

Summary

Regional Incident Survey Team (RIST) Report

Eastern-0905-Fixed

Regional Incident Survey Teams (RIST)

RISTs gather information for the National Hazardous Materials Fusion Center. RISTs are composed of individuals from around the country who are skilled and experienced in hazardous materials (hazmat) response or experienced in the hazmat industry. RIST members are part of a team invited by a local jurisdiction or state authority to conduct a survey of an incident response of interest and record information from the responder's perspective. In no case is the data intended to be used to criticize or condemn response actions, but rather to share lessons learned and smart practices with other emergency responders who may face a similar response.

Incident Type

Fixed facility

Container

Storage tank

Hazardous Material

Hydrogen (gas), UN 1049

Overview

On a late fall evening, in an eastern United States community, emergency personnel responded to a local retail gas station for a report of a leak. The local weather conditions were clear skies, temperature at 15°C (59°F) and slight, variable winds. At 2309 hours local time, the 9-1-1 call center received a report of a fuel spill and dispatched the call as a still alarm with a single engine company response.

While en route dispatch advised units that there was a report of a gas leaking from the fuel pump with smoke visible. The response was upgraded to a full hazmat assignment at 2313 hours. The responding chief officer advised units that this gas station also provides hydrogen refueling and all units should stage two blocks away.

On arrival of the first due engine company, the officer reported a gas tanker on site and several cars at the fuel pumps with nothing visible. The chief officer advised the first due officer to utilize his/her thermal imaging camera to check for heat and/or fire as he/she enters the area to investigate. On further investigation, units found a leak in the area of the hydrogen storage area behind the gas station. Units activated the emergency disconnect for the hydrogen storage area, which did not control the leak.

Units set up a defensive operation with hand hose lines and air monitoring of the area until a representative of the gas company was on scene to assist with mitigation. On arrival of the gas company representative, units and the representative, made entry to the hydrogen storage area where they were able to shut off the main control valve at the hydrogen storage tank to stop the leak. The incident was reported as under control at approximately 0300 hours.

Lessons Learned

- Isolation areas were established using the *Emergency Response Guidebook (ERG)*.
- Initial use of the thermal imaging camera to look for heat and/or fire proved to be a valuable strategy.
- Initial responding units were familiar with the location but did not have access to facility pre-plans.
- Gas station employees were unfamiliar with the hydrogen operations and had no contact information for the gas company service personnel. This created a long delay in

getting technical resources to the scene. Emergency shutoffs did not control the leaking gas. Post incident, the valves have been changed to allow a complete shut down from the source of the hydrogen system by activating the emergency shutoff.

- Thermal heat detectors and security cameras were on site but no one from the gas station could say where they reported to.

For more information on this and other incidents visit the National Hazardous Materials Fusion Center at <http://www.hazmatfc.com/>