



Table Top Training Drills

Table Top Training Exercise- September 2010

Hazardous Materials Spill Response

An alarm for a Hazardous Materials spill can end in many different ways. The actions of the first arriving units can dictate the severity of the entire incident, since the potential disaster that lies ahead must be considered upon the initial size up while the action plan is being developed and implemented. In near-miss report [09-1000](#) units are called for an "oil spill" on a roadway. In the excerpt below, place your unit at the scene and discuss what actions and considerations you would take to mitigate the hazard.

Engine [1] was dispatched to fuel leaking from a truck on a four lane street. Upon arrival, we found the spill continued on for several blocks. While en-route Engine [2] came across a trail of liquid about a mile from the original call. Units began to follow the trail and found a very large spill at the local farmer's market and at a trucking company about two miles apart from each other. Dispatch advised that the county fire department also found a very large spill at a mobile home park about 5 miles outside of town. They also advised it was not fuel but some type of hydraulic fluid. Engine [1] began to apply absorbent on a larger spill at the market.

Upon arrival, we found the entire intersection of the two four lane streets and a majority of the parking lot of the market was covered with the fluid. We dropped off the absorbent at the intersection and pulled into the parking lot and began applying oil dry. I informed my officer that there was no way that this was hydraulic fluid nor was it from a vehicle due to the quantity involved. We completed the assignment and went back to the station.

The fluid ended up being from three very old transformers that contained PCB, which is carcinogenic oil and causes cancer. The transformers were given to a guy to scrap out the copper. While transporting the transformers, about 400 gallons of transformer oil was spilled onto the roadway. We called in the Hazardous Materials Team and they began clean up. They took all of our shoes and tools that came in contact with the oil until the oil could be tested for the level of hazard. We were told it could be over 500ppm. Thankfully the test results came back less than 5ppm.

The Denver Fire Department (CO) has a sample checklist that is being drafted for first due units. Consider and discuss this list along with your departments SOP's.

1. Implement the use of a Site Safety Plan. This plan is to be updated and consistent with all operations going throughout the incident. This plan can be delegated to the Rescue/Safety Officer in expanded incidents.
2. Conduct a comprehensive size-up of the incident. Verify that the incident is a Hazardous Materials Incident. Confirm that a full Haz-mat response is responding

- if it is outside the scope of the first responders. In the event of a possible explosive device the Incident Command (IC) shall initiate the proper evacuation procedures and wait for support from the Haz-Mat Team and Bomb Squad Team.
3. If Hazardous Material Mitigation is within the scope of first responders at the operational level, utilize appropriate protocols for Hazard Mitigation (Fuel spill, Natural Gas leak, Propane Tank).
 4. The first responder needs to determine if the material is outside their scope of operational level. If it is, then they need to secure and isolate the area and also request a Level II response. A Level II response is a formal Hazardous Materials Team with technical level training.
 5. Locate any witnesses to said event and determine initial exposure/casualties.
 6. Set initial Hazard Control zones at the direction of the IC and the Hazardous Materials Team. (Hot, Warm, and Cold Zone)
 7. No rescue attempts should be made into the Hot Zone without utilizing proper PPE and SCBA, and personnel.