Summary

Regional Incident Survey Team (RIST) Report

Eastern-0904-Transportation

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

Transportation

Container

Cargo tank truck, believed to be an Motor carrier (MC) 306

Hazardous Material

Ethanol, UN 1170

Overview

On a late spring afternoon, in an eastern United States community, emergency personnel responded to a report of a tanker rollover on a major interstate on-ramp.

The local weather conditions were

- mostly cloudy skies,
- temperatures at 19°C (66°F),
- humidity at 36 percent, and
- wind out of the SSE at approximately 10 km/h (6mph).

Initial responding units reported a heavy column of black smoke in the area of the accident. Automatic mutual aid resources, including an Aircraft Rescue and Firefighting (ARFF) unit from a regional airport, responded to the scene.

On arrival of the first companies, initial fire suppression was attempted with two aerial master streams, which was ineffective. An engine company began applying alcohol resistant aqueous film forming foam (AR-AFFF) until their water supply was compromised by another company running over their hose. The ARFF unit applied their aqueous film forming foam (AFFF) without success and then attempted to extinguish the fire with their Purple-K dry chemical agent. The application of the Purple-K helped to knock down the fire but when the supply ran out, the fire re-ignited. Additionally, there was drop-down fire off the overpass that set several vehicles on fire on the road below.

The fire was ultimately extinguished using two hand lines flowing AR-AFFF.

Lessons Learned

- Initial companies identified the container type as an MC306, but with the initial black smoke conditions thought the material involved was a fossil fuel. Identification of the

product as ethanol was made 15-20 minutes into the incident.

- The ARFF unit only carried aqueous film forming foam and this was not effective on the alcohol-based fire.
- Operating personnel on scene had AR-AFFF but were not aware that this resource was immediately available.
- There were interoperable communications issues between responding agencies.
- Training for mutual aid companies on fighting both fossil fuel and alcohol-based fires would be helpful.
- Pre-planning and training all personnel on their foam capabilities should be implemented.
- Unified command was helpful and worked great with private and public sector stakeholders.

Administrative Note: This incident occurred three years prior to being surveyed by a RIST. Key personnel were interviewed, but due to the passage of time, many other responders were unavailable for interviews. Only a summary, not a full report, is therefore provided.