Hurricane Harvey 2017
9/5/2017 – 0700 CDT Update

EXECUTIVE SUMMARY

- On September 4, 2017, the President approved the addition of seven more counties (Austin, Bastrop, DeWitt, Gonzales, Karnes, Lavaca, Lee) to the Disaster Declaration. This brings the total number of counties on the Presidential Disaster Declaration to 39.

- The Acting Regional Administrator, the Chairman of TCEQ and Special Advisors to the Administrator will brief Mayor today. EPA Liaison has embedded with Houston Mayor's office. Afterwards, they toured three Superfund sites targeted for inspection and briefed Senator John Cornyn's office.

- EPA Ronnie Crossland, Senior liaison will join TCEQ Chairman Shaw for briefing with Governor Abbott this morning. Acting RA Coleman will join by telephone.

- The Acting Regional Administrator and Special Advisors to the Administrator plan to visit the Houston command post today and the Beaumont command post on Wednesday.

- EPA has demobilized from the Arkema site.

- EPA continues to be embedded with response partners on teams performing Department of Water/ Waste Water (DW/WW) system assessments, hazard evaluations, and container recovery operations.

- EPA continues to conduct ambient air monitoring in Houston, and is evaluating an area of potential concern associated with air pollution from a Valero facility in Houston. EPA's Trace Atmospheric Gas Analyzer (TAGA) will conduct air monitoring in southeast Houston around the Valero Refinery.

PUBLIC AFFAIRS

EPA has deployed a Public Information Officer to the FEMA Joint Field Office in Austin. The PIO will be EPA representative to the federal Joint Information Center (JIC).

The EPA will host a call with key Environmental Justice (EJ) contacts in Texas and Louisiana on September 5, 2017. The purpose of the call is to reach out to EJ contacts to discuss and listen to community environmental concerns in the areas impacted by Hurricane Harvey. EPA is

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establishing an EJ Network and will convene weekly calls to keep the Network abreast of EJ related environmental concerns associated with the current emergency situation. EPA has also fielded calls and emails from EJ contacts seeking information on locating and gathering re-entry supplies, instructions on minimizing environmental hazards, disinfecting private wells, shelter in place guidance in Spanish, and elevated benzene levels along with other compounds in ambient air samples in a neighborhood near the intersection of 225 and 610 in Houston. Callers were directed to the appropriate website, local contact, FEMA or the REOC.

Preparations are being made for Community Liaisons to be deployed to the Houston area later this week. The Community Liaisons will be involved in disseminating information on the hazards of flood waters, mold, residential well water testing, and other issues. Their role will take them to the neighborhoods, rural areas and partnering with local businesses and other federal and local agencies.

DEBRIS RECOVERY

EPA currently has no mission assignment for debris recovery operations.

AIR MONITORING

EPA's mobile air monitoring TAGA bus along with EPA personnel will be operational today.

EPA continued to conduct air monitoring near the Valero Refinery in areas north and south of the intersection of 225 and 610 in Houston. Additional sampling locations were added to include a number of schools and parks. EPA contacted the Houston Health Department (HHD) to discuss concerns they received and had regarding elevated benzene and toluene levels detected in the neighborhood next to the Valero refinery. HHD is currently conducting air monitoring from a mobile laboratory as well as with additional ground support. HHD expressed an interest in EPA possibly taking over the air monitoring in the future so they could continue to address the growing number of locations in the Houston area.

EMERGENCY RESPONSE

Daily/Cumulative Summary of Hazard Evaluations/Recovery				
Status	**Opened**		**Closed**	
	9/4/2017	**Cumulative**	**9/4/2017**	**Cumulative**
Corpus Christi Branch	3	46	8	58
Houston Branch	33	127	5	15
NRC Reports	0	3	0	0
* Note: Open means the target is yet to be recovered. Closed means the target was recovered/left in place or access was denied to collect the item.				

Daily/Cumulative Summary of Spills/Discharges				
Status	**Opened**		**Closed**	
	9/4/2017	**Cumulative**	**9/4/2017**	**Cumulative**
Corpus Christi Branch	12	351	4	32
Houston Branch	7	37	3	6
NRC Reports	6	27	8	15

FIELD RESPONSE ACTIVITIES

The table below displays the teams deployed in the Corpus Christi, Houston and Port Arthur Branches during this operational period:

Quantity and Types of Teams Deployed 9/4/2017			
Team Type	**Corpus Christi Branch**	**Houston Branch**	**Port Arthur / Beaumont**
Water Assessment Teams	1	10	0
Hazard Evaluation	1	21	3
Oil Discharge Assessment	2	3	0
Container Recovery	2	0	0
Oil Recovery Group	3	0	0
ER/Recovery Group	3	1	0
Arkema Group	0	1	0
Air Operations Group	0	2	0

CORPUS CHRISTI BRANCH:

- Personnel completed pre-sampling and fencing on the two staging pads. The pads are located in Port Aransas and Aransas Pass.
- In the City of Rockport, a team assessed an elevated tank. City engineers recommended that the city drain the tank and disassemble it due to structural damage.
- In Holiday Beach, a team met with the water system operator and board members to discuss their concerns and issues. The water system operator stated that more parts are needed for repairs of all the distribution, but all current leaks have been fixed.
- TCEQ operations were turned back over to the TCEQ regional office.
- Ten drums, three tanks greater than 55 gallons and 1 cylinder were recovered, closing a total of seven assessments.

	CONTAINERS			**TOTAL**
	Drums [55 gals]	**Large Containers [<55 gals]**	**Large Containers [>55 gals]**	
9/4/2017	10	0	3	13
Total to date	49	32	5	86

HOUSTON BRANCH:

- Hazard Evaluation teams conducted assessments in Lincoln County and Chambers County. 40 sites will need additional response actions. Hazard Evaluation Assessment status: 90% complete in Lincoln County, 30% in Chambers County and 10% in Austin County. All other counties in the Houston Branch are 0% complete.
- Air reconnaissance conducted an aerial overflight of Austin County and Colorado County to assess flooding extent and pollution. Seven sites were identified for ground assessment.

- Discharge Monitoring teams oversaw fuel transfer and ten facility discharge targets were closed out.

- ASPECT conducted flights to Chambers County, Wharton County and Matagorda County. In Chambers County, ASPECT photographed the remaining Rapid Needs Assessment (RNA) targets (approximately 15) and then proceeded to RNA sites in Wharton and Matagorda Counties (approximately 110 sites). There were no chemical detections. ASPECT's reach back team is consolidating all positive chemical detections from all flights and preparing tabular and geospatial products for the Region.

PORT ARTHUR/BEAUMONT BRANCH:

- It is anticipated that the Port Arthur/Beaumont Branch should be fully stood up by Wednesday, September 6, 2017.

- A hazard evaluation team assessed the Neches Park, Sabine Pass and Sabine. High water prevents ground operations at this time. A second hazard evaluation team visited Motiva. Motiva has no power and is shut down. The team also contacted and confirmed that the Colonial Pipeline is still non-operational.

- Teams conducted assessments and identified 10 sites for reassessment.

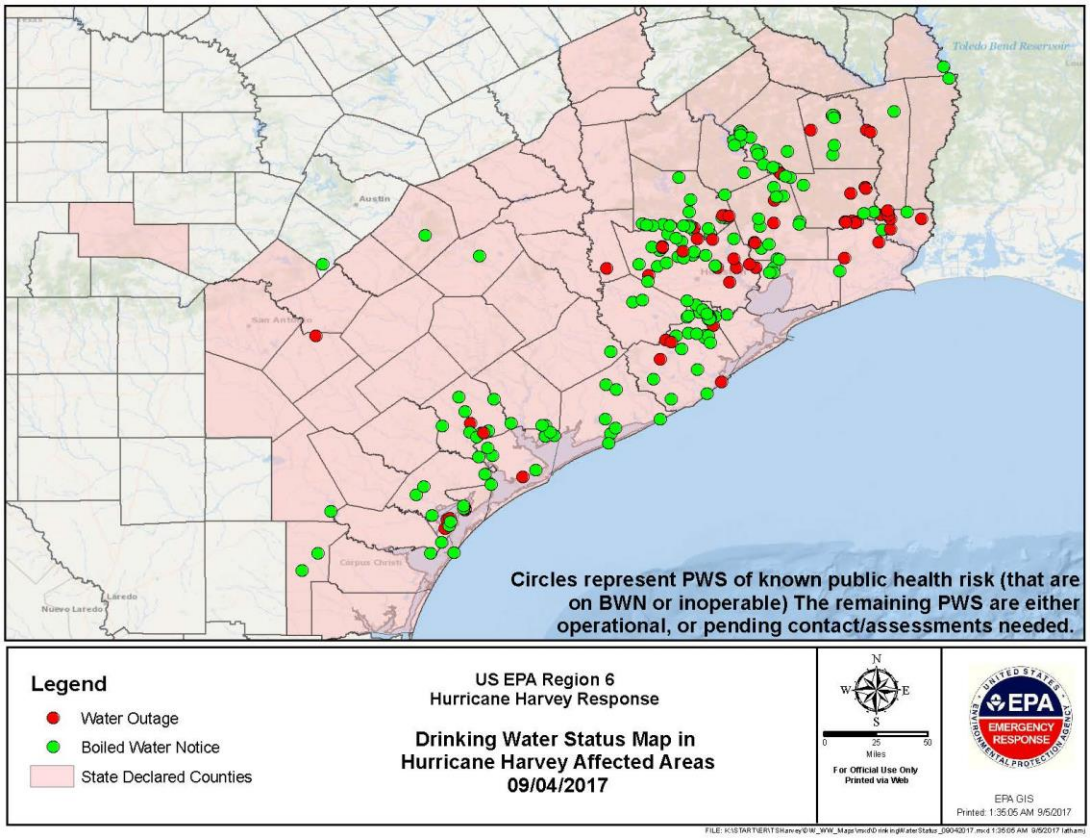
DRINKING WATER / WASTEWATER ASSESSMENTS

EPA is providing support to TCEQ for drinking water (DW) and wastewater (WW) system assessments. There are 10 members at the TCEQ Austin phone bank including one assisting with data flow. In addition, DW and WW assessment teams are currently set up in Houston, with additional members arriving this week. Current response activities consist of six members from EPA Region 6 conducting DW or WW assessments in Houston. Also, two members are providing assistance to the City of Beaumont in coordination with TCEQ, with their home base in Houston. In the next day, there will be seven from EPA Region 7 and one from Region 2 to form additional DW and WW teams for conducting field assessments in the Houston Branch.

Of the approximately 4500 water systems that were initially projected to be impacted by Hurricane Harvey, approximately 3,607 systems were in the affected area (58 State Declared Counties).

Of the systems in the affected areas, 2,175 are public water systems that serve a population of 10,878,982 and 596 are non-transient non-community (NTNC) water systems that serve hospitals, health care facilities, nursing homes and day cares, with a population of 216,871.

As of 1700 September 4, 2017 the EPA and TCEQ have made contact with 2,252 public and NTNC water systems and have confirmed 1,507 are fully operational and servicing water to a population of 9,523,361. As of September 4, 2017, there are 148 systems that have reported being on a boil water notice and 50 have reported a water outage.


Toledo Bend Reservoir
Austin
San Antonio
Corpus Christi
Laredo
Nuevo Laredo
Circles represent PWS of known public health risk (that are on BWN or inoperable) The remaining PWS are either operational, or pending contact/assessments needed.
Legend
Water Outage
Boiled Water Notice
State Declared Counties
US EPA Region 6
Hurricane Harvey Response
Drinking Water Status Map in Hurricane Harvey Affected Areas
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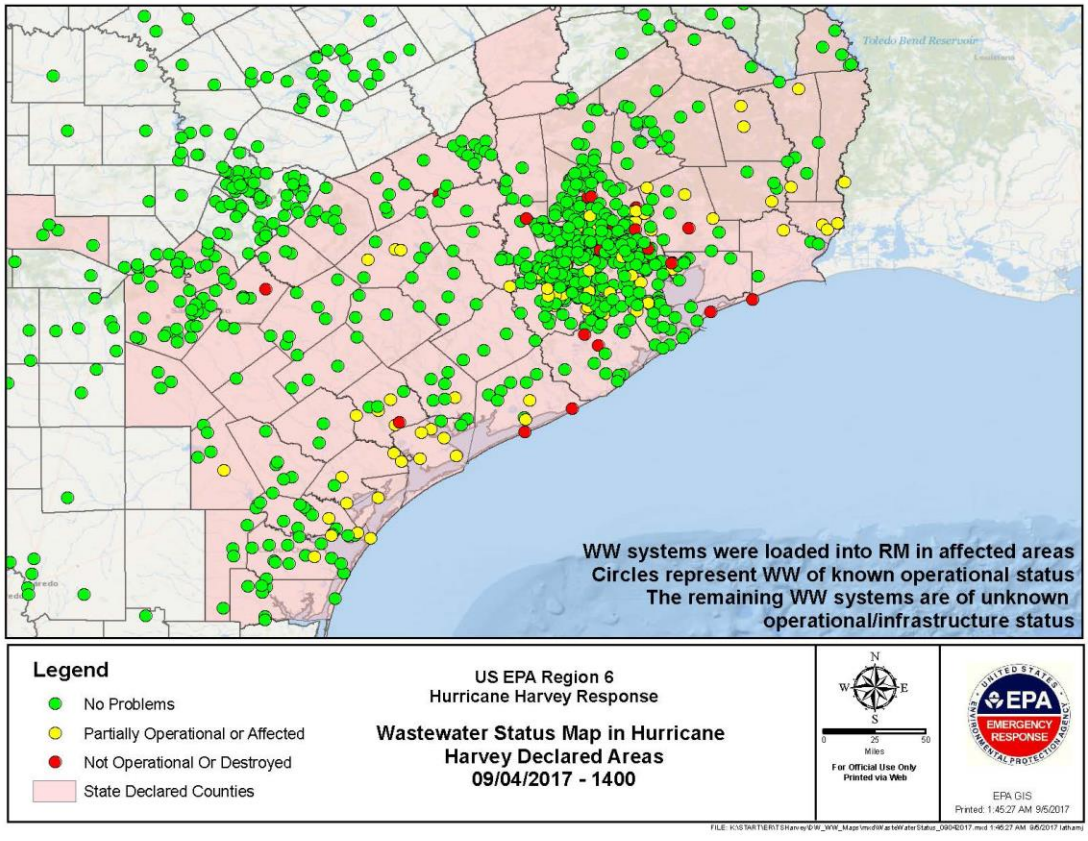
Toledo Bend Reservoir
WW systems were loaded into RM in affected areas
Circles represent WW of known operational status
The remaining WW systems are of unknown operational/infrastructure status
Legend
No Problems
Partially Operational or Affected
Not Operational Or Destroyed
State Declared Counties
US EPA Region 6
Hurricane Harvey Response
Wastewater Status Map in Hurricane Harvey Declared Areas
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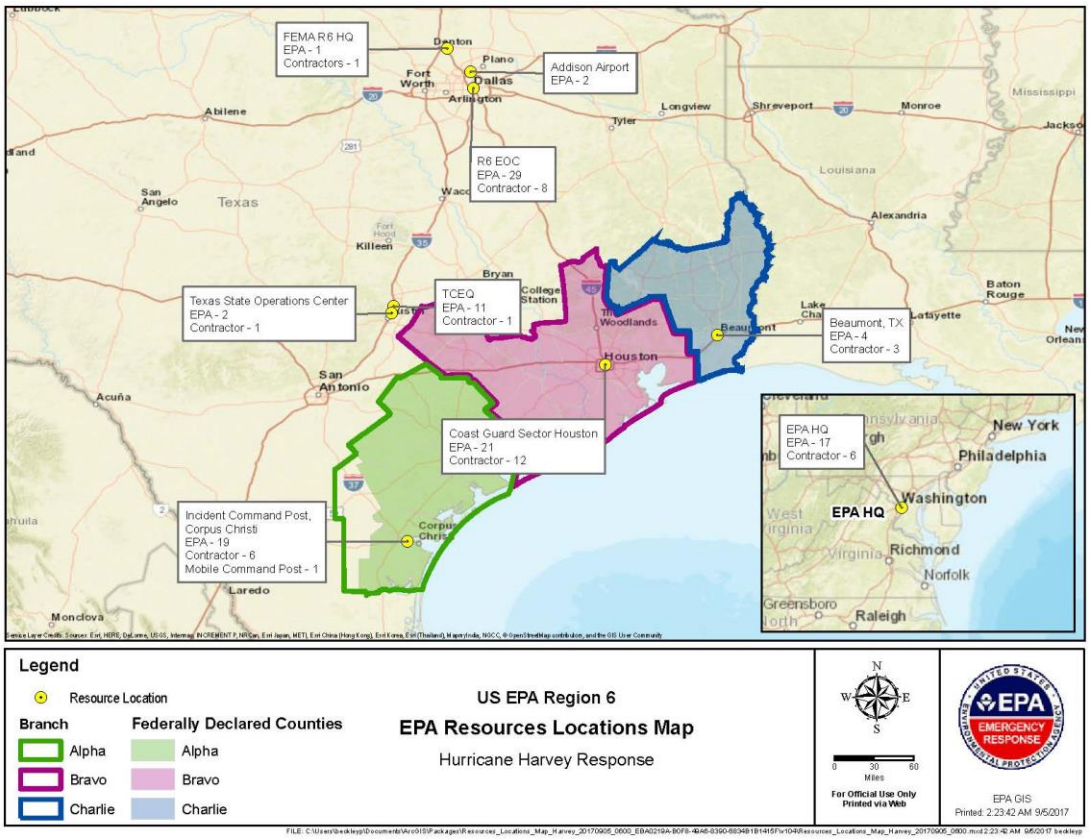
EPA RESOURCES

Personnel	EPA Dallas, TX	FEMA Denton, TX	TX SOC Austin, TX	TCEQ Austin, TX	Houston, TX	Corpus Christi, TX	Beaumont/ Port Arthur	HQ EOC, Wash, DC	TOTAL
EPA	29	1	2	11	21	19	4	17	104
START	7	1	1	1	12	6	3		31
ERRS					7	8			15
Other Contractors	1							6	7
TOTAL	37	2	3	12	40	33	7	23	157



FUNDING

September 4, 2017

SitRep
September 4, 2017, UPDATED 1300 hours

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		
MA 4332DR-TX-EPA-01	$20,000.00	$17,654.00	$13,424.00	$4,230.00	$2,848.00	1.49
MA 4332DR-TX-EPA-03	$8,592,000.00	$7,584,077.00	$3,419,017.00	$4,165,060.00	$236,348.84	17.62
Totals:	$8,612,000.00	$7,601,731.00	$3,496,641.00	$4,169,290.00		

** 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 Lake Charles refinery.

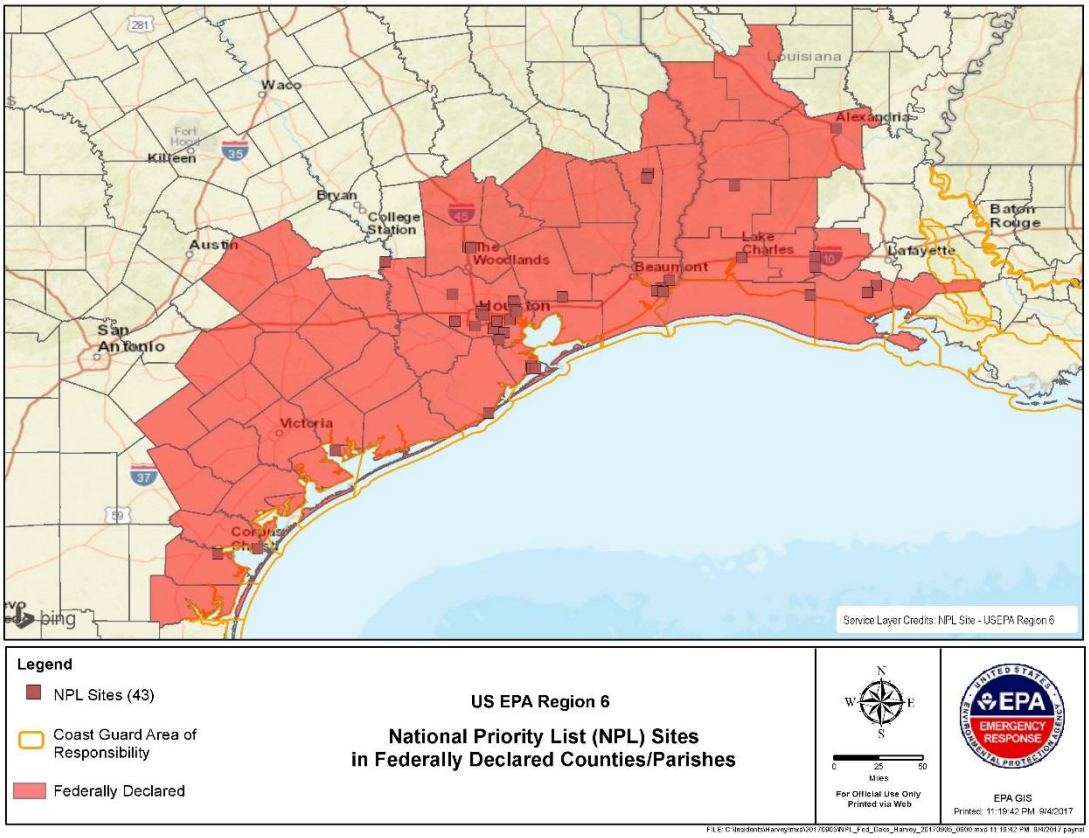
Four No Action Assurance (NAA) letters were signed by EPA on September 1, 2017, and are effective until September 15, 2017. NAAs can help relieve fuel shortages by expediting the distribution of existing supplies in both Texas and Louisiana until impacted refineries can resume normal operations. It is anticipated this will allow for the immediate distribution of 10 million or more gallons of refined product. For each NAA, EPA will exercise discretion not to pursue enforcement for violations of the identified regulations ranging from inadequate vapor recovery and fuel truck documentation to tank refilling procedures at bulk fuel terminals.

SUPERFUND NPL SITES

NPL Site Inspections

- 43 NPL sites are located in the affected area, of these
- 43 NPL sites have had rapid assessments, of these
- 13 NPL sites required follow up inspections
    - 5 site inspections completed before 9/4/2017
    - 6 site inspections completed on 9/4/2017
    - 2 site inspections will be completed on 9/5/2017

As a result of these inspections, two sites (San Jacinto Pits and US Oil Recovery) require added inspection.



Legend

- NPL Sites (43)
- Coast Guard Area of Responsibility
- Federally Declared

US EPA Region 6

National Priority List (NPL) Sites in Federally Declared Counties/Parishes

N W E S

0 25 50 Miles

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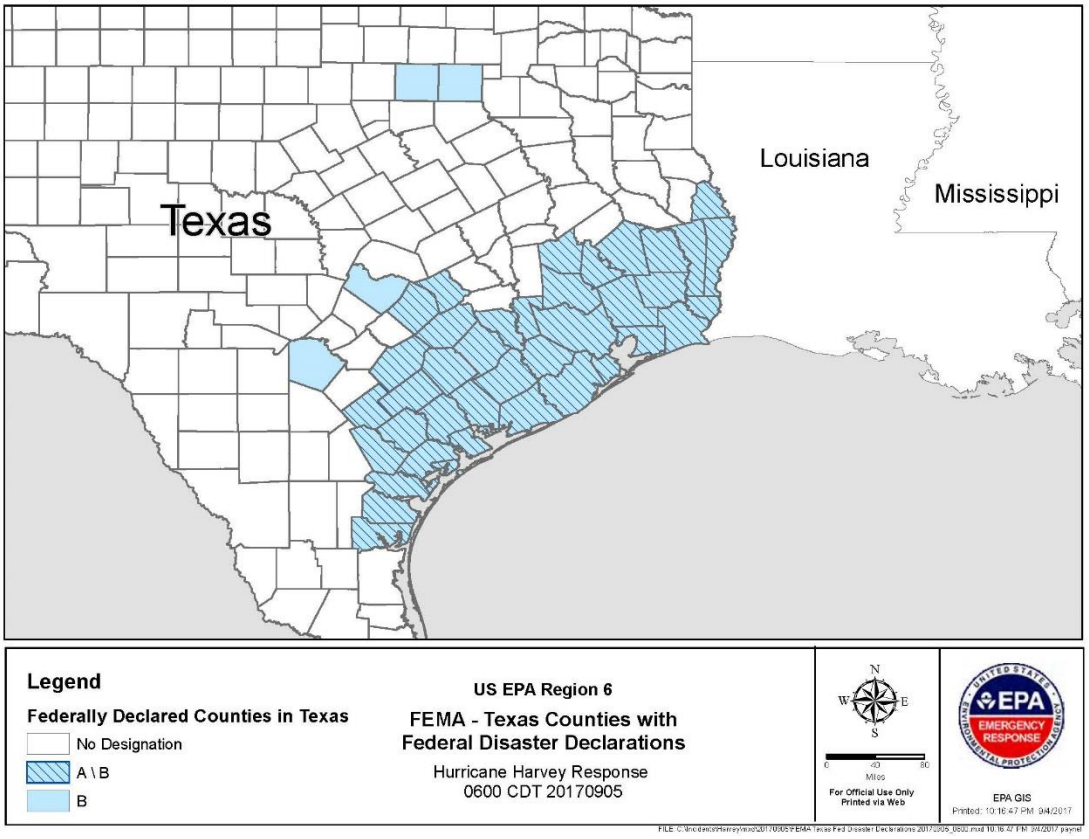
SUPERFUND NPL SITES (Continued)

Superfund Sites within Federally Declared Counties					9/5/2017
Hurricane Harvey Rapid Response Assessment	Phase 1	Phase 2		Phase 3	All Phases Completed
	Rapid Response Assessment	Site Inspection Needed	Inspected	Additional Response Action	
TEXAS					
SITE NAME					
ALCOA (Point Comfort) / LAVACA BAY	8/29/17	No			8/29/2017
BAILEY WASTE DISPOSAL	9/1/17	Yes			
BRINE SERVICE CO.	8/30/17	Yes	8/30/17	No	8/30/2017
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	8/30/17	Yes	8/30/17	No	8/30/2017
FRENCH, LTD.	9/1/17	Yes	9/4/17	No	9/4/2017
GENEVA INDUSTRIES / FUHRMANN ENERGY	9/1/17	Yes	9/3/17	No	9/3/2017
GULFCO MARINE MAINTENANCE	9/1/17	Yes	9/3/17	No	9/3/2017
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	9/4/17	No	9/4/2017
JASPER CREOSOTING	9/1/17	No			9/1/17
JONES ROAD GROUNDWATER PLUME	8/29/17	No			08/29/17
MALONE SERVICES COMPANY	9/1/17	Yes	9/4/17	No	9/4/2017
MANY DIVERSIFIED INTERESTS, INC	9/1/17	No			9/1/17
MOTCO, INC.	8/31/17	No			8/31/2017
NORTH CAVALCADE STREET	8/29/17	No			08/29/17
PALMER BARGE LINE	9/1/17	No			9/1/17
PATRICK BAYOU	9/1/17	Yes	9/4/17	No	9/4/2017
PETRO-CHEMICAL SYSTEMS, INC. (Turtle Bayou)	9/1/17	Yes	9/4/17	No	9/4/2017
SAN JACINTO RIVER WASTE PITS	9/1/17	Yes	9/3/17	Yes	
SHERIDAN DISPOSAL	9/3/17	No			9/3/2017
SIKES DISPOSAL PITS	8/29/17	No			08/29/17
SOL LYNN / INDUSTRIAL TRANSFORMERS	8/29/17	No			08/29/17
SOUTH CAVALCADE STREET	8/29/17	No			08/29/17
STAR LAKE CANAL	8/30/17	No			8/30/2017
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			
UNITED CREOSOTING CO.	9/1/17	No			9/1/17
US OIL RECOVERY	9/1/17	Yes	9/4/17	Yes	
LOUISIANA					
AMERICAN CREOSOTE DERIDDER	09/01/17	No			9/1/17
D.L. MUD, INC.	08/29/17	No			08/29/17
EVR-WOOD TREATING/EVANGELINE REFINING COMPANY	09/01/17	No			9/1/2017
GULF COAST VACUUM SERVICES	08/29/17	No			08/29/17
GULF STATE UTILITIES (North Ryan Street)	08/31/17	No			8/31/2017
MALLARD BAY LANDING BULK PLANT	08/29/17	No			08/29/17
PAB OIL & CHEMICAL SERVICE	08/29/17	No			08/29/17
SBA SHIPYARD	09/01/17	No			9/1/17
RUSTON FOUNDRY	09/03/17	No			9/3/17

Superfund Sites within Federally Declared Counties					9/5/2017
Hurricane Harvey Rapid Response Assessment	**Phase 1**	**Phase 2**		**Phase 3**	**All Phases Completed**
	Rapid Response Assessment	**Site Inspection Needed**	**Inspected**	**Additional Response Action**	
STATUS SUMMARY					
Rapid Response Assessment Completed	43				
Sites with no further action	39				
Sites in Phase 2	4				

FEMA – TEXAS COUNTIES WITH DISASTER DECLARATIONS