



Standard Operating Guideline

Flammable Gas Response Operations



PURPOSE

This document is intended to establish basic Standard Operating Guidelines and procedures for flammable gas response operations. They are designed to be applied generally. They may be modified as situations dictate.

SCOPE

This guideline 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.

OPERATIONAL CONSIDERATIONS

1. Full structural turnouts with SCBA are the required PPE for flammable gas incidents. IDLH for flammable gases is 10% of the lower flammable limit. If air monitoring capability is needed, consider a Level II Hazmat response. Most outdoor leaks do not require offensive action by fire personnel. Isolate the hazard and wait for the utility company to secure the leak.

OPERATIONAL GUIDELINES

Flammable Gas Leak Outside

1. 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.

Flammable Gas Leak Inside a Structure

1. Secure the gas service to the structure.
2. Establish air monitoring, (if available) check around doors and windows.
3. If LEL reading is above 10%, ventilate the structure..
4. Evacuate adjacent structures as necessary.
5. Fire personnel should not restore gas service to the structure.



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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.