

PODCAST TRANSCRIPT

ASSOCIATED REPORT: EPA Needs to Improve Its Emergency Planning to Better Address Air Quality Concerns During Future Disasters

JASON: Hello, my name is Jason Elkins. I'm a public affairs specialist with the EPA Office of Inspector General, or OIG as we call it. I'm joined by my OIG colleague Julie Narimatsu, a program analyst, who just finished working on an audit of the U.S. Environmental Protection Agency's air quality monitoring in the aftermath of Hurricane Harvey in the greater Houston area.

Welcome, Julie.

JULIE: Thanks, Jason. Good to be here.

JASON: To refresh our listeners' memories, the storm hit the U.S. Gulf Coast as a Category 4 hurricane on August 25, 2017, causing catastrophic flooding. It is the second costliest tropical cyclone on record, inflicting \$125 billion in damage. Julie, how can air quality be impacted by such a catastrophe?

JULIE: Well, during Hurricane Harvey, there were air toxic releases mostly due to industrial facilities shutting down and restarting operations in response to the storm and storage tank failures. Most of the incidents occurred within a 5-day period of the storm making landfall.

JASON: And what kind of impact on the public are we talking about?

JULIE: Well, according to facility reports, Hurricane Harvey resulted in industrial facilities releasing an extra 340 tons of air toxics into the air.

JASON: Whoa! That's a big number, Julie. Obviously, the word "toxics" is a bad thing—not the kind of air people should be breathing. But what kinds of chemicals were involved, and what kind of harm can they do?

JULIE: Well, the first thing to understand is that people who live in the Houston area near industrial facilities already experience chronic exposure to high levels of air pollution – without hundreds of additional tons of air toxics suddenly released into their air. One example of an air toxic is benzene. Even short-term airborne exposure can cause symptoms such as drowsiness, dizziness, headaches, eye irritation, and skin and respiratory tract problems. High levels of exposure to benzene can even lead to unconsciousness and death.

JASON: This is serious stuff. Going back to the OIG's audit, your team looked at how air quality was monitored after Hurricane Harvey, is that correct?

JULIE: Yes, Jason. We had three specific objectives. We looked to determine whether the federal EPA's and the state of Texas' air quality monitoring and related activities: (1) addressed potential high-risk areas, (2) indicated any potential health concerns, and (3) were accurately communicated to the public with respect to monitoring results and potential health concerns.

JASON: What did you find?

JULIE: Well, for one thing, we found that state and local in addition to EPA air monitoring activities were not initiated in time to assess the impact of these early releases.

JASON: I see. Did government agencies not prepare for the storm in terms of air quality monitoring?

JULIE: Well, many of the Houston area's air monitors were shut down and secured prior to Harvey's landfall to prevent damage from the hurricane in anticipation of heavy rainfall and flooding. Unfortunately, the Texas Commission on Environmental Quality did not agree to meet with us and we were unable to obtain some of the data from that

agency's monitoring efforts, but we were able to assess data from monitoring conducted by the city of Houston and EPA. And we found that, after landfall, the EPA and state and local agencies conducted mobile monitoring to assess air quality conditions following the storm – but it was too late to assess the total impact of emissions. Another problem was, and continues to be, that there is no EPA guidance outlining how to monitor air quality following an emergency. Even after the monitoring efforts were started, they did not always generate data considered suitable for making health determinations for those impacted in the area.

JASON: I assume your audit team made recommendations to EPA to address this issue for future disaster responses.

JULIE: Yes, we recommended in our report that the EPA develop general guidance that provides direction for state and local agencies on how to collect data acceptable for making public health determinations.

JASON: So, hopefully, EPA will adopt OIG's recommendations for future incidents. Meanwhile, what did the air monitoring data that were collected following Hurricane Harvey show?

JULIE: The air monitoring data collected did not indicate that air toxic levels after Hurricane Harvey exceeded health-related guidelines established by the state of Texas and the EPA. However, the values used to assess public health risks and the EPA's emergency guidelines do not consider the cumulative impact of exposure to multiple pollutants at one time. Further, the EPA's current thresholds do not consider prior lifetime exposures, just short-term exposure to a single pollutant. These thresholds may not be sufficiently protective of residents in communities that neighbor industrial facilities.

JASON: And the OIG's final objective was to find out whether air monitoring results and potential health care concerns were accurately communicated to the public. What did you find?

JULIE: We didn't find any instances of inaccurate communication to the public regarding air quality after Hurricane Harvey, but we did find that public communication about air monitoring results was limited.

JASON: So, are you saying that the communities affected by this hurricane were left unaware of important air quality information?

JULIE: Yes, Jason. And that can diminish public trust and confidence in the EPA. Air monitoring results and air quality risks did not always reach residents of affected communities. Also, we found that communication was limited in that field staff indicated they were not always able to communicate how the EPA resolved residents' concerns. But we found some positives, as well. EPA's Region 6 office deployed more than 80 community liaisons to the region impacted by Hurricane Harvey, and this was the first time so many staff were deployed. These liaisons provided information to the public on how to best protect themselves from environmental risks and did collect citizen concerns, which were then shared with EPA management. In addition, the liaisons distributed informational flyers in three prevalent languages for the communities – English, Spanish and Vietnamese.

JASON: What did your team recommend the EPA do to remedy the public communication concern for future situations?

JULIE: We believe that once EPA develops guidance for emergency air monitoring in heavily industrialized areas, it also needs to develop methods to provide public access to data and establish a plan to communicate the resolution of public concerns.

JASON: Has the EPA been receptive to your recommendations? Where do we stand?

JULIE: Well, we made a total of seven recommendations. And two of those recommendations involving updating the agency's crisis communications plan and conducting environmental justice training are resolved. The other five are unresolved pending the EPA's submission of satisfactory corrective action plans and completion dates.

JASON: Okay, thanks, Julie, for taking the time to talk about this important audit and the resulting report, which the

OIG just issued.

JULIE: You're welcome, Jason. Thank you.

JASON: To learn more about this audit and other Office of Inspector General work, please visit our website at www.epa.gov/oig and be sure to follow us on Twitter @EPAoig.