

SOUTH PORTLAND FIRE DEPARTMENT

STANDARD OPERATING GUIDELINES

SOG #:	6.615	Effective Date:	2/17/2022
Title:	Hazmat Response to Flammable Gas Leaks	# of pages:	2
Category:	Hazardous Materials Response	Classification:	Red

1. **PURPOSE:** To establish a guideline for operations at Natural Gas or Propane Tank Leak

2. **PROCEDURES:**

Leak in a Building

- Ensure that the following have been notified: Unitel, Police Department, and Central Maine Power

First Engine

- Establish Command
- Try to determine information on the leak to relay to Unitel
- Bring 4 gas meter to read LEL levels (make sure you are aware of conversion factor)
- Evacuate building if LEL readings are higher than 10%
- Shut off gas supply to building
- Have CMP disconnect power to building
- Ventilate at highest point and work down. At no point should you take unnecessary chances after evacuation has occurred
- Have pump operator move Engine away from danger area, preferable to a hydrant
- Stretch hand lines for safety purposes
- Evacuate nearby buildings if necessary
- Have the Police close off area
- Continue to monitor ventilation with 4 gas meters

Second Engine

- Position at hydrant outside danger area and hook LDH supply line in preparation to lay feeder

Ladder Company & Third Engine

- Locate at a staging area remote from building in case of explosion
- Establish a Manpower Officer and Manpower Pool
- Await instructions from IC

Leak in Street

- Ensure that the following have been notified: Unitel, Police Department, Public Works, and Central Maine Power

-

First Engine

- Establish Command
- Try to determine information on the leak to relay to Unitel
- Determine type of leak and if pipe has been raised to fresh air or is still leaking in hole
- Start checking buildings closest to leak with 4 gas meter to read LEL levels
- If any buildings have readings consider having CMP drop power to the neighborhood
- Check sewers, storm drains, open manholes for vapors
- Have Police and Public Works block off area
- Have a Public Works Rep report to command as they are most knowledgeable of the storm/sewer system

Second Engine

- Position at hydrant outside leak area and hook LDH supply line in preparation to lay feeder
- Check with IC to assist in checking buildings

Third Engine

- Position at hydrant outside leak area (in an area opposite 2nd Engine) and hook LDH supply line in preparation to lay feeder

Ladder Company

- Standby outside area and establish manpower officer and manpower pool
- Await instructions from IC

Safety

- Full PPE shall be worn by all members; members operating in the danger zone shall also be wearing SCBA
- Natural gas is lighter than air and rises
- Propane is heavier than air and will sink
- Do not turn any electrical items on or off in a building (such as a light switch)
- Stopping the leak should be done from outside as much as possible. Only secure the leak inside if below 10% LEL on meter.
- The most dangerous time is when the gas concentration is within the flammable range (between the UEL & LEL) particularly when passing from the UEL down to the LEL

3. REFERENCES:

- None

By Order Of:

A handwritten signature in blue ink, appearing to read "Jim Wilson". The signature is written in a cursive, flowing style.

James P. Wilson
Fire Chief