

EMERGENCY RESPONSE REVIEW

**Callahan Landfill Fire
Bonham, Texas**

***FINAL REPORT
FEBRUARY 3, 2005***



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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 the evening of October 24, 2004, a fire was initiated in a previous landfill outside the city limits of Bonham, Fannin County, Texas. Ronnie Callahan owns the 120 acre lot of land that was involved in the fire.

In the 1960s and 1970s the northern side of the property operated as a landfill. In the 1990s this site operated as a salvage yard with a gas station at the southern end of the property. Both of these businesses have been shut down since that time.

Bulk and drummed materials from a business in Bonham, General Cable, had been disposed of on the property. Potentially, pesticides from VPG/Bonny Corporation were also disposed of on the property.

Approximately 5 weeks before the fire, Mr. Callahan hired 2 workers to clear and move debris into piles within the site. These piles contained cable and packing/filler for cable manufactured by General Cable in the 1980s. The piles also contained wood, drums, tires, trash and other materials.

At approximately 2025 hours, Dodd City Fire Department and Fannin County Emergency Manager Clint Wagstaff arrived on-scene of a fire at the property, involving two large piles of material. The Dodd City Fire Department staged their vehicles on the west side of the property. Chief Tim Weiler received tasking from Clint Wagstaff to evacuate homes near the path of the plume on the north side of the property.

Dodd City Fire Department evacuated approximately 12-14 residents from their homes, with one resident stating that smoke had entered her home. At approximately 2050 the Bonham Fire Department and Bob Clemmons, Fannin County Constable and Environmental Compliance Officer, arrived on-site.

Captain Billy Hughes of the Bonham Fire Department instructed the Dodd City Fire Department to stop evacuating residents, believing a satisfactory evacuation zone of over a mile from the site had been reached.

The Bonham Fire Department decided not to use water on the fire due to concerns of potential HAZMAT materials in the piles, and the potential of water runoff into a nearby creek.

At approximately 0040 on October 25, Jim Kerlin of TCEQ arrived on-site, and assumed Incident Command of the site. Jim Kerlin asked the 2 workers that had performed the excavation work on the site 5 weeks prior to help in extinguishing the fire.

EPA and EPA-START arrived on-site at approximately 0100 hrs, and offered assistance to local and TCEQ officials.

As work progressed on attempting to extinguish the fire, it was determined that the smothering efforts placed the workers at risk of exposure, so TCEQ stopped the operations at the advice of the EPA On-Scene Coordinator. TCEQ then initiated a call to the State cleanup contractors to extinguish the fire with existing equipment on the site.

TCEQ requested to retain the lead on response activities, which EPA concurred.

At 0200 hrs, Bonham Fire Department performed another evacuation in the same area due to residents returning to their homes before the fire was extinguished.

EPA-START personnel initiated air monitoring at approximately 0300, and detected no levels above background at the downwind residences.

At 0440 hrs, State cleanup contractors arrived on-site. EPA departed the site at 0600 hrs.

At approximately 0930 hrs, the fire was extinguished. At 1030 hrs, TCEQ and the Bonham Fire Department departed the scene.

EPA - START remained on site through the day performing photo documentation and data collection.

Additional information on this incident and response and can be found on the EPA Response Webpage:

www.epaossc.net/bonhampesticidefire

OBSERVATIONS / RECOMMENDATIONS

Observation / Recommendation # 1	<p>All local response organizations should review protocols based on the following:</p> <p>“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.</p> <p style="text-align: center;">DISASTER Paradigm: Safety and Security</p> <p>Don't be selfish - protect yourself. Scene priorities:</p> <ul style="list-style-type: none">● Protect yourself and your team members first● Protect the public● Protect the patients● Protect the environment <p style="text-align: right;"><u>"Basic Disaster Life Support Manual, Version 2.5"</u></p> <p>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.</p> <ul style="list-style-type: none">● 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
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<p>Observation / Recommendation # 2</p>	<p>All response / planning organizations within Fannin County should meet to determine the need for and effectiveness to re-invigorate the LEPC within the County.</p> <p>The Superfund Amendments and Reauthorization Act (SARA), Titles I and III states the roles of local governments in hazardous materials. The federal government has directed local governments to set up mechanisms to assure that planning and training are taking place. The LEPC is responsible for this at the local level.</p> <p>The "Hazardous Materials Operating Sites Practices" course from the National Fire Academy states:</p> <p>"The LEPCs' planning responsibilities included the following:</p> <ul style="list-style-type: none"> ● Identifying local hazardous material facilities and transportation routes. ● Preparing emergency response procedures for facilities and operators, emergency responders, and medical personnel. ● Designating community and facility emergency response coordinators. ● Providing for timely release of detection and notification procedures. ● Maintaining an inventory of essential emergency response equipment and facilities. ● Assisting in the development of evacuation plans, training programs, and planned exercises." <p>Information on establishing and maintaining an LEPC can be found at: www.epa.gov/region6</p>
<p>Observation / Recommendation # 3</p>	<p>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</p>
<p>Observation / Recommendation # 4</p>	<p>Response Organizations within Fannin County should ensure they have the 24 hour phone numbers for both EPA Region 6 (866-372-7745) and TCEQ (800-832-8224), as well as the phone number for the National Response Center (NRC 800-424-8802), and CHEMTREC (800-424-9300).</p>

<p>Observation / Recommendation # 5</p>	<p>As with virtually every other emergency response or simulated drill, communication was an issue in this response.</p> <p>The Dodd City Fire Department arrived on the scene and evacuations were begun thirty minutes before the Bonham Fire Department was aware of an incident taking place in its jurisdiction.</p> <p>Effective communications and information management are critical aspects of incident management.</p> <p>All organizations within Fannin County should work to resolve these communications problems during a response (i.e., notifications between organizations, hand off of incident command)</p> <p>An ideal solution would be to establish county wide 911 dispatching. At the very least, responders need to sign agreements, that would allow them to program each others radio frequencies into department radios.</p> <p>As command of an incident is established / passed / terminated, all personnel on the site should be notified of that action, via radio, in person, or by other means.</p> <p>Reference:</p> <ul style="list-style-type: none"> ● Homeland Security Presidential Directive (HSPD)-5, Management of Domestic Incidents ● National Incident Management System (NIMS), U.S. Department of Homeland Security, March 2004 ● NFPA 1500 - Standard on Fire Department Occupational Safety and Health Program ● NFPA 1561 - Standard on Emergency Services Incident Management Systems
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<p>Observation / Recommendation # 6</p>	<p>Anyone who responds to a hazardous materials incident should receive at least operations level HAZMAT training. All other individuals involved in the incident, including dispatchers, should be trained to a minimum of the awareness level.</p> <p>Awareness level training teaches you to recognize, identify, notify the proper authorities and to isolate an incident. All levels of HAZMAT training are required to have annual updates that demonstrate competencies.</p> <p>The Fannin County LEPC should work to obtain hazardous materials awareness, as well as basic Incident Command System (ICS), training for response personnel within the County who have not already received this training.</p>
<p>Observation / Recommendation # 7</p>	<p>All fire organizations within Fannin County should ensure they understand the rules for outdoor burning, per TCEQ regulations, and guidance. This would include limitations on approval, inspection, and termination of burning. Future classes by TCEQ should assist in this process.</p>
<p>Observation / Recommendation # 8</p>	<p>On all responses, organizations should look at the environmental impacts of response actions (i.e, runoff from fire fighting), but the first priority should always be the protection of the community and the responders. Recovery of environmental impacts is always easier than recovery of public health.</p>
<p>Observation / Recommendation # 9</p>	<p>As State and Federal response officials arrive on-scene, their overall goal is not to take over the incident, but to assist the local officials in an effective, safe response.</p> <p>Local officials should be prepared to provide to State and Federal officials upon arrival two things:</p> <ol style="list-style-type: none"> (1) who is in charge of the incident; and (2) the plan of action on how to properly respond to the incident. <p>This will help ensure consistent messages being provided to each organization.</p>

<p>Observation / Recommendation # 10</p>	<p>Response Organizations within Fannin County should understand that if a response involves hazardous materials, then an official should not be appointed or take on the role of Incident Commander, unless that official has specific Incident Command training.</p> <p>The use of the incident command system is mandated to be the operating management system for all response personnel. This includes law enforcement, emergency medical, fire, public works and anyone who might be expected to respond.</p> <p>The senior emergency response official becomes the incident commander.</p> <p>"Incident commanders will have received the operations level training and in addition will have knowledge and abilities to carry out their employer's incident command system and emergency response plan.</p> <p>"In addition, incident commanders must have an understanding of the hazards and risks associated with operations conducted in chemical protective clothing as well as knowledge of the importance of proper decontamination procedures."</p> <p style="text-align: right;">National Fire Academy, Hazardous Materials Incident Management</p> <p>OSHA 29 CFR 1910.120 and EPA 40 CFR 311 mandate an incident command system be the operating management system for all response personnel.</p> <p>This includes law enforcement, emergency medical, fire, public works and anyone that might be expected to respond. The incident commander is responsible for the success of the entire operation and the safety of all personnel involved.</p> <p>The National Incident Management System requires that field command and management functions be performed in accordance with a standard set of incident command system organizations, doctrine and procedures.</p> <p>Using these procedures establish common terminology and standards that allow organizations to work together effectively.</p> <p>References:</p> <ul style="list-style-type: none"> ● National Fire Academy, Hazardous Materials Incident Management.
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<p>Observation / Recommendation # 11</p>	<p>Using the LEPC as a potential forum, all response organizations within Fannin County should work to better understand the working agreements between the various response organizations.</p> <p>Presently, these agreements do not seem to work satisfactorily for the various organizations within the County.</p> <p>Mutual-aid agreements need to be written and signed with all neighboring or nearby jurisdictions.</p> <p>"At a minimum, mutual-aid agreements should include the following elements or provisions:</p> <ul style="list-style-type: none"> ● definitions of key terms used in the agreement; ● roles and responsibilities of individual parties; ● procedures for requesting and providing assistance: ● procedures, authorities, and rules for payment, reimbursement, and allocation of cost; ● notification procedures; ● protocols for interoperable communications; ● relationships with other agreements among jurisdictions: ● workers compensation; ● treatment of liability and immunity; ● recognition of qualifications and certifications; and ● sharing agreements, as required. <p>Authorized officials from each of the participating jurisdictions will collectively approve all mutual-aid agreements." - The National Incident Management System (NIMS)</p>
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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.

Emergency Response Review (December 6, 2004) Attendees

Steve Mason	EPA OSC
Valmichael Leos	EPA OSC
Scott Harris	EPA OSC
Todd Wolfard	EPA-START
Christy Tullis	EPA-START
Angie Mills	EPA-START
Mike Goldsworthy	FEMA Region 6
Jim Badgett	Texas Division of Emergency Management
Jim Kerlin	Texas Commission on Environmental Quality
Captain Billy Hughes	Bonham Fire Department
Clint Wagstaff	Fannin County Emergency Management
Pat Hilliard	Fannin County Commissioner
Chief Tim Weiler	Dodd City Fire Department
Derrell Hall	Fannin County Judge
John Ockels	Texoma Council of Governments
Captain Michael Garcia	Dodd City Fire Department