EPA Region 6's Environmental Services Branch Laboratory (Houston Lab)
State Assistance Examples

Arkansas

Bella Vista Stump Dump Fire – December 2018-present

- The Houston Lab aided the Superfund Program by providing support during a sampling event for volatile organic compounds at the stump dump fire.
- The Houston Lab provided summa canisters with 24-hour flow control valves and subsequent analysis for benzene.
- However, due to inclement weather the sampling event was delayed, and based on citizen concerns the sampling protocol was revised to include particulates.
- Consequently, Superfund rented data rams (for particulate sampling) and summa canisters and did not utilize the Houston Lab's prepared summa canisters.

Louisiana

Hurricane Response – Ongoing

- The Houston Lab provided analytical services for the emergency response efforts associated with Hurricanes Katrina & Rita.
- While the Louisiana Department of Health (LDH) laboratory (LDH Lab) was not operational post-Hurricane Katrina, The Houston Lab provided drinking water analyses for LDH.
    - The Houston Lab also housed 2 LDH analysts to help process the LDH samples.
- The Houston Lab's mobile laboratory was deployed to both Hurricane Katrina and Rita responses to provide coliform testing, and the Houston Lab analyzed flood waters from Katrina.

Deepwater Horizon (DWH) Response – April 2010 (initial spill date)

- The Houston Lab provided a range of analyses in response to the Gulf Oil Spill.
- The Houston Lab co-developed a method to test for a key component of the Corexit dispersant used on the oil.

New Mexico

Gold King Mine

- Due to concern about mine waste leaching into local groundwater wells near the San Juan River in New Mexico, EPA Region 6 collected drinking water well samples for testing.
- When a private lab had difficulty with their data packages and limited capacity, the Houston Lab provided retesting of some of the samples in a Quality Control role to confirm the results.
- Two sets of 11 samples were priority analyzed with final reports provided within 48 hours of receipt, with analysis including metals by ICP, ICP/MS, mercury, and calculated hardness.

Oklahoma

Semi-volatile Analysis Backup

- The Houston Lab has agreed to support the ODEQ State Environmental Laboratory (ODEQ Lab) with backup analysis capability for semi-volatiles, specifically Method 525.2: Benzo(a)pyrene, di(2-ethylhexyl)adipate, and di(2-ethylhexyl)phthalate.

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EPA Region 6's Environmental Services Branch Laboratory (Houston Lab)
State Assistance Examples

Red River Fish Kill

- The Houston Lab assisted ODEQ with sample analysis during investigation of the cause of fish kills in the Red River and engaged ORD in a research project to help identify the source of the fish kills.

Texas

Hurricane Harvey Response – August 2017 (landfall)

- As soon as the Houston Lab could reopen after Hurricane Harvey made landfall, the Houston Lab began providing support by (1) housing ~30 community liaisons deployed to support county incident command centers, (2) procuring sampling materials and assembling kits for collection of drinking water samples, (3) housing and supporting EPA's national assets of TAGA (mobile air monitoring laboratories) and PHILIS (mobile analytical laboratory) deployed to the scene, (4) providing data validation for rapidly assessing Superfund sites, and (5) deploying staff who served on debris removal monitoring teams.

Corpus Christi Drinking Water Incident – December 2016

- Per TCEQ's request, the Houston Lab provided around the clock analysis services for 200+ drinking water samples collected during the incident. These services included confirmatory sampling sites and complaint verification sampling, among other things.
- Houston Lab developed two new, time critical, analytical chemistry methods, utilizing a liquid chromatography/mass spectrograph and a gas chromatography/mass spectrograph, to detect Indulin AA-86 that was suspected of contaminating Corpus Christi's drinking water distribution system.

Craft-Turney Water Supply Corporation (Craft-Turney) Drinking Water Incident – Date

- The Houston Lab was tasked to assist TCEQ with drinking water sample analysis for Methylene bis-thiocyanate (MBT).
- The Craft-Turney Water Supply Corporation located in Cherokee County, south of Jacksonville, Texas, issued a Do Not Use order on 16 connections related to a MBT back siphonage event at Arrington Sawmill.
- The Houston Lab developed a gas chromatography analysis method for MBT and analyzed 35 samples for TCEQ with an expedited 24-hr turn-around-time.

2017 Water Laboratory Alliance (WLA) Security Summit

- The WLA, which is a part of the Environmental Response Laboratory Network (ERLN), is a nationwide network of laboratories that serves the water sector.
    - This network helps laboratories and utilities respond to water contamination events involving chemical, biological and radiochemical contaminants.
- The Houston Lab, in conjunction with Water Security Division, hosted the 2017 WLA Security Summit, with the centerpiece being a Tabletop Exercise "The Unexpected Storm: Hurricane Watt" that demonstrated elements of the WLA Response Plan intended for practical application with the Lab.

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