



EMERGENCY RESPONSE REVIEW

U.S. Environmental Protection Agency, Region 6

Triad Transportation, Benton, Arkansas

Final Report :: August 24, 2007

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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 Saturday, 12 May 2007 at 1215 hours, an explosion occurred on a semi-trailer at the Triad Transportation's hazardous waste transportation facility, which is located in a semi-rural area between Benton and Glen Rose, Arkansas on US Highway 67.

The impacted trailer, Trailer 5, was situated in a line of six trailers, each storing various hazardous waste materials; the cause of the explosion at the time of the review is unknown.

The Turtle Creek Fire Department was first on-scene; fire departments from Glen Rose, Traskwood, Haskell, and Benton also responded to the explosion and resulting fire.

The fire departments applied approximately 10,000 gallons of water to the fire and to Trailer 6 (per information provided by the Incident Commander), which was located next to Trailer 5, in an effort to cool its contents.

Trailer 6 contained multiple hazardous waste materials, including thousands of disposable lighters with residual contents.

The impacted Trailer 5 contained approximately 3,000 pounds of sodium, packed in diesel, and sixty other hazardous materials; more than 80% of the trailer was destroyed.

Fifty to seventy homes were evacuated, and roads around the facility were closed within one-half mile in all directions; no injuries were reported as a result of the explosion.

ADEQ responded and provided assistance to the Incident Commander. Additionally, the EPA Superfund Technical Assessment & Response Team (START) responded.

The Center for Toxicology and Environmental Health (CTEH) responded at the request of Waste Services, the contractor for TRIAD, and provided air monitoring support.



The air was monitored for volatile organic compounds (VOCs), particulates, oxygen, carbon monoxide, hydrogen sulfide, lower explosive limits of methane (LEL), sulfur dioxide, and nitrogen dioxide.



No abnormal concentrations of the aforementioned elements were detected from the plume. SKC pumps and Minican samplers were also utilized to capture air samples for the analysis of PAH, Method 7300 for metals, and EPA Method TO-15.

A berm of sand was placed to collect the firewater runoff and prevent it from entering a nearby creek.

The fire departments decided to let the fire burn out without further application of water, due to the possible presence of water reactive materials and to mitigate the runoff issue.

The fire was extinguished without water by Sunday morning, May 13; the emergency phase of the response was completed, and the evacuation was lifted.

I-30 remained open during the response; however, approximately 1.2 miles of Highway 67 was blockaded by local law enforcement for the duration of the response activities and overnight.

After the fire was extinguished and the trailers were moved, contractors removed the impacted soil and performed confirmation soil sampling for the analysis of hazardous materials. No runoff was observed during the event; however, water samples and sediment were collected for hazard analysis as a precautionary measure.

A local citizen reported a fish kill, however no avian or fish kills were observed by EPA. ADEQ asked Arkansas Game and Fish (AGF) to investigate the citizen report; AGF did observe a fish kill and sampled the area but the results were inconclusive.

Responding personnel included the following organizations:

On Scene

- Benton Fire Department
- Turtle Creek Volunteer Fire Department
- Glen Rose Volunteer Fire Department
- Haskell Volunteer Fire Department
- Haskell Police Department
- Lonsdale Volunteer Fire Department
- Saline County Sheriff's Office
- MedTran Ambulance/ Saline Memorial Hospital
- Arkansas State Police
- Arkansas Highway Police
- Saline County OEM
- Saline County Judge
- Arkansas Highway and Transportation Department
- Arkansas Department of Environmental Quality

- Waste Services, Inc
- Center for Toxicology and Environmental Health, LLC (CTEH®)
- EPA - START: Weston Solutions

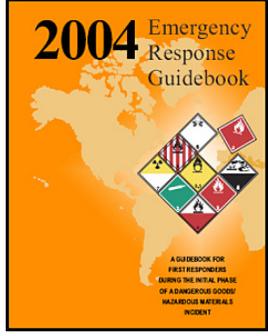
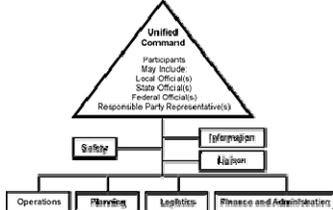
Remote Assistance

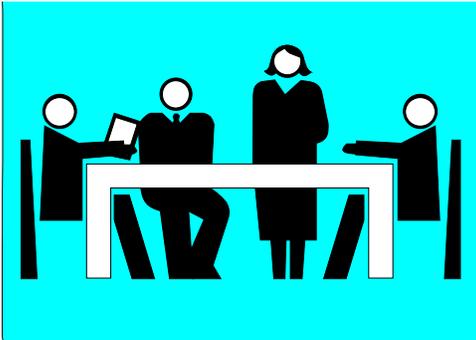
- Saline County 9-1-1
- Benton 9-1-1
- Arkansas Department of Emergency Management
- U.S. Environmental Protection Agency
- RINECO

Post Initial Response (day 2)

- Arkansas Game and Fish Commission

OBSERVATIONS / RECOMMENDATIONS

<p># 1</p>	<p>EPA Region 6 commends the tremendous effort carried out by all response organizations referenced above during the response effort. Throughout the response, numerous local responders displayed professionalism in their efforts.</p> <p>All local response organizations should review their response 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 the number of victims is increased, but the response is now delayed, resulting in additional resource utilization.</p> <p>DISASTER Paradigm: Safety and Security -- Don't be selfish - protect yourself. Scene priorities: Protect yourself and your team members first</p> <ul style="list-style-type: none"> • Protect the public • Protect the patients • Protect the environment <p>Once your team has safely entered the scene, focus on protecting the public ..."</p> <p style="text-align: right;">"Basic Disaster Life Support Manual, Version 2.5"</p>
<p># 2</p>	<p>The local responders have already submitted a reimbursement request to the responsible party, who is reviewing the request and will contact the community with their response.</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:</p> <p>www.epa.gov/region6/lepc</p> 
<p># 3</p>	 <p>Response Organizations within Benton County should ensure they have the 24 hour phone numbers for EPA Region 6 (866-372-7745), The State of Arkansas 24-emergency number: 800-322-4012; as well as the phone number for the National Response Center (NRC 800-424-8802), and CHEMTREC (800-424-9300).</p>
<p># 4</p>	<p>At least 20 of the local responders were trained to either the HAZMAT technician or operations level; this is in large part due to the training offered by the Arkansas Department of Emergency Management.</p> <p>Anyone who responds (in a defensive or offensive mode) 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, and 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># 5</p>	 <p>The fire departments, County Emergency Management, and ADEQ established a Unified Command (UC) structure to ensure that local, State, and private resources were effectively utilized.</p> <p>Unified Command is vital for an effective response; this command system provides the best manner of communication between the multiple agencies.</p>

<p># 6</p>	<p>Media helicopters from the Little Rock area flew over the incident for pictures and information; the UC asked for and was granted a restricted fly zone from the FAA.</p> <p>The LEPC should encourage membership from local media, improving dissemination of accurate information to the public. The LEPC can also provide media with pertinent information, reducing for the perceived need of the media entering the hotzone to gather facts.</p> <p>Saline County should work to have media contacts on their LEPC to pre-plan emergency communications.</p>	
<p># 7</p>	<p>The community evacuation was incomplete; people returned to their homes to gather belongings; response personnel traveled through the hotzone to evacuate people.</p> <p>More personnel were needed to perform the evacuation and to isolate the incident. Local dispatch effectively drew in resources from other area fire departments to provide additional response personnel.</p> <p>Once evacuees have left their homes, they should not be allowed to return until the evacuation order has been lifted. Response personnel must be aware of their own personal safety when evacuating community members.</p> <p>Mutual aide agreements between departments and counties can increase the pool of assistance that a fire department can draw from.</p>	
<p># 8</p>	<p>Water was initially applied to the fire; this creates a concern as chemicals in the trailer were originally unknown and could have been water reactive.</p> <p>The facility could not provide a bill of lading to the responders for approximately 3 hours. Additionally, there were no Tier 2 or TRI reports available to the responders.</p> <p>The community has asked the Department of Transportation to perform an inspection of the Triad facility.</p> <p>Saline County should work to have industry members participate in the LEPC to pre-plan emergency communications and foster relationships between the agencies and the business members of the community.</p>	
<p># 9</p>	<p>Not all State agencies were aware EPA was responding; this caused coordination and communication confusion.</p> <p>EPA normally receives notification of an incident through the NRC, and then responds, if deemed appropriate, or to a State or local request for assistance.</p> <p>When EPA responds to an incident, normal communications is with the Incident Commander and requesting state agency. The requesting state agency can then communicate with other state agencies, as outlined in the state plan.</p> <p>EPA should work to ensure that all State partners are aware of an EPA response to an incident, so a coordinated response is effective, and that resources and actions are not duplicated.</p>	

<p># 10</p>	<p>Communication is a concern in every response. Communication between the various response agencies is vital for the safety of the responders and the community.</p>  <p>In this response, radio communications were many times ineffective; the fire department resorted to cell phones for communication purposes. Additionally, fire departments could not communicate with Saline County OEM without changing channels.</p> <p>As an example, one fire department went through the road block, instead of detouring, as they were unable to hear radio communications.</p> <p>While the response is in progress, primary radio channels can be tied up, potentially disrupting other emergency operations.</p> <p>Saline County OEM can provide training for newly purchased radios. Saline County OEM is working towards placing more communication towers, using CSEPP funds.</p> <p>In the county and agency mutual aid agreements, it should be designated which radio channel will be used in each area. All agencies should coordinate and utilize the same radio channel. Responders can receive a designated channel for the incident from ADEM.</p> <p>Additionally, a 3rd channel should be designated for dispatch so that normal emergency operations can continue.</p>
<p># 11</p>	<p>Saline and Pulaski Counties have a combined LEPC, which is not currently active.</p> <p>All response / planning organizations within Saline and Pulaski Counties should meet to determine the need and effectiveness to re-invigorate an LEPC within the County.</p> 
<p># 12</p>	 <p>Many locations within Saline and Benton Counties will be prone to HAZMAT events, due to the nature and location of the business (proximity to highways, truck traffic, etc.)</p> <p>Pre-planning activities and drills at key locations can increase the effectiveness of the response agencies during an actual incident.</p>
<p># 13</p>	<p>The wells of individuals were sampled and results were sent back to the well owners. Saline County requests guidance on interpretation of sample results for community awareness.</p> <p>ADEQ conducted interpretation follow-up calls to individuals within the area. After an incident, state numbers for appropriate environmental and emergency management agencies should be disseminated to the community for follow-up questions.</p> 

Overall, the response efforts by all parties (local, state, and the responsible party) are to be commended. Region 6 EPA hopes the above recommendations can be used to improve the response and preparedness readiness of the community, if a future emergency occurs.

Emergency Response Review (June 20, 2007) Attendees

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Mark Mills, Benton Fire Department
Angie Mills, EPA-START
Jeff McCully, EPA-START
Sgt. Tim Dudderar, Saline County Sheriff's Office
Lanny Fite, Saline County
Michael Holt, Haskell Police Department
Buz Bartholmey, Waste Services
Michael Parette, ADEQ - ER
Karen Bassett, ADEQ
Matt Brumley, Medtran Ambulance/ Saline Memorial Hospital

Kenny Harmon, ADEM
Jack Stark, EPA-SEE
Johnny Cooper, Turtle Creek Fire Department
Jonathan Greer, Saline County
Jolene Palmer, Saline County OEM
Jimmy Cooper, Turtle Creek Fire Department
Dean Vanderhoff, ADEQ - ER
Melanie Foster, ADEQ - HAZWASTE
Rick Keller, ADEM
Terrell Burks, Saline County OEM