



Jackson Hole Fire/EMS Operations Manual

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PURPOSE

The purpose of this standard operational guideline (SOG) is to establish basic Standard Operating Guidelines and procedures for flammable gas response operations.

SCOPE

This SOG pertains to all Jackson Hole Fire/EMS members and applies to all flammable gas related incidents.

BACKGROUND

There are several different types of chemicals that can be considered flammable gases. The two most common are natural gas and propane. Natural gas is odorless, colorless and lighter than air and will tend to rise and dissipate. Propane is also an odorless, colorless gas that is slightly heavier than air and will tend to move to low lying places. Both have an odorant added to warn of their presence.

SECTION I – OPERATIONAL CONSIDERATIONS

Full structural turnouts with SCBA are the required PPE for flammable gas incidents. Consider Level 1 staging of responding apparatus and/or HazMat team response. Ensure air/gas monitoring capability is on scene or responding. IDLH for flammable gases is 10% of the lower flammable limit. Most outdoor leaks do not require offensive action by fire personnel. Isolate the hazard and wait for the utility company to secure the leak.

SECTION II – OPERATIONAL GUIDELINES

Flammable Gas Leak Outside:

1. Evacuate/isolate the area for a minimum of 100 feet.
2. Where feasible, control ignition sources.
3. Minimum of 1 ¼ inch hose line deployed to protect property.
4. Consider offensive leak suppression, with residential propane tank, should vendor response be extended.

Flammable Gas Leak Inside a Structure:

1. Evacuate/isolate the area for a minimum of 300 feet. Limit personnel inside potential blast area.
2. Shut off the gas service to the structure. Do not shut off electrical service due to spark potential.
3. Establish air monitoring, (if available) check around doors and windows.
4. If LEL reading is above 10%, ventilate the structure.
5. Evacuate adjacent structures as necessary.
6. Fire personnel shall not restore gas service to the structure.

Flammable Gas Leak with Fire:

1. Assume a defensive posture and do not extinguish pressure fed flammable gas fires until the fuel supply can be controlled.
2. Establish a water supply & deploy hose lines to protect exposures.
3. Work with utility company to stop the flow of gas.
4. If fire is impinging on storage tanks, rail cars or cargo tanks and immediate cooling measures (at least 500 GPM) cannot be implemented, evacuate the area for up to 1 mile.