

	Terryville Fire Department Best Practices	
	<u>Subject</u> Flammable Liquid Incidents	BP# 3-11
	<u>Authority</u> Chief of Department	Initiated 9/1/2016 Revised

A. PURPOSE

1. These best practices have been established to ensure the proper response and safety of our members when dispatched to flammable liquid incidents.

B. GENERAL GUIDELINES / CONSIDERATIONS

1. All members shall comply with all safety related best practices.
2. Reflective safety vests should only be worn by support personnel (traffic, EMS, etc.) and not by personnel conducting fire suppression activities.
3. Flammable liquids present particular problems for fire protection, health, safety, and environmental protection. Some of these problems include fire extinguishment, ignition prevention, and disposal of spills. All three of these may be involved in the same incident.

B. OPERATIONAL PROCEDURES

1. Extinguishment
 - a. The primary agent for flammable liquid firefighting is AFFF (Aqueous Film Forming Foam). This agent is available on all Terryville Fire Department engines.
 - b. Initial fire attack should be made with AFFF. The extinguishing action of AFFF is based on its ability to rapidly cover the flammable liquid surface with film. This film prevents the escape of flammable vapors but may have difficulty sealing against hot metal surfaces.
 - c. The application of AFFF should be gentle to avoid breaking the seal and agitating the liquid below.
 - d. Some flammable liquids are difficult or impossible to extinguish with AFFF, including alcohols, gasohol, ketones, and other polar solvents. It may be possible to extinguish some of these liquids with a higher application rate of AFFF.

- e. AFFF will not extinguish a gasohol fire. Gasohol contains approximately 10% alcohol. Consideration should be made to applying water in short duration to separate the gasoline from the alcohol. The alcohol and water will sink, allowing the fire to be extinguished as an ordinary gasoline fire.

2. Spills

- a. Flammable liquid spills include spills without fire in addition to remaining fuel post fire extinguishment. In both cases, the liquid must be protected to prevent ignition until it can be picked up or moved.
- b. All personnel working around spills must wear full PPE. SCBA must be used in vapor areas.
- c. Spills should be covered with AFFF to seal vapors. The application may need to be repeated regularly as the seal will break down in 10-20 minutes.
- d. Control ignition sources in the area of the spill. Extinguish pilot lights, flares, open flames, etc. Prohibit smoking in the area. Position vehicles to prevent contact of vapor with running engines or exhaust.
- e. Do not permit the liquid to run-off into storm drains, sewers, or drainage systems. Damn the run-off and cover the spill with AFFF pending disposal.
- f. For spills greater than 5 gallons, notification should be made to the Town of Brookhaven Fire Marshals Hazardous Materials Team.

3. Disposal

- a. It is the responsibility of the individual, business, or property owner for cleanup and disposal. The Brookhaven Town Fire Marshal and New York State Department of Environmental Conservation should be notified for significant spills or any spill with possible contamination.
- b. Small spills must be absorbed or emulsified

4. Hazard & Safety Considerations

- a. All personnel working around flammable liquids shall wear full PPE. SCBA shall be used when vapors are present.
- b. Unless absolutely necessary, personnel shall not work in a spill area. When this is necessary to person a rescue or control a leak, the spill must be covered with AFFF and all possible precautions against ignition must be taken. Only those personnel certified as Hazardous Material Technicians will be used for this type of operation.
- c. Any exposed personnel will be checked and monitored for exposure and an exposure report will be prepared to document the exposure for each individual. The number of exposed personnel must be kept to a minimum.