

Feedback from States:

- What practices/policies did you have in place prior to the emergency event (e.g., hurricane, flooding, etc.)?
 - In the past, communications were limited to cell phones.
 - A good UST database w/ owner and facility contact information, tank information, & GPS data on most UST facilities that aids in communication and facility location when traditional landmarks are missing. Alabama's UST database has many ASTs registered as well. Also, having four field offices w/ trained UST inspectors is extremely valuable for rapid response and identification of potential problems throughout Alabama. A list of all UST and AST facilities is maintained on a jump drive that can be accessed with a laptop if power is lost. Alabama's UST database is also available on ADEM's website.
 - Corrective Action Program has a paper list of all current UST release sites that could be referenced in the event power is lost. A notebook was developed to include the release lists and key emergency response and ADEM personnel.
 - Before a hurricane approaches the coast, tanks O/O and consultants are notified (as best we can) to shut off the power to remediation systems and stabilize the equipment as best they can. Empty water/oil containers so if hit by winds, will not have a release of contaminated water/fuel.
 - All field and UST staff are trained in 40-hour safety training and can respond to emergency sites.
 - ADEM is connected well with the State Emergency Management Agency. Often participate in the weather related drills (tornado drills, hurricane drills) with other emergency response personnel. This keeps staff well trained and ensures a network of people to contact for support. [FEMA contacted ADEM and requested a list of every federally owned UST system. In the event that FEMA personnel need fuel during severe weather events, they now know where each federal UST is located.]
 - When a natural disaster is eminent, the Governor of Louisiana will declare a state of emergency. Next the Louisiana Department of Environmental Quality issues a Declaration of Emergency and Administrative Order (DEAO). In the LDEQ DEAO, we have separate sections for each media. For Underground Storage Tanks, we require UST owners to perform an emergency evaluation of their UST system before placing the system in service if their UST system was affected. We list the evaluation protocols in an appendix in the DEAO. We also relieve them of any enforcement actions in the event that the weather event causes any non-compliance issues, i.e. their release detection records were swept away by flood or rain, their ATG memory was wiped out, etc.
 1. In the generic plan that we would use (first page copied below, entire text provided separately) we would just plug in the name of the disaster and dates into the DEAO. The UST section is on Page 19, and the emergency evaluation protocols are on page 33 in Appendix E.
 2. We may alter the language a bit for each event, but the evaluation protocols stay basically the same for each weather event.
- What lessons did you learn from addressing the impact of the event?

- When cell towers are damaged/destroyed, satellite phones become more useful.
 - Traditional landmarks are missing. Having lat/long data will help you locate the facility.
 - Impressed current CP systems are frequently damaged and require repair/replacement. Dispensers are also damaged. Occasionally whole UST systems are damaged.
 - Facilities along evacuation routes need to be able to continue to dispense fuel.
 - Have a plan to conduct assessments and a tool to collect the data in an efficient manner.
 - A significant event coupled with a large surge can mean that water can get high enough to enter the tank through the vent lines and displace product.
 - Water weighs a lot – a significant amount of water covering the tanks can pop the fill ports. Locking mechanisms may not be sufficient.
 - Contact facilities ahead of time – example was given that in a particular flooding emergency, initiative was taken to call the potentially impacted facilities to ensure they had the appropriate information on actions to take.
 - Important to keep in mind that in responding to an emergency, there needs to be a way to get fuel to emergency vehicles.
 - For a major hurricane event, there is little environmental contamination that results from UST sites during the weather events because virtually all of the USTs are empty due to the fuel demand to support evacuations. The bulk of the contamination occurs after the emergency is over and damaged UST systems are returned to service in order to get fuel to the emergency responders and returning residents.
 1. We have utilized State LDEQ and LA National Guard, and Federal (EPA) inspectors to evaluate UST sites in some of our weather events. Following NIMS and ICS is a mandatory in these situations in order to coordinate between the many agencies working on the same project. NIMS and ICS training is required for all LDEQ staff members that will respond in these events.
- What would have been useful to you prior to the event (in hindsight, what would you have wanted in place)?
 - Up to date contact information for local fire and emergency authorities. (I say this not knowing how well Field Operations has developed this already).
 - A form/data collection tool – one that would be consistent with the relevant regional office (this would ensure the state data is formatted in the manner requested by the region)
 - The sooner the information is disseminated to UST owners the better, as they are busy preparing for the disaster. Sending an email to all UST owners providing them with the information in advance of the event is the ideal thing to do, that way they don't have to go looking for it after the fact, when email and electricity may be down.
 - What changes did you make to your practices/policies as a result of the event?
 - Continuing to collect GPS data on all active and temporarily closed UST facilities.
 - Each (state) regional field office now has an Emergency Response Plan.
 - After each event, LDEQ staff (and occasionally LA National Guard if needed) performs UST site evaluations in areas that were affected. Over the years we have made changes to how we prioritize the UST site surveys. The highest priority sites to check are the sites that were

not flooded and may have sustained small scale wind damage and have been out of power. These are usually the first back in service and it is important to visually check for flex hose/piping leaks under dispensers due to slight dispenser movement. These are fairly common in high wind situations. The UST sites in flood locations would be done last once it is safe to enter. We have found over the years that some of the assessments can be done via phone calls to UST owners.

- What would be helpful in addressing these events?
 - Providing states with a “checklist” of appropriate activities for states/tank owners after such an event that states could use/distribute in affected areas. If this was provided in Word format w/ spaces available for phone numbers that could be filled in by states and the ability for states to attach appropriate forms for reporting releases/test results, etc. it would be better tailored to communicate state-specific information and requirements.
 - Prepare guidance for other emergencies.
 - Could some weather related information regarding tank operations be provided during Operator Training?
 - Identify caps/fittings recommended rugged enough to remain effective and in place. * This issue was identified by a few different states.
 - Develop a data collection tool that is agreed upon. The data collected must be useful to the state and the region. This data would be used to determine what sites would be eligible for any grant money made available.
 - Develop a generic response plan that could be used by any state.
 - Funding
 1. Removing fuel. Fund to address releases after an impact is very helpful, i.e. Hurricane Katrina.
 2. Stabilize equipment and clean up
 - Establish an environmental strike team – like FEMA’s
 - Ensure that there is interstate communication
 - Have an emergency response session at next tanks conference.
 - Our biggest issue with affected UST site evaluations is funding. In a major event, FEMA may reimburse some of our site evaluation activities.
 - Forgiving states/Regions that miss 3-year inspections near the time of the event due to prioritization of response to storm events.
- Other?
 - Louisiana Department of Natural Resources (LDNR) developed a plan to ensure that UST facilities that are located along evacuation routes have fuel available for evacuees. They developed this plan in consultation with UST owners, marketers, and trade groups. Here is the link to the Louisiana Fuel Team and Playbook:
<http://dnr.louisiana.gov/index.cfm?md=pagebuilder&tmp=home&pid=786>

**STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY**

**IN THE MATTER OF
HURRICANE XXXX
AND ITS AFTERMATH**

AGENCY INTEREST NO. XXXXX

DECLARATION OF EMERGENCY AND ADMINISTRATIVE ORDER

Pursuant to the authority granted to me by Louisiana Revised Statutes 30:2001 *et seq.*, and particularly La. R.S. 30:2033 and 2011(D)(6), I hereby make the following findings, declaration and order:

FINDINGS AND DECLARATION

1. On the **XX** day of **DATE**, Hurricane **NAME** (hereinafter “the Hurricane”) is expected to make landfall on the coast of Louisiana, causing widespread damage within the State of Louisiana.
2. By State of Louisiana Proclamation No. **XXXX**, Louisiana Governor Bobby Jindal declared on **DATE**, that a state of emergency exists in the state of Louisiana, as the Hurricane is expected to impact the coastal parishes of Louisiana with hurricane strength winds, wave surges, high tides, torrential rain and tornado activity, threatening the lives and property of the citizens of the State of Louisiana.
3. The parishes in which local government and/or the Governor has declared or declares an emergency shall constitute the specific areas covered by this Declaration of Emergency and Administrative Order (hereinafter “Order”). These areas shall herein be referred to as the “Emergency Areas.”
4. I find that the Hurricane has created or will create conditions that require immediate action to prevent irreparable damage to the environment and serious threats to life or safety throughout the Emergency Areas.