

# Building a Healthier and Climate Adaptive Houston

## Lessons Learned from Harvey

Elena Craft, PhD

Senior Health Scientist

[ecraft@edf.org](mailto:ecraft@edf.org)



# Arkema

**TV 5**  
NEWS



Photo accessed:

<https://www.google.com/search?q=images+from+arkema+blast&tbm=isch&tbo=u&source=univ&sa=X&ved=0ahUKEwivhOCjxIDXAhUI5lMKHeGBDWEQ7AkIRA&biw=1366&bih=672#imgrc=XQUbQnOHtm2CrM>



# EPA won't release benzene levels collected post-Harvey; private tests show elevated levels

Environmental groups hired a private firm after the flooding and found higher than normal levels of dangerous chemicals in the air around a refinery.

BY KIAH COLLIER, THE TEXAS TRIBUNE AND LISA SONG AND AL SHAW, PROPUBLICA  
SEPT. 14, 2017 3 PM

U.S. Environmental Protection Agency (USEPA) Environmental Response Team Trace Atmosphere Gas Analyzer (TAGA) Post-Harvey Monitoring Houston, Corpus Christi, and Beaumont Areas, TX



Harvey makes landfall near Port Aransas and moves north toward Houston. The region receives over 5 feet of rain within 5 days.

City of Houston receives odor complaints. EDF coordinates with City officials to deploy mobile monitoring unit from CA.

Conference call with EPA, EDF, and City of Houston to discuss situation. Concentrations remain elevated but not as high.

EPA tells Houston Chronicle that Valero significantly underreported emissions (shortly before ProPublica article is published).

October 9, 2017  
TCEQ releases a summary of EPA's monitoring results, 39 days after resident concerns.



Valero files initial report to TCEQ indicating excess benzene emissions of 6.7 pounds. Valero in daily communication with TCEQ. TCEQ never takes a single measurement.

EDF and City of Houston take independent measurements. Benzene concentrations in Manchester exceed 300 ppb.

EPA takes measurements in Manchester but does not release data to public.

EDF releases air quality health alert.

Valero files final emissions report with the state revising their emission estimate to 1881 pounds. Valero never released a public statement.

EPA demands that Valero release reports related to the release.



FOR IMMEDIATE RELEASE

Contact:  
Matthew Tresaugue, (713) 292-7888, [mtresaugue@edf.org](mailto:mtresaugue@edf.org)

Air quality remains a concern after Harvey despite claims from EPA officials  
Statement from EDF's Dr. Elena Craft, senior health scientist

(HOUSTON – Sept. 4, 2017) The Environmental Protection Agency released a statement Sunday that "local residents should not be concerned about air quality issues related to the effects of the storm." Yet the Houston area was under alert for ground-level ozone, a lung-damaging air pollutant, for the fourth day in a row, according to the EPA's Air Now website.

# Messaging

## **TCEQ issues first joint statement with EPA on Sept. 3, 2017**

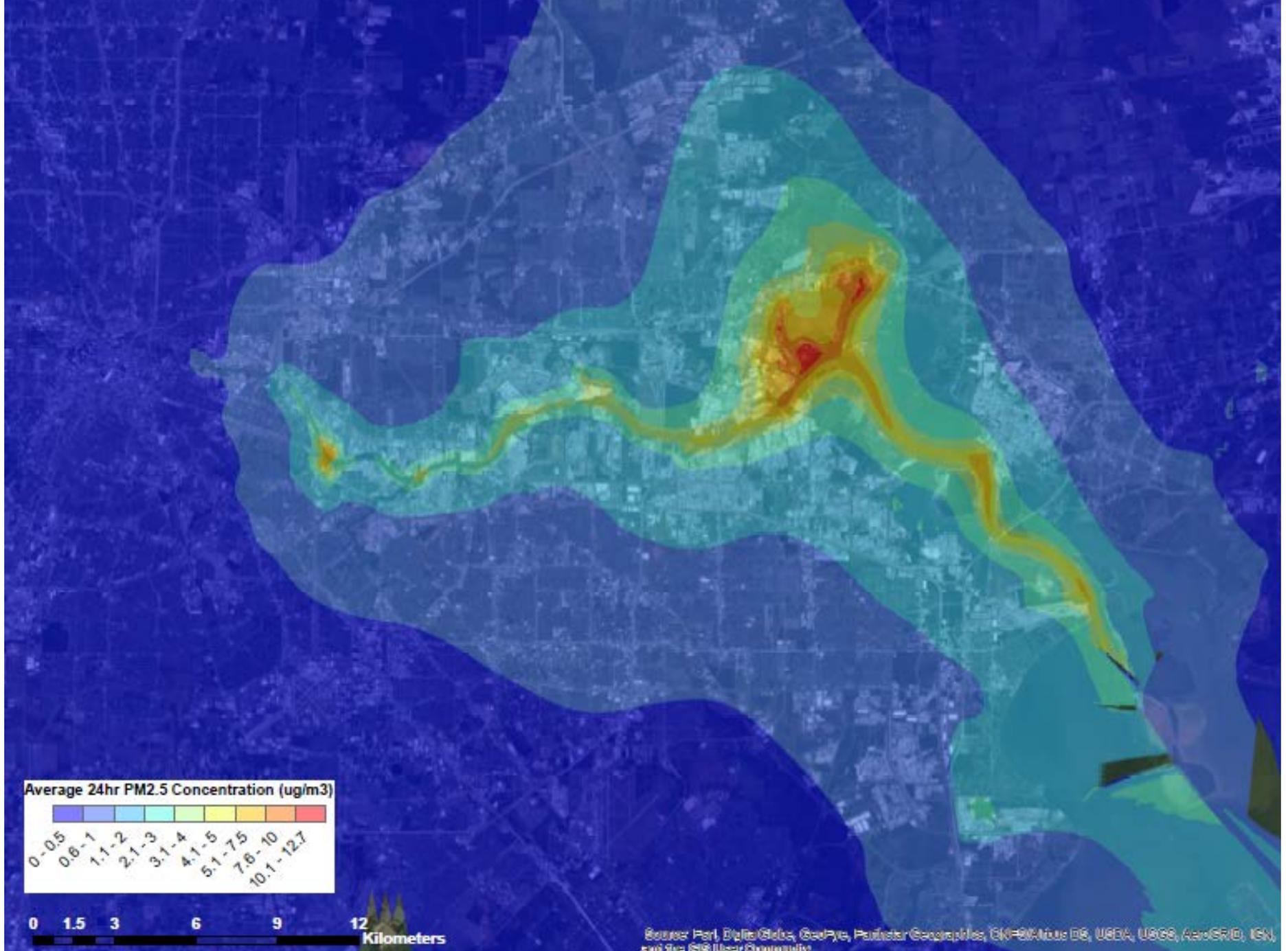
“As of Saturday, Sept. 2, more than 88 percent of monitors are up and working again in Corpus Christi, 85 percent in Houston, and 36 percent in Beaumont. The network is expected to be fully operational again by next week. Of the available air monitoring data collected from Aug. 24-Sept. 2, all measured concentrations were well below levels of health concern. Monitors are showing that air quality at this time is not concerning, and residents should not be concerned about air quality issues related to the effects of the storm.”

## **What the statement should say**

Although air quality monitoring remains limited after the storm, we are seeing high levels of ozone in the Houston region, as well as hearing complaints about strong odors in neighborhoods near storm-damaged oil refineries and chemical plants. Valero reported the release of benzene and other toxics at its Houston refinery, and Magellan Midstream Partners reported a large gasoline spill in Galena Park, among others. We can expect more air pollution as industrial facilities restart over the next month. In response to this storm, TCEQ intends to increase our air quality monitoring efforts and emergency outreach to local residents. This is a critical time for residents to pay attention to air quality as many people work outside for long hours to clean up their homes and neighborhoods. While everyone may experience health effects from air pollution, people with heart and lung disease, older people and children are at greater risk. Please stay vigilant.

# Monitoring





# Environmental Health & Housing Registry

## Goal

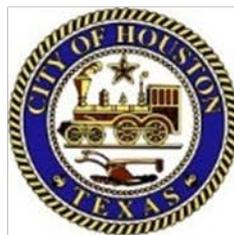
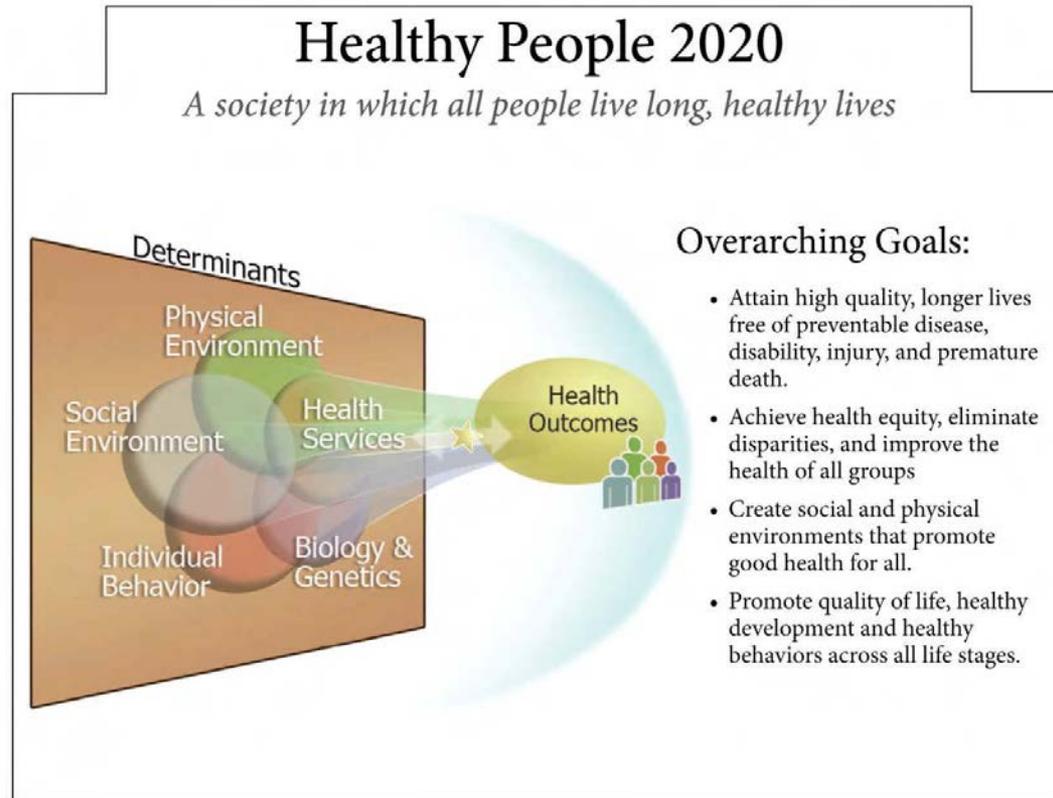
To gather baseline health information on impacted individuals (especially children), and combine it with extensive environmental monitoring over time.

## Timeline

A basic version of the registry will launch April 16

## Data

Housed on Rice's Urban Data Platform, an existing system used by the City of Houston and the Houston Public Health Department.



# Our Air. Our Health. Our Houston.





Photo: Jay Janner

**Elena Craft, PhD**  
[ecraft@edf.org](mailto:ecraft@edf.org)  
512-691-3452

