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REGION 6 Preparedness, Response, and Prevention Update

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ANOTHER SUCCESSFUL REGION 6 ANNUAL LEPC CONFERENCE!!!!!

Thanks to the support of Pulaski County, Arkansas, EPA Region 6 CEPPO program, and all the attendees, we once again experienced another successful annual LEPC Conference. This year the conference was held in Little Rock, AR at the Double Tree Hotel on Jan. 23-25, 2006.

As in the past, we offered a free 8 hr. Hazardous Materials Refresher course on Monday. A special thanks to Jr. Hamric from Hepaco for the free training. On Monday, Chief Alan Bruancini from the Phoenix Fire Department held an all day workshop on ICS and customer service; he was also the opening speaker on Tuesday.

Break out classes on Tuesday included: "Hospitals and LEPC's" (Richard James and Ron Crane, UAMS), "Emergency Response Reviews" (Steve Mason). Tim Gablehouse from Colorado spoke on "The Future of LEPCs" and lead a panel discussion with state representatives concerning EPCRA issues. The conference was wrapped up with a wonderful closing speech by Chief Rhoda Mae Kerr, Little Rock Fire Department.

A special thank you goes to Chief Kerr, for setting up the trip to the Clinton Library; fun was had by all. We hope to see everyone next year!

Left: Conference hosts, Kathy Bodsford, Terry Henson, and Andy Trafanstedt; Pulaski County Office of Emergency Management

Right: Steve Mason and Kenny Harmon lead a session on ER Reviews. Approximately 250 people attended this year's conference in Little Rock, AR.

Hurricane Katrina, *articles retrieved from the websites of the National Oceanic Atmospheric Administration (NOAA); October 31, 2005 and the National Climate Data Center (NCDC); December 29, 2005.*

Hurricane Katrina was one of the strongest storms to impact the Gulf Coast of the United States in the last 100 years. It was the eleventh named storm, fourth hurricane, third major hurricane, and the first category five of the 2005 hurricane season. **Katrina's 902 mb (millibars) central pressure made it the fifth strongest hurricane in U.S. history.**

Initially, Hurricane Katrina developed as a tropical depression in the southeastern Bahamas on August 23. The following day it strengthened into Tropical Storm Katrina. It then turned westward toward Florida during the evening of August 25, and gradually strengthened. As it approached landfall between Hallandale Beach and North Miami Beach it became a Category 1 hurricane, with wind speeds of approximately 80 mph; gusts of 90 mph as it came ashore. As Katrina moved southwestward across south Florida it dumped over a foot of rain, toppling trees and power lines and damaging homes and businesses across south Florida. After passing over Florida, on August 28 it entered the Gulf of Mexico and eventually strengthened to a Category 5 hurricane; it was approximately 250 miles south-southeast of the mouth of the Mississippi River. Its winds reached 175 mph and the pressure fell to 902mb, the fifth lowest pressure on record.

Katrina eventually turned to the northwest and then north making landfall at 6:10 AM CDT on August 29 as a Category 4 in Plaquemines Parish, Louisiana with sustained winds of 170 mph and estimated minimum central pressure of 920 mb; the third lowest landfall pressure on record in the U.S. Katrina continued to move northward and made its second landfall near the Louisiana/Mississippi border at 10:00 AM CDT as a Category 3 and a wind speed of approximately 125 mph. On August 30, Katrina eventually started to weaken and became a tropical depression near Clarksville, TN.

Katrina's catastrophic impact covered the central and eastern Gulf Coast, where the maximum storm tides (combination of storm surge and tidal surge) occurred along the southern Mississippi coast. The National Weather Forecast Office (WFO) out of Lake Charles, LA estimated there was a 30 foot (above MSL) storm tide at the Hancock Emergency Operations Center and a 26 foot (above MSL) storm tide at Wortham, MS along the Biloxi River.

Due to the storm surge on Lake Pontchartrain in New Orleans, devastating flooding occurred in Orleans and St. Bernard Parishes. Approximately 80% of New Orleans was flooded; several areas reaching up to 20 ft of food waters.

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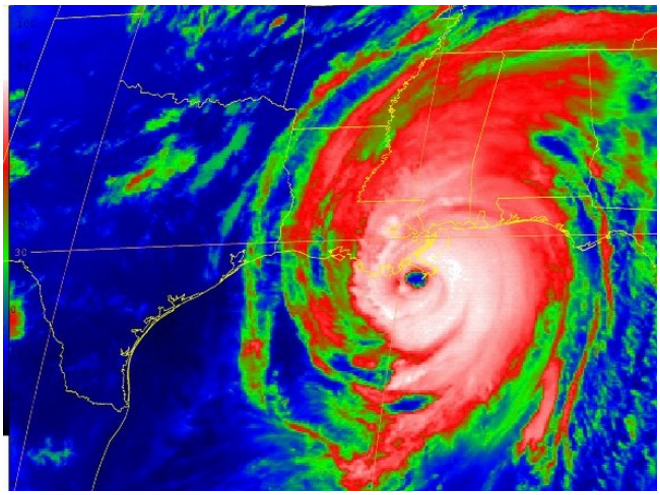


Katrina

Several days following the hurricane, the EPA supported rescue efforts and rescued approximately 800 people.

EPA Continues to Provide Support to Hurricane Katrina,

Information retrieved from the EPA's Katrina Key Messages and Talking Points

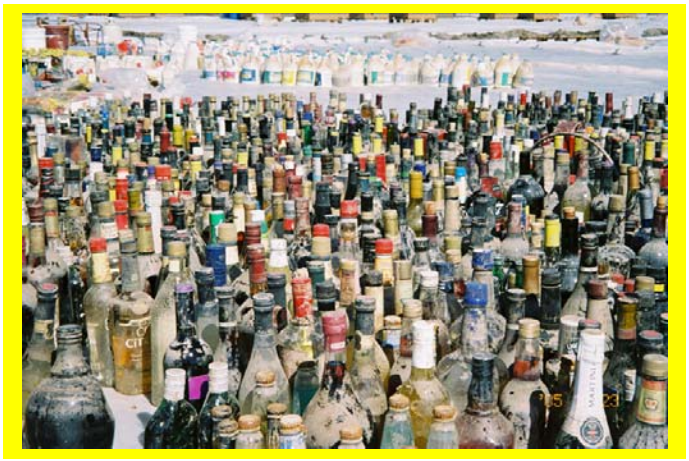
EPA continues to support FEMA with response operations in various parishes in Louisiana. They are working with the Coast Guard and Louisiana Department of Environmental Quality to address hazardous material threats generated by the hurricanes. FEMA issued Mission Assignments to ESF-10 (Emergency Support Function – EPA/Coast Guard) to collect and maintain environmental data in order to characterize the nature of environmental impacts of the hurricane, technical assistance, and provide recovery, removal, and disposal of hazardous substances. The Department of Health and Human Services (DHHS), more specifically the Centers for Disease Control, have a Mission Assignment to provide assistance with health and medical aspects of the conditions involving hazardous materials.

Communication to the public was assigned to DHHS, which is responsible for providing accurate, coordinated, and timely information to audiences affected by the hurricane. The audiences include governments, media, the private sector, and individual citizens. EPA assisted these efforts by distributing more than 2 million flyers/handouts on potential environmental hazards, drinking water safety tips, household hazardous waste collection and mold information.

ENVIRONEMTAL DATA

The following information was updated on February 15, 2006:

Air Quality: Results collected to date for ambient air quality samples appear to be typical for the region of the state and are below levels of health concern. All concentrations of the toxic air pollution are also below EPA one-year screening levels and Louisiana ambient air standards.



Air Monitoring Stations: Eighteen air monitoring stations will be established once access, site preparation, and electrical power supplies are completed at each site. The sites include LDEQ's original air monitoring sites, refitted with EPA equipment, as well as additional sites to monitor air quality during Katrina restoration activities.

Monitoring for metals, volatile organic compounds, polyaromatic hydrocarbons and particulate matter in and around the New Orleans area started on October 9, 2005. Approximate 5,221 air samples have been collected.

Drinking Water: EPA is working with the Louisiana Department of Health and Hospitals (LDHH) to assess drinking water facilities. Approximately 158 have been assessed. A few water providers are still not operational; however, some are under boil orders. LDHH oversees drinking water systems in Louisiana.

Oil Spills: The U.S. Coast Guard has responded to 6 major and 3 medium spills, totaling approximately 8 million gallons of oil. Much of the oil has been naturally dispersed, evaporated or burned off in a process known as in-situ burning. Approximately 4 million gallons of oil have been recovered.

Gulf Coast Water Quality: EPA's Ocean Research Vessel (OSV) "Bold", collected samples in river channels and near shore waters surrounding the Mississippi Delta. Results indicated the water was safe for normal recreational activity, including swimming.

Flood Water: Floodwater samples revealed elevated bacteria levels associated with untreated sewage. Pump water discharge sampling results were similar to discharged storm waters sampled from Orleans and Jefferson Parishes form 2001 and 2004. Unwatering of the flooded areas of Orleans, St. Bernard, Jefferson,

and Plaquemines Parishes has been completed and floodwaters no longer serve as a source exposure to residents returning to impacted areas. EPA has collected and analyzed 646 flood water samples.

Sediments: With the exception of a few areas like Murphy Oil, sampling results in most areas are similar to background levels prior to the hurricanes. Sediments in flooded areas are not expected to cause long-term adverse health effects, provided people use common sense and good personal hygiene and safety practices – such as, limit contact with sediments, minimize dust, and wash skin exposed to sediment with soap and water.

Exposure to the majority of residual sediment contaminants is expected to decrease over time due to growth of vegetation and the degradation and dispersion of the chemicals from natural processes in the environment. EPA has collected and analyzed approximately 974 sediment samples.

RESPONSE

Murphy Oil: EPA is overseeing Murphy's ongoing removal and sampling activities of residential properties. Samples are being taken inside and outside residences. To date, approximately 6,809 samples have been collected at 4,004 residences. EPA has collected 702 QA/QC split samples. Murphy has cleaned the exterior of 1,092 structures in the spill area, and approximately 20 more are done each day. They have also completed both interior and exterior cleanup on an additional 129 homes.

School Assessments: Hazardous materials have been removed from approximately 96 schools, and about 50 remain to be assessed.

Murphy Oil Spill

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FEMA RESPONSE UPDATE, *retrieved from www.fema.gov*

The following information was released on February 8, 2006:

1 With an estimated 90,000 square miles impacted and 400,000 individuals displaced by Hurricane Katrina the storm is the single largest natural disaster in FEMA's 26-year history.

11 Disaster Recovery Centers are still open in Louisiana. DRC's are one-stop information centers where victims can learn more about different types of state and federal disaster assistance, including loans from the U.S. Small Business Administration (SBA) for homeowners, renters and business owners.

45 States and the District of Columbia received Presidential emergency declarations after Hurricane Katrina. This total is the most declarations made for a single disaster in FEMA history.

607 To date, vessels federally funded by FEMA's Mission Assignment have been removed by U.S. Coast Guard.

1,980 The USACE has cleared debris from residential properties impacted by Hurricane Rita.

2,997 federal housing units occupied. These consist of HUD and USDA approved housing.

5,046 businesses approved by the U.S. SBA for disaster assistance loans. Total: $412.1 million.

65,057 Approximate **travel trailers and manufactured housing units as** temporary homes for hurricane victims. Louisiana has a significant number of such housing among impacted Gulf Coast states, nearly triple the number of units used after all of last year's Florida hurricanes and far exceeding any housing mission in FEMA's history.

70,358 LA Swift, the **free emergency bus system** between Baton Rouge and New Orleans for displaced residents, has served in seven daily round trips.

49,000 FEMA's Disaster Medical Assistance Teams worked around the clock at the New Orleans airport during the peak of patient movement operations, treating 49,000 patients. The team gave 65,000 immunizations and provided crisis counseling to 5,800 individuals, among other medical services.

81,737 There are more than 81,000 damaged roofs that have been temporarily covered under **FEMA's "Blue Roof" program**, operated by the U.S. Army Corps of Engineers. The program allows families to remain in their homes as they rebuild.

108,000 More than 108,000 claimants have been approved for **disaster unemployment assistance**.

256,735 In Louisiana, 256,735 checks were issued for **Other Needs Assistance**. The program provides assistance for serious, disaster-related needs to impacted individuals.

1.4 Million FEMA has completed **over 1.4 million housing inspections**. The inspection process includes a complete overview for structural damage. The inspector will look at the foundation, roof, flooring, drywall and ceiling. Heating, cooling, electrical and plumbing systems are also reviewed. The inspector will record all disaster-related damages, and a survey of damaged personal property, clothing and vehicles may also be conducted.

1.4 Million FEMA has issued 1.4 million **housing assistance checks,** totaling: $3.2 billion.

38.1 Million The U.S. Army Corps of Engineers has **removed 38.1.7 million cubic yards of debris**. FEMA has reimbursed the state at 100 percent for this expense and will continue to do so through June 30.

184 Million FEMA has obligated $184 million in **unemployment assistance** for eligible hurricane victims in Louisiana who signed up during the application period.

325 Million FEMA has paid or reimbursed more than **$325 million for hotel and motel rooms** for those without housing. 7

700 Million FEMA has approved $700 million in **Community Disaster Loans** in Louisiana to help keep essential services online in the hardest hit communities, including a $120-million loan to the City of New Orleans.

1.2 Billion $1.2 billion has been approved to individuals for **Other Needs Assistance**.

2.1 Billion More than $2.1 billion in federal dollars has been allocated for **Public Assistance** projects, such as debris removal and emergency services in Louisiana, equaling the amount allocated for PA grants in Florida in the eight months following the 2004 Hurricane Season.

4.7 Billion The SBA has approved more than $4.7 billion in **disaster assistance loans** to business owners, homeowners and renters in Louisiana.

3.5 Billion FEMA has paid out $3.5 billion in **housing assistance**.

4.5 Billion FEMA has provided more than $4.5 billion directly to Katrina victims for financial and housing assistance through the **Individuals and Households Program** (IHP). This is more than the $1.2 billion used for IHP after last year's Florida hurricanes. This amount is the most ever provided to victims by FEMA for any single natural disaster, nearly doubling the combined total of IHP dollars for the Northridge Earthquake in 1994 and 1992's Hurricane Andrew.

7.7 Billion FEMA projects a **$7.7 billion** payout for the individuals and households program.

12.6 Billion FEMA projects $12.6 billion in **payments under the National Flood Insurance Program** to policyholders in Louisiana. To date, over $11 billion has been paid out in Louisiana.

Emergency Numbers for Spill Reporting in Region 6

Arkansas Dept. of Emergency Management	800-322-4012
Louisiana State Police	877-925-6595
New Mexico State Police	505-827-9126
Oklahoma Dept. of Environmental Quality	800-522-0206
Texas Environmental Hotline	800-832-8224
**********	**********
National Response Center	800-424-8802
EPA Region 6	877-372-7745
CHEMTREC	800-424-9300

CAMEO CORNER

CAMEO Search:

What chemical is “light-tan” in color, has an IDLH of “300” mg/m^3, has “84” in its CAS# and has the synonym “Blitex”?

ALOHA Exercise:

At 9:07 am on March 17, 2006, a truck carrying canisters of Stibine was hit by a train on the frontage road of I-40 near S. Shepard Avenue in El Reno, Oklahoma. The collision caused 3 of the canisters hit the street (ground level 0 inches) and rupture releasing their entire contents of 450 pounds instantaneously. The buildings in the area are single storied and unsheltered. The wind is out of the southeast at 5 mph with a measurement height of 10 meters. The sky is completely overcast with an urban ground roughness. The temperature is 34° F with no inversion and humidity of 93%.

What is the downwind distance of the TEEL-1?
What was the release rate?

ANSWERS:

1. Ronnel, which is biocidal (toxic to all animal life in differing degrees) by its action as a cholinesterase inhibitor, is used as an insecticide.

2. 2.4 miles and 7.5 pounds/sec

Katrina Samaritans

Katrina also left haunting images of animal victims of the disaster. Thanks to thousands of volunteers, many animals were rescued and reunited with their families. Supplies such as food, treats, toys, kennels, shelter space, and money were donated by individuals and businesses from all over the U.S. Thankfully, the following story is one of many that represent the support of Katrina volunteers.

Inis Zelaya spent 12 days trapped by the floods that hit New Orleans after Hurricane Katrina, but her only concern was the safety of her pets and those of her relatives and friends. In all, she rescued 21 dogs, risking her life as she clambered on a ladder between properties to rescue her neighbor's pets. The disaster left her with nothing and now she is being helped by IFAW so that she can continue to care for her foster family of animals. "I was left with nothing but the clothes I am standing in, but I live for my animals. They are all that matters and the fact they are now safe makes me happy every day. I love them and they are my life," said 49-year-old Inis, whose home on Cleveland Avenue was wrecked.

"I knew I just had to get those dogs out"

"I used the ladder to get over the water to my neighbor's home and bust her window to get the dogs. I don't know how to swim so if I had fallen in I had no chance. Then I got a small boat and managed to move all the animals to the first floor of one property. People and animals were dying and drowning all around, it was very scary. "Those 12 days were a nightmare, but I knew I just had to get those dogs out. Eventually the Army came and they evacuated me, but I insisted the dogs go, too. Some belong to my cousins and my aunt - everyone is happy they survived."

Now with help from the International Fund for Animal Welfare (IFAW), Inis is caring each day for all of the dogs in her own dedicated area of the LSU Emergency Relief Animal Shelter in Baton Rouge. "Since I was evacuated, I have been back twice to rescue more animals from New Orleans," added Inis. "I just want to do everything I can to help rescue as many as possible." IFAW's Emergency Relief team leader, AJ Cady, said: "The courage this woman displayed is inspiring and beyond belief. It is hard to imagine the hell she went through to save these animals. We are glad we can now give her a helping hand in looking after them and getting her life back together."

IFAW is also playing a leading role at the shelter by providing animal transport to move animals across the US, administration help and other crucial support.

Left: Inis Zelya (left) holding Blackie and IFAW ER Team member Iben Munck (right) holding Blondie; LSU shelter

Right: 4 of the 21 dogs rescued by Inis Zelaya.

Katrina Photo Gallery

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