

## Regional Response Team RRT 6

**PERIOD OF REPORT: January 1 to December 31, 2006**

### I. MAJOR ACTIVITIES

#### A. MAJOR/NOTEWORTHY RESPONSE ACTIVITIES

##### Hurricanes Katrina and Rita – Response Effort Summary

The federal, state, and local response agencies across the hurricane affected areas continue to be engaged in a myriad of operations ranging from vessel recovery/salvage and debris removal to small/large tank, cylinder, and container recovery (hazardous materials). Through the implementation of the NRP and other response plans such as the NCP, unified commands have enlisted the assistance of the Regional Response Team and technical experts in responding to these catastrophic events.

To date, over 24,000,000 pounds of hazardous waste has been collected for proper disposal, which includes over 13,500,000 pounds of household hazardous waste (HHW). Additionally, over 380,000 white goods have been collected for proper Freon recovery; over 870,000 electronic goods collected for recycling; and over 82,000 pounds of ammunition and 1,900 firearms collected.

In terms of environmental monitoring, EPA has collected over 12,000 air, 650 water, and 2,600 samples to characterize the conditions for response personnel and citizens returning to the communities.

Work at the Murphy Oil spill area continues, with EPA contractors accompanying Murphy Oil contractors on indoor air sampling, exterior and interior cleaning of residences, soil remediation actions, and condemnatory inspections for the Parish, as well as clearing of properties for trailer placement by FEMA.

By the end of November, much of the HHW, orphaned container, ammunition, and special recovery operations had been transferred to the U.S. Army Corps of Engineers.

For the Coast Guard in Region VI, coastal zone oil spill response activity was complete by the beginning of calendar 2006. Sector New Orleans has worked hard this year collecting evidence for the coastal oil spill investigations for spills that occurred due to Hurricane Katrina. Vessel salvage activities have continued mostly in Louisiana (minimal activity in Texas). Although not funded under ESF-10 funds the work requires some element of oversight for potential pollution of the maritime environment. One particular case is highlighted below (tank barge MOR 152). Although the sinking of the barge was caused by Hurricane Katrina the salvage of the barge did not take place until calendar year 2006.

##### Stevenson LP Gas

- Date: October 24, 2006
- Location: Sallisaw, Oklahoma
- Product(s) involved: Propane, hydrogen fluoride

- A truckload of propane, contaminated with elevated levels of hydrogen fluoride, was delivered to approximately 76 residents from the responsible party. EPA was dispatched to the area to obtain samples of the contaminated propane at the residences and the LP gas business.
- Additional information available on EPA OSC webpage:
- [www.epaosc.net/stevesons](http://www.epaosc.net/stevesons)

#### Crawford Train Derailment

- Date: September 19, 2006
- Location: Crawford, McLennan County, Texas
- Product involved: Ethanolamine
- A Burlington Northern Santa Fe (BNSF) train derailed in a semi-rural area at the edge of the city of Crawford. 24 rail cars derailed including tank cars containing vinyl acetate, styrene monomers, tetrafluoroethane, and ethanolamine. The tank car containing ethanolamine was breached and approximately 22,000 gallons was released to the ground and nearby drainage ditch. A small vapor plume from the leaking tank car caused the evacuation of a one-half mile radius. EPA / START mobilized to the site and provided air monitoring capabilities, as well as providing technical assistance to State and local response officials
- Additional information available on EPA OSC webpage:
- [www.epaosc.net/crawfordderailment](http://www.epaosc.net/crawfordderailment)

#### Valero Refinery Sulfuric Acid Release

- Date: October 4, 2006
- Location: Houston, Harris County, Texas
- Product(s) involved: Sulfuric Acid
- A vapor release from a tank during the start of a turnaround caused the evacuation of the facility, a shelter in place around the facility, and transportation of approximately 20 employees to the hospital for observation from inhalation of the vapors. START contractors responded, provided air monitoring support, as well as providing technical assistance to State and local response officials.
- Additional information available on EPA OSC webpage:  
[www.epaosc.net/valerosulphuricacid](http://www.epaosc.net/valerosulphuricacid)

#### Explorer Tank Fire

- Date: June 12, 2006
- Location: Glenpool, Tulsa County, Oklahoma
- Product(s) involved: Burning Unleaded Gasoline

- A fire in a storage tank, caused by lightning, caused the evacuation and shelter in place of residences around the tank facility. EPA mobilized OSC, START contractor, and the ASPECT aircraft to the incident to conduct air monitoring and participate in the Unified Command.

Additional information available on EPA OSC webpage:

[www.epaosc.net/ExploreTankFire](http://www.epaosc.net/ExploreTankFire)

#### Wynnewood Refinery Fire

- Date: May 12, 2006
- Location: Wynnewood, Garvin County, Oklahoma
- Product(s) involved: Natural gas fire, hydrogen fluoride
- A fire in the HF alkylation unit raised concerns of an HF release, prompting an evacuation and shelter in place surrounding the facility. EPA and START contractors mobilized to the site to participate in Unified Command, as well as monitoring of the air for potential contamination.
- Additional information available on EPA OSC webpage:  
[www.epaosc.net/Wynnewood](http://www.epaosc.net/Wynnewood)

#### Huntsman Explosion and Fire

- Location: Port Arthur, Neches County, Texas
- Product(s) involved: A fire in the primary refrigeration unit caused the release of propylene and ethylene. A shelter in place was issued for the surrounding community.
- EPA / START dispatched to scene to conduct air monitoring. EPA participated in Unified Command as part of the response.
- Additional information available on EPA OSC webpage:  
[www.epaosc.net/huntsmanA&OExplosion](http://www.epaosc.net/huntsmanA&OExplosion)

#### MODU ZEUS

- Location: Freeport, TX
- Product(s) involved: Diesel Fuel and Oily Sludge (Totals being sampled and assessed).
- Cause of Incident: Rusted Hull and Deteriorated Deck Plating.
- Time and Date of Spill: September 13, 2006.
- MODU Owner: Mr. Emilio Sanchez
- Key Operational Activities: Boom off MODU and Remove Hazardous Materials.
- Major Lessons Learned: Immediate Identification of Owner and removal of barge (s).

CITGO Petroleum Corp. Spill

- Location: Lake Charles, LA
- Product(s) involved: 40,000 Barrels of Slop Oil
- Cause of Incident: Slop Oil Escaped From Above Ground Storage Tanks.
- Time and Date of Spill: June 19, 2006
- Owner: CITGO Petroleum Corp.
- Key Operational Activities: Closed 11 miles of the Calcasieu Ship Channel, a key lane for transporting petroleum in and out of the region's four refineries. As the response evolved from an emergency event to a remedial cleanup several telephone conferences were held with the incident-specific RRT to discuss a proposal by CITGO to use bioremediation in certain limited areas. The incident specific RRT participants approved the use of the bioremediation agents in the proposed site spill area of remediation which was around the source of the spill and along the outer perimeter of the contaminated area near the Indian Marais Canal.
- Major Lessons Learned: When a major waterway is impacted by response operations industry impact and economic impact must be evaluated carefully and reflected in daily reports.

T/B MOR 152

- Location: Lower Mississippi River (MM 73.1), right descending bank.
- Product(s) involved: Hazardous Waste Sludge. The sludge was an amalgamation of various heavy petroleum products, many apparently waste, which created an extremely viscous product with virtually no pour point and near perpendicular angle of repose. In order to create a product that could be pumped from the barge, high pressure jets created a slurry of approximately 2 million gallons which was successfully offloaded.
- Cause of Incident: Hurricane Katrina.
- Time and Date of Spill: August 29, 2005.
- Barge Owner: Unknown
- Key Operational Activities: Lightering of barge, rigging, salvage and recovery operations.
- Major Lessons Learned: This was a highly complex operation requiring months of preparation. The primary lesson learned is ensure adequate analysis is completed prior to re-floating sunken barges, including complete hull survey and a thorough understanding of products(s) contained and amount(s).

### Radiological Incident

- Location: Berwick, LA (Precise Piping & Clad)
- Product(s) involved: Piping was undergoing x-ray examination prior to shipping.
- Cause of Incident: Radiation readings were detected during a routine law enforcement patrol.
- Time and Date of Spill: November 27, 2006
- Facility Owner: Precise Piping & Clad
- Key Operational Activities: Quickly identified the source and set perimeter. Levels decreased to zero within two hours.
- Major Lessons Learned: Local responders do not have radiological response capabilities; only State Police have such capabilities.

### Valero/Citgo Refinery Spill

- Location: Corpus Christi, TX
- Product(s) involved: Oily Waste Water.
- Cause of Incident: Two separate spills, one at each facility (Valero spill; 4000 barrels) (Citgo spill; 5 barrels). The Valero spill was considered major and the Citgo spill was considered minor.
- Time and Date of Spill: June 01, 2006
- Facility Owner: Valero Refinery /Citgo Refinery
- Key Operational Activities: Quickly identified the source and responded by booming of oiled area. Restricted vessel movement within the waterway to one vessel at a time with thirty minute spacing.
- Major Lessons Learned: None reported.

### High Island Pipeline

- Location: Sector Houston/Galveston; (A pipeline, 60 – 70 Miles off shore).
- Product(s) involved: Heavy black oil (Approximately 21,756 gallons was reported discharged from the pipeline). RP reports that an estimated 1 barrel of product was being discharged every two hours.
- Cause of Incident: A vessel was anchored nearby and the ship's Master reported the vessel had drifted and dragged anchor in the vicinity of the pipeline.
- Time and Date of Spill: December 24, 2006
- Facility Owner: Plains Pipeline LP

- Key Operational Activities: Quickly identified the source and the responsible party (RP). Two response vessels conducted skimming operations, as weather permitted, with fast response skimming units. Source was secured using temporary plugs within a week of discovery.
- Major Lessons Learned: None reported.

## B. RRT MEETINGS

1. The RRT 6 winter meeting (USCG) was held in New Orleans during 10-11 January 2006. Topics covered during the meeting included:

State reports, RRT federal member reports, USCG Sector reports on significant incidents, RRT Committee Chair reports, presentation by Minerals Management Service on offshore hurricane response, Fish and Wildlife Service operations during the hurricane, Strategic Petroleum reserve response to the hurricane, a report on the Breton Island oil spill, a tour of the hurricane impacted areas around New Orleans, and a report on the MEXUS activities.

2. The RRT 6 spring meeting (EPA) was held in San Antonio during 27-28 June 2006. Topics covered during the meeting included:

State reports, RRT federal member reports, USCG Sector reports on significant incidents, RRT Committee Chair reports, presentation on pandemic flu, liquid storage tanks damaged by the hurricane, discussion of action items from previous meetings, lessons learned from the hurricanes, presentation on poison control centers, presentation on NOAA coastal research center and CHEMTAP project, changes to CAMEO, presentation on the Emergency Management Assistance Compact, SONS07, NFPA 472 changes, and the Texas TransCaer program.

3. RRT 6 Incident-Specific Conference Calls

### EXXON MOBILE, Baytown, TX

On November 12, 2006, the Incident Specific RRT, was convened to discuss the potential use of a "Surface Washing Agent", PES 51, to clean 3 contaminated barges from an approximately 1 barrel spill of #6 fuel oil. The responsible party, EXXON MOBILE, Baytown, TX, was proposing a spray and wipe method with PES 51. Mr. Charlie Henry, SSC, cautioned that the clean-up responders should be provided with the proper PPE for the application of this product. All of the RRT 6 incident specific members on the conference call gave consensus for the use of the surface washing agent. The clean-up process was successful without any additional pollution.

### Buffalo Barge 251 and Vessel Cape Blanco

On August 24, 2006, Sector Houston/Galveston received a request from the RP requesting the use of PES 51, surface cleaning agent, to clean the vertical portions of the vessel and sides of the Buffalo 251 barge. The vessel, Cape Blanco, had an area of approximately 75' x 75' that was oiled and required cleaning. The SSC wanted to confirm that the RP would use "gross cleaning first" and deploy sorbents before they used surface washing agents. Confirmation was provided that the RP had been cleaning the decks of the vessel and barge using sorbent pads. The surface washing agent was used for the oil that was stuck to the sides of both the vessel and barge. Technique 2 (Spray and Flush) from the, " RRT 6, Emergency Response Pre-approval

Guidelines to Decontaminate Vessel and Hard Structure in Coastal Port Areas” was used as there was not enough space between the barge and the vessel to use wiping pads safely. Sorbent sweep material was placed around the vessel and barge to capture any run-off. Sixteen hundred feet of containment boom fully encapsulated the cleaning area. All of the RRT 6 incident specific members on the conference call gave consensus for the use of the surface washing agent. The clean-up process was successful without any additional pollution.

#### CITGO Refinery/ Indian Marais, Lake Charles, LA

Two telephone conference calls, July 28 and August 02, 2006, were held to discuss the use of bioremediation for oil contaminated soil and shoreline in the Indian Marais area adjacent to the CITGO Refinery in Lake Charles, LA. The July 28, 2006 conference call resulted in a request for additional scientific information regarding the efficacy of the remediation workplan CITGO had proposed. Prior to the second conference call, the incident specific RRT VI members had received additional information about the procedures in the proposed work plan from Mr. Albert Venosa, a bioremediation expert with EPA (Cincinnati, OH). One discussion point was whether to require CITGO to conduct their remediation with a more scientific process to collect data for the effectiveness of bioremediation. However, the workplan was accepted as proposed after the product recommended for use was confirmed as being approved and listed in the NCP Product Schedule. CITGO enacted the bioremediation workplan approved by the RRT on 27 November 2006. The bioremediation efforts appeared to work well in the Indian Marais (canal) part, however, the technique was not as successful in the marsh land next to the creek, due to the fact that it was difficult to spray in that area.

### C. COMMITTEE AND WORKING GROUP UPDATES

The Science and Technology Committee is working on best practices for facilities with above ground storage tanks to use as a guide for preparations in anticipation of a natural disaster. A meeting was held at the Clean Gulf Conference to outline the work to date and future activities. A report on the committee’s progress will be delivered at the January 2007 meeting.

## II. GENERAL PREPAREDNESS AND CONTINGENCY PLANNING

### A. TRAINING

Several CAMEO training workshops were conducted by EPA / START personnel, as well as the State of Oklahoma DEQ to local / state officials.

The 7<sup>th</sup> Annual Hot-zone Conference was conducted in Houston, Texas, which is sponsored and conducted by several RRT member agencies. Over 700 attendees were provided 4 days of extensive hazardous materials training.

EPA Region 6 conducted its 11<sup>th</sup> Annual Local Emergency Planning Committee Conference in Little Rock, AR. Over 350 LEPC attendees were given basic and advanced training on LEPC activities, as well as other hazardous materials related planning topics.

USCG, RRT 6, conducted two, Levels 300 and 400, ICS training sessions for federal and state personnel. Both classes had approximately 30 participants per session.

Eighth Coast Guard District sponsored a Shoreline Cleanup Assessment Training, SCAT, in the Houston/Galveston area. This training took place December 4 – 8, 2006. Approximately 30 Coast Guard and the State of Texas, TGLO, personnel participated in this week-long training.

Area Committees in Louisiana and Texas continue to meet with their local, state and federal environmental groups, emergency managers, first responders, providing and sharing information. This information is used to update their Area Contingency Plans and the “One Gulf Plan”.

## B. EXERCISE/WORKSHOPS

Work is continuing on the Region 6 participation of the SONS 07 exercise, which involves a New Madrid Earthquake exercise. The scenario involves the State of Arkansas, and 2 EPA On-Scene Coordinators and USCG, Sector Lower Mississippi River, are working with the State / local officials on planning / coordination issues leading up to the exercise in June, 2007.

The fifth bi-national, United States and Mexico exercise was held from May 22 to May 25, 2006, in Matamoros, Mexico, in accordance with the Joint Contingency Plan between both countries regarding pollution of the marine environment by discharges of hydrocarbons or other hazardous substances (referred as the MEXUS Plan) signed in February of 2000. The exercise was attended by over 250 representatives from the United States and Mexican Federal, state and local agencies and was sponsored by PEMEX, the quasi-governmental Mexican National petroleum exploration and production company. Members of the exercise design team were from the Coast Guard Eighth District office; the Mexican Navy Zone 1 from Tampico, Mexico; Sector Corpus Christi; Texas General Land Office; and PEMEX.

On November 9, 2006, the State of Texas General Land Office, USCG, Sector Houston/Galveston, Marine Spill Response Corporation, MSRC, plus several other local spill response organizations located in the Houston/Galveston area, participated in a “Dispersant Application” exercise. This was the first dispersant exercise in over six years for the Houston area. CAPT John Hardin, USCG, RRT 6, Co-chair, had the opportunity to participate in this off-shore evolution.

## C. FEDERAL, STATE, AND LOCAL PLANNING AND COORDINATION EFFORTS

None to report

## III. PERSONNEL CHANGES

Captain John Hardin, Chief of Response at the Eighth Coast Guard District, became the RRT VI USCG co-chair.

Michael Baccigalopi (Texas General Land Office) was selected as the new, RRT 6, Chair of the Science and Technology Committee, replacing Buzz Martin (Texas General Land Office), who did an admirable job during his tenure.

## IV. ISSUES OR OPERATIONAL REQUIREMENTS REQUIRING NRT ATTENTION:

None to report