Message

From: gray.david@epa.gov [gray.david@epa.gov]
Sent: 3/27/2019 11:14:47 PM
To: Konkus, John [konkus.john@epa.gov]; Grantham, Nancy [Grantham.Nancy@epa.gov]; Lyons, Troy [lyons.troy@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]; Idsal, Anne [idsal.anne@epa.gov]; Chancellor, Erin [chancellor.erin@epa.gov]
Subject: WED PM - International Terminals Corporation Fire

Intercontinental Terminals Company (ITC) Fire AfternoonUpdate
Deer Park, Texas
March 27, 2019 0400 – March 27, 2019 1200

Incident Overview:

On March 17, 2019, an above ground storage tank containing Naphtha, caught fire at the Intercontinental Terminal Company (ITC), LLC facility in Deer Park Texas. The ITC facility consists of 15 80,000-barrel capacity above ground storage tanks containing petroleum products including Naphtha, Xylene, Toluene, Gasoline Blendstock, and Base Oil. Eleven of the 15 80,000-barrel capacity above ground storage tanks on site were involved in the fire, resulting in the release of contaminants into the atmosphere, as well discharging the contents of the tanks to drainage pathways. Firefighting water and foam potentially containing petroleum products were released from an outfall due to accumulation of water from firefighting efforts. Various firefighting organizations assisted in putting out the fire utilizing a variety of firefighting foams.

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 was placed along the ditch leading to Tucker Bayou and Buffalo Bayou (Houston Ship Channel). The Responsible Party's contractor has rebuilt the containment wall using clay material.

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 along Tidal Road. Foam was applied to the tanks and the ditch to extinguish the fire.

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. These readings were located along the ship channel.

The United States Coast Guard (USCG) Captain of the Port is continuing the controlled open for the Ship Channel on March 26, 2019, with traffic during the daytime only. Decontamination vessels are being positioned to help ships that may have residue on the hulls.

Due to the initial fires and subsequent releases, shelters in place have occurred throughout the week of March 17, 2019.

Executive Overview:

• ITC continues foaming of the tanks and secondary containment to prevent reignition and reduce emissions as necessary.

• EPA conducted surface water sampling on March 27, 2019 during reporting period 18 at ten sample locations. Samples were collected from upstream the confluence of Buffalo Bayou and the San Jacinto River in the Old River (at River Terrace Park, Channelview, Texas), confluence of Buffalo Bayou and the San Jacinto River (at the shoreline of Juan Sequin Historic Park), in the main channel of the San Jacinto River just upstream the confluence with Buffalo Bayou, and downstream in the San Jacinto River. The surface water samples will be analyzed for Per- and Polyfluoroalkyl Substances (PFAS), Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds, Chemical Oxygen Demand (COD), and Oil & Grease.

• Several entities including Harris County, Texas Commission on Environmental Quality (TCEQ), EPA, the 6th Civil Support Team, and ITC continue to conduct air monitoring around the tank farm, in adjoining industrial areas, and communities downwind from the facility.

• The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values on March 27, 2019 during Flight 14. 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 TCEQ short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs. Isobutylene was detected by the ASPECT at a value less than the AMCV. EPA conducted handheld air monitoring from March 27, 2019 (4:00 am) to March 27, 2019 (12:00 pm) at seven locations. No results above the detection limit have been observed.

• ITC continued air monitoring on March 26 (midnight to midnight); based on their latest report 370 Benzene readings were done with no detects and 614 VOC readings with 4 detects. There continues to be readings above the action levels for benzene close to the tank farm on Tidal Road, and by Dock 4 on Buffalo Bayou.

- TCEQ continued handheld air monitoring between 2:00 pm and 10:00 pm on March 26 (34 readings). No significant readings were detected.
- Vac truck operations at Tucker Bayou and the outfall ditch continue on 24 hour basis.

Coordination with State Agencies:

On March 17, 2019, in response to a tank fire at the ITC, federal, state and local agencies joined ITC in a Unified Command. Multiple agencies including the United States Coast Guard, the TCEQ, and Harris County Pollution Control Services supported the response effort.

EPA Resources:

Personnel	EPA R6 Dallas	ITC Deer Park	Total
EPA Region 6	7	7	**14**
EPA Non-Region 6	0	4	**4**
START	1	14	**15**
Other Contractors	0	8	**8**
Total	**8**	**33**	**41**

Additional Information: Air Monitoring and Water Sampling locations:

Sent from my iPhone

On Mar 27, 2019, at 10:09 AM, Gray, David <gray.david@epa.gov> wrote:

Intercontinental Terminals Company (ITC) Fire Morning Update
Deer Park, Texas
March 26, 2019 1200 – March 27, 2019 0400

- Environmental Protection Agency (EPA) continues to participate in Unified Command with the Texas Commission on Environmental Quality (TCEQ), Harris County Pollution Control Services, and ITC.
- On March 26, 2019, TCEQ conducted overflight operations to observe the impacted tank farm, Tucker Bayou, and the Houston Ship Channel. The team observed a few pockets of material that had not been addressed by the United States Coast Guard (USCG) or ITC. USCG has been made aware of these areas and are addressing the spots.
- On March 26, 2019, TCEQ discussed concerns with re-starting the Waste Water Treatment Plant. ITC will address those concerns before re-starting.

- On March 26, 2019, ITC incident commander updated the tank status to empty for tanks 80-10 (Py Gas), 80-14 (Py Gas), and 80-15 (Py Gas). Tank 80-7 (Py Gas) is empty of product, but a foam layer is being maintained. ITC is assessing the status of tank 80-13 (Toluene).
- All Py Gas tanks contents have been reduced to residue. It is expected that this will reduce benzene vapors from the ITC tank farm.
- On March 26, 2019, EPA and TCEQ discussed the documentation plan with ITC. TCEQ legal will review the plan and provide additional comments.
- On March 26, 2019, EPA and TCEQ discussed the status with ITC Incident Command, with potential flushing of the ditches as an option. This will be discussed with USCG, EPA, and TCEQ further in the morning.
- ITC continues foaming of the tanks and secondary containment to prevent reignition and reduce emissions as necessary.
- EPA conducted surface water sampling on March 26, 2019 during reporting period 18 at five sample locations. One duplicate sample was also collected. One sample and a duplicate were collected upstream the confluence of Buffalo Bayou and the San Jacinto River in the Old River (at River Terrace Park, Channelview, Texas). One sample was collected at the confluence of Buffalo Bayou and the San Jacinto River (at the shoreline of Juan Sequin Historic Park). Two samples were collected in the main channel of the San Jacinto River just upstream the confluence with Buffalo Bayou. The fifth sample was collected downstream in the San Jacinto River. The surface water samples will be analyzed for PFAS, VOCs, SVOCs, COD, and Oil & Grease. Several entities including Harris County, Texas Commission on Environmental Quality (TCEQ), EPA, the 6th Civil Support Team, and ITC continue to conduct air monitoring around the tank farm, in adjoining industrial areas, and communities downwind from the facility.
- The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft did not fly during this reporting period.
- EPA conducted air sampling using the Trace Atmospheric Gas Analyzer (TAGA) on March 26, 2019. 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 results found exceedances of the short-term AMCV for benzene (0.18 ppm). These exceedances of the short-term AMCV for benzene were in the vicinity of and just north of the ITC site and have been shared with unified command and local officials.
- EPA conducted handheld air monitoring from March 26, 2019 (4:00 pm) to March 27, 2019 (12:00 am) at 54 locations. No results above the detection limit have been observed.
- ITC continued air monitoring on March 26 (midnight to midnight); there were 2,612 VOC readings (481 detections) with and 1,785 benzene readings (355 detections). There continues to be readings above the action levels for benzene close to the tank farm on Tidal Road, and by Dock 4 on Buffalo Bayou.
- TCEQ continued handheld air monitoring between 2:00 pm and 10:00 pm on March 26 (34 readings). No significant readings were detected.
- On March 26, 2019, Unified Command developed, reviewed, and approved the Incident Action Plan (#5) for the next operational period.
- Vac truck operations at Tucker Bayou and the outfall ditch continue on 24 hour basis.

From: Gray, David
Sent: Tuesday, March 26, 2019 6:43 PM
To: Konkus, John <konkus.john@epa.gov>; Grantham, Nancy <Grantham.Nancy@epa.gov>; Lyons, Troy <lyons.troy@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>; Idsal, Anne <idsal.anne@epa.gov>; Chancellor, Erin <chancellor.erin@epa.gov>
Subject: TUES PM - International Terminals Corporation Fire

Intercontinental Terminals Company (ITC)
Fire AfternoonUpdate
Deer Park, Texas
March 26, 2019 0400 – March 26, 2019 1200

• Environmental Protection Agency (EPA) continues to participate in Unified Command with the Texas Commission on Environmental Quality (TCEQ), Harris County Pollution Control Services, and ITC.

• EPA is developing an Emergency Funding Authorization (EFA) for both the United States Coast Guard (USCG) and the National Oceanic and Atmospheric Administration (NOAA) to continue funding for operations.

• ITC Operations are refining boom locations to facilitate recovery of product using vacuum trucks at Tucker Bayou and the Houston Ship Channel confluence.
• Petroleum products and foam continue to be recovered by vacuum truck at Tucker Bayou on a 24-hour basis.
• On March 26, 2019, fourteen dead fish and one dead turtle were collected adjacent to the ITC docks. A wildlife expert has been requested by ITC.
• The USCG Captain of the Port is continuing the controlled open for the Ship Channel on March 26, 2019, with traffic during the daytime only. Decontamination vessels are being positioned to help ships that may have residue on the hulls.
• ITC continues foaming of the secondary containment and tanks as necessary to prevent reignition and reduce emissions.

• On March 25, 2019, USCG expressed concerns about holding recovered material on the skimmers due to a potential fire hazard. TCEQ, EPA, and USCG agreed to allow ITC to pump recovered material from the multiple skimmer vessels to barges destined for disposal at a TCEQ authorized disposal facility.

• Benzene detections by ITC monitoring equipment in theimmediate tank farm area are decreasing. EPA has requested ITC to develop a visual aid (chart) that displays the number of readings, detections, and action level detections of benzene daily.
• Several entities including Harris County, Texas Commission on Environmental Quality (TCEQ), EPA, the Texas National Guard 6th Civil Support Team, and ITC continue to conduct air monitoring around the tank farm, in adjoining industrial areas, and in communities downwind from the facility.

• EPA conducted surface water sampling on March 26, 2019 during reporting period 17 at five sample locations. The surface water samples were collected along Buffalo Bayou and will be analyzed for Per- and polyfluoroalkyl substances, Volatile Organic Compounds (VOCs), Semi-volatile Organic Compounds (SVOCs), Chemical Oxygen Demand (COD), and Oil & Grease.

• The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values on March 26, 2019 during flight 13. 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 TCEQ short-term Air Monitoring Comparison Values (AMCVs) and found no exceedances of the short-term AMCVs.

• EPA conducted air sampling using the Trace Atmospheric Gas Analyzer (TAGA) on March 25, 2019 during reporting period 15. The reporting of this TAGA information was delayed due to technical issues with the Global Positioning System (GPS) and Geographical Information System (GIS). The TAGA analyzed the air samples for benzene, toluene and xylene. The TAGA air sampling results

were compared to the TCEQ short-term AMCVs and found no exceedances of the short-term AMCVs for benzene, toluene and xylene

• EPA conducted handheld air monitoring from March 26, 2019,(04:00 pm) to March 26, 2019, (12:00 am) at 60 locations. No results above the detection limit have been observed.

• ITC continued air monitoring on March 26, 2019, (midnight to noon), there were 323 VOC readings (2 detections) and 185 benzene readings (0 detections); overall there were 3958 VOC readings (112 detections) with and 2954 benzene readings (110 detections). Benzene measurements above the action levels continue to be detected close to the tank farm on Tidal Road, and near Dock 4 on Buffalo Bayou.

• EPA conducted handheld air monitoring on March 26, 2019, from 4:00 am to 12:00 pm at 17 locations. No results above the detection limit have been observed

• On March 26, 2019, Unified Command developed, reviewed, and approved the Incident Action Plan for the next operational period.

• The Rapid Assessment Team (RAT) continues visual assessments and documentation along the Bayou shorelines on March 26,2019. OSC Fisher is accompanying the team.

Sent from my iPhone

On Mar 26, 2019, at 8:52 AM, Gray, David <gray.david@epa.gov> wrote:

> Here is today's update and maps. It will be distributed shortly.
> David
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> Intercontinental Terminals Company (ITC) Fire Morning Update
> Deer Park, Texas
> March 25, 2019 1200 – March 26, 2019 0400
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> • Environmental Protection Agency (EPA) continues to participate in Unified Command with the Texas Commission on Environmental Quality (TCEQ), Harris County Pollution Control Services, and ITC.
> • EPA is developing an Emergency Funding Authorization (EFA) for both the United States Coast Guard (USCG) and the National Oceanic and Atmospheric Administration (NOAA) to continue funding for operations.
> • The USCG Captain of the Port will have a controlled open for the Ship Channel on March 26, 2019 during the daytime only. Decontamination vessels are being positioned to help ships that may have residue on the hulls.
> • ITC continues foaming of the secondary containment continues as necessary to prevent reignition and reduce emissions.

- On March 25, 2019, USCG expressed concerns about holding material on the skimmers due to a potential fire hazard. TCEQ, EPA, and USCG agreed to allow ITC to remove the material from the skimmer vessels and be placed in barges that will go off for disposal to a TCEQ authorized disposal facility.
- On March 25, 2019, ITC requested to start releasing its wastewater from its permitted Waste Water Treatment Plant (WWTP). This would be already treated water that is not related to the incident. USCG, TCEQ, and EPA have agreed, as long as it does not impact recovery efforts on Tucker Bayou. USCG has requested that the flow be kept at a low rate and to ensure that the ditch with foam will not have any adverse reactions to it.
- On March 25, 2019, EPA and TCEQ provided comments on the Waste Management Plan to ITC.
- An ITC 3-man entry team, dressed in Level A Personal Protective Equipment (PPE), entered the tank farm on March 25, 2019, to determine the viability of the valves Tanks 80-14 and 80-15. The team was able to open the sump valve on Tank 80-10.
- ITC is beginning to see a decrease in benzene detections in the immediate tank farm area. EPA has requested ITC to develop a visual aid (chart) that displays the number of readings, detections, and action level detections of benzene on a daily basis.
- Several entities including Harris County, Texas Commission on Environmental Quality (TCEQ), EPA, the 6th Civil Support Team, and ITC continue to conduct air monitoring around the tank farm, in adjoining industrial areas, and communities downwind from the facility.
- EPA conducted surface water sampling on March 25, 2019 during reporting period 16 at one sample location. The surface water sample was collected along Buffalo Bayou and will be analyzed for PFAS, VOCs, SVOCs, COD, and Oil & Grease.
- The Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft found no exceedances of the Texas comparison values on March 25, 2019, during Flight 12. 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.
- EPA conducted air sampling using the Trace Atmospheric Gas Analyzer (TAGA) on March 25, 2019. 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 results found exceedances of the short-term AMCV for benzene (0.18 ppm). These exceedances of the short-term AMCV for benzene were in the vicinity of the ITC site and have been shared with unified command and local officials.
- EPA conducted handheld air monitoring from March 25, 2019, (12:00 pm) to March 26, 2019, (4:00 am) at 60 locations. No results above the detection limit have been observed.
- ITC continued air monitoring on March 25, 2019, (midnight to midnight); there were 2,000 VOC readings (427 detections) with and 1,684 benzene readings (388 detections). There continues to be readings above the action levels for benzene close to the tank farm on Tidal Road, and by Dock 4 on Buffalo Bayou.
- TCEQ continued handheld air monitoring between 2:00 pm and 10:00 pm on March 25, 2019, (36 readings). No significant readings were detected.
- On March25, 2019, Unified Command developed, reviewed, and approved the Incident Action Plan for the next operational period.

- The Rapid Assessment Team (RAT) is scheduled to continue assessments along the Bayou shorelines on March 26,2019. OSC Fisher will accompany the team.
- Vac truck operations at Tucker Bayou continue on a 24-hour basis.

<ITC AIR MONITORING AND ASPECT MAP - RP16_REV1.pdf>

<ITC TAGA MAP - RP16_REV1 (002).pdf>