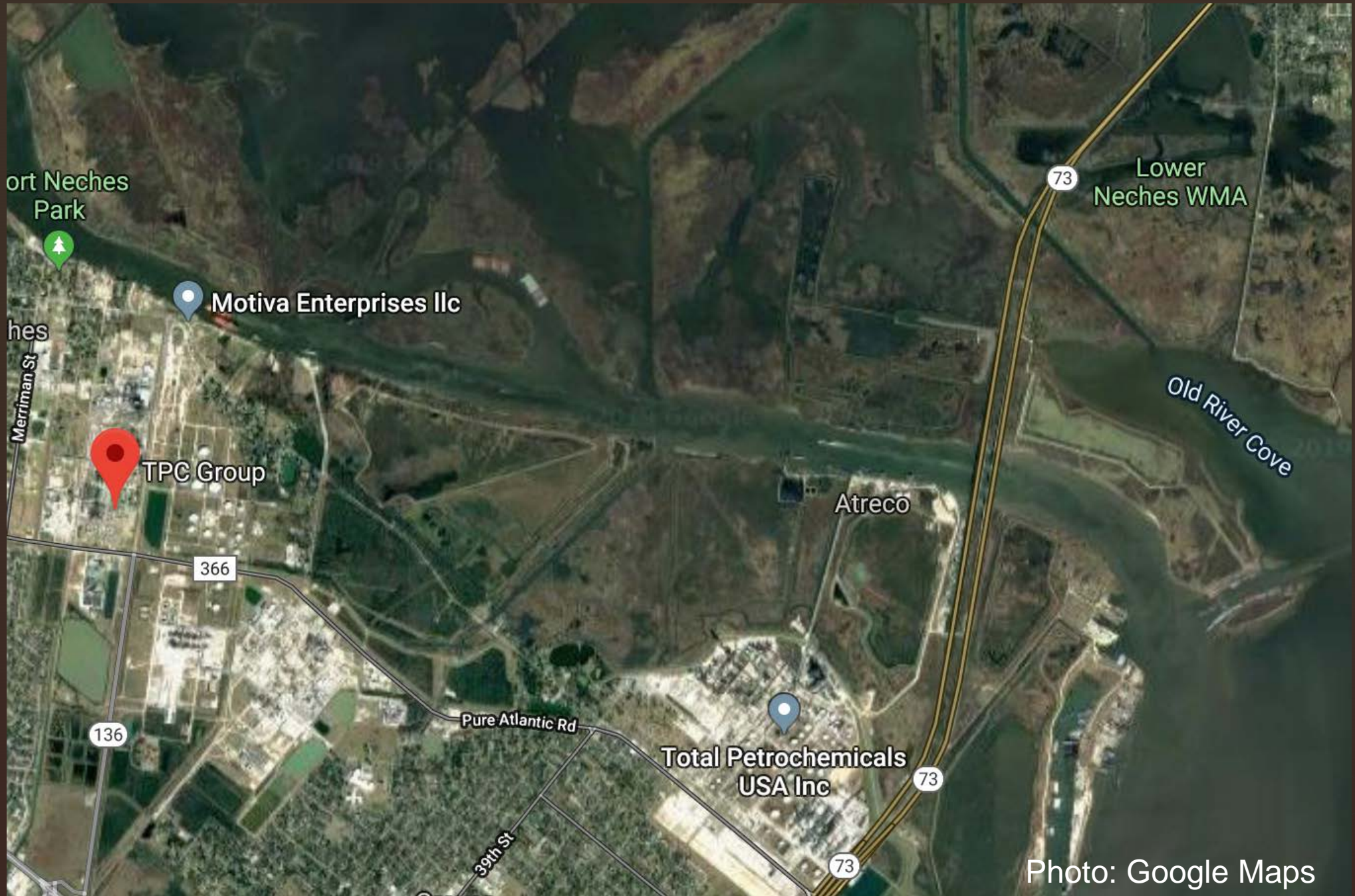


Photo: Google Maps

TEXAS PETROLEUM CHEMICAL (TPC) GROUP PORT NECHES OPERATIONS

- High-priority violator by U.S. EPA for over 2 years
- Out of compliance with Clean Air Act since August 2017
- Since 2016, emitted 9,000 lbs of 1,3 butadiene beyond permit

Enforcement and Compliance Summary

Statute	Insp (5 Years)	Date of Last Inspection	Compliance Status	Qtrs with NC (of 12)	Qtrs with Significant Violation
CAA	1	08/08/2017	High Priority Violation	12	12

Penalties against TPC Port Neches Plant

Year	EPA	State (TCEQ) Fines
2019		\$41,191
2018		\$13,688, \$55,753, \$7,500
2017	\$72,187 federal penalty \$275,000 fence line monitoring for 1,3 butadiene \$95,000 compliance action cost (install flare monitoring equipment)	\$7,500
2016	\$14,900 compliance action cost \$30,750 federal penalty (chlorine release)	\$22,063, \$7,125
2015		\$15,600
2014		\$45,75, \$5,775
2013		\$13,688
2011		\$6,775, \$6,800
2009		\$10,200, \$20,206
2008		\$3,625, \$8,000, \$7,300, \$3,600

Air Monitoring

- 1,3 Butadiene
- Benzene
- Total Volatile Organic Compounds (VOCs)
- Carbon Monoxide
- Oxygen
- Hydrogen Sulfide
- Particulate Matter

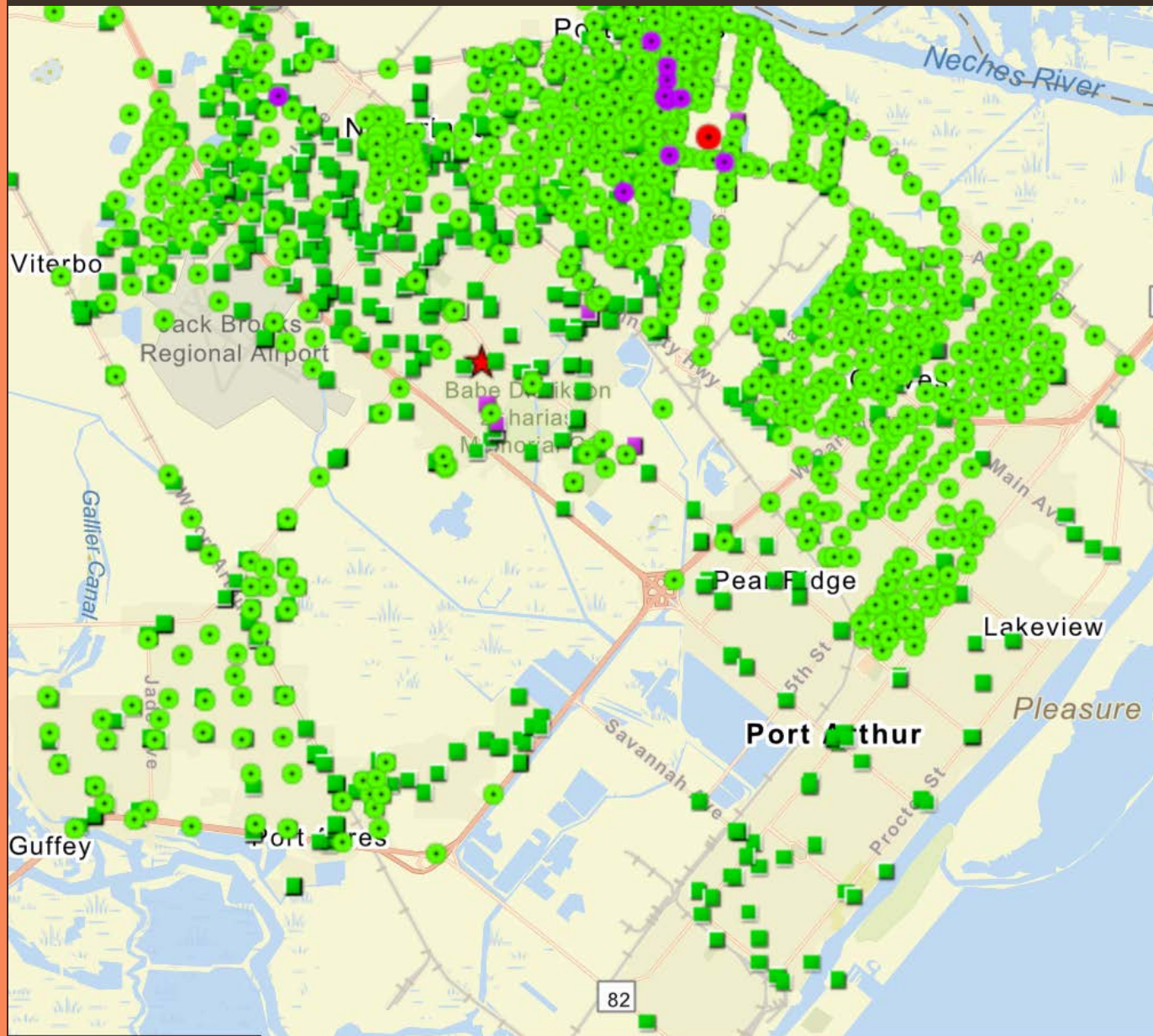
Photo credits: U.S. EPA







NEDERLAND HS STATIONARY MONITOR

- Closest stationary monitor with timely information on relevant pollutants
- 4-miles West of the TPC Group Port Neches plant
- Variable seasonal winds have steered emission plumes away from the monitor
- Average butadiene readings for December are 40 times higher (0.0077 ppm) than yearly average (0.00019 ppm)
- Maximum hourly average (0.16443 ppm) is 22 times higher than the average maximum hourly median for rest of year (0.01153)



EPA Handheld Air Monitoring Locations

Air Monitoring Location

-  No Exceedance
-  Exceedance

TCEQ Handheld Air Monitoring Locations

Exceedance



Non-Exceedance



Operations

TPC Fire Location



EOC Location



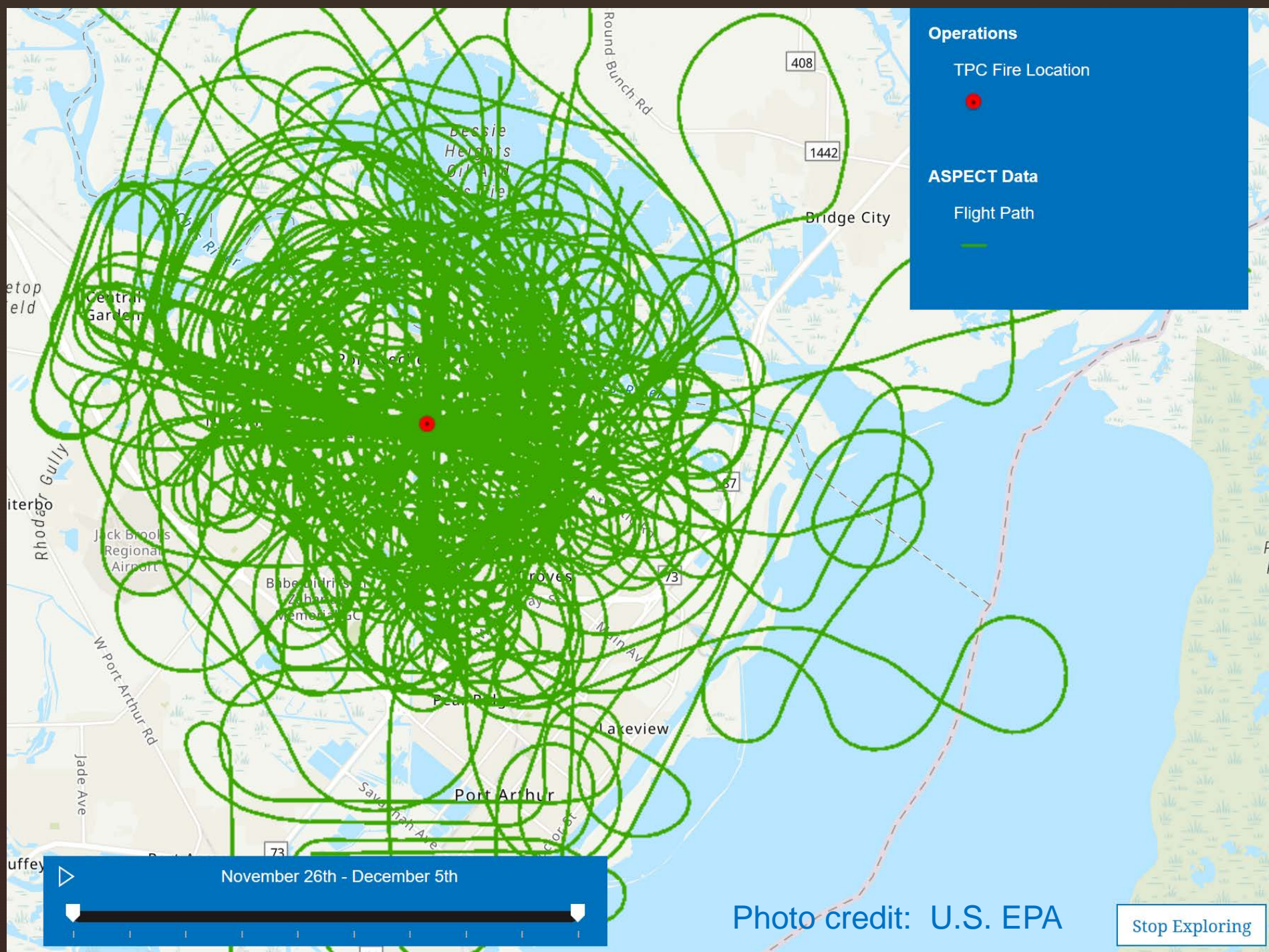
AIR MONITORING

Photo credit: U.S. EPA

▶
EPA AIR MONITORING PLANE
A.S.P.E.C.T.



Photo credit: U.S. EPA



Operations

- TPC Fire Location

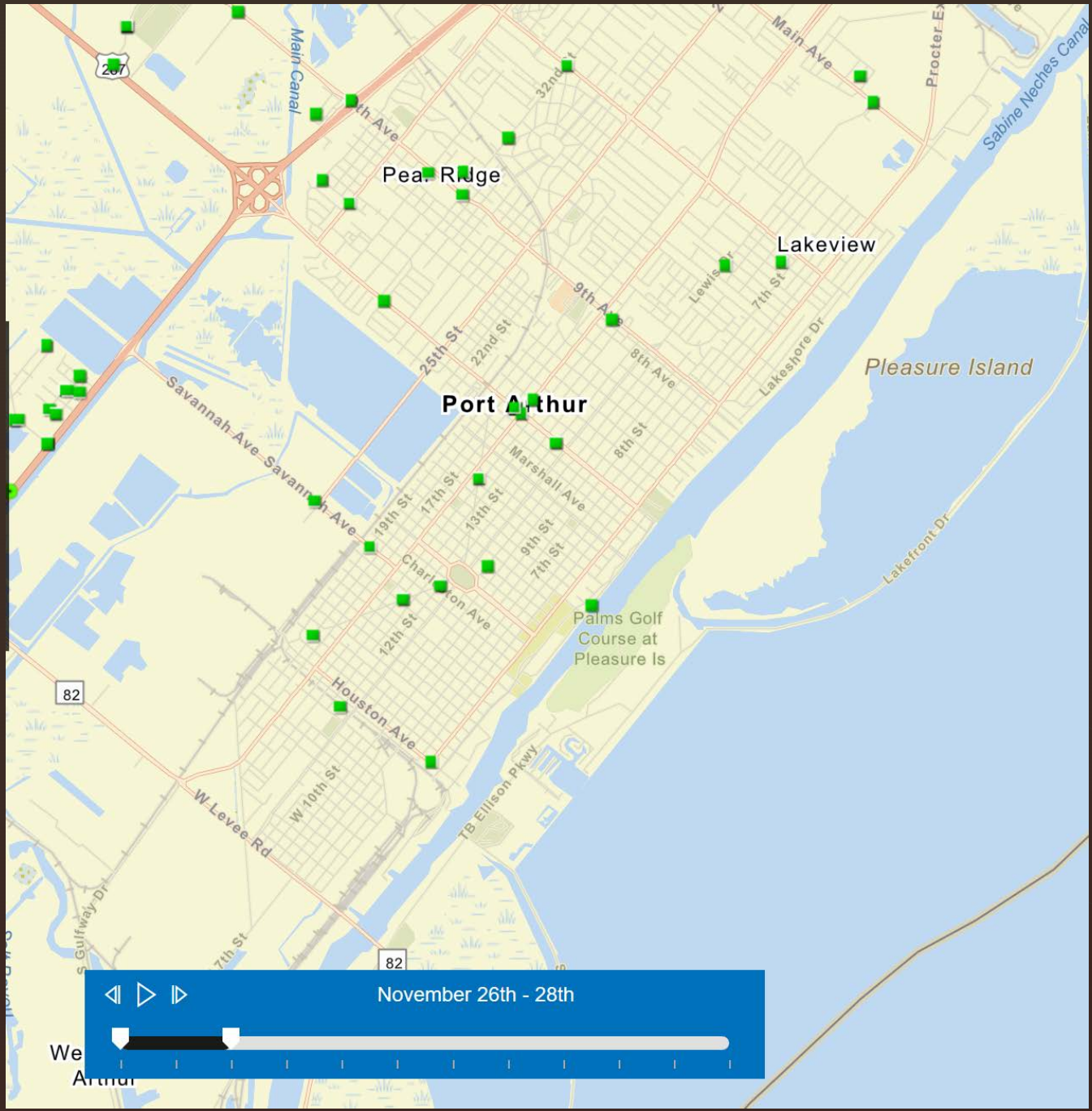
ASPECT Data

- Flight Path

November 26th - December 5th

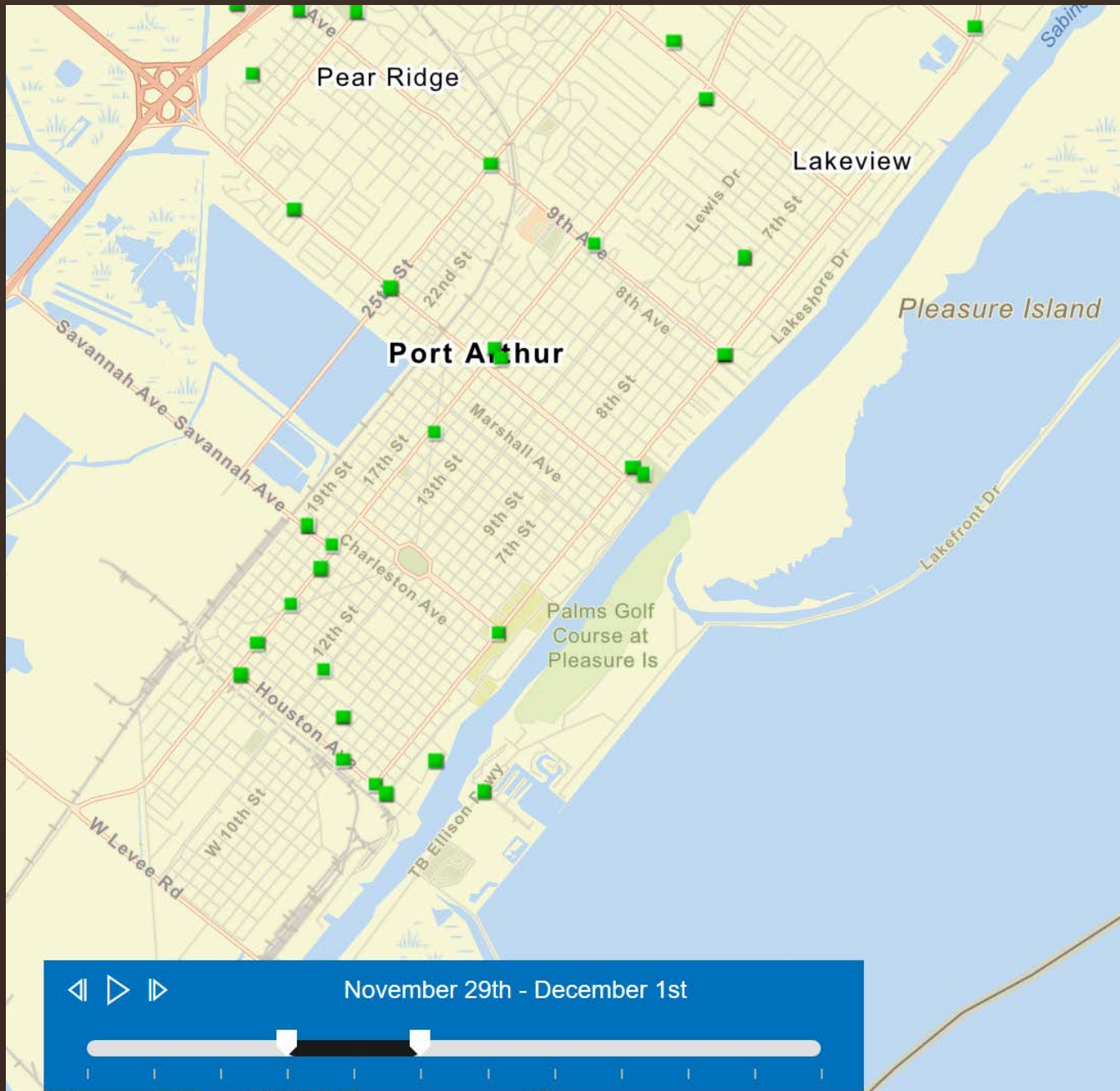
Photo credit: U.S. EPA

Stop Exploring



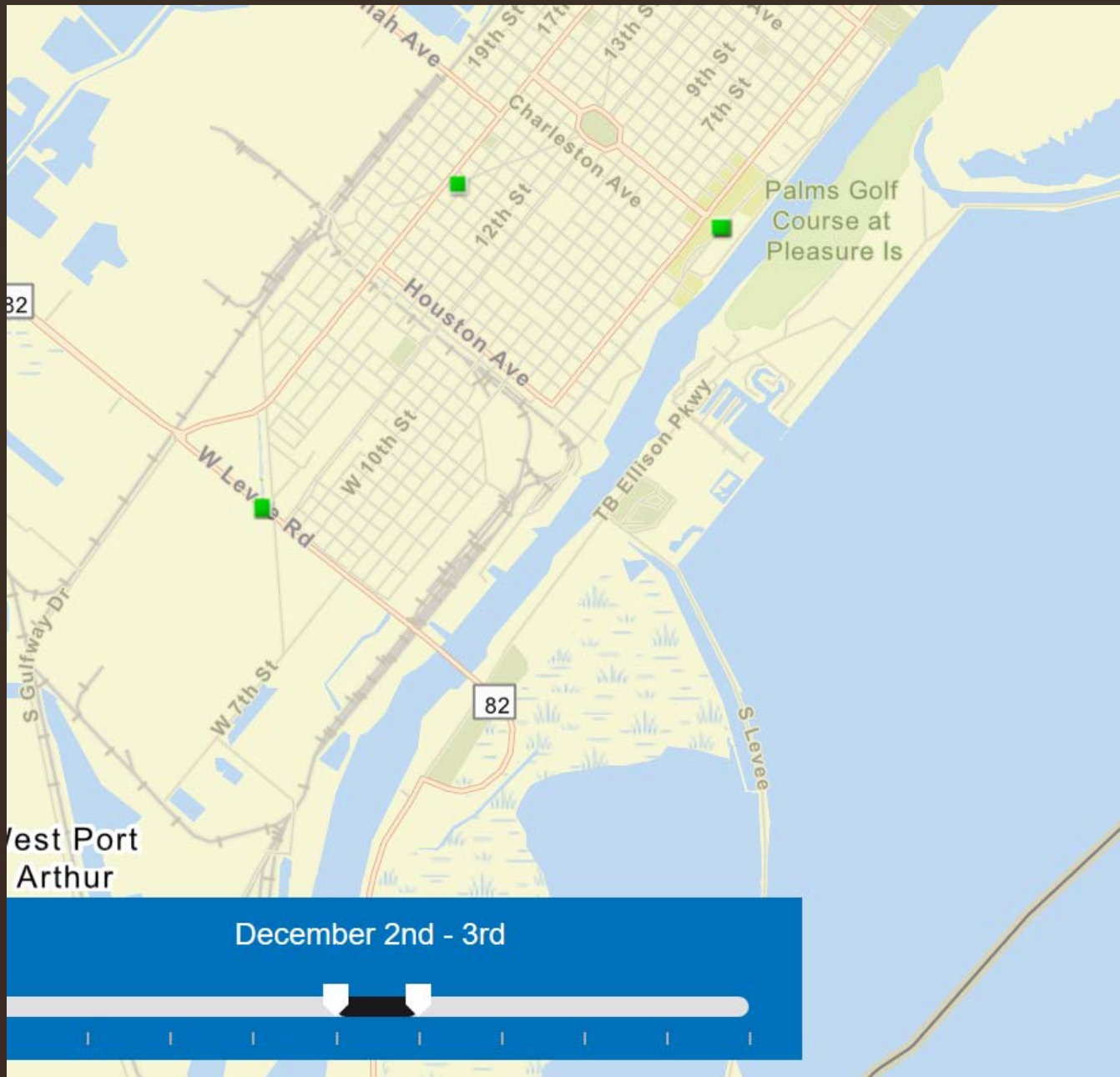
EPA HANDHELD MONITORING IN WEST PORT ARTHUR

Photo credit: U.S. EPA



EPA HANDHELD MONITORING IN WEST PORT ARTHUR

Photo credit: U.S. EPA



EPA HANDHELD MONITORING IN WEST PORT ARTHUR

Photo credit: U.S. EPA

CHEMICAL OF CONCERN

Action Level
0.5 ppm

Duration	TCEQ AMCV
Short-Term	1.7 ppm
24-hour	0.43 ppm
Long-Term	0.009 ppm

Duration	CalEPA REL
Acute	1.474 ppm
8-hour	0.02 ppm
Chronic	0.045 ppm

1,3 Butadiene or Butadiene

- Colorless gas used to make rubber, plastics & resins
- Causes cancer
- Short-term effects:
 - Irritation of eyes, nose, throat and lungs (Low Exposure)
 - High Exposures
 - Neurological effects
 - Blurred vision
 - Headache
 - Dizziness

PARTICULATE MATTER

Action Level

0.137 ppm

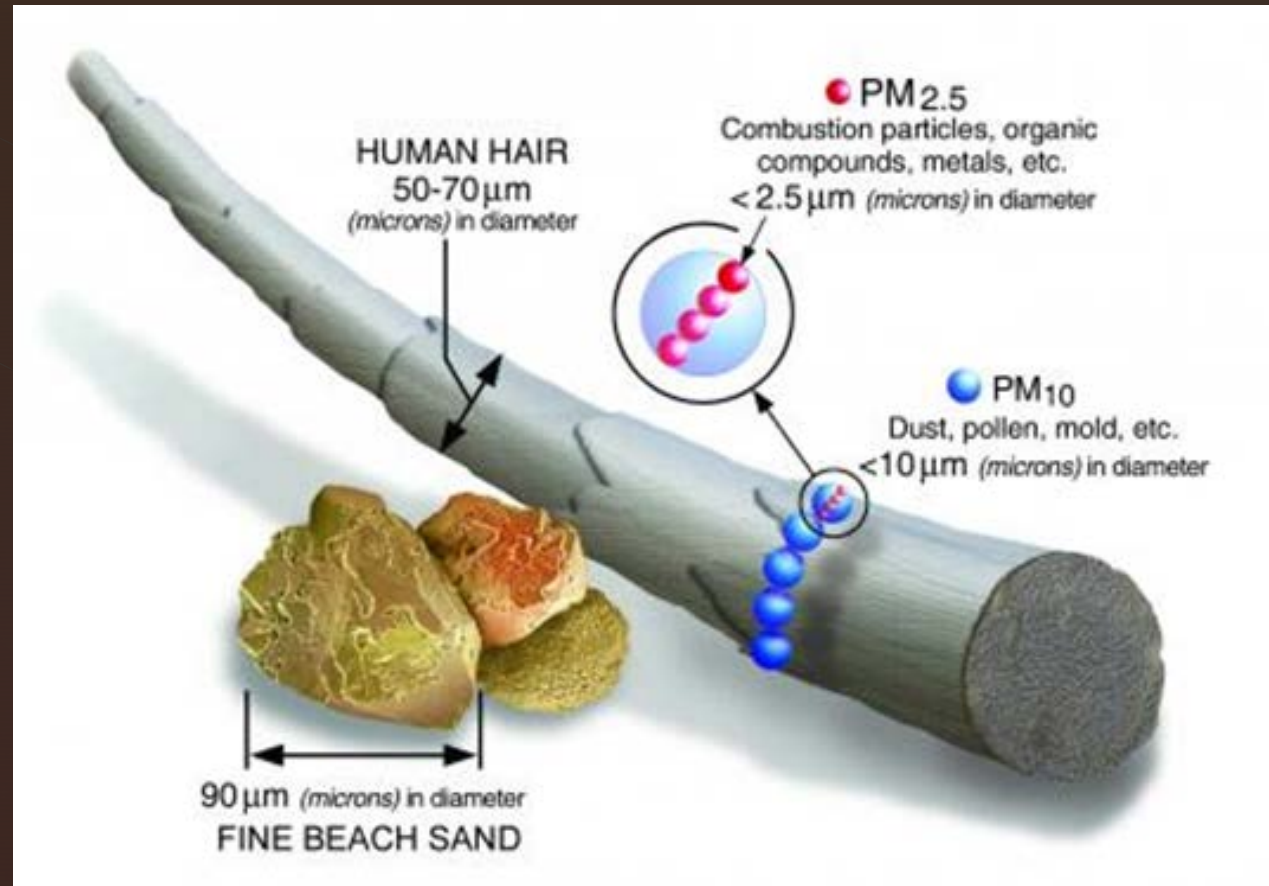
Photo: U.S. EPA

PM2.5

- FINE INHALABLE PARTICLES, WITH DIAMETERS THAT ARE GENERALLY 2.5 MICROMETERS AND SMALLER

PM10

- INHALABLE PARTICLES, WITH DIAMETERS THAT ARE GENERALLY 10 MICROMETERS AND SMALLER





TIMELINE

Photo credit: US EPA

11/27 - Wednesday

- Explosion occurred at facility
- 3 workers at plant injured during explosion
- Second explosion occurred at 2pm
- 11 schools in a 4-mile radius
- 50,000 people evacuated
- At least 3 tanks were impacted
- Water contamination begins at 201 Canal Outfall due to overflows

Photo credit: REUTERS/Erwin Seba/File Photo



11/28 - Thursday

- Four-mile mandatory evacuation order still impacting 50,000 people
- Unified Command had to relocate Command Post to Beaumont on 11/27
- Foaming product being used for firefighting operations
- ASPECT did not fly
- Wastewater Treatment Plant is without power
- Additional overflows at 201 Canal Outfall due to firefighting water



Photo Credit: U.S. EPA

11/29 - Friday

- 9 fires going
- 3 actively fed
- Mandatory evacuation order rescinded at 10am
- High Particulate Matter (300 ug/m³) readings west of site (above 0.137 ppm community action levels)
- No ASPECT flight
- Car driver cut water supply to firefighters
- Containment booms installed

Photo credit: U.S. EPA



11/30 - Saturday

- All fires in Block 5 were extinguished
- 3 active fires in Block 10 area
- 13 tanks impacted, 3 tanks compromised
- South 45B tower collapsed
- 10 detections of butadiene of 1.0 ppm (above 0.5 ppm action levels)

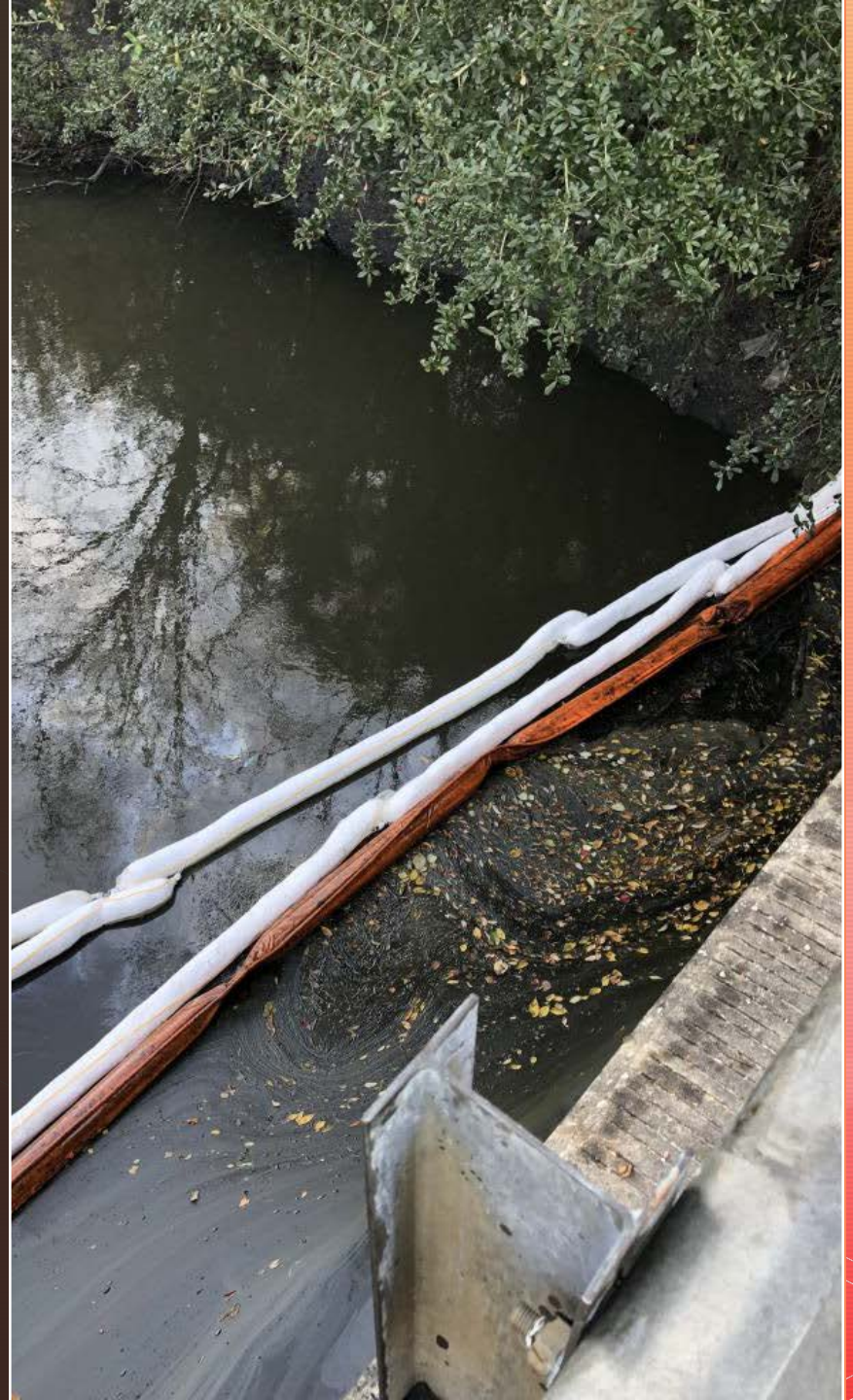
Photo credit: U.S. EPA



12/1 - Sunday

- Fires still burning
- Butadiene readings of 3.0 ppm at Hwy 366 & Spur 136 (above action level of 0.5 ppm)
- 23 detections of butadiene in work area – 3.22 ppm
- Isobutylene detected 1 ppm at Orchard Rd & Hwy 366 by ASPECT
- Port Neches –Grove ISD Schools open
- Water sampling conducted

Photo credit: U.S. EPA

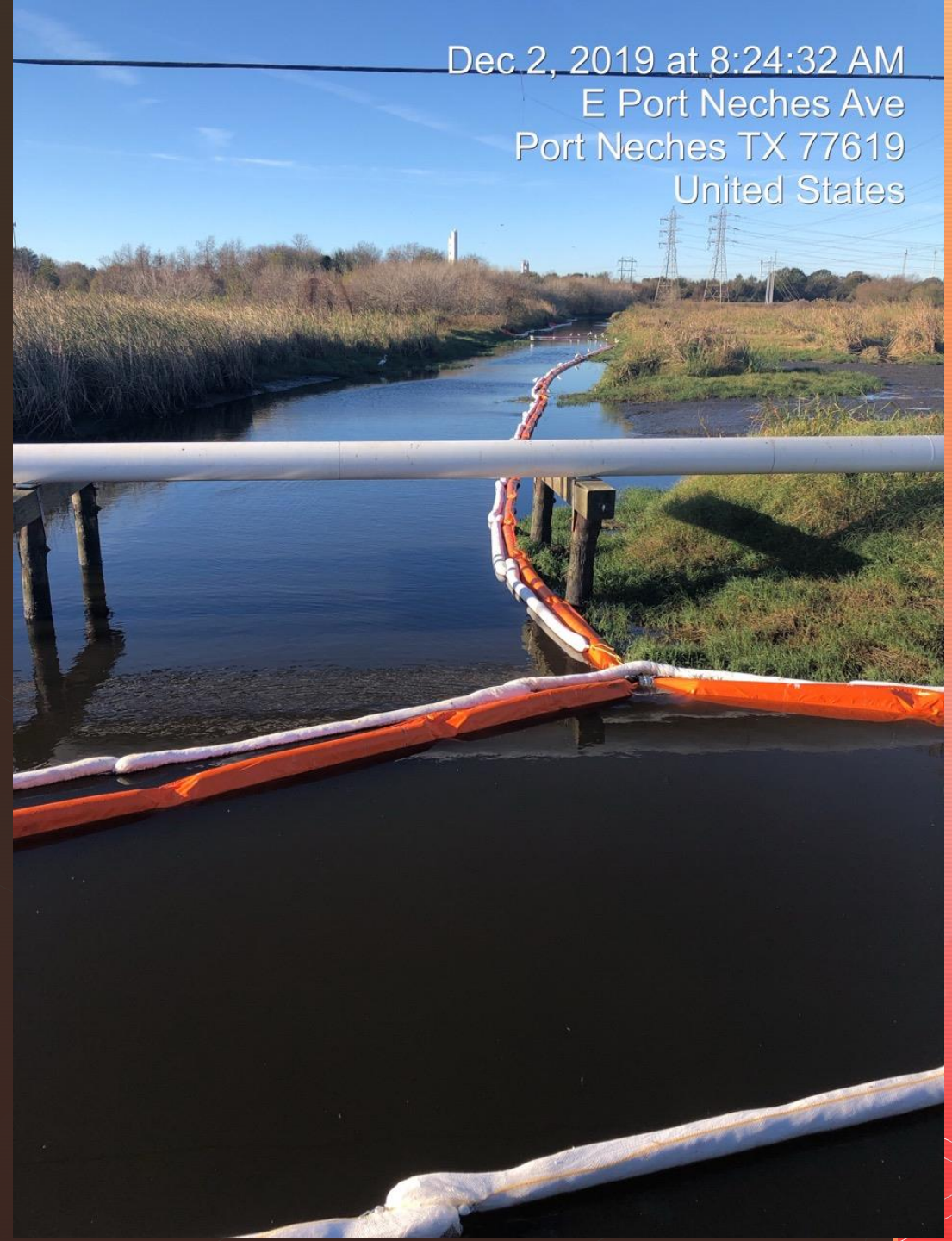


12/2 - Monday

- One fire still burning
- Piece of equipment fell (not a tower)
- Particulate Matter readings were 0.338 ppm (above action level of 0.137 ppm)
- 27 detections of butadiene (1.8 ppm in work area)
- 7 detections of butadiene in community at Hwy 366 & Spur 136 of 0.79 ppm (above action level of 0.5 ppm)
- Low cloud ceiling kept ASPECT from flying
- Car driver cut water supply to firefighters
- Port Neches –Grove ISD Schools open

Photo credit: U.S. EPA

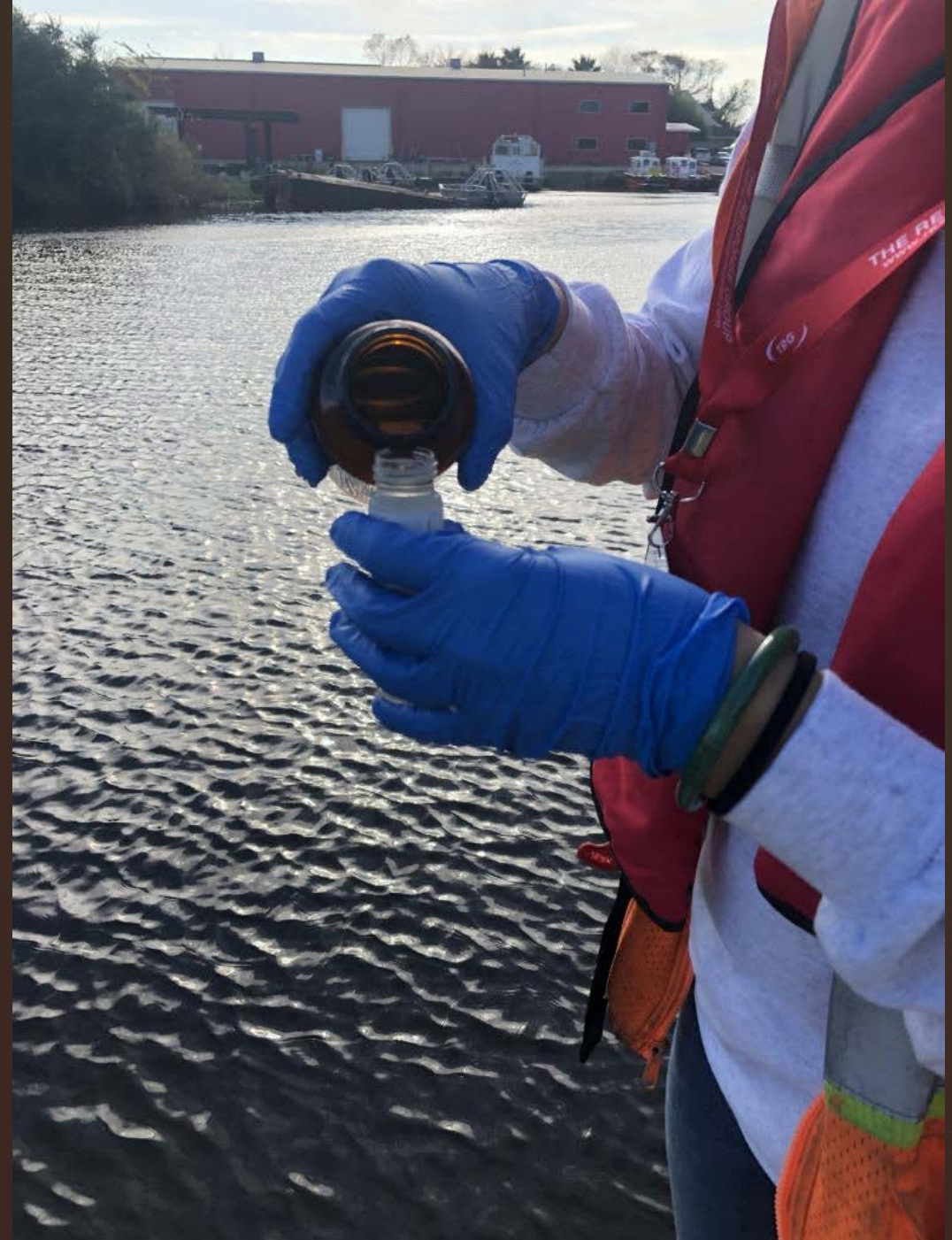
Dec 2, 2019 at 8:24:32 AM
E Port Neches Ave
Port Neches TX 77619
United States



12/3 - Tuesday

- One fire still burning
- Piece of equipment fell (not a tower)
- 28 readings of butadiene in the community (1.1 ppm – 1.35 ppm) (above action levels of 0.5 ppm)
- Butadiene detections raised concerns about schools on fence line
- 59 readings of butadiene in work area (5.1 ppm)
- Schools reopened in Port Neches-Grove ISD
- Additional 201 Outfall Overflows (water contamination)

Photo credit: U.S. EPA



12/4 - Wednesday

- One fire still burning
- Piece of equipment fell (not a tower)
- Detections of butadiene in the community (highest reading was 12.09 pm) (above action levels of 0.5 ppm). Wind was blowing emissions to south and south-east of facility.
- Shelter-in-place ordered for City of Port Neches
- Voluntary evacuation order for City of Port Neches
- Additional 201 Outfall Overflows (water contamination)

12/5 - Thursday

- Discovered leaking pressure relief valve on an impacted Tank 25.
- Reduced concentrations of butadiene in the community to 0.168 ppm (highest concentration 0.230 ppm) **(still above action levels of 0.5 ppm)**
- Work area levels maxed out at 17 ppm.
- Port Neches – Groves ISD schools closed
- ASPECT conducted fly over
- Additional 201 Outfall Overflows (water contamination)

12/6 - Friday

- 2 small fires are still blazing onsite
- Residual fires are likely to continue, but can be contained
- Smoke may still be visible at the site
- Fire has impacted 12 tanks on site
- TPC is making plans to transfer all remaining materials from the site
- Still likely to have elevated air measurements on site and in the community
- Port Neches – Groves ISD schools closed



IMPACTS



EVACUATION



Mark Felix for The New York Times

Evacuation Claim Form Port Neches Response

November 27, 2019

As a result of the Port Neches Response on November 27, 2019 my household was included in a mandatory evacuation zone order issued by Judge Jeff R. Branick of Jefferson County.

Claims:

- (1) evacuation related and
- (2) property damage.

Online [Evacuation Claim Form](https://form.jotform.com/93328046922156),

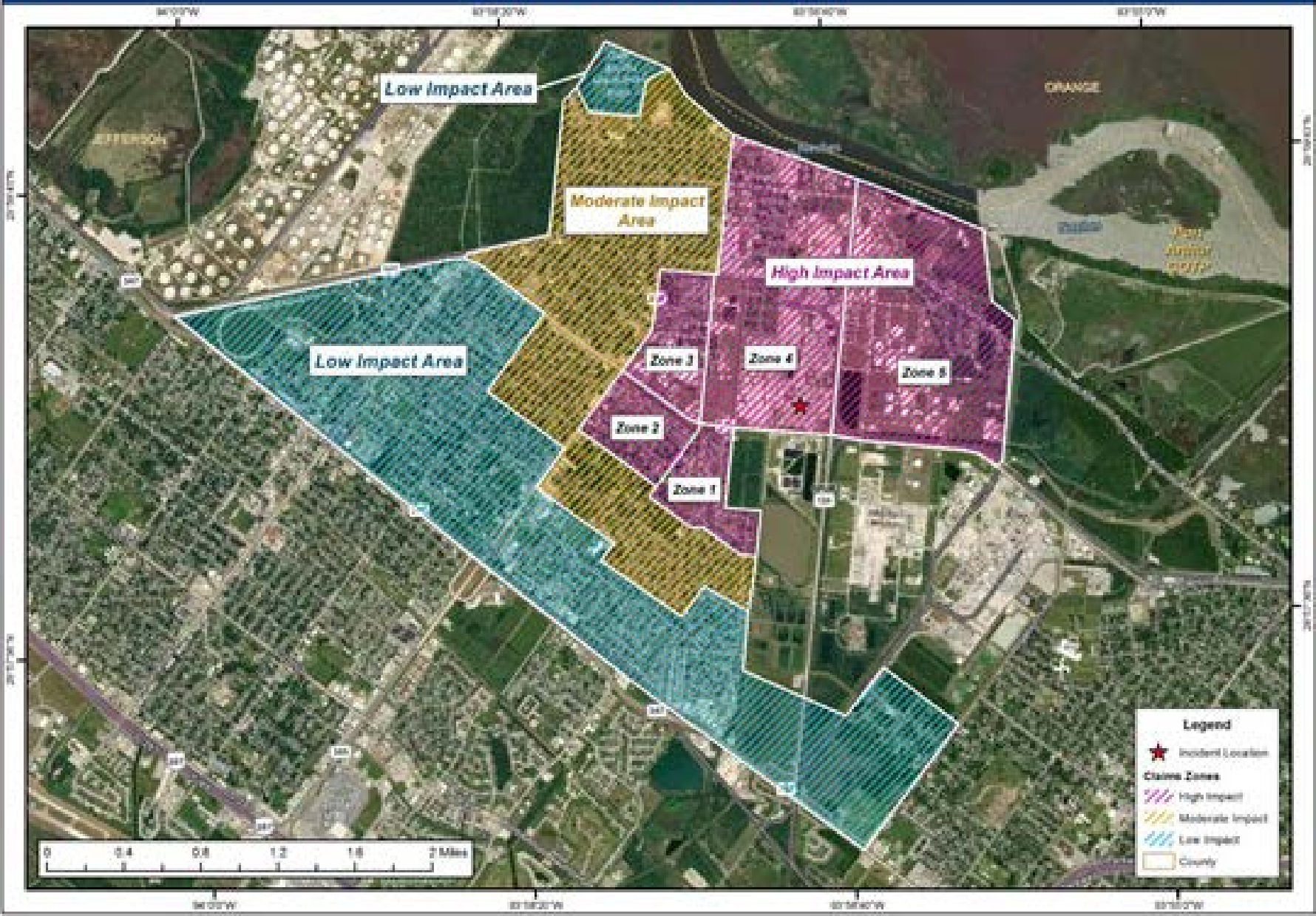
- <https://form.jotform.com/93328046922156>
- You live or work in the evacuation zone
- You do not already have a claim number from reporting by telephone

Community
Assistance Helpline
(866-601-5880)



Property Damage Claims Impact Areas Overview Map

Scale: 1:40,000



REPORTING DEBRIS ON YOUR PROPERTY

Community Assistance Helpline (866-601-5880)

- Debris located at over 46 homes
- Environmental response specialists with CTEH will come to your property
- Will assess homes and yards within approximately ½ mile of TPC Group Plant
- Chemical ash on property



Photo credit: Fred Heubach, Port Neches Resident



Photo credit: Steve Tingler, Orange County Resident

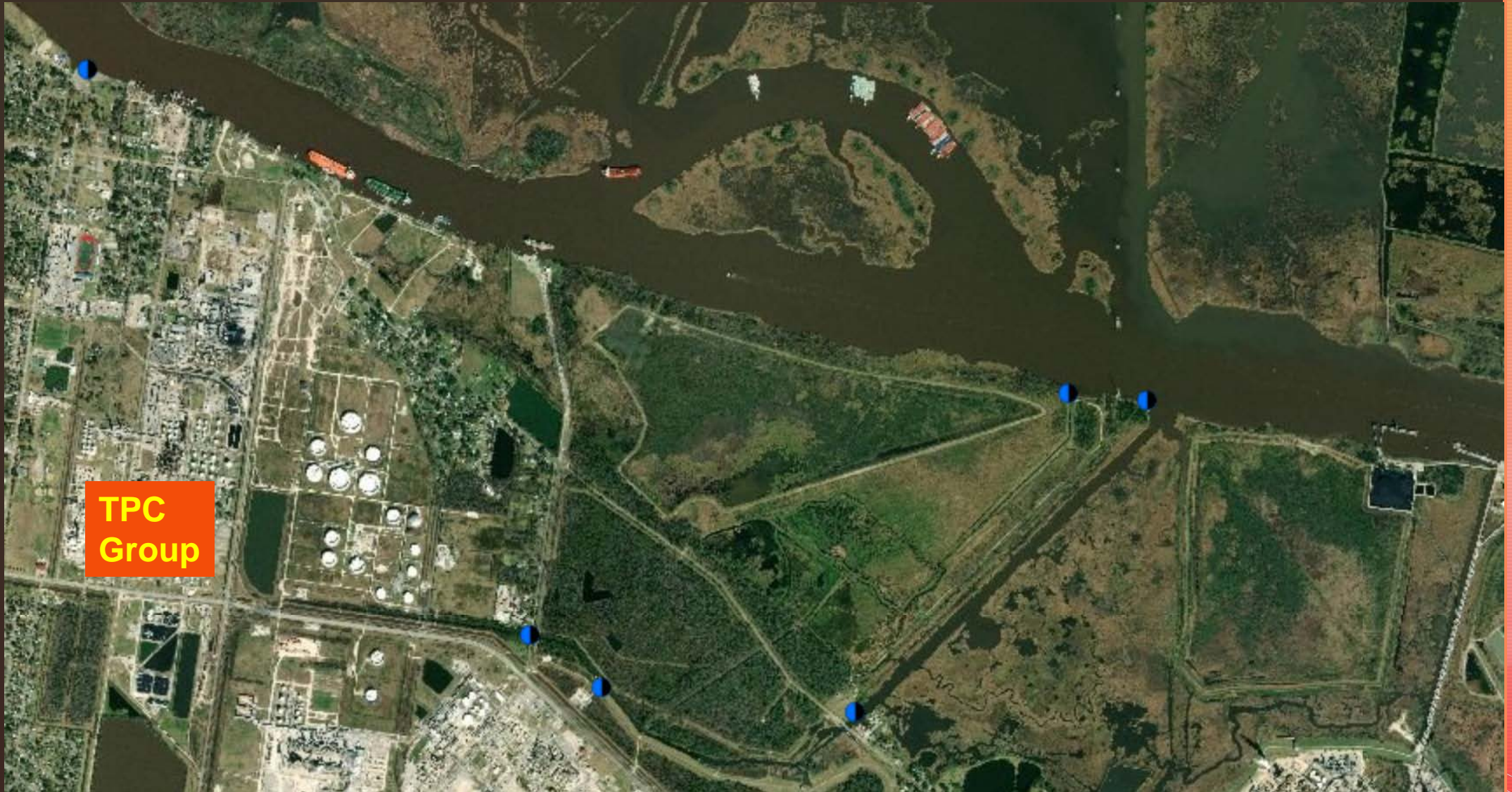
ASBESTOS ALERT



Photo credit: U.S. EPA

- Found 7 miles away from the plant
- Primarily NE of the facility
- Soil contamination concern
- Used in building and construction materials for insulation and as a fire retardant.
- Asbestos fibers may have been released into the air
- Exposure may increase risk of lung disease

SURFACE WATER CONTAMINATION



TPC
Group

Photo: U.S. EPA

WATER CONTAMINATION TIMELINE

- On 11/27, firefighting water overtopped tank containment berm and discharged to 201 Canal
- 11/28 - Sheen seen in 201 Canal
- 11/29 - Booms put in place
- 11/30 to 12/1 - Sheen seen up to 2 miles away from Canal 201 outfall up to Port Neches/ Atlantic Road
- 12/1 to 12/3 - Sheen observed 1.3 miles upstream from Neches River
- PFAs compounds present in firefighting foam (1,320 gallons est. released)
- 12/4 to Present – 201 Canal outfall overflow has continued

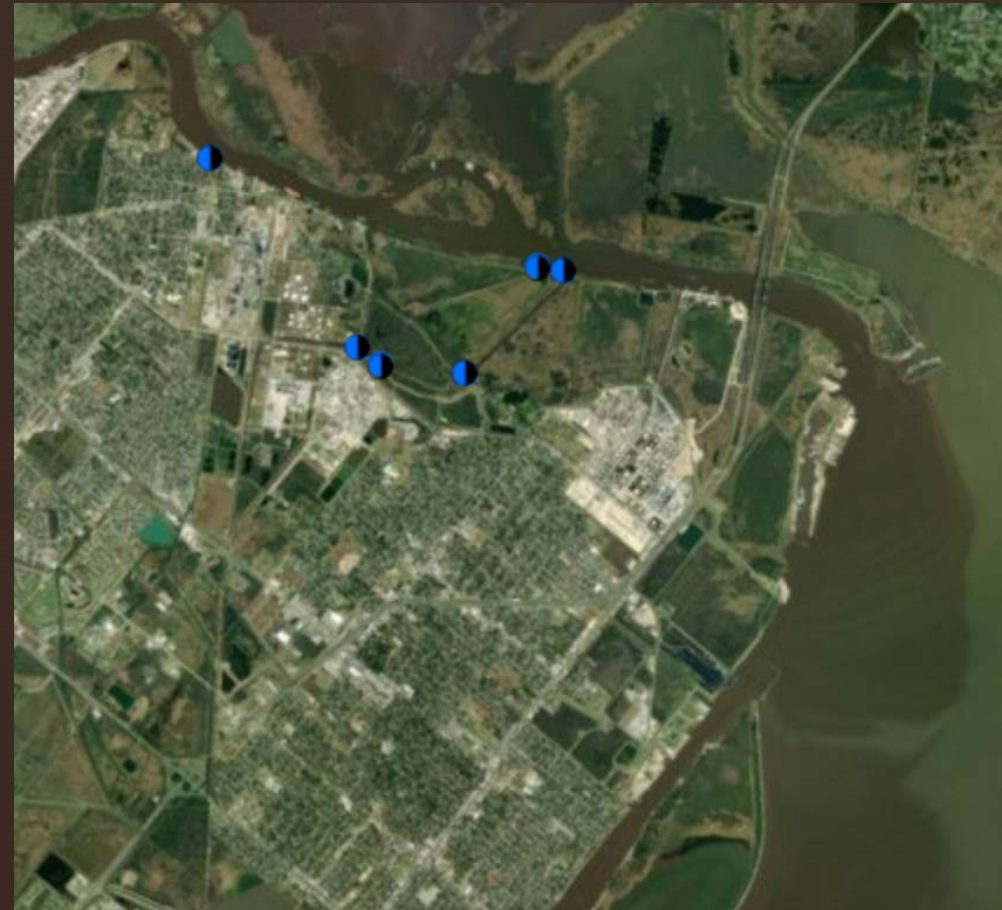


Photo credit: U.S. EPA

WATER SAMPLING RESULTS

Exceedances found in surface water at TPC-01 and TPC-02 of

- Methyl tert-butyl ether (MTBE)
- Benzene

No exceedances of PCLs for Neches River samples



Photo credit: U.S. EPA

WILDLIFE IMPACTS

- 11/30 - Fish Kill reported at Orchard St. Bridge (11 am)
- 12/1 - Fish Kill reported at Port Neches Atlantic Road Bridge (100-300 dead fish estimated; 54 fish carcasses collected)
- 12/2 - Dead Alligator and three dead birds recorded
- From 12/1 to 12/6, additional dead wildlife reported:
 - 30 fish
 - 24 crabs
 - 2000 shad carcasses



Photo credit: U.S. EPA, Water Sampling



RESOURCES





NEDERLAND RECOVERY CENTER

Where: First Baptist Church of Nederland, 1911 Nederland Ave, Nederland, TX 77627

When: Dec. 7, Saturday 9:00 a.m. - 1:00 p.m.

Caseworkers will work one-on-one with residents to help them with their specific disaster-caused emergency needs:

- create personal recovery plans,
- navigate paperwork
- locate assistance from the Red Cross and other agencies.

Trained Red Cross spiritual care and mental health workers will also be available.

Emotional support/ stress management services

FREE emotional support hotline staffed by licensed professional counselors

Provider: Samaritan Counseling Center of Southeast Texas.

Call: (409) 727-6400, ext. 250

Hours: 9:00 a.m. – 6:00 p.m.

After hours routed to Spindletop Crisis Hotline, (800) 937-8097

In-person follow-up sessions with counselors available, as needed.

Counseling calls and session discussions will be kept confidential.

MORE DETAILED MONITORING INFORMATION

- EPA South 4 Group Fire Website
- Story
- Map: https://response.epa.gov/site/site_profile.aspx?site_id=14566
- Air quality monitoring information
- Water sampling results
- TCEQ
- Website: <https://www.tceq.texas.gov/response/tpc-incident>
- Air quality monitoring information
- Unified command updates



TIME FOR ACTION



SHORT TERM ACTION ITEMS

Report

- Damages to TPC Claims Hotline

Assess

- Damages fully – Consult an attorney, if needed

Seek

- Mental health resources or claims assistance at recovery center

Attend

- TCEQ Commissioner Meeting on December 18th in Austin regarding TPC Explosion

Request

- Elected officials to host community forum regarding event

- Website that allows you to monitor and report pollution violations.
- Sign up to receive alerts and report polluters in your area.



<http://www.neighborhoodwitness.org/>

LOCAL ACTION ITEMS

Establish

- Pollution Control Services for Jefferson County

Conduct

- 360 Review – Gap Analysis of TPC Response

Implement

- Regional Air Toxics Plan

Purchase

- Mobile air monitors for Jefferson County

Create

- Community air monitoring network

Sign Up

- For alerts from Southeast Texas Alerting Network (STAN) and Blackboard Connect

HOW TO GET INFORMATION DURING A EMERGENCY RESPONSE

REGISTER FOR STAN

- <http://thestan.com/register/>
- Or call 1-844-578-7826
- Sign up for emergency notifications
 - via voice or text on cell phone
 - via email

BLACKBOARD CONNECT

- <https://setrpc.bbcportal.com/>
- Sign up and enter your contact information to receive important messages from your local jurisdiction.



STATE & NATIONAL ACTION ITEMS

Follow

- Chemical Safety Board Review Results

Increase

- Funding for TCEQ Investigators and Enforcement

Comment

- Enforcement action at TCEQ

Reinstate

- Chemical Disaster Rule

Join LSLA's EJ Team's mailing list.

Just send your email address by text message:

Text

EJUSTICE

to **22828** to get started.

