Region 6 Superfund Division Meeting
Monday, September 10, 2018, 12:30pm CDT
Region 6 OIG Conference Room, OIG-09D15

1. Please discuss the initial EPA response to Hurricane Harvey? When was air monitoring first discussed with TCEQ in planning for Hurricane Harvey? When did EPA have "boots on the ground" in and around the Houston area?
   The Region 6 Multimedia Division discussed coordination with TCEQ on ambient air monitoring. EPA coordinated with air monitoring associated with emergency response activities prior to the Hurricane. Since EPA has a Laboratory and Office in Houston, we had Boots on the ground the entire time during Hurricane Harvey. The first Response boots on the Ground were August 30, 2017.

2. What was the timeline of air monitoring:
   a. When were the stationary air monitors taken down?
      According to the Multimedia Division, TCEQ started securing their air monitors on August 23, 2017.
   b. When did the requests for additional air monitoring come in from TCEQ?
      EPA & TCEQ were working in unified command and emergency air monitoring or screening is part of the preplanning we do with the State. The ESF-10 Mission Assignment was issued August 28, 2017.
   c. When did EPA mobilize resources to ensure TAGA/ASPECT were available?
      ASPECT had been prearranged to be on Standby for the Hurricane Harvey Response. TAGA was requested in anticipation of a formal request by TCEQ and mobilized on August 29, 2017, due to widespread impacts to the petroleum and chemical industry along the coast. TCEQ requested the TAGA on September 2, 2018.
   d. When did TAGA/ASPECT resources arrive in Houston?
      Due to an Emergency at the Arkema Facility, ASPECT began operations east of Houston around the Arkema facility in Crosby, Texas on August 30, 2017. ASPECT initially flew out of their base in Addison TX, but due to the extensive time needed on the Arkema Response, they temporarily based out of Houston Hobby. TAGA reached Houston on September 4, 2017.
   e. What was the plan for air toxics monitoring during the Hurricane and directly after?
      Area/facility screening with the ASPECT aircraft with areas identified or suspected of having air quality concerns, EPA's Trace Atmospheric Gas Analyzer (TAGA) mobile laboratories, would be deployed to assist in response activities.

3. How much discretion is given to state agencies during emergencies? Was there any coordination with TCEQ on the waiver of environmental rules? Were any federal regulations suspended during Hurricane Harvey? How are those decisions made?
   EPA Administrator Scott Pruitt, in consultation with Energy Secretary Rick Perry and at the request of Texas Commission on Environmental Quality Executive Director Richard Hyde and Texas Governor Greg Abbott, waived certain fuel requirements to address shortages that occur as a result of Hurricane Harvey. Administrator Pruitt determined that extreme and unusual fuel supply circumstances exist in portions of Texas as a result of the hurricane, and granted a temporary waiver to help ensure an adequate supply of

gasoline is available in the affected areas until normal supply to the region can be restored. Additionally, No Action Assurance (NAA) letters were signed by EPA and to help relieve fuel shortages by expediting the distribution of existing supplies in both Texas and Louisiana until impacted refineries could resume normal operations. For each NAA, EPA exercised discretion not to pursue enforcement for violations of the identified regulations ranging from inadequate vapor recovery and fuel truck documentation to tank refilling procedures at bulk fuel terminals.

4. Is there any coordination with county and local agencies before an emergency? Is there a way for local agencies to reach out to EPA for assistance directly? Did the City of Houston ask specifically for additional air monitoring or assistance?
   EPA Region 6 has conducted workshops for local communities for the past 4 years. These LEPC workshops which have been attended by over half of the counties within Region 6 (and approximately 5,500 attendees). At these workshops we covered what resources and assets EPA can provide to assist local communities during a hazardous materials release, and how the communities could reach EPA for support (our regional hotline), as well as support / assets from each state. During the workshops, we provided information on the National Response System (using the flow chart from the National Contingency Plan (NCP)) and explained they could ask for assistance directly to EPA or the State during a hazardous materials emergency.
   During a large incident, such as Hurricane Harvey, the local community can request assistance through the State to EPA under a Mission Assignment Request for Resource assistance if we are activated under Emergency Support Function-10, under the Stafford Act. However, even if we are not activated under ESF-10, we could provide support to local communities for emergency response, air monitoring, etc, under our own authority during a large event. The Houston Health Department contacted EPA of potential Air Quality issues in the Manchester neighborhood on September 4, 2017. EPA had already dispatched an Team to investigate and begin air monitoring on September 3, 2017.

5. How is information provided to localities so they can make informed decisions about evacuation/shelter-in-place (SIP)?
   a. Is there any guidance for local agencies to use to determine when evacuation or SIP is necessary?
   b. Did TCEQ or City of Houston ask for guidance on whether to evacuate/SIP? If they had asked for this guidance, what would EPA provide?

   Initial emergency response actions are generally the responsibility of local authorities, such as city and county governments. Local emergency responders have authority to handle initial responses to emergency situations. There are many Federal and Industry guidance documents out that provide guidance on evacuations based on chemical concentrations or types of chemicals involved in an emergency. The Department of Transportation's Emergency Response Guidebook (ERG) is widely adopted in the Emergency Response and Public Safety communities. Also, EPA has sponsored software, such as CAMEO (Computer-Aided Management of Emergency Operations), and ALOHA (Which is the hazard modeling program for the CAMEO® software suite, which is used widely to plan for and respond to chemical emergencies). State and local authorities may also use the Interagency Modeling and Atmospheric Assessment Center (IMAAC) to develop plume models to support their decisions. Additionally, there are many publications from FEMA, American Red Cross, and other entities on evacuation / shelter in place that support local emergency management.

6. What standard was used during Hurricane Harvey to determine whether air toxics emissions were a risk to public health?
   Both the TCEQ AMCVs and EPA AEGLs are used to assess air monitoring data. AMCVs are comparison values used in TCEQ's evaluation of ambient air monitoring results to assess the potential for measured concentrations of specific chemicals to cause health effects. Like TCEQs Effect Screening Levels (ESLs), AMCVs are chemical-specific air concentrations set to protect human health and welfare from potential cumulative and aggregate exposures to chemicals in the air. These values can be used to inform several potential courses of action depending on the results. They could indicate the need for evacuations within a certain area.
   a. Can and does EPA use non-certified data to identify potential public health risks?
   b. What is your view on monitoring conducted by NGOs during and after the hurricane?
   c. How is air toxic data gathered during disasters? How can this data be used to directly impact the public in real-time?
      During Emergency Response operations all available information is considered in making decisions. If the information or data is from an outside source, EPA will use that information to direct its own monitoring and attempt to verify the information provided. The ASPECT aircraft is used to screen large areas and the TAGA mobile laboratories, would be deployed to assist in response if/when areas are identified having air quality concerns. No levels of targeted toxic chemicals were detected above the Texas TCEQ Air Monitoring Comparison Values (AMCV) short-term screening levels.

7. Was OEJTIA consulted about environmental justice (EJ) communities in the Houston area prior to Hurricane Harvey? How did environmental justice issues factor into EPA's response?
   The EJ Program in Region 6 are part of the Regional Incident Coordination Team (RICT) which convened that first Monday, after Harvey made landfall. The DRA working through the REOC coordinated the EJ activities through Community Liaisons (CLs) deployed to the impacted areas. The Region 6 EJ Program established a communication strategy within 2 days of the disaster. EJ Harvey Calls with EJ Contacts were held to discuss and listened to community concerns in impacted areas. EJ Program provided updates regarding response efforts and passed along Information from EJ contacts regarding Harvey impacts to appropriate REOC staff, who shared this information as applicable, with the State Emergency Operations Center. Calls included community members in Texas & Louisiana, City of Houston Health Dept., with TCEQ participation. The calls were a platform for communication with State and federal partners. Additionally, a dedicated EJ email address was established so that EJ concerns could be sent directly to the EJ office and EJ conveyed those concerns to the REOC.
   Community Liaisons made direct contact with EJ advocate. EJ Staff deployed during the first weeks as Community Liaisons, who worked with EOCs in more than 30 Counties. CL's imbedded in emergency response centers in Beaumont-Port Arthur & Houston. Provided information on reentry, disposal of household hazardous waste, recycling white goods, indoor mold remediation, debris removal, and water well disinfection.

8. We understand that communication was coordinated with TCEQ on a regular basis. Were similar measures taken to coordinate communication with the City of Houston?
   EPA mobilized a liaison to Houston to coordinate with Houston Mayor's Office.
   a. Besides press releases and information posted on EPA and TCEQ websites, how much direct communication was there with community members regarding potential public health risks (e.g. Arkema, Magellan, Valero, high ozone days)?

39 County Liaisons were mobilized to County Emergency Management offices and coordinated with disaster service centers in the impacted Counties.

b. What was the basis for EPA statements about the air quality in the Houston area?
EPA's statement in the September 8, 2018, Press Release included the basis for the statement: "The U.S. Environmental Protection Agency's (EPA) mobile laboratory, using the trace atmospheric gas analyzer and commonly called TAGA, is a triple quadrupole mass spectrometer system, extensively monitored the neighborhood adjacent to the Valero refinery in southeast Houston. To date, no levels of targeted toxic chemicals were detected above the Texas TCEQ Air Monitoring Comparison Values (AMCV) short-term screening levels."

9. Please discuss the timeline of and response to the Valero incident:
   a. When did Valero report excess emissions?
   In an effort to provide accuracy and consistency, we will identify the "Valero Incident" as the spill of crude oil, which resulted from the partial "cave in" of the floating roof tank and subsequent ambient air issues associated with the spill. August 27, 2017, Valero reported the discharge of an unknown amount of crude oil from a submerged floating roof tank. Release was reported secure and No air issues were identified in the NRC report.
   b. When did EPA know that Valero underreported emissions?
   The Texas Commission on Environmental Quality (TCEQ) is delegated the responsibility for receipt of excess emissions reports in Texas. Valero submitted its excess emissions report to the TCEQ's State of Texas Environmental Electronic Reporting System (STEERS)and later submitted an amended report showing the revised emissions estimates. STEERS excess emissions reports are not submitted to EPA. This question would more appropriately be answered by TCEQ.
   c. When did Valero correct their excess emissions report?
   The Texas Commission on Environmental Quality (TCEQ) is delegated the responsibility for receipt of excess emissions reports in Texas. Valero submitted its excess emissions report to the TCEQ's State of Texas Environmental Electronic Reporting System (STEERS) and later submitted an amended report showing the revised emissions estimates. STEERS excess emissions reports are not submitted to EPA. This question would more appropriately be answered by TCEQ.
   d. When did EPA communicate to the public about Valero's underreported emissions?
   EPA communicated with TCEQ daily for air monitoring results. No air monitoring results were above the AMCV. EPA made air monitoring results available to the public through a September 8, 2017, Press Release and the Hurricane Harvey Response website.
   e. Did EPA take measurements itself when Valero reported excess emissions? If not, why not?
   With EPA's TAGA bus en route, EPA began air monitoring with handheld monitors and AreaRae on September 3, 2017. Once TAGA reached Houston on September 4, 2017, they began monitoring in the area around Valero. No levels of targeted toxic chemicals were detected above the Texas TCEQ Air Monitoring Comparison Values (AMCV) short-term screening levels.

10. Please discuss the timeline of and response to the Arkema incident.
   a. When did Arkema communicate to EPA about the problem?
   August 29, 2017, EPA received NRC report 1188740 and was notified by TCEQ of chemical incident at Arkema facility in Crosby. EPA begins monitoring situation and worked with the Department of Homeland Security to develop plume modeling to provide to local

responders. The plume modeling indicated the offsite consequences of the chemical of concern.

b. When did EPA communicate to the public about the Arkema situation?
Harris County Emergency Management oversaw the incident. EPA sent an OSC to join unified command and assist with air monitoring. Harris County took the lead in evacuations and public notifications. Additionally, EPA began providing News Releases about the incident on August 31, 2017.

c. Did EPA take measurements itself during the Arkema fires? If not, why not?
In the early morning hours of August 30, 2018, EPA deployed its ASPECT aircraft to assess the conditions at the Arkema facility in Crosby to detect chemical leaks, thermally image the facility and obtain aerial photos of current site conditions to help first responders. No levels of targeted toxic chemicals were detected above the Texas TCEQ Air Monitoring Comparison Values (AMCV) short-term screening levels. Additionally, EPA provided ground level monitoring using handheld monitors to assist in guiding decision makers about public health issues, such as evacuations.

11. Please discuss the timeline and response to the Magellan gas leak.

a. When did Magellan communicate to EPA about the spill?
On September 1, 2017, Magellan Galena Park reported the spill of an unknown amount of a "gasoline type" product released within facility and contained in secondary containment. This report was later updated to an estimate of almost 11,000 barrels.

b. Did EPA communicate to the public about the spill?
Local Officials were notified through the National Response Center.

c. Did EPA take measurements itself after the spill? If not, why not?
The Hurricane Harvey Unified Command deployed Oil Discharge Assessment Groups to monitor the discharge cleanup. In addition to EPA's TAGA mobile lab, monitoring in the area around the Magellan terminal, EPA personnel conducted VOC area monitoring in the ship channel area using used a Photo Ionization Detector (PID) and a Forward Looking Infrared (FLIR) camera in the area west of the Magellan Terminals Facility along the fence line. No levels of targeted toxic chemicals were detected above the Texas TCEQ Air Monitoring Comparison Values (AMCV) short-term screening levels.