

**Natural gas leak alarms from residential methane detectors:
Your key response strategies**

Residential methane detectors (RMDs) represent a relatively new technology that is gaining consumer acceptance. Also known as natural gas detectors, these devices provide early warning of leaking natural gas inside the home.

Proposed legislation could require RMD installation in all new and existing dwelling units in New York; similar laws may follow in other states. As RMDs become more widely installed, the incidence of residential natural gas leak alarms will increase. Prepare yourself for a successful response by learning how RMDs work and how to safely handle both legitimate and false/unintentional natural gas leak alarms.

**How RMDs work**

Natural gas consists primarily of methane. An RMD constantly measures the concentration of methane in the air and sounds an alarm before dangerous, flammable levels are reached. Given the relative risk associated with a natural gas leak, consider any RMD activation to be credible until combustible gas indicator (CGI) monitoring proves otherwise or National Grid personnel report the structure is safe.

Responding to RMD alarms

An RMD alarm pattern for leaking natural gas is typically a single, loud beep that repeats about once per second. (RMDs will alarm in the same way when propane is detected.) Some RMDs also serve as carbon monoxide (CO) detectors; these use a different alarm pattern for CO, which typically consist of 4 loud beeps separated by a 5-second pause. Some models include a colored light that blinks in sync with the beeping pattern. Please note: Alarm patterns may vary by brand.

Dispatchers who receive a call regarding an RMD natural gas alarm activation should contact National Grid, initiate an appropriate emergency response and advise occupants to evacuate the residence and meet the responding fire officer at least 100 feet away and upwind from the structure. Responders should assume leaking natural gas is present and take the following precautions:

1. Approach the incident scene cautiously.

Park at least 100 feet from the front of the building and away from manhole covers, gas valve covers and storm sewer grates.

2. Meet with the reporting party to obtain information about the locations of the activated detector, the gas meter and fuel-burning appliances.**3. Clear the building of all occupants and bystanders.**

Do not enter the building unless you are wearing full personal protective equipment (PPE) and self-contained breathing apparatus (SCBA).

4. Eliminate any potential sources of ignition, such as vehicle engines, flame-producing devices and anything that could produce sparks.

Use intrinsically safe radios and flashlights. Do not ring doorbells or turn on or off any electrical switches, as a spark from these devices could ignite the gas. Do not step on doormats; friction from your boots could create a spark of static electricity.

5. Monitor the atmosphere around and in the structure with a combustible gas indicator (CGI).

If natural gas concentrations are well below the lower explosive limit of 5% gas in air and you can enter the structure without risk, monitor inside the building to find the source of the leak and control it. If gas concentrations are within or above the flammable range (between 5 and 15 percent gas in air), secure and clear the area and work with National Grid personnel to coordinate the safe control of the situation.

6. If the response is the result of a CO alarm sounding, follow your department's guidelines for CO response and advise occupants to seek medical treatment as appropriate. Work together with the National Grid emergency representative to determine the source of the CO and when it is safe for occupants to return to the structure.**7. Never disconnect an RMD to silence an alarm.** The alarm will turn off automatically when it senses that gas concentrations in the air have fallen below the danger level.**If a gas leak is NOT detected**

If atmospheric monitoring does not confirm the presence of natural gas, propane or CO at the premises, it's likely a false alarm has occurred. A false alarm can result when an RMD is exposed to humidity, temperature extremes, aerosols, dust, grease or other substances. To prevent false alarms, review the general guidelines below with occupants:

- **The RMD must be properly located.** RMDs should not be installed in garages, in very dirty/dusty areas or in locations with extreme temperatures, such as uninsulated attics and crawl spaces. They should be positioned away from fuel-burning equipment and sources of moisture, with the following clearances:

- At least **20 feet** from fuel-burning heaters, water heaters or cooking appliances
- At least **10 feet** from bath/showers, saunas, humidifiers, vaporizers, dishwashers, laundry rooms or utility rooms

- **Common household agents may trigger an RMD alarm or damage device sensors.** Paints, varnishes, ammonia-based cleaners and aerosol sprays (including insect sprays and compressed gas dusters) should not be used on or near an RMD.

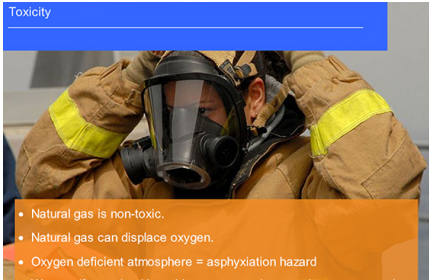


Refer occupants to their RMD user's manual for comprehensive installation and maintenance instructions.

Learn more gas and electrical utility response tips at

firstresponder.ngridsafety.com.

National Grid's free **First Responder Utility Safety Training Program** has helped thousands of emergency response personnel learn to operate safely during incidents involving utility hazards. This program, which includes gas and electric certification trainings, covers natural gas pipelines and electric power lines as well as other facilities.

Toxicity

- Natural gas is non-toxic.
- Natural gas can displace oxygen.
- Oxygen deficient atmosphere = asphyxiation hazard
- Wear self-contained breathing apparatus in natural gas emergencies.

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Our certification programs are self-paced. Users who complete the gas and electric programs will earn personalized certificates of completion.

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complete your utility safety training.



Know what's below.

811 before you dig.

Smell Gas. Act Fast.

To report emergencies, call 911 and National Grid immediately.**In case of gas emergencies:**

Long Island and the Rockaways:
911 and 1-800-490-0045

Metro New York:
911 and 1-718-643-4050

Upstate New York:
911 and 1-800-892-2345

Massachusetts:
911 and 1-800-233-5325

Rhode Island:
911 and 1-800-640-1595

In case of electric emergencies:

Upstate New York:
911 and 1-800-867-5222

Massachusetts:
911 and 1-800-465-1212

Rhode Island:
911 and 1-800-465-1212

IMPORTANT TERMS AND CONDITIONS – PLEASE READ PRIOR TO USE.

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