



# 2023 Risk Management Conference

Mitigating Today, Ensuring Tomorrow:  
Discover the Path to Resilience



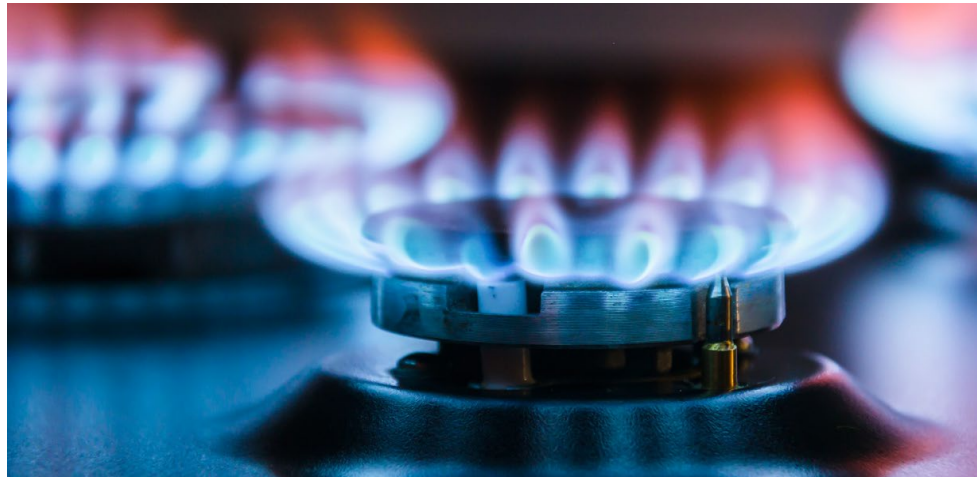
# Introduction



New England's largest energy delivery company, serving four million customers in Connecticut, Massachusetts, and New Hampshire.

# Natural gas: A reliable source of energy

**American Gas Association:** *“American communities rely on natural gas infrastructure. Because of decades of planning and investment, 2.6 million miles of natural gas pipelines now deliver energy to 187 million customers daily. America’s vast natural gas distribution system enables us to cook our food, heat and cool our homes, and more.”*





# Why are we here?

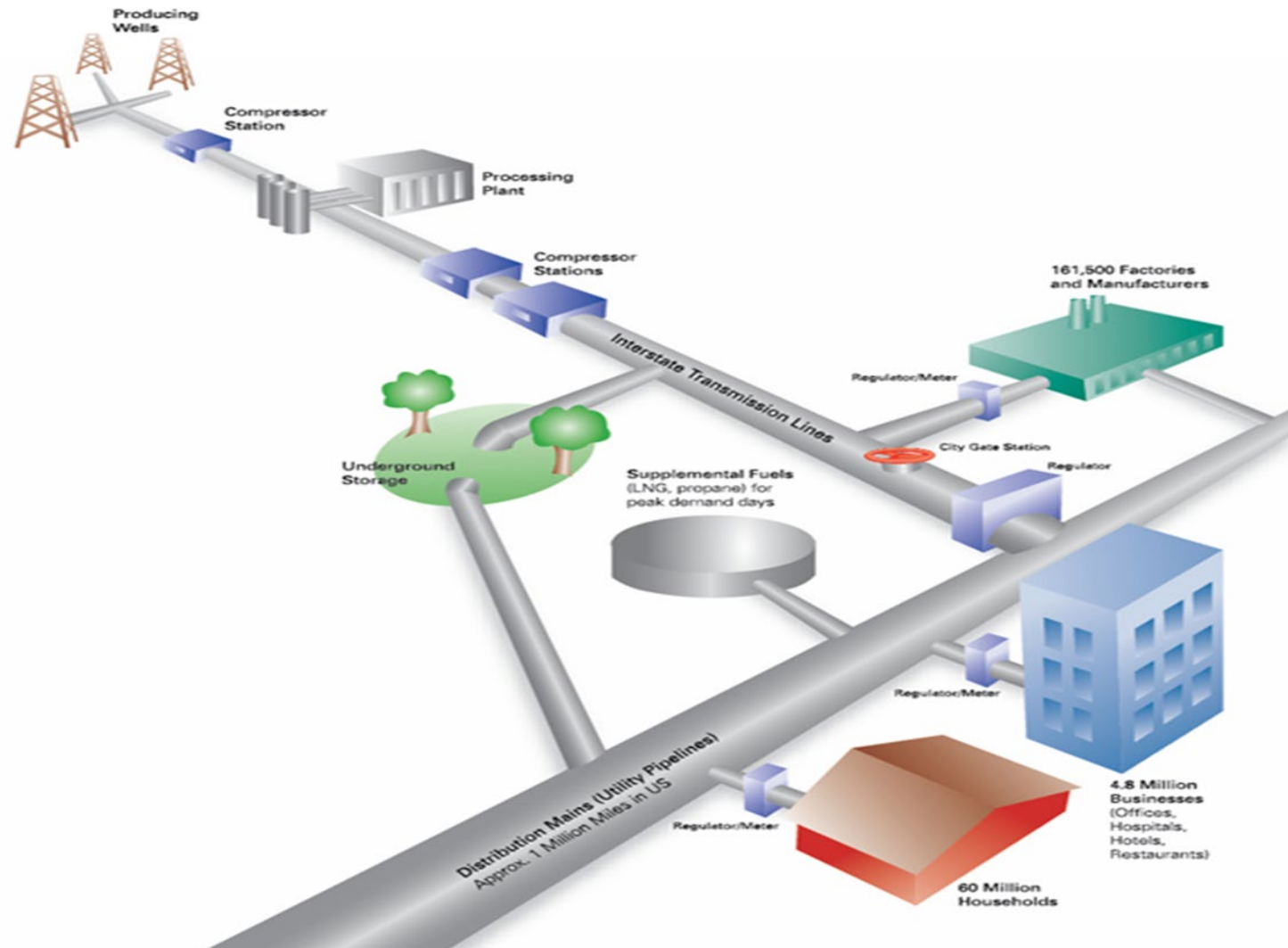
- July 2023 explosion at a New Jersey apartment complex.
- Gain a general understanding of the gas distribution system and how it relates to what you can do to keep your organization and its residents safe.
- Understand the properties and characteristics of natural gas and how they can be dangerous in certain situations.
- Improve safety by gaining an understanding of what property managers can do during a gas emergency, and what residents can do when they are concerned about gas-related issues (e.g., gas odors, leaks, carbon monoxide, inside issues, outside issues).

# Follow agency policies and guidelines

- No two gas emergencies are the same
- **Follow your agency's guidelines, policies, procedures**



# How does gas get to your community?



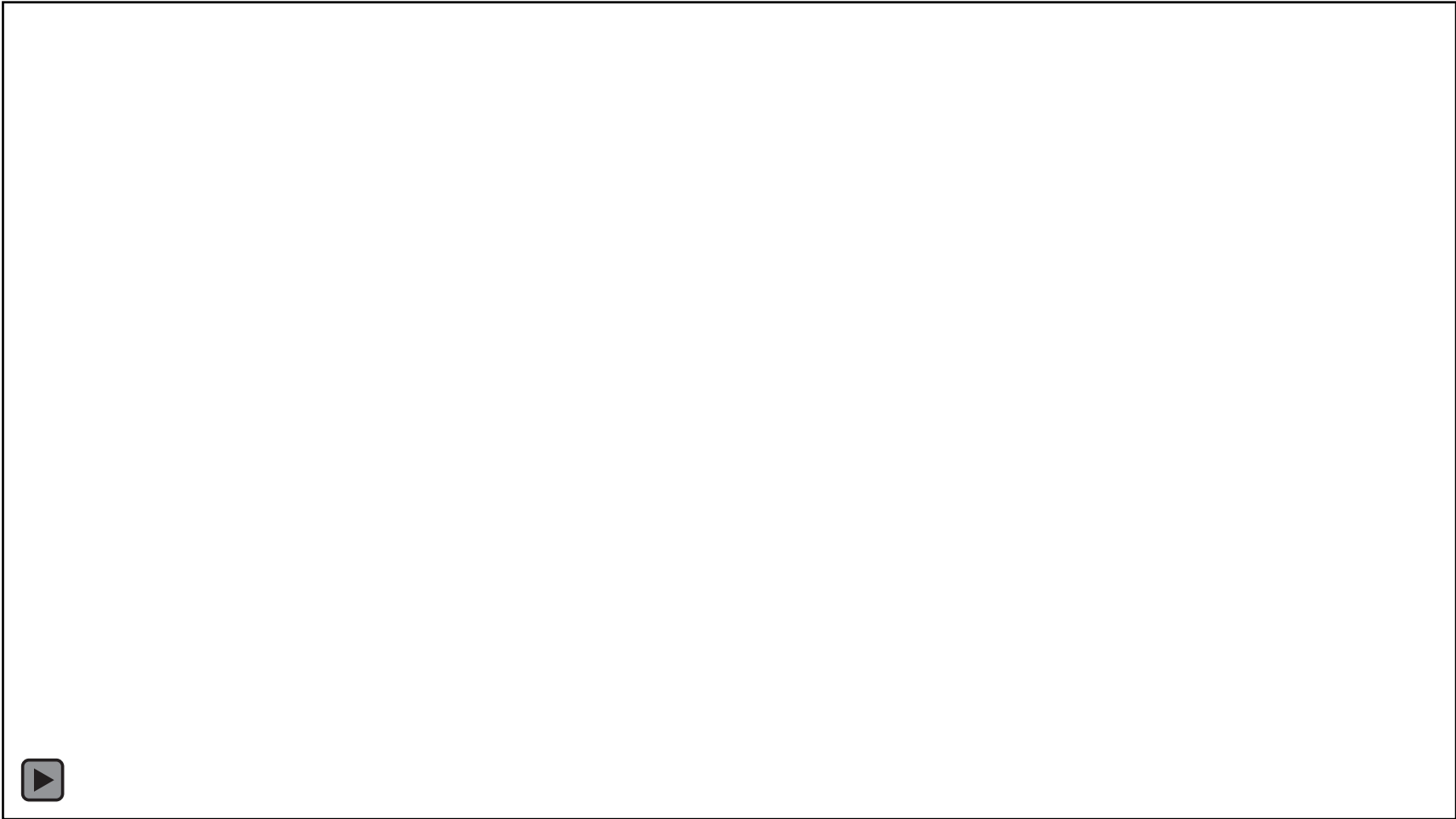
# Local Distribution Companies (LDC)

- You will likely deal with a local distribution company
- Eversource is one of many LDCs in the United States
- Why are LDC's important to you?





# Bremerton, Washington

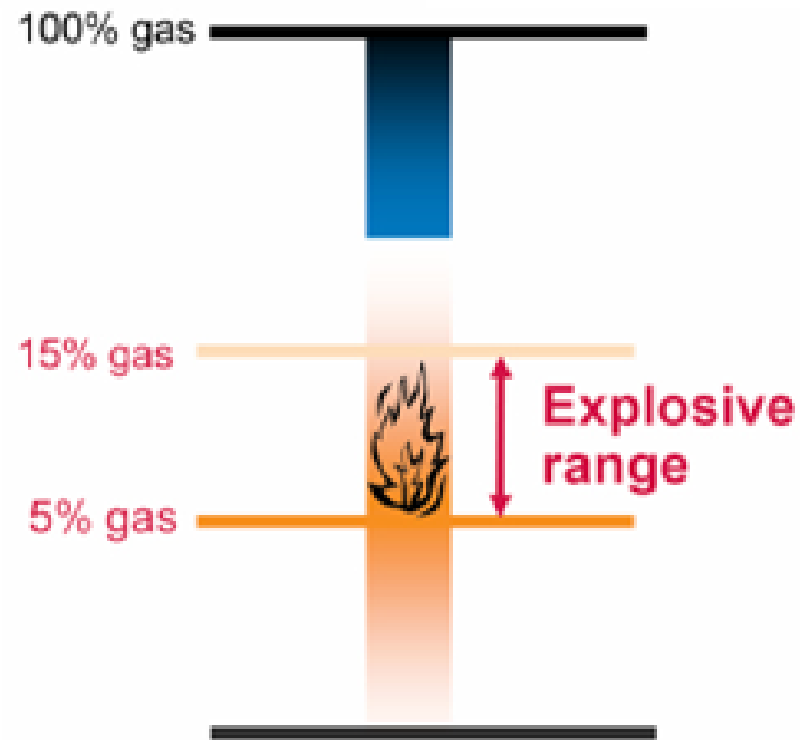


# How can gas be dangerous to employees and residents?

- Colorless
- Odorless (Mercaptan added)
- Tasteless
- Asphyxiant
- Lighter than air – vapor density (Specific Gravity) = 0.68
- Ignition temperature – between 1,100°F - 1,200°F
- By-products incomplete combustion – carbon monoxide

# Limits of flammability

Gas leak + enclosed area + air + ignition source = explosion





# Sources of Ignition

Light Switches

**Doorbells**

**FLASHLIGHTS**

Ringling Telephones

Radios & Pagers

Pilot Lights

Open Flames

**Static Electricity**

Cell Phones

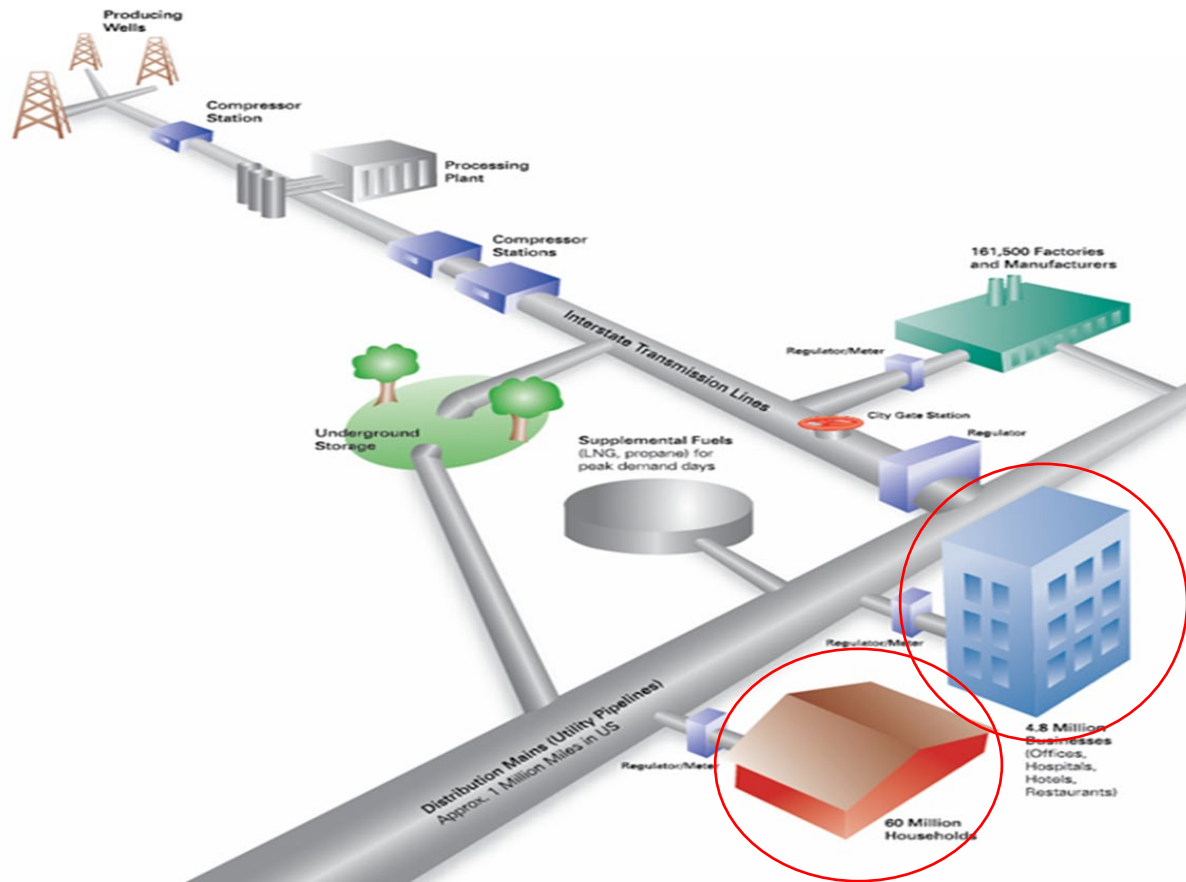
# Hazard areas



# Properties and characteristics

## Properties and Characteristics Demonstration

# What can you try to control?



## Create a culture of safety:

- Call Before You Dig/Dig Safe/8-1-1
- Dial 9-1-1 in an emergency
- Notify the local gas company
- Know your limitations
- Be aware of which gasses are on-site

# 8-1-1: Know what's below

## Pipeline Hazardous Materials Safety Administration:

Research has revealed that if someone calls 8-1-1 before they dig, they have a 99% chance of avoiding an incident, injury, harm to the environment and even death.



# 8-1-1: Know what's below



# Case study



# Case study



# Case study



# Case study



# Case study



# Case study



# Distribution mains and service laterals



## Locations:

- Streets
- Parking lots
- Driveways
- Grass areas
- Right-of-ways



# Contact 9-1-1 and your local gas company

- **When in doubt call 9-1-1 (If you're thinking about it, do it).**
- **Make the phone number of your local gas provider available to your employees and residents:**
  - The sooner you call, the better; provide as much information as possible
  - Gas companies can expand their response as needed
  - Life safety is always first and foremost
  - Evacuation is never wrong
  - Don't take unnecessary risks; **call for help**

# Evacuation considerations

- Refrain from the use of electronic devices that can cause an ignition (such as P.A. systems and megaphones)
- DO NOT use fire alarm systems
- Remember – DO NOT use doorbells when evacuating door-to-door. If evacuating occupants, loudly announce yourself and instruct occupants: “DO NOT use any light switches”
- Keep people at least 330 feet away once they are evacuated

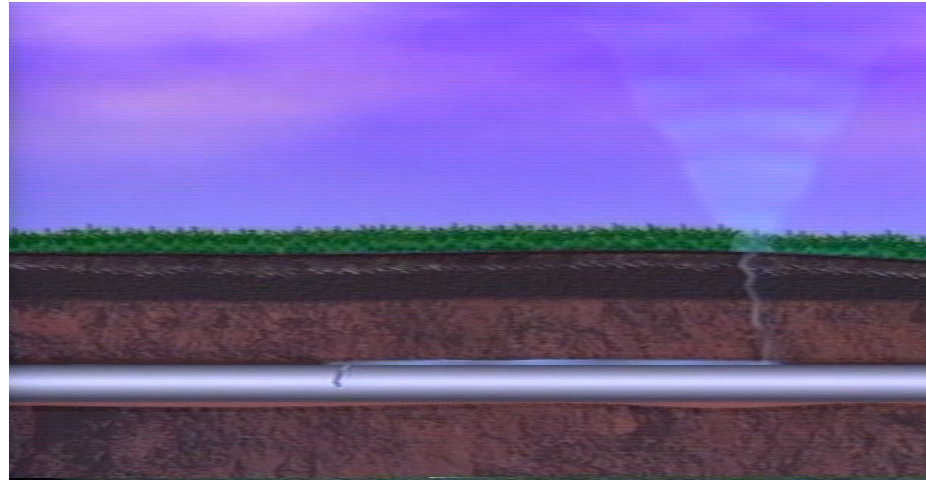
# Inside leaks

- Ensure the gas company has been called and is responding
- If necessary, evacuate occupants and restrict access
- Use caution to not introduce ignition sources
- Request electric utility to secure power if necessary



# Exterior leaks

Natural gas escaping from a broken underground pipe will usually rise and vent into the open air.



- Concentration of gas in the immediate area of an outdoor leak may be hazardous.
- If soil is hard packed or frozen, the gas may not be able to vent directly to the surface and it will search for another way out.
- **Natural gas can migrate along the pipeline until it reaches a point where the soil is less dense.**
- **Gas may also follow a service pipe to a foundation wall and enter a building through cracks and voids.**



# What to expect from the gas company at a potential leak?

- A thorough investigation of the area and any buildings
- Determination if natural gas is involved
- Ensure systems are safe
- Communication with occupants and/or responsible party
- Determination of findings and if any follow-up is needed
- Repairs of gas company equipment if necessary
- Red tagging of customer-owned equipment until repairs are made
- Relights and restoration of service



# Questions:

