



Table Top Training Drills

Table Top Exercise-March 2011

Responding to Gas Leaks

Responding to a gas leak emergency is a type of response that can be a very minor situation such as a leaking stove or malfunctioning gas burner or it could be a large scale event that involves the entire block. Sometimes the situation that is presented may be only a small piece of the entire scenario. The actions taken by the first arriving units can have a serious impact on the outcome. In near-miss report [09-909](#) units arrive at a vacant residential structure with a strong odor of gas. Place yourself at the scene of the alarm and discuss your department's SOP/SOGs on gas emergencies.

Event:

Units responded to a report of a natural gas odor. Upon arrival, the deputy chief located the caller who stated that the vacant house next door has a strong odor of gas coming from it. After a complete 360 degree walk-around, the deputy chief confirmed the dispatch. The house had a "FOR SALE" sign in the front yard and was reported to be vacant. The gas line going into the structure was shut off by the fire department. The gas utility company was notified and responded. Once the gas company arrived, the fire department gained access to the structure but did not enter. After venting the structure for approximately twenty minutes, the fire department entered. Once in the house, they entered the utility room to find a gas line for a gas clothes dryer was left in the "on" position. The dryer had been removed. Right next to the gas dryer was a wash sink with water slowly running from the faucet. The water was hot water. In the same room and in close proximity to the gas line was a hot water heater. This created the perfect recipe to blow up a house. Upon further investigation the house just went into foreclosure. We consider this a close call because, if we had just entered this house, we potentially could have lost an entire company. The decision to not enter this vacant building was important and communication was a key factor.

Lessons Learned:

Always conduct a 360 degree walk-around. Notice "FOR SALE" signs, identify vacant properties, and talk to neighbors. Step back and proceed cautiously when responding to situations like this. Good decision making and communications skills are always key factors. Maintain situational awareness when planning what to do. Remember to conduct a complete size-up and use caution when responding to reported gas odors. Good communication and command structure protected the responders from a potential disaster. When approaching a structure with a suspected gas leak inside, use a meter and check explosive levels before entering. To help mitigate this situation, we utilized a gas powered fan to ventilate. However, for safety purposes, we started the fan at a remote location and then walked it to the position just outside the front door. Remember, if a scene seems suspicious, do not tamper with evidence. In this case, we notified the police department and the Fire Investigation Unit for further investigation.

Discuss the operational checklist below in addition to the successful tactics used in this report.

Odor of Gas

1. Obtain information from the caller or occupant such as:
 - Was anyone doing plumbing, excavation or construction on the premises?
 - How long has the odor been present?
2. Be aware that gas may be entering the building from an outside leak.
 - Is there an odor outside?
 - Are any utility trucks/workers, construction sites or recently patched sections of pavement in the area? These may indicate that recent or ongoing work may be the source of a gas leak.
3. Does the combustible or digital gas indicator indicate the presence of gas?
4. Determine if the gas is leaking from a high or low pressure gas system. Look for vents and/or regulators.

Tactics

1. Notify the gas utility company for an immediate response.
2. Wear full PPE when operating at these incidents and wear SCBA facepiece when operating in a gas atmosphere.
3. Do not position apparatus in what is or might become a hazardous area.
4. All units should stay out of the potential collapse or ignition zone.
5. Ladder companies should take a preliminary safe position that will allow them access to the building.
6. Engine companies should take hydrants in safe locations and prepare to stretch lines as needed.
7. Locate gas leak.
8. Ventilate as necessary.
9. Shut the gas supply as close as possible to the leak.