

# First responder utility safety bulletin

Summer 2021



## LNG transport trailer incidents

Liquefied natural gas (LNG) transport trailers carry LNG over roadways from import terminals and other storage facilities. Response tactics for LNG tank incidents are very different from those for tanks containing other flammable liquids, such as propane or gasoline. Learning to recognize LNG transport trailers and how to respond when they are damaged will help you protect yourself, your team and the public in incidents involving these specialized vehicles.

### Learn to recognize LNG trailers

The best way to identify an LNG transport trailer is to pay close attention to the tank and its placards. An LNG tank is approximately 13 feet high and 40 to 45 feet long with flat ends. Coils run along its belly, and the rear of the tank has a “bucket box” that contains piping, valves and gauges.

A dedicated LNG trailer will have a placard labeled “UN 1972” and LNG or its other trade names stenciled on the two sides and two ends of the tank. Look for the phrase “Methane Refrigerated Liquid,” “Liquefied Natural Gas” or “Refrigerated Methane.” If the tank is on its side or over an embankment, you may not be able to see its placards and stencils. You can identify an LNG trailer from a distance by its characteristic features: the shape of the tank, the coils and the bucket box.



### Secure the area

If an LNG trailer has overturned or been damaged, approach cautiously and secure the area.

- **If you must approach the incident, do so with the minimum amount of personnel**, each wearing personal protective equipment (PPE) and self-contained breathing apparatus (SCBA).
- **Eliminate potential ignition sources**; use intrinsically safe equipment.
- **Establish a strong formal unified command** and control structure that includes National Grid personnel.
- **Use a combustible gas indicator (CGI)** to monitor the atmosphere and determine if a leak has occurred. LNG in transport is not odorized, so do not rely on your sense of smell to detect a leak.
- **Park at least 300 feet away** from any LNG spill or vapor cloud.
- **Use caution tape to secure the area** and establish a safe perimeter. Reroute pedestrian and vehicular traffic if necessary.
- Unless an immediate threat to life exists, **focus on evacuation and containment of the LNG**, and protect exposures. Consult Guide 115 in the DOT Emergency Response Guidebook for appropriate evacuation distances and actions.

### Work with technical personnel to assess the damage

In the event of an LNG transport emergency, the incident commander or the driver of the LNG trailer will contact the LNG trailer’s dispatcher. Both the driver and the transport company dispatcher are excellent sources of information and technical advice. The dispatcher will contact the appropriate zone response company for the city or town affected – usually the closest natural gas local distribution company. The zone response company will dispatch a technical advisor with expertise in LNG emergencies and provide specialized LNG emergency materials and equipment.

When made safe, technical personnel will assist emergency responders in assessing the damage to a trailer and will advise the incident commander on the likelihood of a release. Depending on the nature of the incident and whether there has been a release of LNG, a regional hazardous materials response team may be called.

### Prepare to control a release

An LNG tank may begin to vent vapors through its relief stacks if it has been damaged or has had its insulation system integrity compromised. LNG vapors are flammable at concentrations of 5 to 15 percent gas in air. If an LNG tank begins to vent during an emergency, be prepared to contain the spill and control the vapor cloud:

- **Support and protect technical personnel.** Provide a safe path for ingress and egress.
- **Monitor the atmosphere, using multiple CGIs** at various heights to determine the concentration, location and movement of LNG vapors.
- **Prepare for long-term operations**, considering resource needs and the ability to secure a reliable water supply to support offensive operations should they become necessary.
- **Anticipate the direction liquids may flow.**
- **Assess wind conditions** to anticipate movement of a vapor cloud.
- **Consider the need for cloth barriers and sand** to keep spilled liquid out of nearby sewers and storm drains. (This step should be performed whether or not a leak has occurred, especially if a trailer has overturned.)
- **Have a hand line available with a fog stream** for dispersing the vapor cloud or directing it away from nearby buildings and low-lying areas. Whenever a fog stream is applied, **assess wind conditions** to ensure water mist is not carried onto relief devices on the LNG trailer.
- **Do NOT spray the trailer and relief valves, as this can increase internal tank pressure and cause icing** that interferes with the normal operation of critical pressure-relief devices.

If LNG vapor has ignited, let it burn. Do NOT apply water to an LNG tank unless there is fire impingement or you are specifically directed to do so by an LNG technical advisor. If a life safety situation exists and/or the fire will escalate the incident, your incident commander may consider more offensive measures.

**Keep yourself, your team and the public safe this summer. Visit [firstresponder.ngridsafety.com](http://firstresponder.ngridsafety.com) today to register and complete your utility safety training.**

To report emergencies, call **911** and **National Grid** immediately.



Know what's below. **811** before you dig.

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.**