



Environmental Issues in Emergencies

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TCEQ Responsibilities and Activities during an Emergency

- Public Water Supply (PWS) Assessments / Wastewater Treatment Plant (WWTP) Assessments
- Dam Safety
- Debris Management
- Hazardous Materials Response
- State Superfund Sites
- Air Quality Monitoring
- Refinery and Commercial/Industrial Facilities
- Landfills

Other Activities during an Emergency

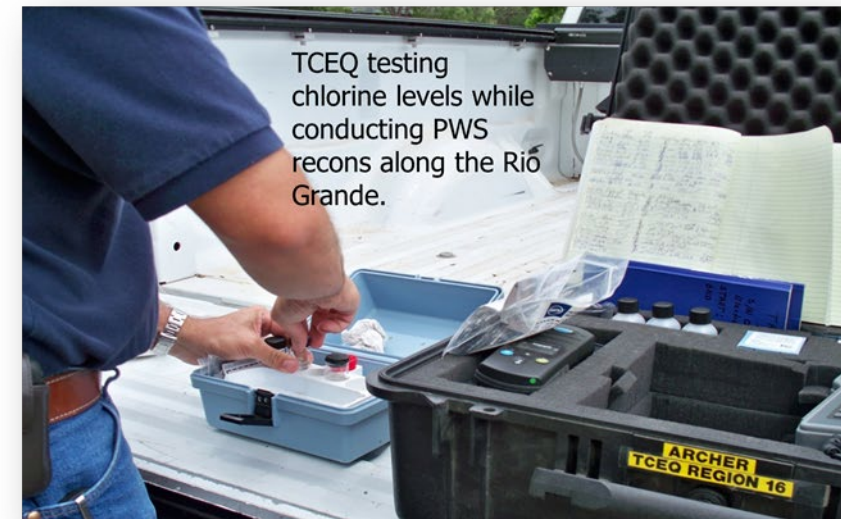
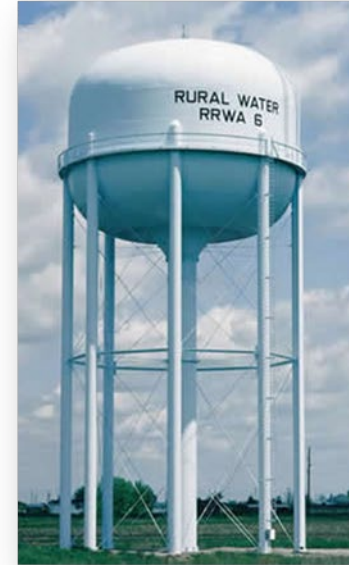
- Providing Regulatory Flexibility (as needed for response and recovery)
- Conducting Outreach to Local Officials

Public Water Supply (PWS) Assessments / Wastewater Treatment Plants (WWTP) Assessments

- The TCEQ conducts outreach (first, by phone) to facilities in the impacted area to determine operational status, provide technical assistance and guidance.
 - For those systems not available by phone, TCEQ will send field teams to conduct site visits.
- Determine PWS issues and track Boil Water Notices (BWN).
- Determine WWTP issues and track Sanitary Sewer Overflows (SSOs).
- Coordination with the Public Works Response Team (PWRT) and TXWARN who is also able to provide needed assistance.
- Conduct coordination with EPA, as appropriate.

The TCEQ 2021 winter weather response activities included:

- Assessing and tracking over 3,000 PWS systems in 212 counties;
- Assisting and providing regulatory guidance to 262 disabled PWS systems that served a population of 352,661 people;
- Assisting and providing regulatory guidance to 2,324 PWS systems that were placed under a boil water notice that served a population of almost 18 million people (over half the state);
- Establishing a help line phone bank to provide technical assistance to PWS systems;
- Staff working night and day to provide advanced technical assistance to get water systems back online as quickly as possible.





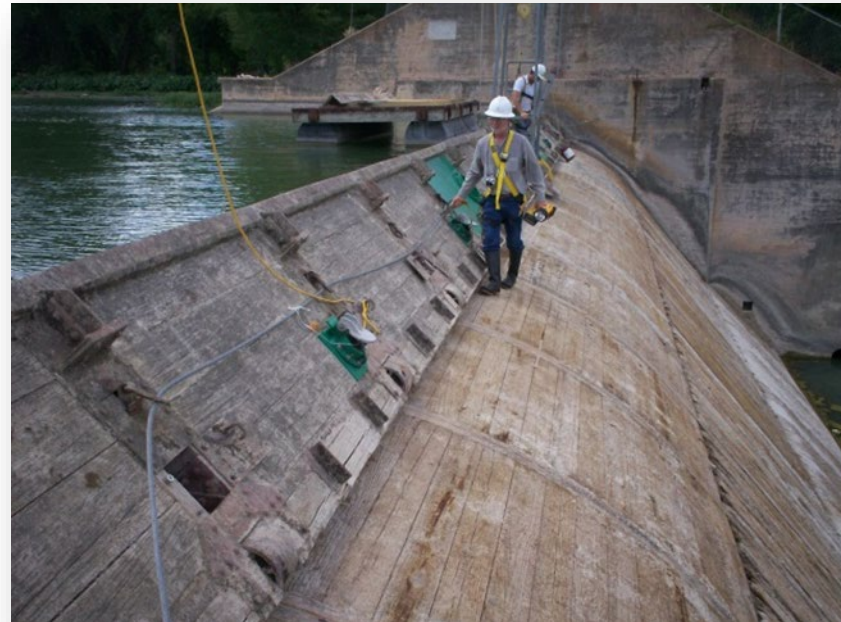
The TCEQ 2021 winter weather response also included:

- Assessing and tracking 134 WWTPs in 57 counties; and,
- Assisting and providing regulatory guidance to 85 disabled WWTPs.



Dam Safety

- TCEQ Dam Safety Engineers track reported issues with dams and provide the dam owner/engineer with technical assistance and guidance.
- TCEQ Dam Safety Engineers conduct site investigations for impacted dams as appropriate.
- Determine and track dam issues.



Hazardous Materials Response

- Under the State of Texas Emergency Management Plan, TCEQ is the primary agency (ESF#10 Lead) for Hazardous Materials and Oil Spill Response.
- TCEQ will form a Unified Command with other the Natural Disaster Operational Workgroup (NDOW) partners (EPA, TGLO, USCG, and Texas National Guard) to more efficiently utilize everyone's resources.
 - The NDOW Unified Command will identify hazardous material concerns, deploying teams to conduct reconnaissance and assessments for orphan drums and containers, and assess facilities to locate any spills or releases, and respond to reports of spills and releases.
 - The NDOW Unified Command will also respond to ensure that orphan drum and container recovery operations and spill/release response and cleanup activities are conducted timely, efficient, and minimize threats to human health and the environment.





Hurricane Preparedness

FAIL



Debris Management

- Provide oversight of appropriate disposal of disaster waste.
- Provide authorizations for temporary debris management sites.
- Ensure that debris management sites are operated in a manner not to create a human health threat or threat to the environment.
- Ensure proper separation of Household Hazardous Waste (HHW) and white goods (i.e. refrigerators, washers & dryers) prior to disposal.
- Ensure proper disposal of HHW and white goods.
- Issuing “burn” letters to local jurisdictions as appropriate.
- Assisting with animal carcass disposal issues.
- When needed, the TCEQ will set up and staff a Debris Management Hotline in coordination with the Regional Offices to address and process requests regarding temporary debris management sites.







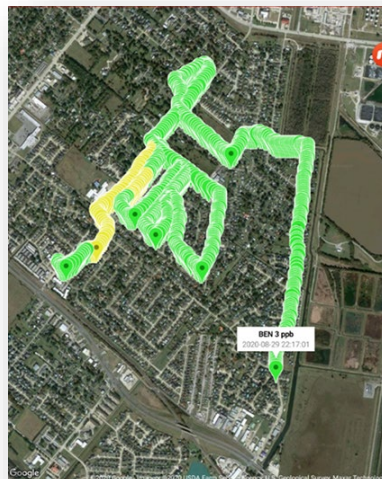
State Superfund Sites

- Pre-storm – ensure state superfund sites are secured.
- Post-storm - assess state superfund sites for impacts.
- Coordinate with EPA for securing and assessing federal superfund sites.

Air Quality Monitoring



- TCEQ will conduct air monitoring to assess impacts to human health and the environment from hazardous material spills and releases or ensure that such activities are being properly conducted by the responsible party.
 - TCEQ can deploy Air Monitoring Vehicles with real-time, mobile air monitoring technology.
 - TCEQ can also obtain air monitoring data from any of TCEQ's continuous Ambient Monitoring Stations - Multiple fixed air monitoring stations are used to assess ambient concentrations of VOCs and PM_{2.5} throughout the state.



Air Quality Monitoring – Cont.

- TCEQ can deploy staff to monitor storm-impacted areas and neighborhoods, and industrial fence lines with hand-held instruments, such as optical gas imaging cameras (OGIC), toxic vapor analyzers, summa canisters, and portable multi-gas monitors. The use of these tools allows for the most effective source identification for drifting volatile organic compound (VOC) plumes so that swift action can be taken to address the cause of these emissions.
- TCEQ in coordination with EPA can also deploy the federal Trace Atmospheric Gas Analyzer (TAGA) mobile monitoring system to conduct air quality analyses in neighborhoods surrounding impacted facilities, and the Airborne Spectral Photometric Environmental Collection Technology (ASPECT) aircraft to conduct real-time sampling of potential emission targets over facilities.



Event Data Collected

Event	Van Surveys/ Miles*	Handheld Surveys/ Total constituents*	Staff Hours*
ITC Fire	**16 surveys 3,100 samples	10,000 surveys 56,859 constituents	32,396
Winter Storm Uri	400 surveys 1,200 miles	1,900 surveys 9,700 constituents	17,671
Hurricane Laura	60 surveys 120 miles	2,000 surveys 7,129 constituents	5,966
TPC Fire	n/a	4,500 surveys 15,089 constituents	3,093
Hurricane Delta	10 surveys 13 miles	80 surveys 285 constituents	n/a

Refinery and Commercial/Industrial Facilities

- TCEQ verifies and reports on operational status of refinery and industrial facilities as needed.
- TCEQ may conduct site visits to industrial facilities as conditions allow to determine the integrity of facilities which handle hazardous materials, including petrochemical production facilities, hazardous waste disposal facilities, fuel storage tanks, etc.



Landfills

- TCEQ may conduct site visits to landfill facilities as conditions allow to determine the integrity of those facilities.
- TCEQ works with the landfills to issue Temporary Authorizations (TAs) to help them handle the tremendous volume of disaster debris that needs to be disposed. Those TAs may include:
 - TCEQ granting TAs to landfills and Transfer Stations in the impacted counties that request to operate 24/7 to help expedite the processing and disposal of debris (TAs are granted for up to 180 days and TCEQ can extend them for an additional 180 days); and,
 - TCEQ granting TAs to landfills requesting to stage waste above their currently permitted height for up to 360 days in order to accommodate the excess storm debris. At some point prior to the expiration of the TAs, the waste must be permanently disposed of within the existing permitted space, or they will need to modify their permit to leave the waste in place above their current permitted vertical height.

Regulatory Flexibility

- Provided guidance and regulatory flexibility to facilities.
- TCEQ may be requested to assist with requesting Fuel Waivers from USEPA or USDOE due to issues that may disrupt Texas' gasoline and diesel fuel supply. A few of the waivers that may be requested included:
 - low-Reid Vapor Pressure gasoline
 - federal reformulated gasoline
 - Texas Low-Emission Diesel fuel in the eastern part of the state
- TCEQ may also work with the Governor's Office to obtain a waiver from USEPA and the Internal Revenue Service to allow use of dyed diesel fuel to be used in on-road vehicles to facilitate the rescue and feeding of stranded livestock.

Outreach to Local Officials

- Agency staff will reach out to County Emergency Management Coordinators, County Judges, and Mayors to offer assistance/guidance with disaster related activities including authorizations for temporary debris management sites, burn guidance and animal carcass issues.
 - TCEQ conducts outreach directly to public drinking water facilities and wastewater facilities to offer technical assistance and guidance to operators.

The reason situational awareness is so important is that it helps us identify potential problems, and allows us time to take appropriate actions to avoid negative outcomes.

Any Questions?

