REDACTED VERSION

Region 6 Emergency Management Branch

Region 6 Unique Response Universe

General Information:

- Region 6 has conducted more than 1100 removal actions over the last 37 years to address the immediate health risks. Approximately 90% of these sites are available for or currently in reuse.
- Region 6 is also one of the most active regions in the area of emergency response. We receive on average 4,300 release calls per year and we average 49 response actions each year.
- Region 6 obtains its removal and emergency response sites not only through the National Response Center, but also through referrals from state, local and other federal partners.

Unique Aspects of Region 6:

- Region 6 comprises of over 565,000 square miles and is almost 1,500 miles across at its farthest points. The Region has over 42,000,000 in population, with over 30 languages spoken within the Region.
- Region 6 each year must address several types of natural disasters, including an average 190 tornadoes each year, ice storms each winter, and major river and stream flooding during the spring season. The Region has been impacted by 24 hurricanes and tropical storms since 1999, including Hurricanes Katrina, Rita, Gustav, and Ike. Region 6 consistently leads the nation in the number of Presidentially declared disasters.
- The Region is at the top of all industrial modes, including 2nd in highway miles, 3rd in railroad miles, and 1st in pipeline miles. Additionally, the Region is 1st in refining capacity (60% of national refining).
- Region 6 has over 170,000 facilities regulated under the EPCRA, SPCC/FRP, and RMP programs, which is approximately 40% of the national total. Each of these facilities store, use, or process hazardous chemicals

Region 6 Emergency Management Branch

which may present a risk to human health or the environment.

- Each year, Region 6 is at the top, when it comes to the number of spill/release notifications nationally. This includes 17% of all notifications (2rd nationally) and 37% of all air release notifications (1st nationally). Harris County, Texas, reports more release reports each year than 38 states.
- The priority areas (most releases, responses) in Region 6 include: Dallas-Fort Worth area, Houston/Harris County area, Lake Charles, LA, Osage County, OK, far west Texas, and the Baton Rouge-New Orleans, LA corridor.
- Approximately 4% of all release reports received within Region 6 result in a death, injury, community/facility evacuation or shelter-in-place, or major property damage. Almost weekly, there is a shelter-in-place or evacuation occurring in the Region.
- The Emergency Response program responds to hazardous material incidents, oil spills, and other events, using authorities under CERCLA and OPA. Additionally, the Region may respond under the Stafford Act for natural disaster events.

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Strengthening The Region 6 Response Network

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Region 6 LEPC Update

Steve Mason, EPA Region 6
mason.steve@epa.gov
Hilary Gafford, Weston Solutions
hilary.gafford@westonsolutions.com

This month, we dedicate the newsletter to the Safety Data Sheet. What exactly can it tell us? Who writes those things? How the heck does anyone understand what they mean?
-Steve and Hilary

NOTICE
SDS
INFORMATION
INSIDE

All about Safety Data Sheets

The Hazard Communication Standard (HCS) of the U.S. Occupational Safety and Health Administration (OSHA) requires companies which manufacture or distribute hazardous chemicals to provide Safety Data Sheets (SDS) to their customers.

The SDS (Formerly known as an MSDS) provides useful information about a specific chemical, such as various names used for the chemical, procedures for safe handling and storage, exposure risks, appropriate personal protective equipment (PPE), exposure limits, and emergency response measures.

Employers should provide SDSs for every chemical to which employees might come into contact. SDSs are also useful to persons not covered by OSHA rule, because they provide important safety information of chemicals.

In December 2015, OSHA implemented elements of the Global Harmonization Standard into the Hazard Communication Standard, mandating that all chemical manufacturers in the U.S utilize the GHS SDS format.

The Global Harmonization Standard (GHS) was developed by the United Nations, as a way to bring into agreement the chemical regulations and standards of different countries.

In short, it is an international attempt to get everyone on the same page.

Who creates the SDS? The chemical manufacturer is responsible for creating an accurate SDS for each chemical they produce. Some chemical manufacturers may write the SDS themselves, while others may hire a specialist to write the SDS for the chemical they are manufacturing.

SDSs present lots of information, and may seem overwhelming at first glance. However, once you know how the sheets are organized, you can find information quickly, thanks to the standardized format. . .

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- Region 6 has issued an LEPC Update quarterly since 1988, going out to over 5,000 state, local, tribal, and industry partners. This update provides technical assistance on issues such as changes in oil spill responses, latest regulations, and best practices in response and preparedness efforts.
- Region 6, in coordination with its state partners, OSHA, and DHS, has conducted LEPC workshops since 1990, including 95 workshops in the past three years, attended by over 4,500 state, local, tribal, and industry officials to understand prevention/preparedness programs and how to better implement the provisions of EPCRA.
- Each year, the Region conducts a full-scale exercise to test its emergency response capabilities, partnering with state and local officials. Last year's exercise included over 155 participants from 15 federal, state, and local entities.
- For the past 17 years, Region 6 has been a co-sponsor of the HOTZONE Conference in Houston, Texas. This conference provides over 500 first responders each year with technical knowledge to respond appropriately to hazardous material incidents within their own jurisdiction. The Region assists in conducting a planning track each year, as well as disseminating response/planning information to all attendees.

- For the past 15 years, Region 6 has been an instructor and evaluator for the HAZMAT Challenge, hosted by Los Alamos Labs in New Mexico. This week-long training brings together local/state hazmat teams from around Region 6, providing the teams with various scenarios to respond to safely and effectively.

April 18, 2017

Region 6 Emergency Management Branch

Response Highlights: Exxon Pipeline Mayflower Arkansas Oil Spill

Background: On March 29, 2013, a 20" pipeline ExxonMobil pipeline released approximately 5,000 barrels of Canadian crude oil impacting a residential subdivision and down gradient lake. The Pegasus Line connects Patoka, IL to Nederland, TX and Mayflower is located 22 miles northwest of Little Rock. 22 homes were evacuated for an extended period of time; three homes of which were demolished. The heavy crude oil released from the damaged pipeline flowed down a residential street, into a bar ditch, into an unnamed creek, and into a tributary to a cove of Lake Conway. EPA directed the response actions until November 2013 at which time the response phase was deemed complete.

Action: EPA, along with other federal, state and local agencies responded to ensure ExxonMobil Pipeline Company addressed the oil spill impacts. EPA provided the Federal On Scene Coordinator (FOSC) for the incident as provided for under the National Contingency Plan (NCP). EPA deployed five EPA personnel and four EPA contractor personnel at a time. EPA also deployed a mobile command post to the incident. In addition to monitoring ExxonMobil's oil spill cleanup, EPA conducted air monitoring in support of the incident. EPA coordinated response actions with local, state and other federal agencies. All EPA and USFW cost were charged to the Oil Spill Liability Trust Fund (OSLTF).

EPA's response personnel joined with local and state responders to ensure that the spill was cleaned up properly and the public was protected.

Cooperating Agencies:

Region 6 Emergency Management Branch

Arkansas Department of Environmental Quality
Arkansas Department of Emergency Management
Arkansas Game and Fish
Arkansas Department of Health
Faulkner County Emergency Management
Mayflower Fire Department
Mayflower Police Department
Faulkner County Judge
US FWS

Region 6 Emergency Management Branch

Response Highlights: Assisting State & Locals on Mercury Responses in Region 6

Normangee Hg, Normangee, TX / Mercury Exposure and Response

Mercury exposure from a single source stretches multiple cities (4), multiple states (3), multiple EPA Regions (2), and includes four homes, a hospital, and multiple vehicles.

EPA was activated on July 26, 2016, to respond to a reported mercury exposure to a family at a home in Normangee, Texas. The OSC mobilized to the family's location at a hospital in Dallas, briefed the hospital staff, met with the family, and screened the hospital room and family's belongings for elevated mercury vapors.

On July 28, 2016, EPA met with LDEQ and screened another relative's home in Deridder, Louisiana, where family members had stayed and taken belongings previously in the Normangee home. An additional resident of the Normangee home had moved back with family in Jackson, Mississippi. EPA Region 6 notified EPA Region 4, as well as contacted this resident and briefed him on the response, findings, and answered questions regarding mercury exposure concerns he had.

Within the first 48 hours following the notification of the incident to EPA, EPA had screened three homes in two states, four vehicles (additional relatives' vehicles), and a hospital room. And all mercury contamination was secured and transported to the primary residence in Normangee for decontamination or preparation for proper disposal.

EPA met with TCEQ, County Emergency Manager, County Health Authority, and County Health Department. TCEQ teamed with EPA and performed all disposal for this unified response to include the elemental mercury as well as the actual disposal of the mobile home the family formerly resided in.

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Golden, New Mexico Mercury Response

On June 23, 2016, EPA was notified of a mercury spill at a residential home located on a ranch in Golden, Sandoval County, New Mexico. The spill occurred in the bedroom of a 4 yr old child. Initial blood screening for the child indicated an elevated level of 67 µg/L. All of the occupants of the mercury impacted home relocated to another residential home on the ranch. The Poison Control and Information Center of New Mexico requested the assistance of ATSDR and EPA to assess the home for mercury contamination.

Due to the high likelihood of the mercury getting tracked from the contaminated house to other residences or public areas. The spilled mercury posed a substantial threat to human health and the environment through its toxic vapors and highly traceable/spreadable nature. EPA worked closely with the New Mexico Environmental Department and the local authorities to commence a removal action at the incident location to address the mercury contamination and make the house rein habitable.

Amasia Cove Mercury Response, Austin, TX

On December 15, 2014, a representative of the Texas Department of State Health Services reported a spill of mercury to the EPA Region 6. Three children who live at the house were admitted to the Dell Hospital in Austin with elevated blood mercury concentrations. The property owners temporarily relocated to a local hotel. EPA along with the Texas Commission on Environmental Quality (TCEQ) activated resources to respond to the incident. EPA/TCEQ initiated an investigation and assessment of the mercury contamination at the residence. TCEQ began mercury removal operations with EPA support by screening the home using a Mercury Vapor Analyzer (Lumex) to identify areas above established action levels. EPA transitioned to the role of lead response agency and EPA mobilized additional resources to support TCEQ cleanup efforts. EPA resources conducted mercury cleanup operations within the house and garage as TCEQ resources coordinated the transportation and disposal of mercury and mercury-contaminated items.

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This response was a great example of how Locals (Williamson County) State (TCEQ & TDSHS), and Federal (EPA & ATSDR) worked together to respond to Environmental and Public Health incidents.

Region 6 Emergency Management Branch

Response Highlights: Camp Minden - Explo

Background: Following an explosion of a magazine in October 2012, it was found that approximately 20 million pounds of energetics were improperly stored and managed at a facility on Camp Minden in Louisiana. Explo Systems went bankrupt in August 2013, and the Louisiana National Guard/Military Department (LMD) took ownership of approximately 16 million pounds of the material. Additionally, other potentially responsible parties (PRPs) took ownership of the remainder of materials they had sent to Explo for demilitarization.

Action: General Dynamics Ordinance and Tactical Systems and Alliant Tech Systems (GD/ATK) signed an Administrative Order on Consent (AOC) in January 2014 and completed removal of approximately 3 million pounds of material in August of 2015. Material removed included pit powder, H6, TNT, extracted aluminum, tritonal contaminated debris, nitrocellulose, and M30. Approximately 2,099,154 pounds of the extracted aluminum were recycled.

Hercules signed an AOC in April 2014 and completed removal of 849,023 pounds of nitrocellulose in December 2014.

The remainder of the material was part of an AOC signed in October 2014 by the Department of the Army, LMD, and LDEQ and included the removal of approximately 16 million pounds of M6 and clean burning igniter (CBI). After concerns by the community for the original method of disposal of almost 16 million pounds of M6 and CBI in December of 2014, EPA worked with the State of Louisiana and the community to establish a Dialogue Committee and review alternative technologies.

Region 6 Emergency Management Branch

Successfully, this included EPA, LMD, LDEQ, technical experts, local and state officials, and the community. An alternative method was chosen, and LMD hired a contractor, Explosive Service International (ESI), to create a contained burn system (includes a contained burn chamber and pollution abatement system (PAS)). The safe destruction of 15,682,874 pounds of M6 was conducted between 13 April 2016 and 12 April 2017. After an auto-ignition on 29 September 2016 of a magazine containing approximately 120,000 pounds of CBI and consult with the DOD Explosive Safety Team, two additional magazines were destroyed during a disposal in-place operation. This was safely conducted between 30 October and 2 November 2016. EPA conducted air monitoring and sampling at four stations around each magazine event and also mobilized the Trace atmospheric gas analyzer (TAGA) bus for mobile real time air monitoring downwind and in the community. EPA conducted real time air monitoring during the yearlong removal action, as well as LMD conducting ambient air monitoring at four stations around the CBS throughout the removal. No elevated parameters were observed that posed a risk to public health and the environment. Moving forward, LMD is conducting restoration for approximately 90 days, which also includes the clean-up of the magazine storage area where the CBI magazines were destroyed.

Region 6 Emergency Management Branch

Throughout this removal action, EPA has sent out factsheets to the community, met monthly with the Community Advisory Group (CAG), and presented educational workshops and public meetings to share information about the project and answer questions. EPA has worked closely with the CAG, LDEQ, LMD, and all the stakeholders to keep them informed and address concerns.

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Response Highlights: Tulane National Primate Research Center Bio Agent Release

Background: In November of 2014, two of the non-human primates (rhesus macaques) at Tulane National Primate Research Center (TNPRC) in Covington, Louisiana were infected with a deadly select agent, Burkholderia pseudomallei (Bp) and one of them was euthanized. Several of the Research Center's primates had been exposed Bp. Numerous local, state and federal agencies formed a Unified Command and sought guidance from EPA on environmental sampling and decontamination for potentially impacted areas.

Action: In February 2015, EPA, acting as an assisting Federal Agency to the Centers for Disease Control and Prevention(CDC) and the local and state agencies, mobilized to the site and assisted TNPRC with the development of sample collection plans for water, soil, and air and with the collection of air, water, and soil samples in targeted areas in and around the macaque enclosures where the bacteria would most likely be present were it to have been released outside the laboratory. All samples collected were negative for the presence of Bp. On March 13th, 2015, CDC released a statement saying "CDC has found no evidence to date to suggest the organism was released into the surrounding environment and therefore it's unlikely there is any threat to the general population". On March 31, 2015, EPA joined other Unified Command members on a panel during an open house town meeting to discuss the incident and answer questions.

Region 6 Emergency Management Branch

Response Highlights: Multi-Region & Multi-State Airosol Fire Response

Background: Two days before Thanksgiving 2016, the Airosol Inc. facility in Neodesha, Kansas had a catastrophic explosion and fire. EPA Region 7 deployed On-Scene-Coordinators to the site. The local fire department failed to collect the fire suppressant water from the response which resulted in contaminated water entering the Verdigris River which starts in Kansas and enters Northeast Oklahoma. In Oklahoma, this river serves as the raw water for several drinking water systems. Region 7 notified Region 6 of the incident. Due to several drinking water intakes being shut down during Thanksgiving week, the incident received a high level of involvement from the Kansas governor's office, State of Oklahoma, EPA HQ, and others.

Action: EPA Region 7 deployed three On-Scene Coordinators to the Airosol Inc. response and the START contract for particulate monitoring. EPA Region 6 also mobilized an On-Scene Coordinator to Northeast Oklahoma to collect water samples from the Verdigris River at the various drinking water intakes. EPA teamed up with Oklahoma Department of Environmental Quality personnel for the collection of these samples which were sent to the DEQ lab for analysis. Drinking water inputs were temporary closed until results showed there was no threat to the drinking water systems.

Region 6 Emergency Management Branch

In addition to the coordination in the field, daily coordination calls were conducted between EPA Region 7, EPA Region 6, Kansas and Oklahoma. These calls served to ensure all parties maintained situational awareness and agreed to future operational direction.

After 24 hours of the drinking water intakes being shut in, the water storage at the drinking water systems began to dwindle and the ability of these systems to provide safe drinking water became critical. However, due to the actions and coordination between the two regions and states, water samples were collected and analyzed quickly and both Kansas and Oklahoma had the information they need to allow the intakes to be opened. This minimized impacts to drinking water systems and citizens of these two states

Region 6 Emergency Management Branch

Response Highlights: West Odessa Tire Fire, West Odessa, TX

Background: On April 09, 2017, a fire broke out at BG Tire Disposal facility located in West Odessa, TX. The facility had approximately 100,000 tires. The facility is located within ¾ of a mile to a residential area. The facility is located within ¾ of a mile to a large oil and gas blending facility and is located within 50 yards from a tank battery site containing 200 barrels of crude oil. The local emergency management agency, Ector County Emergency management, placed a voluntary shelter in place to downwind residents. The primary hazards from the fire were the smoke plume, and the potential of the fire spreading to a tank battery and to an oil and gas chemical blending facility. The company did not have the resources to address the incident. Local and state responders could not extinguish the fire and requested EPA assistance.

Action: EPA, the Texas Commission on Environmental Quality(TCEQ), and Ector County Emergency Management, formed a Unified Command and leverage each agency's resources to address the incident. EPA provided the Federal On Scene Coordinator (FOSC) for the incident as provided for under the National Contingency Plan (NCP) and deployed 7 EPA contractor personnel. EPA deployed a mobile command post to the incident for the Unified Command. EPA provided air monitoring along the perimeter and downwind of the fire to protect the public. Ector County Emergency Management provided a Local On Scene Coordinator, and provided a dirt pit and resources to transport the dirt to the

scene. TCEQ provided a State On Scene Coordinator, and contractor resources, and assisted by excavating and loading dirt at the county dirt pit. EPA contractors utilized heavy equipment and personnel to suffocate and extinguish the fire with dirt. The Ector County Volunteer Fire Department created fire breaks around the perimeter and around adjacent property to control the fire from spreading outside of the fire pit area. The Ector County Volunteer Fire Department provided resources and water at the incident to keep the perimeter of the fire cool and to cool down the heavy equipment throughout the response. The Ector County Health Department and the TCEQ reviewed air monitoring data provided by EPA. The Texas Department of Transportation controlled access into and out of the incident scene area.

EPA's response personnel joined with state and local responders to ensure that the public was protected, to ensure adjacent properties were protected, and to extinguish the fire. The Unified Command response operations took approximately 5 days to extinguish the fire.

Cooperating Agencies:

Texas Commission on Environmental Quality
Ector County Emergency Management
Ector County Land and Road Department
Ector County Department of Health
Ector County Volunteer Fire Department
Ector County Environmental Crimes Department
Texas Department of Transportation
Texas Department of Public Safety

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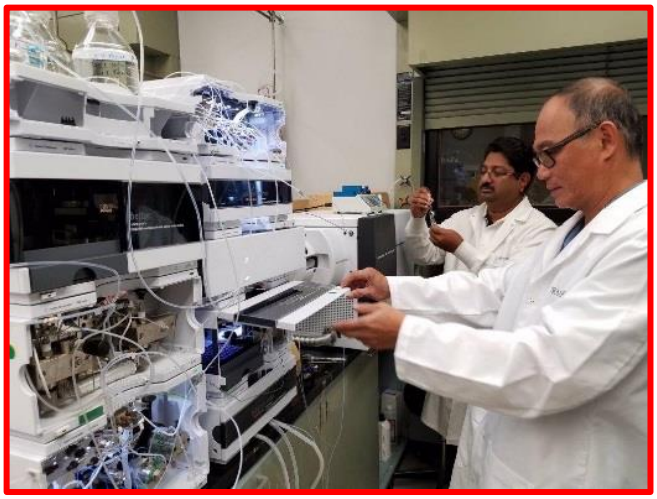
Response Highlights: Corpus Christi Drinking Water Incident, Corpus Christi, TX



Background: On December 15, 2016, EPA was notified of a December 14th public "Do Not Use the Water" advisory issued by the City of Corpus Christi. The advisory warned Corpus Christi's 320,000 residents to not drink or use tap water following a back-flow incident at an asphalt terminal operated by Ergon Asphalts & Emulsions on the property of Valero Energy Corporation. Also on December 15, the City of Corpus Christi provided a news release that identified the chemical of concern as asphalt emulsifier, Indulin AA-86, and that City officials estimated the amount of the product involved in the back-flow incident from 3 to 24 gallons.

Action: EPA activated a Cross-Divisional team to assist the state and local community. Personnel from the Water Division, Management Division, Superfund Division and Agency for Toxic Substances and Disease Registry (ATSDR) quickly assembled to provide much needed support to determine the extent and scope of contamination of the drinking water supply, and begin the process of investigating the release to identify the parties involved and collect information for future use. The Emergency Response team began coordination of efforts with local and State agencies and Responsible Parties to coordinate remediation efforts, and sample collection and analysis. EPA facilitated a meeting with State officials and Industry experts to acquire a laboratory method for the Indulin AA-86 for review by the Houston Laboratory Team to facilitate the development of the analytical method used to test the drinking water system. A EPA drinking water expert co-located with State personnel at the Texas Commission on Environmental Quality (TCEQ) Austin office. The drinking water program worked closely with TCEQ to develop a defensible protective strategy to ensure that the drinking water was safe for residence once it was turned back on. ATSDR partnered with the Texas Poison Control to monitor potential exposures and complaints from residents that used the drinking water system. The Superfund Enforcement Team worked extra hours over several days, in coordination with the Emergency Response Team, to begin the investigation process to identify responsible parties and gather information to understand all aspects of the incident. Careful coordination with the Texas Attorney General's Office, TCEQ, and the companies Ergon and Valero was critical in being able to quickly resolve issues and achieve clarity regarding the who, what, when, where and why of the drinking water contamination incident.

Initial samples from Corpus Christi's drinking water system were collected by the TCEQ and sent for analysis to the Department of State Health Services (DSHS) laboratory in Austin. Upon learning the chemical nature of the asphalt emulsifier, DSHS determined that they had neither the expertise or equipment to analyze for Indulin AA-86. Therefore, the Team was tasked with the emergency capability development of an analytical method(s) for Indulin AA-86 in drinking water, and for developing the capacity to analyze numerous and recurring daily samples from the City's drinking water system, as well as, citizen health complaint derived samples on demand.

Houston Laboratory Team (Lab Team) developed two new, time critical, analytical chemistry methods, utilizing a liquid chromatography/mass spectrograph (LCMS) and a gas chromatography/mass spectrograph (GCMS), to detect Indulin AA-86 that was suspected of contaminating Corpus Christi's drinking water distribution system. Additionally, the Team provided 'around the clock' analysis services for over 200 drinking water samples collected during the incident, from confirmatory sampling sites as well as complaint verification sampling.

The Lab Team expeditiously and successfully, within 24 hours, developed not one, but two methods to detect Indulin AA-86 in drinking water, one utilizing a LCMS technique and one utilizing a GCMS technique, with method detection levels of 0.05 mg/l for LCMS and 0.28 mg/l for GCMS. The Lab Team was able to develop the two analytical methods, calibrate instrumentation, establish detection levels, analyze initial samples, and begin providing analysis results, all within 72 hours of notification of the incident. This herculean effort, and all negative test results, enabled TCEQ to lift the Corpus Christi drinking water advisory on December 18.

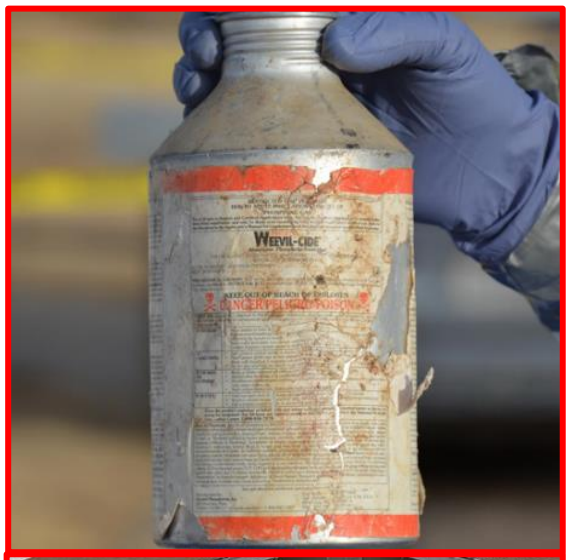
The entire EPA Team of highly qualified and dedicated professionals worked long hours, well past normal work hours and on weekends, to accomplish this emergency mission. None of the over 200 drinking water samples collected from across the City of Corpus Christi water supply system tested positive for the presence of Indulin AA-86 in drinking water at method detection levels. The Team was able to deliver data summary tables to the public expeditiously to demonstrate that the drinking water was safe for public consumption.

Cooperating Agencies:

Texas Commission on Environmental Quality
Texas Department of Health
Agency for Toxic Substances and Disease Registry
City of Corpus Christi
Nueces County

Region 6 Emergency Management Branch

Response Highlights: Amarillo Phosphine Incident, Amarillo, TX



Background: Tragically, 4 kids died and 6 other family members were hospitalized after the illegal application of a restricted use pesticide under a residential home. The incident occurred when an aluminum phosphide fumigant, under the house to address a pest problem. The application created strong odors in the house and the resident attempted to wash the material away using water. Aluminum phosphide, when mixed with water, creates phosphine gas, which is toxic and may ignite spontaneously in air.

Action: EPA joined TCEQ and the City of Amarillo within Unified Command. The Unified Command established a strategy to mitigate the threat posed to the surrounding community. EPA mobilized its START contractor to initiate air monitoring and sampling. TCEQ mobilized its removal contractor to remove the aluminum phosphide, deactivate it and dispose of it. R6 and HQ pesticide programs coordinated with the Texas Department of Ag on the investigation of how the resident obtained a restricted use pesticide. State, county and local health officials continue to focus on determining when or if the home will be safe for habitation. During the height of the response, EPA held daily coordination call to make sure all parties were kept update on ongoing activities.

Cooperating Agencies:

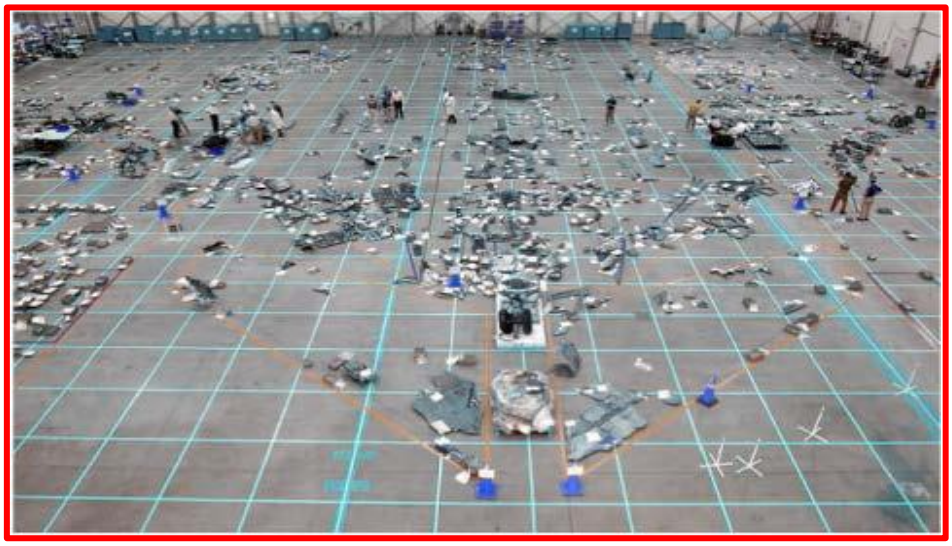
Texas Commission on Environmental Quality
Texas Department of Health
Texas Department of Agriculture
Agency for Toxic Substances and Disease Registry
City of Amarillo
Potter County Health Department

April 18, 2017

Large Disaster Responses

In addition, to the routine facility accidental releases and spills, Region 6 Emergency Management Branch staff respond to major man-made and natural disasters. Over the past 5 years, 18 % of all Presidentially Declared Emergencies and Major Disaster have occurred in the Region 6 area. As a result, Region 6 has the most Presidentially Declared Emergencies and Major Disasters in the country. Since 1999, the Region has experienced over 24 Hurricanes and Tropical Storms, including Hurricanes Gustav and Ike and Rita and Katrina. On average the “Tornado Alley” area experiences 190 tornados per year.

COLUMBIA SHUTTLE RESPONSE



EPA Region 6 responded under an Emergency Declaration from FEMA. Participated in largest interagency emergency mobilization in US History. In order to ensure public safety EPA participated in the identification and removal of hazardous materials from the shuttle debris. Approximately 76% of hazardous material containing tanks and cylinders were recovered and 38% of hazardous material pyrotechnics.

HURRICANE KATRINA/RITA RESPONSE

EPA Region 6 deployed within x days after landfall in its capacity as Emergency Support Function (ESF) 10. EPA performed search and rescue activities in the early days of the response, rescuing more than 800 citizens from flood waters during the first days of the flooding of New Orleans.

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Transitioned to sampling of floodwaters and sediment throughout the impacted areas. Sampling activities provided much needed information to responders on potential contaminated areas, as well as providing returning citizens information on their residential areas.

Conducted inspections and sampling of 3,588 trucks of drinking water which were delivered to Algiers for impacted areas. Working with LDEQ and the Louisiana Department of Health and Hospitals, we conducted over 1,030 POTW and 695 water treatment facility assessments to determine operational status, and what assistance was needed to resume operations.

Performed various activities such as: orphan container recovery, household hazardous waste collection, emergency response to flood affected chemicals and debris monitoring and sampling. Worked with LDEQ and the Department of Energy (DOE) to locate and assess radiation sources in impacted areas to determine stability of source. 250 sources were assessed and secured.

HURRICANE IKE RESPONSE

Pre-landfall EPA OSCs mobilized to San Antonio to join Texas Task Force Ike. Task Force Ike included Texas Task Forces 1 and 2 (Urban Search and Rescue), Texas Military Forces, federal partners, Texas Department of Public Safety (TDPS) and other state agencies, private sector partners, and mass care organizations. As soon as the storm passed over the Gulf Coast area and further inland, the team deployed to the affected area to initiate support for local communities.

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Post-landfall additional EPA personnel deployed to the impacted area and established ESF-10 Unified Command along with the US Coast Guard, Texas General Land Office and Texas Commission on Environmental Quality. Performed air and ground reconnaissance to conduct damage assessment. Assessed public water systems. Assessed potential emergency conditions resulting from oil and chemical releases, investigate complaints, and evaluate facilities. Performed mitigation of oil and hazardous material (HAZMAT) emergencies. Conducted reconnaissance, collection, segregation, staging, and disposal of orphan drums, tanks, cylinders, and other hazardous containers. Conducted hazardous debris and Household Hazardous Waste (HHW) collections.

DEEPWATER HORIZON OIL SPILL RESPONSE

EPA personnel Conducted Subsurface water monitoring and sampling operations and subsurface biota sampling from vessels. Conducted surface water sampling for oil and dispersant analysis. EPA's ASPECT aircraft conducted oil reconnaissance flight operations. EPA conducted air monitoring and sampling operations from various land based locations.

OKLAHOMA TORNADOS

EPA Region 6 has responded to tornado outbreaks in Oklahoma in 1999 and in 2003. EPA OSCs performed reconnaissance tornado damaged areas, responded to reports of hazardous chemical and oil releases and staffed several collection points within the damaged area, collecting household hazardous waste generated by the debris removal and storm cleanup.