

Hurricane Ida Report #20 – FINAL

September 24, 2021

INCIDENT OVERVIEW Hurricane Ida made landfall August 29, 2021, at approximately 12:00 pm west of Grand Isle, Louisiana. High winds and storm surge affected the coastal Parishes of Louisiana, leading to widespread power and communications outages throughout Southeast Louisiana. Ida produced heavy rains across the central Gulf Coast from southeast Louisiana to coastal Mississippi, Alabama, as well as the Lower Mississippi Valley resulting in considerable flash, urban, small stream, and riverine flooding.

EXECUTIVE SUMMARY

- As of 10:00 am on September 24, 2021, EPA has received a total of 223 National Response Center (NRC) reports with 66 in EPA's Area of Responsibility (AOR) related to Hurricane Ida, of these 20 are air releases. No reports have required EPA response actions beyond assessments by the Phone Duty Officer.
- The Shell Norco facility continues to be in start-up phase. The oil spill clean-up in Lake Salvador by the responsible party is continuing.
- The EPA Remedial Program monitored 23 total NPL sites pre- and post-hurricane. All 23 were cleared and none required action.
- On September 22, 2021, EPA concluded Stationary Air Monitoring (for PM_{2.5}) with co-located Summa Air Sampling. The Stationary Air Monitors and the Summa Air Samplers were stationed at 8 locations, 1 downwind and 1 upwind of each facility (Marathon, Denka, and Shell-Norco) and 1 each at Irish Channel and Port Fourchon. PM_{2.5} readings have all been below the 24-hr NAAQS comparison value of 35 ug/m³. All data will be posted to the Story Board by October 1, 2021.

PM2.5 readings for 9/22/2021 (0000 – 2400)		
Location	24-hr Time Weighted Avg (ug/m3)	Maximum Detection (ug/m3)
Denka DW	2.39	5.60
Denka UW	2.69	6.70
Irish Channel	-	-
Marathon DW	4.58	21.10
Marathon UW	2.83	9.20

Norco DW	4.14	9.90
Norco UW	3.30	9.10
Port Fourchon	4.99	7.90

- Out of 72 samples collected from September 9, 2021 through September 19, 2021, only five detected concentrations exceeded the response screening levels. The exceedances did not constitute an acute hazard, nor did they exceed a 1×10^{-4} risk level.

Sample Location	Date	Analyte	Result ug/m3	RSL ug/m3
Marathon DW	9/13/2021	Trichloroethylene	15.8	2.24
Norco DW	9/9/2021	1,3-Butadiene	3.12	2.09
Denka DW	9/18/2021	Vinyl chloride	2.61	2.24
Denka UW	9/16/2021	Acrylonitrile	3.62	2.09
Norco DW	9/15/2021	1,3-Butadiene	14.5	2.09

- As of September 18, 2021, all 6 of the air monitoring/sampling sites around Denka are fully operational with continuous Photoionization Detectors (PIDs), wind sensors and 3 summa canisters installed at each site to collect event triggered chloroprene measurements.
- LDEQ reported that 1 ambient air monitoring site is still not polling due to power outages as of September 24, 2021. The site is in LaPlace and the estimated return to service date is September 29, 2021.
- As of September 23, 2021, LDEQ has conducted 521 industrial facility assessments with an additional 35 remaining. LDEQ has also conducted 107 wastewater treatment plant assessments with 10 remaining.
- The WasteWater Subject Matter Expert (SME) will demobilize COB on September 24, 2021 per FEMA.

- **Drinking Water System Status**

Status *	Systems	Population Served
Water Outages	11	12,589
Boil Water Advisories	22	54,242
Cleared of Boil Water Advisories	293	1,101,347

* As of 3:00 pm on September 23, 2021

- LDEQ is working with the Parishes to review, approve, and activate emergency debris sites.
- At COB on September 24, 2021 the liaison role with the Federal Emergency Management Agency (FEMA) will be demobilized.

SIGNIFICANT ACTIONS

- The incident "Story Map" which outlines EPA's and LDEQ's response actions and displays maps, photos, and data collected, including air monitoring and sampling data, is on the response site at <https://response.epa.gov/HurricaneIda>
- OCTEA sent stakeholders the latest report on EPA's activities.
- On September 21, 2021 - OCTEA held its final Hurricane Ida Update meeting with EJ Stakeholders. Stakeholders were told to continue to reach out to OCTEA if there was

information that they needed to share or concerns that they wanted EPA to be aware of. Information shared from stakeholders is below:

- Stakeholders have been informed that summa canister data is available on the story map. Stakeholders are wondering if there was a place to find all the data rather than having to click on every facility. They are also wanting to know what the actionable levels are for each pollutant and how long will the cannisters be collecting samples?
 - Stakeholders were informed that a link will be added in the story map so users can download the summa canister data and that the last canisters was deployed September 22, 2021.
- Does EPA have the status of all public/private sewage plants impacted by the hurricane?
 - EPA does not have the status of all public/private sewage plants impacted by the hurricane and that information is usually with the state.
- St. John and St. James Parishes still do not have power and community members cannot attend the meetings. Thought should be given as to alternate method of communicating to communities before the next disaster.
- Other than the 9 facilities that EPA released the air release data reported to NRC, how many facilities were the questionnaires sent to?
 - EPA provided the list of NRC releases and responsible companies that EPA had sent follow-up questions.
- Concern was expressed about Union Carbide's flaring and stakeholders asked if a follow-up letter to Union Carbide on their flaring would be sent?
 - EPA had not received an NRC report specific to Union Carbide's flaring and at the time and EPA did not have plans to send the company additional questions.
- The Region 6 Air Enforcement Branch sent follow-up questions to facilities that reported air releases to the NRC. All facilities have responded.

FORCE MAJEURE

- On August 27, 2021, Office of Regional Counsel (ORC) received a Force Majeure notice from the Valero (Meraux) Refinery in St. Bernard Parish, Louisiana. The notice provides that the refinery will shut down its Community Air Monitoring Station on Ventura Drive in order to protect the equipment. The refinery provided the notice pursuant to the terms of the Consent Decree it is under. On September 2, 2021, ORC received an update to the notice, the facility still lacks power, therefore, the air monitoring has not resumed.
- A Force Majeure notice from New Orleans Water and Sewerage Board was received on September 3, 2021. The notice provides that the Sewerage and Water Board does not yet know the extent of damage sustained as a result of Hurricane Ida.
- EPA received a Force Majeure notice of a two-week delay from the Chair of the Star Lake Canal Cooperating Parties (SLCCP) pursuant to EPA's 09/26/2016 Remedial Design Administrative Order on Consent was received by EPA. The notice acknowledges that Hurricane Ida did not impact the Star Lake Canal Superfund Site near Port Neches, Texas. However, the Pre-Final Design work cannot be completed because the SLCCP contractors, who are located in Baton Rouge, LA, cannot deploy due to storm damage.

- On September 8, 2021, ORC received an informal notice that the Phillips 66 Belle Chasse Refinery, Louisiana refinery shutdown in advance of Hurricane Ida's landfall and that it has remained shutdown since. The informal notice claims a more formal, written Force Majeure notice would be forthcoming no later than September 27, 2021.
- On September 13, 2021, ORC received a Force Majeure notice from Union Carbide Corporation pursuant to a Consent Decree with the EPA. The notice provides that Hurricane Ida knocked out power to its Hahnville, Louisiana facility. As a result, flare monitoring data has not been available. A subsequent email update to the Force Majeure notice provides that power was restored on September 9, 2021 and that the facility is going through the process to reintroduce power systematically to each building, control systems, instruments and equipment and at the same time completing damage assessments.
- On September 14, 2021, ORC received a Force Majeure notice from Exxon Mobil Corporation's Baton Rouge, Louisiana refinery pursuant to a 2005 Consent Decree it entered into with the EPA. The notice provides that Hurricane Ida damaged and disrupted third party suppliers of feedstocks, utilities, other critical infrastructure and specifically nitrogen supply. The loss of nitrogen supply impacted operations and contributed to a shutdown of the refinery during the storm. The shutdown, restart efforts and lack of nitrogen supply have resulted in compliance issues with the refinery's consent decree obligations.

