Message

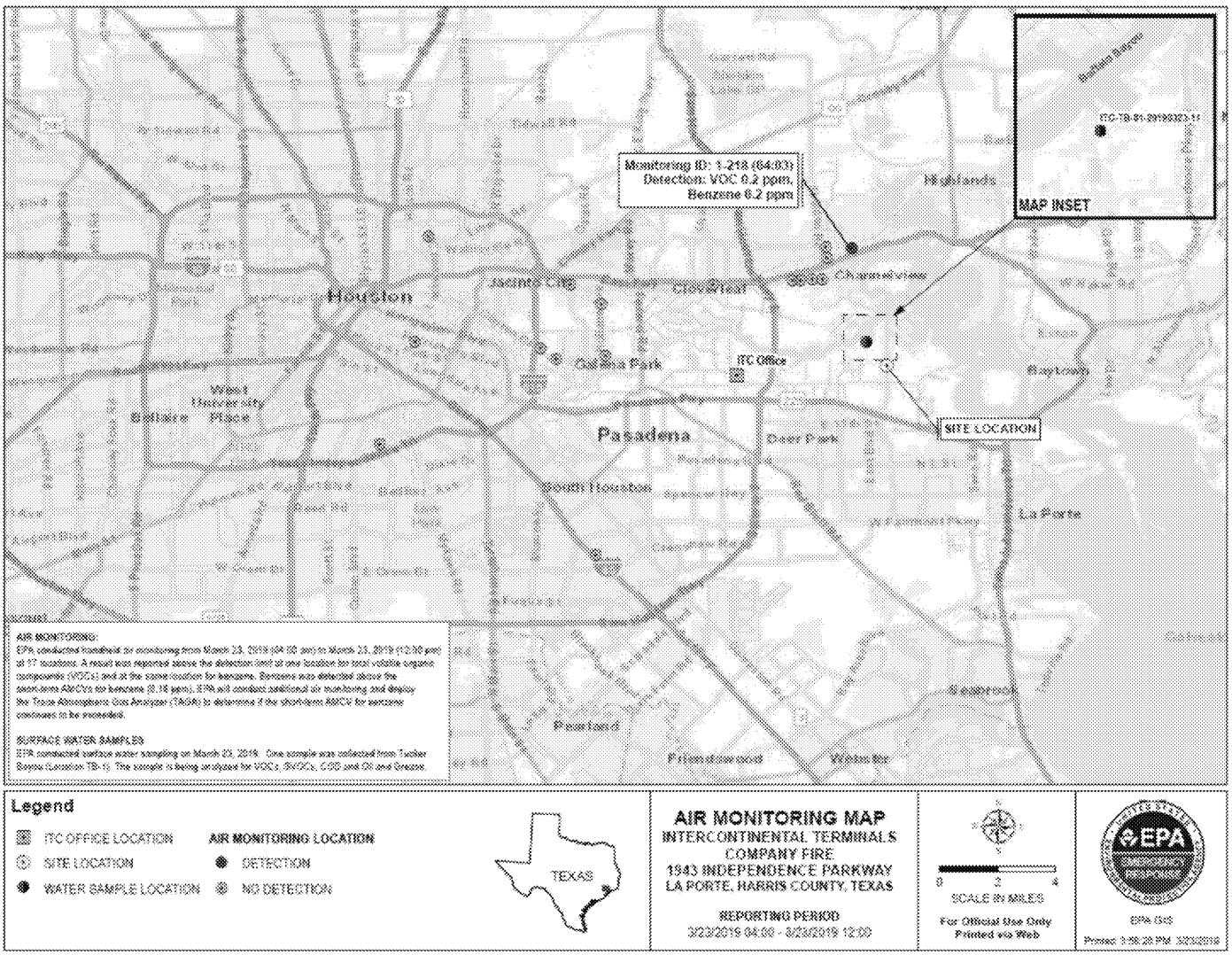
**From**: Gray, David [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=881C62B1E54142388C1DE2F8E3799C33-GRAY, DAVID]
**Sent**: 3/23/2019 10:35:16 PM
**To**: Konkus, John [konkus.john@epa.gov]; Grantham, Nancy [Grantham.Nancy@epa.gov]; Lyons, Troy [lyons.troy@epa.gov]; Palich, Christian [palich.christian@epa.gov]; Frye, Tony (Robert) [frye.robert@epa.gov]; McFaul, Jessica [mcfaul.jessica@epa.gov]; Abboud, Michael [abboud.michael@epa.gov]; Hewitt, James [hewitt.james@epa.gov]; Schiermeyer, Corry [schiermeyer.corry@epa.gov]
**Subject**: SAT PM UPDATE - International Terminals Corporation Fire

This will go out to the Congressional delegation shortly.

**Intercontinental Terminals Company (ITC) Fire Morning Update**
**Deer Park, Texas**
**March 23, 2019 0400 – March 23, 2019 1200**

- The US Environmental Protection Agency (EPA) continues to participate in Unified Command with Texas Commission on Environmental Quality (TCEQ), Harris County Pollution Control Services, and ITC.
- On March 23, 2019, ITC has placed additional boom along the ditch leading to Tucker Bayou and Buffalo Bayou.
- ITC continues to make improvements to the temporary clay containment wall on March 23, 2019.
- ITC continues to apply foam to the secondary containment and tanks to reduce emissions and reignition of hot spots on March 23, 2019.
- ITC has delayed the pumping of tank 80-7 and the pumping process is expected to start at approximately 3:00 pm on March 23, 2019.
- On March 23, 2019, portions of the ship channel remain closed due to elevated benzene levels.
- As of 12:00 pm on March 23, 2019, the ITC had laid approximately 27,000 feet of boom in Tucker Bayou and areas along Buffalo Bayou. Booming has been placed around sensitive marsh areas, the battleship, and other sensitive areas of concerns.
- EPA conducted surface water sampling on March 23, 2019. One sample was collected from Tucker Bayou (Location TB-1). The sample is being analyzed for Volatile Organic Compounds (VOCs), Semi-Volatile Organic Compounds (SVOCs), Chemical Oxygen Demand (COD), and Oil & Grease.
- EPA will conduct additional water sampling on the afternoon of March 23, 2019 in the Houston Ship Channel/Buffalo Bayou near the San Jacinto State Historical Park and Lynchburg Reservoir and will be analyzed for Per- and Polyfluoroalkyl Substances (PFAS), VOCs, SVOCs, COD, and Oil & Grease.
- EPA conducted handheld air monitoring from March 23, 2019 (04:00 am) to March 23, 2019 (12:00 pm) at 17 locations. A result was reported above the detection limit at one location for total VOCs and at the same location for benzene. Benzene was detected above the short-term Air Monitoring Comparison Values (AMCVs) for benzene (0.18 parts per million (ppm)). EPA will conduct additional air monitoring and deploy the Trace Atmospheric Gas Analyzer (TAGA) to determine if the short-term AMCVs for benzene continues to be exceeded.
- On March 22, 2019, the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft underwent maintenance and is ready for operations. EPA will conduct additional air monitoring and deploy ASPECT on the afternoon of March 23, 2019.
- On March 23, 2019, the Rapid Assessment Teams (RAT) were deployed to visually assess and document impacts along the bayou.

- ITC continued air monitoring in the communities around the facility. By 12:00 pm on March 23, 2019, ITC had taken 2338 VOC readings/104 detections, as well as 1720 benzene readings/104 detections. Since 12:00 am on March 23, 2019 there have been 360 benzene readings with 30 detections; 5 readings above 1 ppm and 359 VOC readings with 33 detections.
- EPA continues to participate in the daily press conferences held at the Incident Command Post.




**From:** Gray, David
**Sent:** Saturday, March 23, 2019 11:18 AM
**To:** Konkus, John <konkus.john@epa.gov>; Grantham, Nancy <Grantham.Nancy@epa.gov>; Lyons, Troy <lyons.troy@epa.gov>; Palich, Christian <palich.christian@epa.gov>; Frye, Tony (Robert) <frye.robert@epa.gov>; McFaul, Jessica <mcfaul.jessica@epa.gov>; Abboud, Michael <abboud.michael@epa.gov>; Hewitt, James <hewitt.james@epa.gov>; Schiermeyer, Corry <schiermeyer.corry@epa.gov>
**Subject:** SAT UPDATE - International Terminals Corporation Fire

A few additions - we are preparing an endangerment order to ITC. US Coast Guard is activating a cleanup contractor. EPA will initiate an emergency response to access funding. Working with TX on high levels of isopropylene (sp?) and possible source (may not be ITC). Update below will go out to congressional delegation shortly.

Call for details 214,789,2619.

**Intercontinental Terminals Company (ITC) Fire Morning Update**
**Deer Park, Texas**
**March 22, 2019 1200 – March 23, 2019 0400**

- EPA continues to participate in Unified Command with TCEQ, Harris County Pollution Control Services, and ITC.
- A partial breach of the tank farm containment wall on the northeast side near Tank 80-7 occurred at approximately 12:00 pm on March 22, 2019, to the ditched area and into Tucker Bayou. Additional boom has been placed along the ditch leading to Tucker Bayou, Tucker Bayou, and Buffalo Bayou. The Responsible Party's contractor has rebuilt the containment wall using clay material, but will continue to improve it during the day.
- At approximately 3:40 pm on March 22, 2019, three tanks reignited. The fire spread from the containment area through the breached containment wall into the ditch on Tidal Road. Foam was applied to the tanks and the ditch to fight the fire. A shelter in place recommendation was in effect for industrial neighbors, the Battleship Texas and Monument State Park. There was no shelter in place for the city of Deer Park.
- During and after the fire and the breach of the secondary containment, several readings of benzene above 1.0 ppm were detected (highest was 16.5 near National Tank Services) by the various entities conducting air monitoring through the afternoon and night time. These readings were located along the ship channel, Channelview.
- Foam continues to be applied to the secondary containment and tanks to reduce emissions and reignition of hot spots. At 3:00 am, approximately 145 totes (250 gal each) of foam were remaining. Approximately 200 additional totes are in route and will be arriving throughout the day.
- ITC will again attempt to start pumping product out of tank 80-7 (pyrolysis gasoline) to an empty tank within another tank farm.
- For safety purposes, there is no remediation actions taking place on the ship channel at night, but operations continued at night in the ditch area.
- As of 12:00 am on March 23, 2019, the RP had laid approximately 8,500 feet of boom in Tucker Bayou and areas along Buffalo Bayou. Another 600 feet will be deployed early on March 23. Booming has been placed around sensitive marsh areas, the battleship, and other sensitive areas of concerns. Currently, they have about 5,000 feet of additional boom.
- EPA conducted water sampling on March 22, 2019, in two locations in the drainage ditch feeding into Tucker Bayou and up by the Battleground park area. Samples will be analyzed for Chemical Oxygen Demand, VOCs, SVOCs, and oil/grease. Sampling was suspended after the breach in containment wall due to safety concerns from the containment breach.
- The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found detections of acetone, butadiene, isobutylene, 1-butene, and isoprene. ASPECT found exceedances of the Texas comparison values on the afternoon of March 22, 2019. ASPECT has conducted a screening level assessment to evaluate the unreported or undetected releases of hazardous materials or contaminants at the Intercontinental Terminal Company (ITC) in Deer Park, Texas. The screening level results from ASPECT were compared to the ASPECT list of Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs) and found exceedances of the short-term AMCVs for butadiene (1.7 ppm) and isoprene (0.02 ppm).
- The ASPECT aircraft is undergoing maintenance and is expected to be ready for operation at approximately 12:00 pm on March 23, 2019.
- EPA conducted air sampling using the Trace Atmospheric Gas Analyzer (TAGA) from March 22, 2019 (12:00 pm) to March 23, 2019 (4:00 am). The TAGA analyzed the air samples for benzene, toluene and xylene. The TAGA air sampling results were compared to compared to the Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs for toluene and xylene. The TAGA air sampling results found exceedances of the short-term AMCV for benzene. These exceedances of the short-term AMCV for benzene partially correspond to the ITC site and have been shared with unified command and local officials.

• EPA conducted handheld air monitoring from March 22, 2019 (12:00 pm) to March 23, 2019 (4:00 am) at 50 locationslocated in residential areas north of the ship channel as the wind was from the south/south-east. Results were reported above the detection limit at five locations for total volatile organic compounds (VOCs) and five locations for benzene. Benzene was detected at two of these locations above the short-term AMCVs for benzene (0.18 ppm). EPA will conduct additional air monitoring and deploy the Trace Atmospheric Gas Analyzer (TAGA) to determine if the short-term AMCV for benzene continues to be exceeded.

• CTEH continued air monitoring and from March 21, 2019 12:30 pm to March 22, 2019 12:00 am, there were 344 VOC readings and 133 benzene readings (with 2 detections above 1.0 ppm)

• Rapid Assessment Team (RAT) activities were cancelled on March 22, 2019 due to safety concerns after the containment breach.

• EPA continues to participate in the daily press conferences held at the ICP.

Sent from my iPhone

On Mar 22, 2019, at 6:03 PM, Gray, David <gray.david@epa.gov> wrote:

**Intercontinental Terminals Company (ITC) Fire Special Update**
**Deer Park, Texas**
**March 22, 2019 1200 – March 22, 2019 1600**

- At approximately 3:40 pm on March 22, 2019 three tanks reignited. The fire spread from the containment area through the breached containment wall into the ditch on Tidal Road. Foam was applied to the tanks and the ditch to fight the fire. A shelter in place recommendation was in effect for industrial neighbors, the Battleship Texas and Monument State Park. There was no shelter in place for the city of Deer Park.
- During the reporting period, the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values on March 22, 2019 from 12:00 pm to 4:00 pm. ASPECT has conducted a screening level assessment to evaluate the unreported or undetected releases of hazardous materials or contaminants at the Intercontinental Terminal Company (ITC) in Deer Park, Texas. The screening level results from ASPECT were compared to the ASPECT list of Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs. Acetone was detected below the short-term AMCV near the ITC site.
- During the reporting period, EPA conducted handheld air monitoring on March 22, 2019 from 12:00 pm to 4:00 pm at three locations. No results above the detection limit have been observed.
- During the reporting period, EPA conducted air sampling using the Trace Atmospheric Gas Analyzer (TAGA) on March 22, 2019 from 12:00 pm to 4:00 pm near the ITC site. The TAGA analyzed the air samples for benzene, toluene and xylene. The TAGA air sampling results were compared to the Texas Commission on Environmental Quality (TCEQ) short-term Air

Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs for toluene and xylene. The TAGA air sampling found exceedances of the short-term AMCV for benzene. These exceedances of the short-term AMCV for benzene corresponded to the ITC site.

<image001.png>

<image002.png>

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**From:** Gray, David
**Sent:** Friday, March 22, 2019 3:49 PM
**To:** Konkus, John <konkus.john@epa.gov>; Grantham, Nancy <Grantham.Nancy@epa.gov>; Lyons, Troy <lyons.troy@epa.gov>; Palich, Christian <palich.christian@epa.gov>; Frye, Tony (Robert) <frye.robert@epa.gov>; McFaul, Jessica <mcfaul.jessica@epa.gov>; Abboud, Michael <abboud.michael@epa.gov>; Hewitt, James <hewitt.james@epa.gov>; Schiermeyer, Corry <schiermeyer.corry@epa.gov>
**Subject:** URGENT - International Terminals Corporation Fire

There has been a failure in the secondary containment at the ITC facility and up to 40,000 gallons of material has been released into a ditch that flow to the nearby bayou. Emergency response personnel are responding. The exposed material has increased vapor concentrations in the area. Air concentrations have risen and locals have called for a shelter in place. Several nearby facilities are reading higher levels on their monitors also. As I write this, I have also been informed that several fires have been spotted at the ITC facility.

I am notifying the Congressional delegation now.

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**From:** Gray, David
**Sent:** Friday, March 22, 2019 12:15 PM
**To:** Konkus, John <konkus.john@epa.gov>; Grantham, Nancy <Grantham.Nancy@epa.gov>; Lyons, Troy <lyons.troy@epa.gov>; Palich, Christian <palich.christian@epa.gov>; Frye, Tony (Robert) <frye.robert@epa.gov>; McFaul, Jessica <mcfaul.jessica@epa.gov>; Abboud, Michael <abboud.michael@epa.gov>; Hewitt, James <hewitt.james@epa.gov>; Schiermeyer, Corry <schiermeyer.corry@epa.gov>
**Subject:** Re: HEADS UP - International Terminals Corporation Fire

All - I just heard that the secondary containment in one area has failed and could release up to 40,000 gallons of material into the Bayou.

More shortly

Sent from my iPhone

On Mar 22, 2019, at 9:02 AM, Gray, David <gray.david@epa.gov> wrote:

Quick update – air reading generally good. No shelter in place for Deer Park. Several schools had already announced closing today more due to having to plan ahead than data. TAGA doing community monitoring only seeing readings near gas stations and busier auto congested areas (intersections). Suspect tank appears to be the source of vapors and foaming/off loading have reduced vapor levels in nearby areas. Attention turning to water and impacts on Tucker Bayou. Working with variety of HQ offices to look at PFFF impacts.

Long version

**Intercontinental Terminals Company (ITC) Fire Morning Update**
**Deer Park, Texas**
**March 21, 2019 1200 – March 22, 2019 0400**

- EPA continues to participate in Unified Command with TCEQ, Harris County Pollution Control Services, and ITC.
- Foam continues to be applied to the secondary containment and tanks to reduce emissions and reignition of hot spots.
- ITC provided a list of foams that were ordered and used during fire-fighting efforts. ITC plans to sample the foam totes for PFOS/PFOA, as well as the water and foam within the secondary containment once it safe to do so.
- The Pasadena, La Porte, and Deer Park ISDs decided to cancel classes for Friday, March 22, 2019. There was a concern that the same weather conditions which created the elevated benzene levels on the morning of March 21, 2019, may occur again on the morning of March 22, 2019.
- EPA conducted surface water sampling at five locations along Buffalo Bayou. One location was above the confluence of Tucker Bayou and Buffalo Bayou, one location was at the confluence of Tucker Bayou and Buffalo Bayou, and three were downstream from the confluence of Tucker Bayou and Buffalo Bayou.
- ITC continues to take water samples every two hours at the ditch feeding into Tucker Bayou and send the samples to an outside laboratory for analysis.
- EPA conducted air sampling using the Trace Atmospheric Gas Analyzer (TAGA) on March 21, 2019. The TAGA analyzed the air samples for benzene, toluene and xylene. The TAGA air sampling results were compared to compared to the Texas Commission on Environmental Quality (TCEQ) short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs for toluene and xylene. The TAGA air sampling results found eleven locations that the short-term AMCV for benzene was exceeded. These locations corresponded to gasoline stations and traffic congestion along the Sam Houston Tollway (Beltway 8). These exceedances of the AMCV for benzene are unrelated to the ITC site.
- EPA conducted handheld air monitoring from March 21, 2019 (12:00 pm) to March 22, 2019 (4:00 am) at 32 locations. Results were reported above the detection limit at one location for total volatile organic compounds (VOCs) and benzene. Benzene was detected at this one location at 0.35 ppm, which is above the short-term AMCVs for benzene (0.18 ppm). EPA notified Unified Command and local officials for further action. EPA will conduct additional air

monitoring and deploy the Trace Atmospheric Gas Analyzer (TAGA) to determine if the short-term AMCV for benzene continues to be exceeded.

- ITC continued air monitoring in the communities around the facility. There was one detection of benzene at 1.05 ppm close to the Battleship Monument north of the facility. Subsequent monitoring was non-detect. By 12:30 on March 21, 2019, IT had taken 909 VOC readings/52 detections, as well as 745 benzene readings/51 detections.
- TCEQ, EPA, ITC, and Deer Park officials discussed action levels for issuing shelter-in-place advisories for the city. The city determined to leave the action levels at 1 ppm.
- ITC is developing a waste management plan for the final disposition of the materials within the tanks and secondary containment.
- A very small flash fire occurred at the manifold (at the edge of the tank farm) at approximately 1900 on March 21, 2019, hours due to insulation situated next to a charged steam line. The fire lasted less than five minutes.
- A Rapid Assessment Team (RAT) comprised of ITC, TCEQ, and USCG representatives will visually assess and document the extent of the release along the bayou, starting at approximately 0815 hours.
- The U.S. Chemical Safety Board was on site on March 21, 2019 and interviewed several persons involved in the response. They will be here for several days to conduct the investigation.
- The Texas Poison Control Network received a total of 33 calls from March 17, 2019 to March 21, 2019. Of these calls, 28 calls were possible exposures and 5 were requests for information calls.