



EMERGENCY RESPONSE REVIEW

Krum Mercury Response, Krum, Texas

FINAL REPORT, June, 2006

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The Environmental Protection Agency (EPA) Region 6 is issuing this Emergency Response Review as part of its ongoing effort to protect human health and the environment by responding effectively to chemical accidents. Emergency Response Reviews are designed to:

- Review with a local community and state officials the response procedures and outcomes to a specific chemical accident, affecting that community;
- Share information about chemical response safety practices;
- Develop potential recommendations and lessons learned to more effectively respond to an accidental release in the future;
- Build cooperation among local, state, and federal government agencies.

Emergency Response Reviews are entirely voluntary and may include all local, state, and federal entities involved with the response, as well as the responsible party and their representatives.

This document does not substitute for EPA's regulations, nor is it a regulation itself. It cannot impose legally binding requirements on EPA, states, or the regulated community, and may not apply to a particular situation based upon circumstances. This guidance does not represent final agency action, and may change in the future, as appropriate.

SUMMARY OF INCIDENT

On 6 January 2005 at approximately 1832 hrs, the Krum Fire Department was dispatched to the Krum Police Station. Upon arriving to the scene Officer Briggs of the KPD requested the FD assistance in securing the area around the police station.

Officer Briggs reported that a local resident had dropped of a jar of unknown substance at the police station. Initially the material was thought to be nitroglycerin. A mobile command unit, brush truck, and fire engine were placed at the intersection of Britton and First street to divert traffic, Jackson and McCart, and McCart and First to divert traffic.

Upon the arrival of the Denton Bomb Squad a briefing was held and it was determined that the jar should be detonated in the parking lot of the city hall. All members of the Denton Bomb Squad Team are Hazmat trained.

An evacuation was conducted within a 1/4 mile radius of the site. The material was surrounded by square bails of hay in order to control the blast. A safety briefing by the bomb technician was conducted prior to the detonation. The substance was secured and detonated by the Denton Bomb Squad. A fire engine and ambulance were placed in front of the city hall. \

A fire engine placed one hand line on ground for safety while an ambulance remained on stand-by. Media was staged at the church parking lot and Officer Easley was designated to be the PIO. Detonation proved to be successful, however upon reviewing the material post-detonation it was determined to be approximately 1oz of Mercury.

Hot, warm, and cold zones were established by the Denton Hazmat Team. The EPA tested the hay and site and found it to be highly contaminated. The substance was isolated, cleaned-up, and placed in hazmat trailer for pick-up.

Clean-up was conducted by the Krum Fire Marshall and Assistant Fire Chief. The mayor confirmed to Chief Mills that the city had no money to pay for clean-up expenses. The material was stored in the Krum fire station for several months due to waiting on information concerning possible payment by homeowners insurance.

However, the homeowners insurance declined payment. The Krum Fire Department has approximately 30-35 part-time/volunteer responders with 2 dedicated to EMS. Approximately 60% have Awareness Level training, 2-3 have Operations Level, and **no Technician Level**. The FD has a hazmat truck but it is only used to contain non-IDLH materials.

OBSERVATIONS / RECOMMENDATIONS

Observation / Recommendation # 1

All local response organizations should review protocols based on the following:

“Response teams to a disaster scene have a responsibility to first protect themselves and their team members. If you or your team is injured, not only are the number of victims increased, but the response is now delayed, resulting in additional resource utilization. This delay and need for additional resources due to your inability to keep yourself and your team protected could cost other victims their lives.

DISASTER Paradigm: Safety and Security

Don't be selfish - protect yourself. Scene priorities:

- Protect yourself and your team members first
- Protect the public
- Protect the patients
- Protect the environment

"Basic Disaster Life Support Manual, Version 2.5"

At an incident, safety should be the first concern of any responder. When fire fighters, police officers or emergency medical technicians become injured or contaminated, they become part of the problem, instead of a solution. It's unfair to ask first responders to risk their life, health, or the health of their families by becoming contaminated at an incident. Difficult decisions need to be made and risks taken should be weighed against the possibility of a positive outcome.

- ✓ OSHA 29 CFR 1910.120 -- Hazardous Waste Operations and Emergency Response (HAZWOPER)
- ✓ OSHA 29CFR 1910.134 -- Respiratory Protection (Commonly referred to in the fire service as the Two In/Two Out Rule)
- ✓ EPA 40 CFR 311 -- Worker Protection
- ✓ NFPA 471 -- Recommended Practice For Responding to Hazardous Materials Incidents
- ✓ NFPA 472 -- Professional Competence of Responders to Hazardous Materials Incidents
- ✓ NFPA 473 -- Competencies for Emergency Medical Personnel Responding to Hazardous Materials Incidents
- ✓ NFPA 1500 -- Standard on Fire Department Occupational Safety and Health Program

Observation / Recommendation #2

Local governments that respond to hazardous materials emergencies should always be aware of the potential for reimbursement under the Local Government Reimbursement program, operated through EPA. More information on this program can be found at:

www.epa.gov/region6/lepc

Observation / Recommendation #3

All local response officials should be familiar with the technical support and assistance available through their State and EPA Region 6 during a hazardous materials incident or oil spill. The State of Texas has a 24-emergency number: 800-832-8224; and EPA Region 6 24-hour number: 866-372-7745

Observation / Recommendation #4

The material should have been weighed prior to decision to detonate. With a close estimate of the weight, as well as common knowledge of hazardous materials, a determination could have been made that the material was probably not an explosive material, but mercury, based on the weight / density.

Fire departments should keep scales on a truck at all times in order to weigh unknown materials if applicable.

Observation / Recommendation #5

It is a federal law to report mercury spill of 1 oz or more. Once material was detonated, a release to the environment was involved. A report to the National Response Center should have been made to activate a potential federal response to the release, thus assisting the local community during the event.

Observation / Recommendation #6

The hazardous material was stored in the fire station for several months due to cost issues and delay in a reply from homeowners insurance.

Hazardous materials should not be stored in the fire station. Appropriate storage should be designated and set up for future similar situations.

Observation / Recommendation #7

Response organizations should ensure they have the 24 hour phone numbers for both EPA Region 6 (866-372-7745) and ADEM (501-703-9750); as well as the phone numbers for the National Response Center (800-424-8802) and CHEMTREC (800-424-9300).

Each of the emergency response reviews conducted within Region 6 show one consistent pattern: Emergency response personnel within Region 6 are to be commended for their professionalism and sincere desire to protect the citizens of their communities.

Region 6 EPA is grateful for the efforts made by all emergency response personnel, and hopes the above recommendations can be used to improve the response and preparedness readiness of a community, if a future emergency occurs.