



FEMA

Volume 19, No. 4 REGION 6 Preparedness, Response, and Prevention Update December, 2006

Steve Mason, EPA Region 6
E-Mail: mason.steve@epa.gov

Joe Howard, DHS/FEMA Region 6
E-Mail: joe.howard@dhs.gov

In this Issue:

TransCAER rolls into Jacksonville, TX for railcar training..... 1

President Signs Bill Providing Authority For DHS to Set Rules for Chemical Plants4

1st Annual EMAT Preparedness and Response Symposium 4

EPA Raises Reporting Threshold for Some Nitrogen Releases..... 5

API & OSHA Recommendations for the BP Refinery Explosion, Texas City, Texas..... 5

Region 6 LEPC Contact and Coordinator Numbers 6

CAMEO Corner 7

Emergency Numbers for Spills in Region 6 7

Texas TransCAER rolls into Jacksonville, TX for railcar training; *information retrieved from Texas TransCAER.*

On September 28th, Texas TransCAER conducted a training exercise in conjunction with the community of Jacksonville, Texas. The drill was a simulation of a collision between a railcar carrying Hexachlorocyclopentadiene (UN 2646) and an SUV; this accident also caused three other vehicles and a motorcycle to collide. Additionally, the simulation showed that the railcar was leaking at a rate of 100 gallons a minute with 500 gallons of product on the ground.

There were 11 mock casualties with a range of injuries designed to test the response of the both the paid and volunteer fire departments, EMS, police department, and hospitals. The casualties included: head injuries, chemical exposure, 1st and 2nd degree burns, punctures, and broken bones.

| | |
|---|--|
| Observation # 1 | When the first police car arrived and observed the scene with the vapors coming from the tank car, they backed up and established an isolation zone one block upwind. Excellent job by Jacksonville Police Department (JPD) to isolate the area of the incident from the public; good initial assessment. |
| Observation # 2 | An Incident Safety Officer should be on the scene as mandated by CFR29.1910.120. Some training on proper lifting techniques for the Emergency Responders is needed; some of the responders were lifting with their backs and not their legs. |
| Observation # 3 | The Fire Department (FD) took the time needed to don their Personal Protective Equipment (PPE) before entering the hotzone; the 1 st FD entry team triaged multiple patients in bunker gear and Self Contained Breathing Apparatus (SCBAs). This was appropriate PPE for the chemical of concern, which had not been identified at that point but was known to be toxic based on the placards on the railcar. |
| Observation # 4 | The rear of one of the vehicles involved in the collision was on fire with 3 victims inside; FD rapidly evacuated the vehicle as soon as they were told that the van was on fire. |
| Recommendation # 4/ Opportunities of improvement | This was a good plan of action, however the FD moved 2 victims from their vehicles to a sewer drain curb, which was closer to the chemical vapors and worsened the victim's conditions. The fire was successfully extinguished; however, one victim was left in the hot zone for 30 minutes. |
| Observation # 5 | The FD set up the decontamination area as the 1 st entry team was in the hot zone. Good transference of care from hot to warm to cold zone/ team was observed. |

| | |
|--|---|
| Recommendation # 5/ Opportunities of improvement | The decontamination area needs to be established before the entry team is committed; all zoning needs should be done before or at the very least at the same time as entry to establish the entry/exit/decon corridor for the HAZMAT incident. The decontamination area was set up next to the sewer cover exposing patients to sewer vapors when it was known that the spilled chemical was entering the sewer system. RIT team needs to be <u>prepared & standing by</u> at the same time that the entry team is entering the hazard area. There was a lack of soap or surfactant to decontaminate victims. |
| Observation # 6 | A victim went back inside the hot zone concerned about the victim that FD had moved to the sewer drain curb |
| Recommendation # 6/ Opportunities of improvement | Site control is a necessity; victims should not be able to re-enter the hot zone. |
| Observation # 7 | The FD Captain (emergency operations chief) was in the hot zone trying to locate the railroad conductor or engineer. |
| Recommendation # 7/ Opportunities of improvement | The Incident Commander (IC) needs to stay out of the hot zone. |
| Observation # 8 | Two dump truck loads of sand were applied to the spill and storm sewer drains. |
| Recommendation # 8/ Opportunities of improvement | Good mitigation of the hazard and the affects that it may have had on the city sewer system and the environment; runoff from the decon area needs to be contained for later disposal. |
| Observation # 9 | Outstanding work on response and communications from all the departments represented. |
| Recommendation # 9/ Opportunities of improvement | Good utilization overall with the tools, equipment, personnel and resources that were available to mitigate the incident. Jacksonville FD has no hazmat team, for a city this size with many trains coming through, this could cause issues in responding to a hazmat event. Possibly Jacksonville needs a consultant to prepare paperwork for homeland security and fire district tax base grants to get money for equipment and training. This may be a good opportunity for TransCAER to volunteer someone with the expertise to connect Jacksonville with a grant writer. |
| Observation # 10 | Good organization in the EMS response of getting the victims to the hospital; the team recognized changes in patient status and responded appropriately. |
| Recommendation # 10/ Opportunities of improvement | No plastic or other shield in ambulance to avoid unnecessary contamination; minimal use of gloves, and patients were under triaged based on incomplete reviewing of patient information. |
| Observation # 11 | Good decontamination area at the hospital with a designated large area and a well trained and prepared staff. Good familiarization with decontamination and PP equipment; physician involvement was minimal but available. There was good organization of care and moving patients to in-house rooms. |
| Recommendation # 11/ Opportunities of improvement | It was unclear on the keeping patients who exceeded Level III (head injuries, 30% burns, and a pregnant woman with inhalation injuries in Jacksonville. Ventilation may need to be improved in the decontamination area; the current ventilation may be a problem depending on the wind and nature of the chemical. An area for the staff to disrobe prior to entering the cold zone would be helpful. A process for communicating between the hospital staff and the communication center is necessary. |
| Observation # 12 | Upon transportation from the accident scene, the patients were given a portion of their priority tag, so the medics did not have the baseline vital signs to gage whether or not a patient's condition was improving or deteriorating, because of this re-evaluations were necessary for some of the victims. When the patients were transferred to the hospital, the transport medic had no scene history so it had to be determined whether or not these patients needed to be decontaminated or not. |
| Recommendation # 12/ Opportunities of improvement | Patient accountability was well handled by the command staff, which assured that the patients were accounted for and had been treated. The City of Jacksonville should be proud of their city emergency services and medical treatment facilities; they are ahead of many other cities of comparable size and population. |

Mock chemical vapors escaping from the leaking railcar.



The initial mock collision and a fatality.



A firefighter attending to a mock casualty.



The decontamination and triage line.



President Signs Bill Providing Authority for DHS to Set Rules for Chemical Plants

information retrieved from the Bureau of National Affairs, Inc.

President Bush Oct. 4 signed a fiscal year 2007 appropriations bill for the Department of Homeland Security that gives the department authority to require "high risk" chemical plants to implement security measures.

The House and Senate approved H.R. 5441 Sept. 29 before adjourning to campaign for the midterm elections. The bill authorizes DHS to require compliance with its security requirements, including the authority to audit and inspect facilities, and shut down a facility if it is not complying.

The bill directs the department to establish risk-based and performance-based standards for chemical facilities to help protect against terrorist attacks. Chemical plants are required to conduct vulnerability assessments and create and implement site security plans based on their specific vulnerabilities, subject to approval by the secretary of DHS.

Interim authority is provided to DHS for up to three years until permanent, comprehensive authority is enacted.

The chemical security language was submitted to appropriators by Senate Homeland Security Committee Chairman Susan Collins (R-Maine) and House Homeland Security Committee Chairman Peter E. King (R-N.Y.)

Both the House and Senate Homeland Security committees took up chemical security bills (H.R. 5695, S. 2145) during the summer but were not able to resolve disagreements over requiring chemical plants to use "inherently safer technology" and allowing states to enact stricter standards. These proposals were favored by environmentalists but opposed by chemical companies. H.R. 5441 is silent on both issues.

The American Chemistry Council said Sept. 30 that the measure represents significant progress in the effort to secure America's chemical industry. ACC, the trade association of the chemical industry, represents 133 chemical manufacturers who encompass approximately 85 percent of U.S. chemical production capacity.

"While this bill is not a home run, Congress came through in the last inning to deliver essential chemical security legislation," the council said.

Marty Durbin, ACC managing director of federal affairs said industry would have preferred language to explicitly preempt state laws. However, he applauded the bill overall, noting it includes language to protect sensitive security documents from public disclosure and prohibit private lawsuits.

Several environmental groups had lobbied for a much stronger bill. Just prior to its passage, the environmental advocacy group Greenpeace Sept. 25 called the measure's provisions "a politically expedient bill designed for the fall elections." The legislation is inadequate, the group said, because it will exempt thousands of chemical plants from regulations unless DHS considers them high-risk facilities.

Greenpeace also objected to the bill's exemption of approximately 3,000 drinking water and waste water plants. The environmental group said the bill give DHS no criteria for choosing high-risk plants.

1st Annual EMAT Preparedness and Response Symposium

Information from EMAT

Please join us for the 1st Annual EMAT Preparedness and Response Symposium in Denton, TX on April 2-4, 2007. Some of the conference topics include Grant Writing, All Hazards Planning, a FREE HAZWOPER Refresher, and many, many more. You can participate as an attendee, a sponsor or an exhibitor. For more information, visit our website at www.hotzone.org and click on the EMAT logo.

EPA Raises Reporting Threshold for Some Nitrogen Releases

information retrieved from the Bureau of National Affairs, Inc.

The threshold quantity for reporting certain airborne releases of nitrogen dioxide and nitrogen dioxide will increase 100-fold under a final rule issued Oct. 4 by EPA (71 FR 58525).

Industries that emit nitrogen dioxide and nitrogen dioxide during combustion and related activities – while blasting at mining or construction sites, for example – will have to report those releases only if the releases are 1,000 pounds or more over 24 hours, according to the agency. The new threshold also applies to releases from accidents or equipment malfunctions.

Existing rules require reporting if the releases are 10 pounds or more within 24 hours.

Release reporting is required under the Comprehensive Environmental Response, Compensation, and Liability Act and the Emergency Planning and Community Right-To-Know Act, although the laws provide for exemptions in some cases.

EPA said raising the threshold is protective of human health and the environment and consistent with the agency's goal to reduce "unnecessary reports."

According to the agency, the existing threshold for reportable quantities is exceeded even during many routine operations.

The final rule takes effect Nov. 3 EPA proposed the new threshold level Oct. 4, 2005 (70 FR 57813).

API & OSHA Recommendations for the BP America Refinery Explosion, Texas City, TX

information retrieved from the www.csb.gov.

American Petroleum Institute (API) 2005-04-I-TX-R2

In light of the findings concerning the March 23rd incident at BP's Texas City refinery, revise your Recommended Practice 752, Management of Hazards Associated with Location of Process Plant Buildings or issue a new Recommended Practice to ensure the safe placement of occupied trailers and similar temporary structures away from hazardous areas of process plants. Ensure that the new recommended practice:

- Protects occupants from accident hazards such as heat, blast overpressure, and projectiles;
- Establishes minimum safe distances for trailers and similar temporary structures away from hazardous areas of process plants;
- Evaluates the siting of trailers under a separate methodology from permanent structures, since trailers are more susceptible to damage, are more readily relocated, and likely do not need to be placed near hazardous areas.

American Petroleum Institute (API) 2005-4-I-TX-R4

Revise API Recommended Practice 521, Guide for Pressure Relieving and Depressurizing Systems to ensure that the guidelines:

- Identifies overfilling vessels as a potential hazard for evaluation in selecting and designing pressure relief and disposal systems;
- Addresses the need to adequately size disposal drums for credible worse-case liquid relief scenarios, based on accurate relief valve and disposal collection piping studies;
- Warns against the use of atmospheric blowdown drums and stacks attached to collection piping systems that receive flammable discharges from multiple relief valves and urges the use of appropriate inherently safer alternatives such as a flare system.

Occupational Safety and Health Administration (OSHA) 2005-4-I-TX-R5

1. Implement a national emphasis program for all oil refineries that focuses on:

- The hazards of blowdown drums and stacks that release flammables to the atmosphere instead of to an inherently safer disposal system such as a flare. Particular attention should be paid to blowdown drums attached to collection piping systems servicing multiple relief valves;
- The need for adequately sized disposal knockout drums to safely contain discharged flammable liquid based on accurate relief valve and disposal collection piping studies

2. Urge states that administer their own OSHA plan to implement comparable emphasis programs within their respective jurisdictions.

Region 6 LEPC Contacts and Coordinators

| | | | |
|-------------|----------------|-------------------|--|
| Arkansas: | Kenny Harmon | 501-730-9750 | Kenny.Harmon@dem.state.ar.us |
| Louisiana: | Bob Hayes | 225-925-6113 X227 | bhays@dpsmail.dps.state.la.us |
| New Mexico: | Ron Breland | 505-476-9681 | Ronald.Breland@state.nm.us |
| Oklahoma: | Dale Magnin | 405-521-2481 | dale.magnin@dem.state.ok.us |
| | Tom Bergman | 405-702-1013 | tom.bergman@deqmail.state.ok.us |
| Texas: | Jim Ogden | 512-424-5677 | jim.ogden@txdps.state.tx.us |
| | Paula McKinney | 800-452-2791 | pmckinney@beh.tdh.state.tx.us |

EPA Region 6

1445 Ross Ave. Dallas, TX
75202

Phone: (214) 665-2292

FAX: (214) 665-2278

EMAIL
Mason.Steve@epa.gov

We're on the Web!

See us at:

www.epa.gov/region6/lepc

CAMEO CORNER

CAMEO Search:

What chemical is "light yellow" (general description), has a TEEL-1 equal to 25 mg/m³ and has "somnia" listed as a health hazard?

ALOHA Exercise:

At 2:38pm on October 31, 2006, a 55 gallon drum containing Triethylamine fell out of the back of a van with missing license plates in Pine Bluff, Arkansas (an urban area). The collision caused the drum to rupture and begin releasing the chemical from a 2 by 10 inch hole that is 6 inches from the bottom of the drum. The drum landed right side up not on its side and sparks from the drum sliding to a stop has caused the chemical pool to catch fire. The wind is 21 mph out of the West with a partially cloudy sky. The measurement height is 3 meters. The temperature is 52 degrees F with 67% humidity and no inversion. Model the drum as 85% full and the puddle diameter as unknown.

What is the distance of the yellow thermal radiation threat zone?

ANSWERS:

1. Cupferron
2. 31 yards

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 |

