

Winter Storms Uri and Viola

EPA Report #21

March 9, 2021

INCIDENT OVERVIEW

Beginning February 14, 2021, Winter Storms Uri and Viola brought dangerous cold/freezing rain/snow throughout much of the state of Texas with life-threatening wind-chill temperatures and hazardous travel conditions from ice and snow. Due to the storms, many drinking water facilities across the state lost power or pressure and many petrochemical facilities shut down. EPA is working with federal and state partners to respond to the impacts of these storms.

EXECUTIVE SUMMARY

- As of March 9, 2021, EPA has received a total of 161 National Response Center (NRC) reports in EPA's Area of Responsibility (AOR) related to Winter Storms Uri and Viola, of these 113 are air releases. None have required EPA response actions beyond assessments by the Phone-Duty Officer.
- The draft ASPECT report for March 8, 2021, was provided to Ms. Wilma Subra, former EPA National Environmental Justice Advisory Council member, for review to help ensure content and results would be clear and understandable to the general public and potentially impacted communities.

AIR MONITORING

- On March 8, 2021, ASPECT, in support of the Texas Commission on Environmental Quality (TCEQ), flew over the Beaumont/Port Arthur and Houston areas. Results were compared to the list of TCEQ short-term Air Monitoring Comparison Values (AMCVs) and found exceedances of the short-term AMCVs for isoprene in the Houston area. Results are provided to TCEQ for follow up with its air surveillance resources which include handheld monitoring and mobile air monitoring vans (SMART vans).
- TCEQ Regional staff have conducted handheld monitoring in Areas where EPA's ASPECT flights have noted some atmospheric low-level concentrations of air contaminants. Ground level air monitoring in areas beneath the areas identified by ASPECT flights have resulted in no detections, readings below actions levels or could not be replicated.
- TCEQ's SMART van conducted surveys around industrial areas in Corpus Christi on Monday. Highest notable concentrations were ethane/ethylene concentrations downwind of Valero. The Rapid Assessment van surveyed areas in Port Neches and the Milby Park, Manchester and Galena Park areas of Houston on Monday. Detections were at background level concentrations, with the exception of 13 ppb benzene downwind of TOTAL in Port Neches, the AMCV for benzene is 180 ppb.
- Maps and the ASPECT reports for March 8, 2021 were finalized and made public. They can be found at <https://response.epa.gov/UriandViola>.

Statewide Status of Petrochemical Facilities in Texas Impacted by Winter Storms

Facility Status	# Facilities*
Operating	52
Partially or Fully Shutdown/Idling	32
Shutdown Indefinitely for Maintenance	1
Starting up	48

*As of 1000 hrs, March 9, 2021, per the Texas Severe Cold Weather Event Daily SOC Report. A shutdown may be authorized under a TCEQ air permit, or unauthorized and conducted in accordance with state rules. Recordkeeping is required in either case, but only certain unauthorized events are required to be reported either before the event or shortly thereafter. A final report of these unauthorized events is due two weeks after the event. These unauthorized events are generally ‘unplanned’ emission events not authorized by their permits. These are typically facility upsets, malfunctions, or unplanned events due to shutdown and/or restarting operations due to an unexpected event such as hurricane or winter weather.

MISSION ASSIGNMENTS

- EPA received a signed Mission Assignment for \$2.54 million to have drinking water samples analyzed at certified labs for bacteria levels and to provide certified mobile drinking water labs to analyze drinking water samples for bacteria levels. The start date for the MA was February 18, 2021 with a completion date of March 18, 2021.
- On February 27, 2021, FEMA lowered its response level for the Winter Storms and deactivated the EPA ESF #10 representative virtually staffing the Regional Response Coordination Center. EPA received a Mission Assignment for \$30,000 for virtual staffing of an ESF #10 Liaison at the FEMA Regional Response Coordination Center. The start date for the Mission Assignment was February 11, 2021 with an estimated completion date of March 21, 2021.
- On February 28, 2021, EPA received a Mission Assignment for \$109,000 to provide the State of Texas air monitoring support by deploying the EPA ASPECT plane to conduct chemical detection and identification and map chemical plumes in the atmosphere over the Houston Ship Channel Industrial area, the Beaumont Industrial Complex and the Corpus Christi Industrial complex. The start date for the Mission Assignment is February 27, 2021. On March 5, 2021, EPA received an extension of this Mission Assignment. The extension moves the completion date to March 12, 2021, and adds additional funding to allow ASPECT to continue flying while additional facilities come back on-line post winter storms.

EPA RESOURCES

Winter Storms Uri and Viola			
Personnel	REOC Dallas	Houston	Total
R6	6*	1*	7
ASPECT	2*	0	2
START	1*	0	1
Total	9	1	10

*working virtually