https://www.wsj.com/articles/after-oil-refinery-is-damaged-by-harvey-benzene-is-detected-in-the-air-in-houston-area-1504638772

U.S.

After Oil Refinery Is Damaged by Harvey, Benzene Is Detected in Houston Area

City and EPA investigate potentially dangerous plume after Valero Energy Partners reported leak tied to hurricane

An aerial view of the Valero Houston Refinery is seen in Houston, Texas, U.S. August 31, 2017. REUTERS/Adrees Latif Published Credit: adrees latif/Reuters **PHOTO:** ADREES LATIF/REUTERS

By Melanie Evans

Updated Sept. 5, 2017 9:15 pm ET

The city of Houston, the Environmental Protection Agency and an environmental advocacy group are investigating a potentially hazardous plume of a carcinogenic substance in one neighborhood after a nearby oil refiner reported its operations suffered hurricane-related damage.

The city and the Environmental Defense Fund said extra air monitors they dispatched to Houston's Manchester region on Monday detected the presence of benzene, a component of crude oil and gasoline.

Two monitors detected significantly different levels of the carcinogen at different times of the day, and additional sampling is needed to determine the concentration, according to Loren Raun, chief environmental science officer for the Houston Health Department, and Elena Craft, a senior

health scientist at the Environmental Defense Fund, which became involved in the probe after offering the city assistance.

A Valero Energy Partners LP refinery in the neighborhood reported a hurricane-related leak on Aug. 27.

The EPA said it was deploying an air monitor to the area on Tuesday to help the investigation. Officials are seeking to pinpoint the source of the benzene plume, the concentration and how far-reaching the emissions may have spread, Ms. Raun said Tuesday morning, after a call with EPA, EDF and Houston city officials.

"EPA continues to conduct ambient air monitoring in Houston and is focusing on an area of potential concern associated with reported air emissions from a Valero facility in Houston," said David Gray, a spokesman for the agency.

A Manchester oil refinery that is a subsidiary of Valero Energy Partners said the leak on Aug. 27 resulted in the emission of benzene and other hazardous compounds, according to a copy of the refiner's report to the Texas Commission on Environmental Quality, or TCEQ.

The report, which was filed through the State of Texas Environmental Electronic Reporting System and is available on TCEQ's website, said the leak was a result of "heavy rainfall complications," and that cleanup was under way.

Valero Energy Corp. is the majority owner of Valero Energy Partners. In an Aug. 29 statement on its website, Valero Energy Corp. said Harvey's pounding rainfall sank the floating roof of a crude-oil tank, leading to an oil leak.

The statement said the company's air-quality monitoring found "no detectable levels of emissions in the community." Valero said it didn't have an immediate update on Tuesday.

RELATED

- Senate GOP to Tether Storm Aid to Debt Vote
- Houston Starts to Return to Work as Focus Shifts to Recovery

Companies must report emissions that exceed permitted amounts, a TCEQ spokesman said, adding that the state "investigates all emissions events that are reported to the agency."

Houston Health Department investigators who visited the Valero refinery Tuesday found low traces of hazardous compounds using a hand-held air monitor, which is used to identify whether compounds are present, but doesn't identify specific compounds, Ms. Raun said.

Investigators didn't detect hazardous emissions from the damaged tank Tuesday using an infared camera. "That's good news," she said.

Valero's disclosure to the TCEQ was one of 56 preliminary emissions reports citing Hurricane Harvey that the state commission received from petroleum and chemical companies as of Aug. 31, according to an analysis of TCEQ filings by the Center for Biological Diversity, an environmental group based in Tucson, Ariz.

Those Harvey-related emissions released nearly 1 million pounds of seven toxic compounds, including benzene, the group reported.

TCEQ declined to comment on the nonprofit's Harvey-related analysis.

In 2016, petroleum, chemical and polymer companies reported 3,289 emission events to the TCEQ, excluding events that were scheduled or involved excess capacity, commission data show. Those 2016 events released 56 million pounds of materials, the data show.

The majority of the Harvey-related reports involved hazardous emissions triggered by the shutdown of operations as the storm approached, said Shaye Wolf, an ecologist and climate science director at the Center for Biological Diversity. Such shutdowns can cause emissions that escape via a mechanism known as a flare, which relieves pressure that builds up when operations cease quickly, she said.

Other Harvey-related emissions reports, including Valero's disclosure, involved storm damage to tanks, boilers, and power systems that led to hazardous emissions, according to report data available on TCEQ's site.

Public health officials worry when those pollutants concentrate at ground level, instead of soaring into the atmosphere or being diluted and dispersed by strong winds, said Michael Honeycutt, director of the TCEQ toxicology division.

One of Houston's permanent air monitors in the vicinity of the Manchester neighborhood is still disabled after it was flooded during Hurricane Harvey, according to TCEQ. Texas has two additional air-monitoring stations to the north and one to the south of the flood-disabled monitor, a TCEQ spokesman said. Those have been back online and working since Sept. 1, after the state temporarily shut down its entire air-monitoring system before the hurricane hit to prevent damage, he said.

Roughly 80% of state air-monitoring stations in Houston, Corpus Christi and Beaumont were back up and running Monday, said Cory Chism, who oversees air monitoring for the TCEQ. As the air-monitoring network came back online, the state began receiving pollution data again late on

Aug. 31. “Nothing we have seen thus far in the data has been out of the ordinary,” Mr. Chism said of the working monitors.

Write to Melanie Evans at Melanie.Evans@wsj.com

Appeared in the September 6, 2017, print edition as ‘Benzene Found in Part of Houston.’