Hurricane Harvey 2017
9/3/2017 – 1700 CDT Update

NEWS RELEASES

EPA issued two Harvey related news releases on September 3, 2017. The first news release announced the status of water systems in areas affected by Harvey and updates of EPA/TCEQ response activities addressing National Priority List (NPL) sites, air quality monitoring, and 24-hour watch at the Arkema facility. The second EPA news release responded to the Associated Press September 2, 2017 story which erroneously reported that EPA was not actively involved in the assessment of NPL sites impacted by Harvey.

In another EPA news release issued on September 2, 2017 the agency announced the status of NPL Superfund sites, identifying numerous sites that have been evaluated or will be evaluated as soon as it is safe to inspect. A Field Public Information Officer (PIO) is mobilizing to Houston on September 3, 2017 to liaison with the Houston Mayor.

ARKEMA FIRE

The Arkema plant continues to be under close observation. Overnight, smoke and ash were observed as well as a strong sweet, detergent-like odor. The organic peroxides in the trailers are known to have a strong odor associated with them. Each of the trailers contain approximately 38,000 lbs and is venting. There are small fires and vaporization occurring which may explain reports of an orange glow.

Complaints were called in from outside the perimeter and these were consistent with the wind direction at the time of the complaint. EPA dispatched a team to conduct air monitoring. No elevated readings were detected and no adverse effects were reported, only odor.
The list of decomposing products is not considered toxic, however, they have a low odor threshold resulting in the complaints.

The temperature of the contents is critical to estimating the moment of ignition. Because this information is not considered accurate and verifiable, specific information is not being disseminated. Results from EPA's aerial reconnaissance fly-over confirmed smoke and evaluated a chemical release sweep directly over the trailers. Many chemical detections were

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consistent with light hydrocarbons caused by the heated constituents emitted from the trailers. These hydrocarbons were all measured slightly above the limit of detection (about 5 parts per million) Other downwind passes did not show chemical detections above the detection limits.

Recent flyover photos indicate that flood waters within the facility have receded almost completely. Access to the facility remains unsafe and therefore, the 1.5-mile radius evacuation is still in effect. EPA will continue to maintain a rotational 24-hrs presence and air monitoring capabilities at the incident command operations center.

BEAUMONT/PORT ARTHUR

Beaumont's wastewater treatment plant (WWTP) is fully operational and running. All units are being powered by generator and are fully functional. The collection system has been effectively shut off due to power loss. The WWTP lost two pumps earlier, but they have been restored. The city is focusing the majority of its resources on the drinking water issues currently being experienced and then will begin assessing and working on the wastewater side.

DEBRIS RECOVERY

According to U.S Army Corps of Engineers (USACE) many impacted counties are reporting that they will handle their own debris removal. Aransas Pass has eight trucks and are currently conducting debris removal in their area.

FIELD RESPONSE ACTIVITIES

On September 3, 2017, the agencies under Unified Command conducted operations in both the Corpus Christi Branch and Houston Branch.

The Oil Discharge Assessment Group utilized by Corpus Christi Branch during the previous operational period was replaced with an Emergency Response/Recovery Group. Additionally, an Oil Recovery Group consisting of two teams was added to the Corpus Christi to begin closing out oil discharges discovered by the assessment teams. The National Response Center Investigation Group utilized by Houston during the previous operational period was replaced with a Container Recovery Group.
Geographic areas focused on by Corpus Christi Branch during the previous operational period including Port Aransas and Mustang Island are largely complete except orphan containers being carried in from the tide. These containers will be addressed as they are discovered. Projected Corpus Christi Branch geographic areas for this operational period include Rock Port, Aransas Bay and Victoria.
In addition, an Aerial Operations Team will be located in Houston. Plans are being implemented regarding Beaumont have started and when feasible, several EPA personnel and a Data Unit will be deployed.

- The oil discharge assessment branch visited 13 facilities and queried seven throughout the Houston area of responsibility. Of those targets, we have two of particular concern, were referred for response teams and five to follow-up on in the next week.

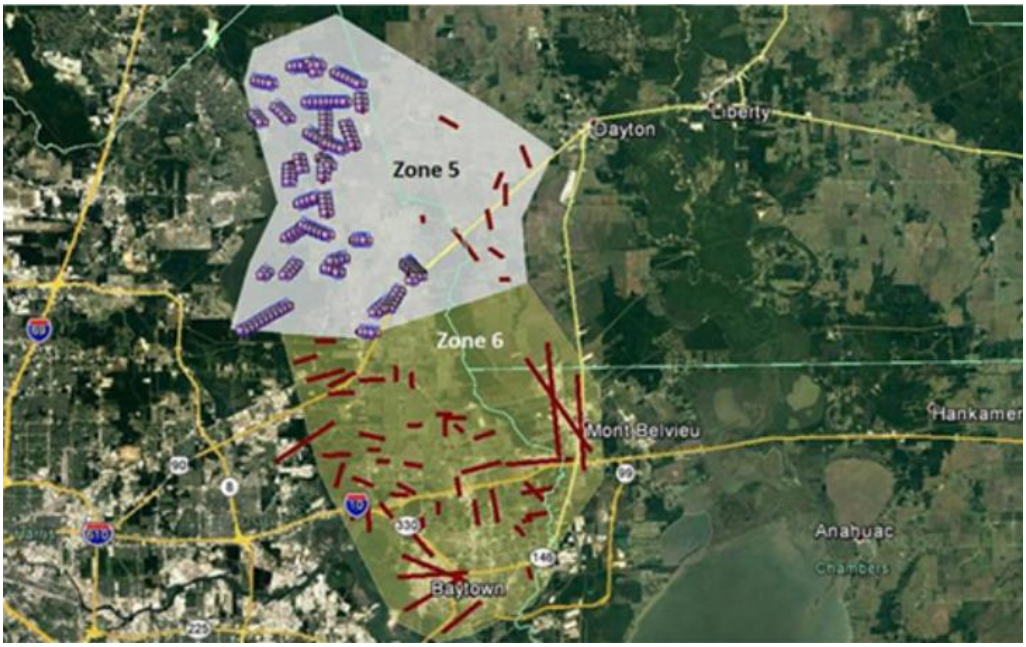
- The Magellan facility along the Houston Ship Channel reported approximately 25,000 barrels of a gas/stock blend released within their facility and currently contained in secondary containment. An oil spill response organization (OSRO) has been hired and they drafted a transfer plan to conduct an over the top transfer from secondary containment back into a facility tank. .

- The San Jacinto River and Rail Facility reported an approximately 15,000 gallons of waste oil discharged within their facility to include 12 mystery drums scattered across the facility. Damage Assessment teams confirmed that vegetation and residual ponds are coated with an oil. The responsible party is in the process of hiring an OSRO to commence clean-up operations. No mobile oil visible in the waterway; oil has coated to vegetation.

- Helicopter operations was airborne throughout the day and reported no major pollution concerns, but noted small targets to investigate along the shoreline. They did note that the Lake Houston area was still heavily flooded, but waters were residing quickly. Fly-overs were conducted patrolled from Galveston to Matagorda, they canvassed the Houston harbor and conducted an assessment overhead Lake Houston.

- Our hazard evaluation is 100% complete on shoreline assessments. A team was routed to investigate a report of adrift containers at an intersection in Dickens, TX. Responders confirmed containers were not on the road and marked them for further investigation.

- The system has also been assigned targets in Zone 6 (Crosby down to Baytown) consisting of 49 targets. ASPECT is preparing for flight 9 with a follow-on flight 10 consisting of Arkema and zones east of Crosby. Rapids Needs Assessment (RNA) targets include Remedial Management Plan (RMP) locations, wastewater facilities, water treatment facilities, and National Priority List (NPL) sites. ASPECT flights collected aerial images over several hundred target sites. These targets have been categorized by the ASPECT team into geographic area designated by chronological zone numbers



- **Figure One. Zones Five and Six**.

Figure Two shows locations where ASPECT conducted chemical monitoring in Harris County to date as part of our Rapid Needs Assessment mission. To date, there have been no confirmed detections over primary targets which are wastewater and drinking water treatment facilities. As we make progress on the Rapid Needs Assessment mission, we will continue to assess any potential positive hits over non-Arkema sites.

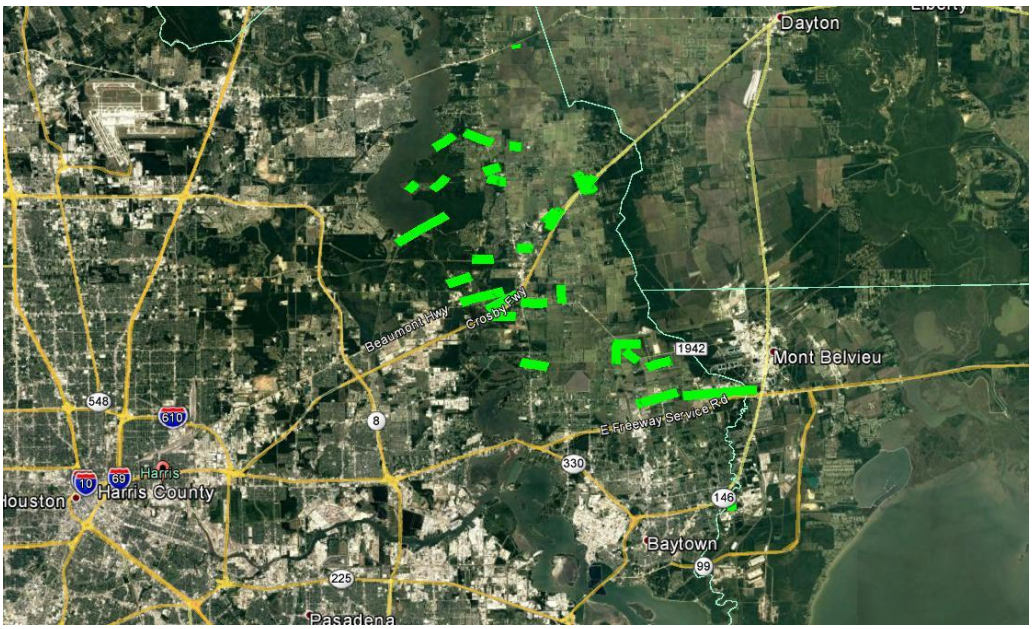


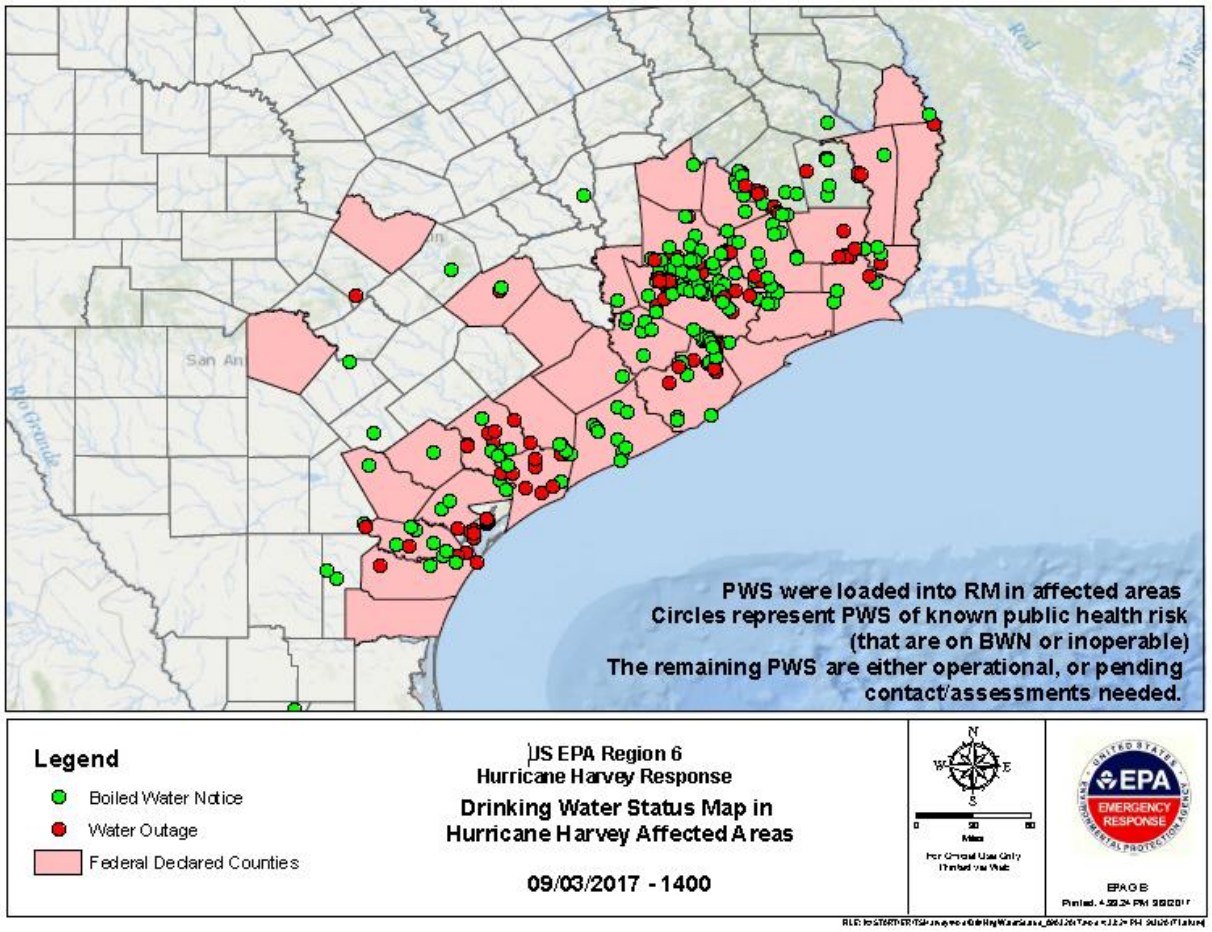
Figure Two. ASPECT monitoring locations in Harris County.

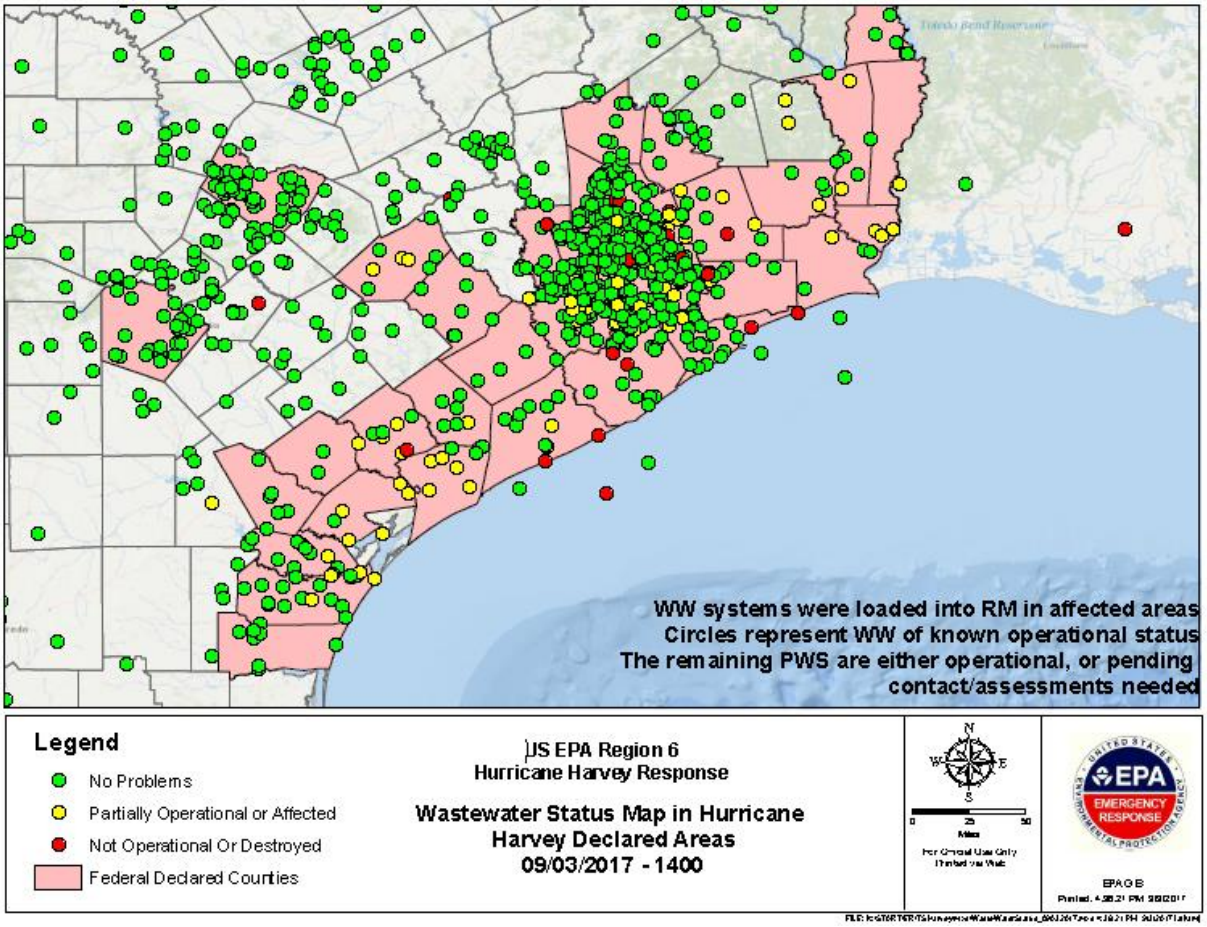
SPILL/RELEASE RESPONSE

Hotline Calls as of September 3, 2017	
Number of Harvey Related Calls Received During Reporting Period 0100-1300	7
Total Number of Harvey Related Calls to Date	136
*** EPA is assessing each call to determine appropriate response and forwarding reports to field personnel to conduct further assessments and response as needed.**	

DRINKING WATER / WASTEWATER ASSESSMENTS

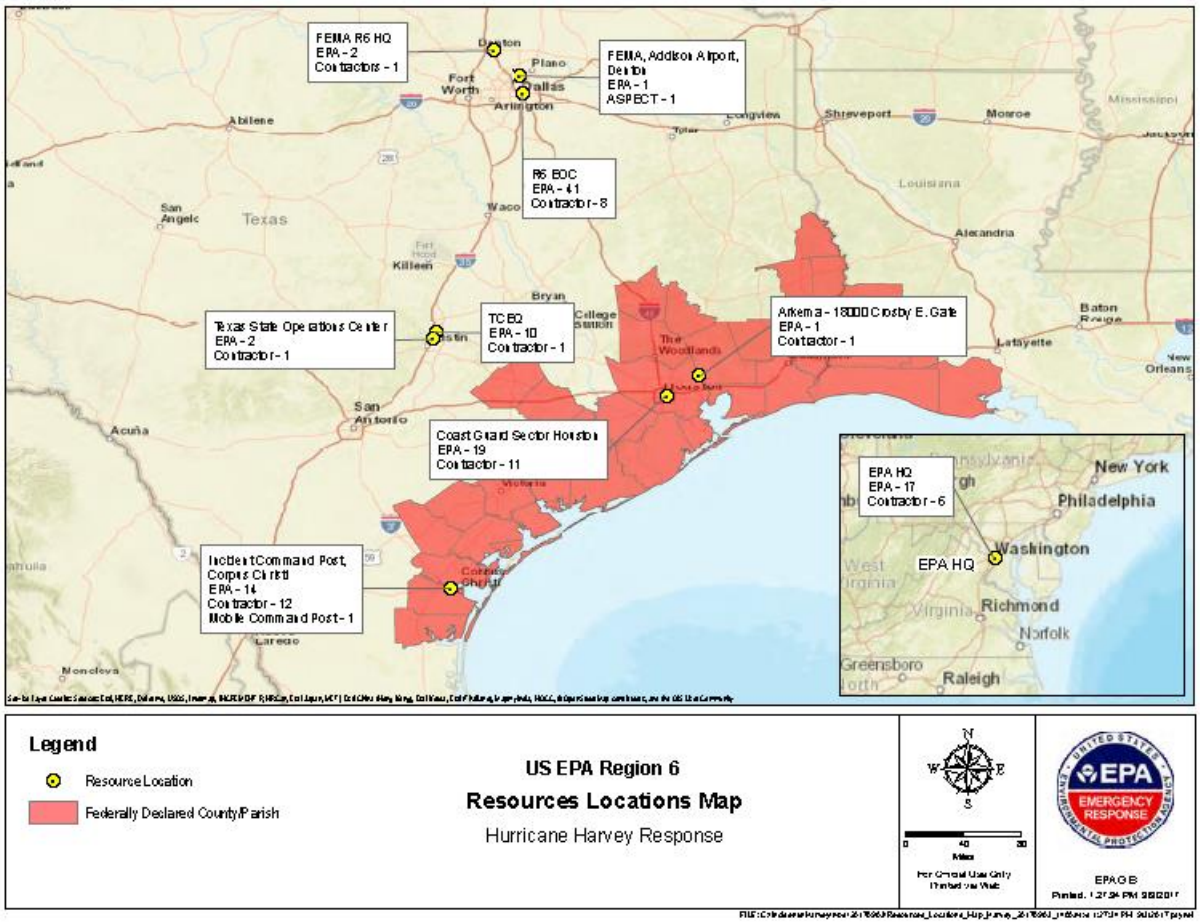
EPA continues to support TCEQ in contacting drinking water and waste water systems with 10 personnel manning TCEQ's Drinking Water and Waste Water Phone Bank located in Austin.





EPA RESOURCES

Personnel	EPA Dallas, TX	FEMA Denton, TX	Texas SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	HQ EOC Wash DC	Totals
EPA	41	1	2	10	19	14	17	104
START	7		1	1	11	6		26
ERRS						6		6
Other Contractors	1						6	7
TOTAL	49	1	3	11	30	26	23	143



FUNDING
SEPTEMBER 3, 2017

Funding Sources	Funding Ceiling	Funding Ceiling Less Indirect	Spent to Date	Remaining Balance	Daily Burn Rate	Days Remaining
Non Mission Assignment	N/A		$64,200.00	$0.00		25.15
MA 4332DR-TX-EPA-01	$20,000.00	$17,654.00	$0.00	$17,654.00		
MA 4332DR-TX-EPA-03	$8,592,000.00	$7,584,077.00	$2,628,702.00	$4,955,375.00	$197,752.84	
Totals:	$8,612,000.00	$7,601,731.00	$2,692,902.00	$4,973,029.00		

** Indirect costs represent the money the Cincinnati Shared Service Center takes off the top to manage the Mission Assignments

*Burn rate does not include daily ERRS amounts, not yet received. The burn does include START & ASPECT.

REFINERIES/FUEL WAIVERS

No New Information

The Department of Energy authorized the Strategic Petroleum Reserve (SPR) to negotiate and execute an emergency exchange agreement with the Phillips 66 Lake Charles Refinery. This decision will authorize 200,000 barrels of sweet crude oil and 300,000 barrels of sour crude oil to be drawn down from SPR's West Hackberry, Louisiana (LA) site and delivered via pipeline to the Phillips 66 refinery.

Four No Action Assurance (NAA) letters were signed by EPA on September 1, 2017, to help address fuel shortages. NAAs will help expedite the distribution of existing gasoline supplies in both Texas and Louisiana while the refineries work to re-start and resume normal operations. For each NAA, EPA will exercise discretion not to pursue enforcement for violations of the regulations identified in the NAAs. Each NAA is effective for two weeks, or until September 15. It is anticipated that these NAAs will allow for the immediate distribution in Texas of 10 million or more gallons of gasoline to consumers.

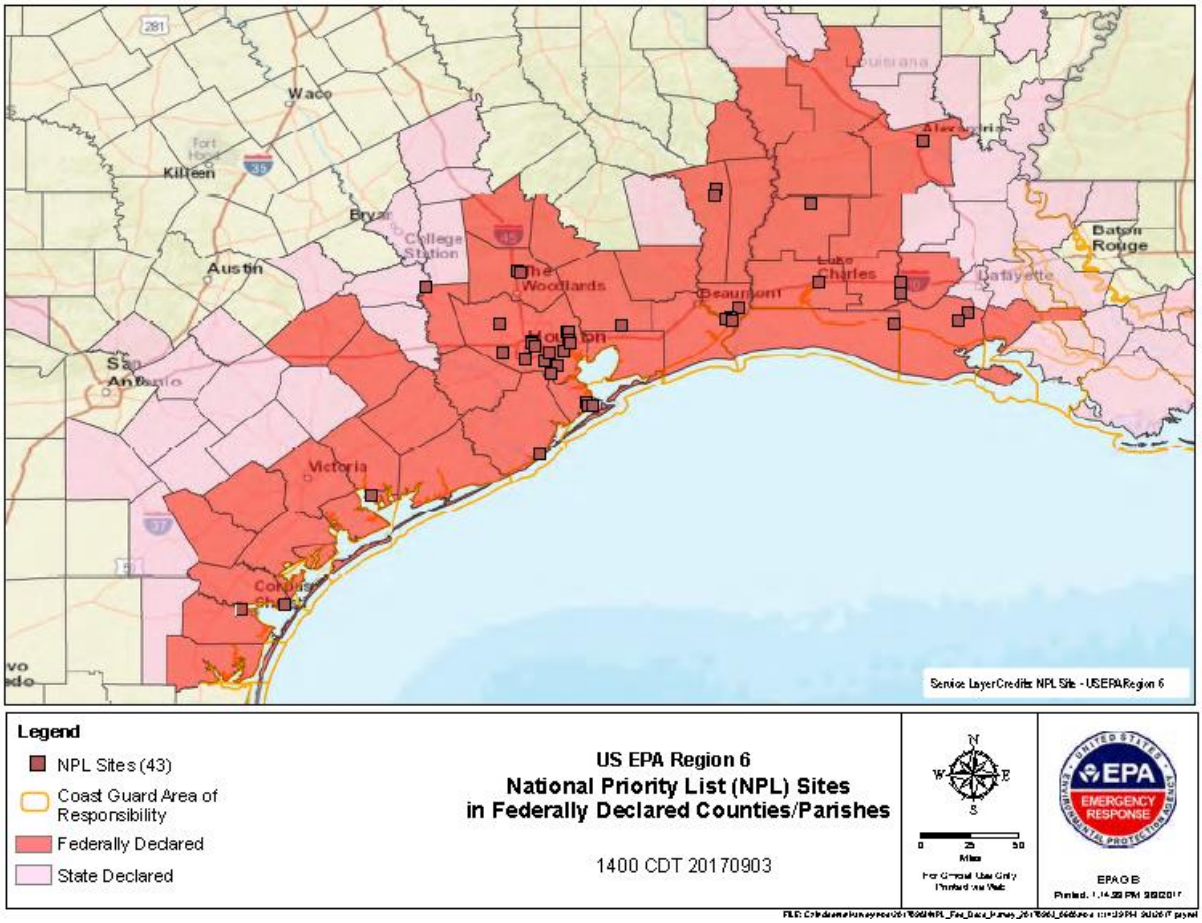
Texas NAA for Vapor Recovery Systems: Several federal regulations and the Texas State Implementation Plan (SIP) require that bulk gasoline, marine, and rail loading terminals operate a vapor control system to collect the fuel vapors displaced from tank trucks during product loading. This NAA allows the loading and unloading of fuel at terminals that have damaged or inoperable vapor recovery devices or that are otherwise not equipped with such devices.

Texas NAA for Truck Loading at Petroleum Distribution Terminals: Several federal regulations and the Texas SIP require that gasoline tank trucks obtain testing and certification that the tank trucks are vapor tight. This NAA allows tank trucks to load and unload fuel at terminals even though the trucks may not be registered with the terminals as having completed all the testing for tank tightness or have the documentation on hand to prove it.

Texas NAA for Roof Landings at Gasoline Storage Vessels: This relates to several federal regulations and the Texas SIP covering storage vessels with external floating roofs. Specifically, when the operator removes product from the vessel such that the roof lands on the vessel's legs, such action must be a continuous motion, i.e. the process of re-filling the vessel must begin immediately after roof landing. This NAA will allow roof landings without requiring immediate re-filling of the vessel.

Louisiana NAA for Truck Loading at Petroleum Distribution Terminals: Several federal regulations and the Louisiana SIP require that gasoline tank trucks obtain testing and certification that the tank trucks are vapor tight. This NAA allows tank trucks to load and unload fuel at terminals even though the trucks may not be registered with the terminals as having completed all the testing for tank tightness or have the documentation on hand to prove it.

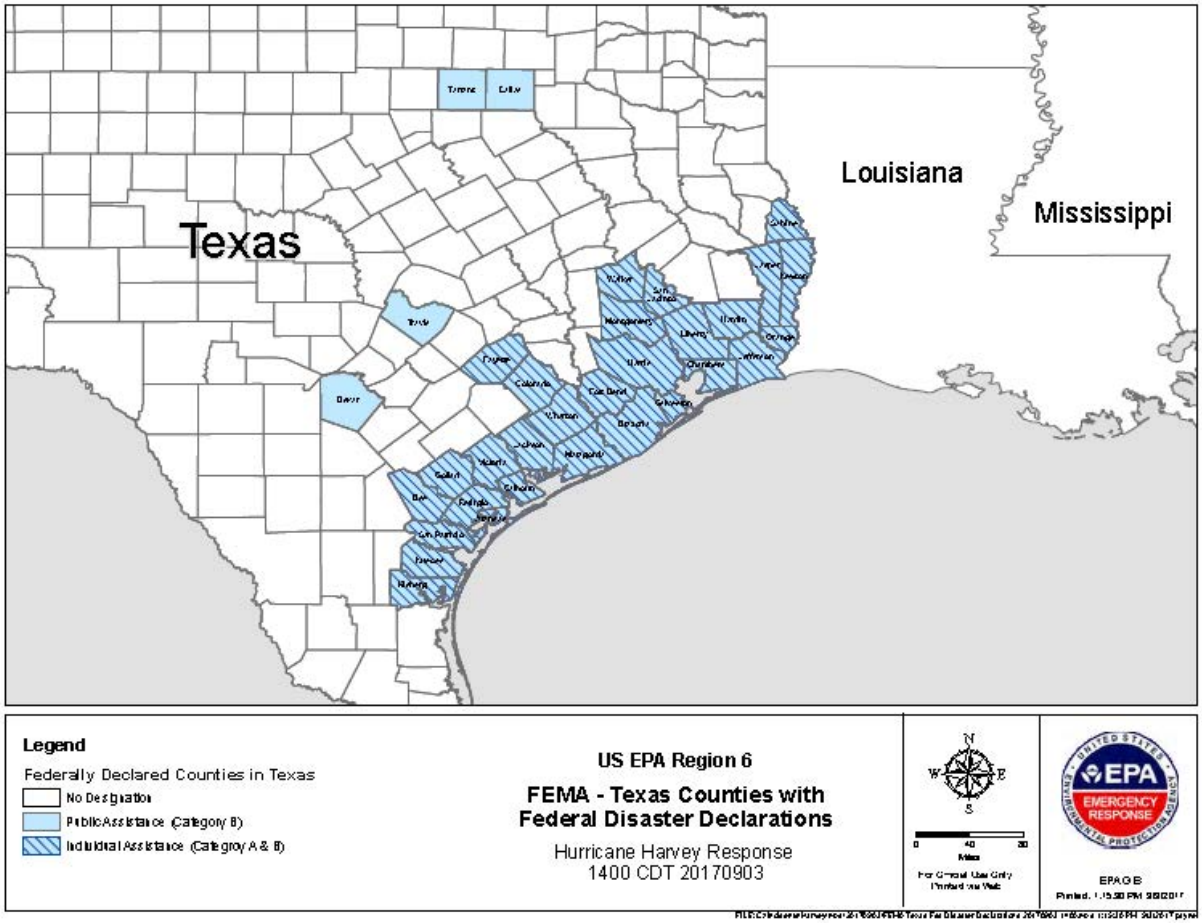
SUPERFUND NPL SITES



SUPERFUND NPL SITES (Continued)

Superfund Sites within Federally Declared Counties					9/3/2017
Hurricane Harvey Rapid Response Assessment	Phase 1	Phase 2		Phase 3	All Phases
	Rapid Response Assessment	Site Inspection Needed	Inspected	Additional Response Action	Completed
TEXAS					
SITE NAME					
ALCOA (Point Comfort) / LAVACA BAY	8/29/17	No			8/29/17
BAILEY WASTE DISPOSAL	9/1/17	Yes	9/4/17		
BRINE SERVICE CO.	8/30/17	Yes	8/30/17	No	8/30/17
BRIO REFINING INC.	9/1/17	No			9/1/17
CONROE CREOSOTING COMPANY	9/1/17	No			9/1/17
CRYSTAL CHEMICAL CO.	8/30/17	No			8/30/17
DIXIE OIL PROCESSORS INC.	9/1/17	No			9/1/17
FALCON REFINERY	8/31/17	Yes	8/30/17	No	8/30/17
FRENCH, LTD.	9/1/17	Yes	9/4/17		
GENEVA INDUSTRIES / FUHRMANN ENERGY	9/1/17	Yes	9/3/17	No	9/3/17
GULFCO MARINE MAINTENANCE	9/1/17	Yes	9/3/17		
HARRIS (FARLEY STREET)	9/1/17	No			9/1/17
HART CREOSOTING	9/1/17	No			9/1/17
HIGHLANDS ACID PIT	9/1/17	Yes	9/3/17		
JASPER CREOSOTING	9/1/17	No			9/1/17
JONES ROAD GROUNDWATER PLUME	8/29/17	No			8/29/17
MALONE SERVICES COMPANY	9/1/17	Yes	9/3/17		
MANY DIVERSIFIED INTERESTS, INC	9/1/17	No			9/1/17
MOTCO, INC.	8/31/17	No			8/31/17
NORTH CAVALCADE STREET	8/29/17	No			8/29/17
PALMER BARGE LINE	9/1/17	No			9/1/17
PATRICK BAYOU	9/1/17	Yes	9/4/17		
PETRO-CHEMICAL SYSTEMS, INC. (Turtle Bayou)	9/1/17	Yes	9/4/17		
SAN JACINTO RIVER WASTE PITS	9/1/17	Yes	9/3/17		
SIKES DISPOSAL PITS	8/29/17	No			8/29/17
SOL LYNN / INDUSTRIAL TRANSFORMERS	8/29/17	No			8/29/17
SOUTH CAVALCADE STREET	8/29/17	No			8/29/17
STAR LAKE CANAL	8/30/17	No			8/30/17
STATE MARINE OF PORT ARTHUR	9/1/17	No			9/1/17
TEX-TIN CORP.	9/1/17	No			9/1/17
TRIANGLE CHEMICAL COMPANY	9/1/17	Yes	9/4/17		
UNITED CREOSOTING CO.	9/1/17	No			9/1/17
US OIL RECOVERY	9/1/17	Yes	9/4/17		
LOUISIANA					
AMERICAN CREOSOTE DERIDDER	09/01/17	No			9/1/17
D.L. MUD, INC.	08/29/17	No			8/29/17
EVR-WOOD TREATING/EVANGELINE REFINING CO	09/01/17	No			9/1/17
GULF COAST VACUUM SERVICES	08/29/17	No			8/29/17
GULF STATE UTILITIES (North Ryan Street)	08/31/17	No			8/31/17
MALLARD BAY LANDING BULK PLANT	08/29/17	No			8/29/17
PAB OIL & CHEMICAL SERVICE	08/29/17	No			8/29/17
SBA SHIPYARD	09/01/17	No			9/1/17
Status Summary					
Rapid Response Assessment Completed	41				
Sites with no further action	28				
Sites in Phase 2	13				

FEMA – TEXAS COUNTIES WITH DISASTER DECLARATIONS



PHOTOS

Command and General Staff Meeting on September 2, 2017.

USCG and EPA Members discussing operations.

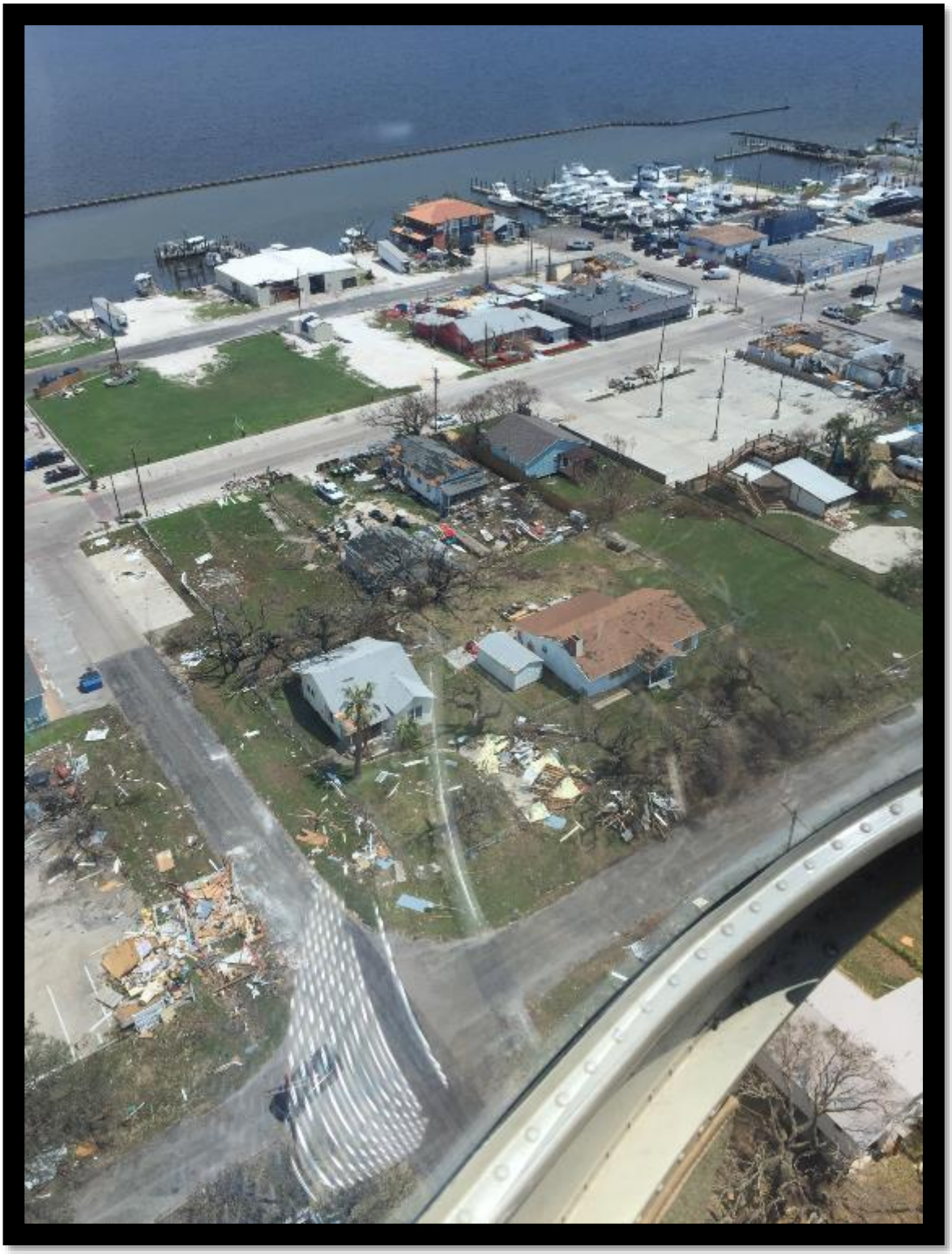
PHOTOS

OSC in Corpus Christi Branch performing a field assessment.

EPA training for personnel from TCEQ, TGLO, USCG, and the Civil Support Team about in Corpus Christi September 2, 2017.

PHOTOS

TCEQ/EPA/TGLO Recon flight over Rockport/Fulton on Sep 1st, 2017.



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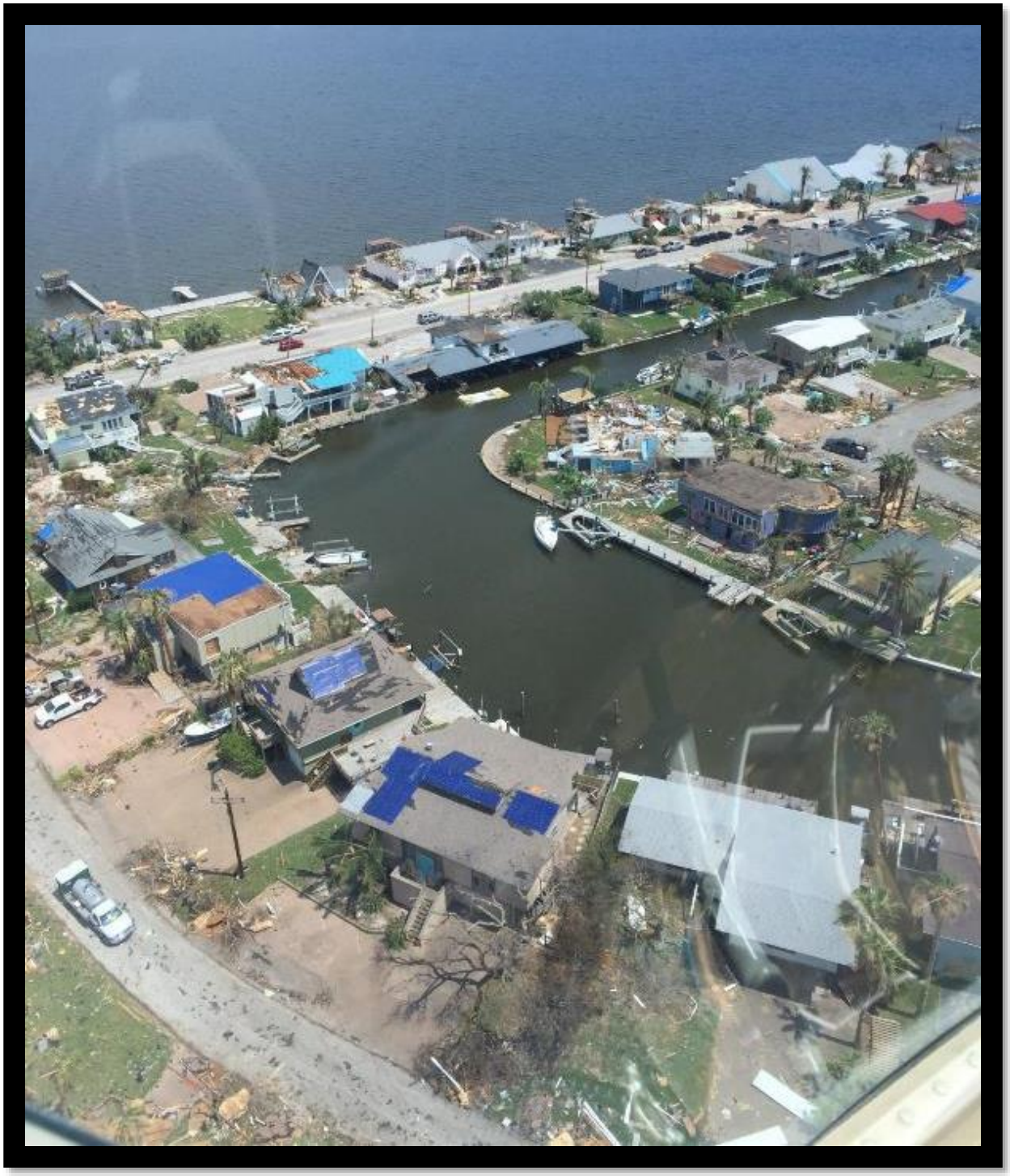
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