Gowrie Group Risk Report: Safe Propane Storage

Safe storage of propane cylinders/tanks, combined with understanding how propane responds to environmental conditions, helps ensure that tanks are not damaged and do not cause damage to surrounding property. Proper storage prevents explosions and prevents having tanks “rocket” through facilities and/or properties. This Gowrie Group Risk Report provides an overview of safe propane storage; for more detailed information regarding propane safety practices, see OSHA 1910.110.

What is Propane? Although propane is a gas that is commonly used in our homes and businesses, it can be extremely dangerous. When exposed to air, oxidizers, heat, or pressure, propane tanks can explode. Propane gas is flammable, with a flashpoint of 156 degrees. Propane is known as LPG – liquefied petroleum gas. In other words, it is liquid fuel stored under pressure. Usually, it is vaporized to gas before it leaves the tank. However, if the liquid comes in contact with skin, severe “freeze burns” or frostbite can occur. Propane usually has a strong odor that resembles rotten eggs, a skunk’s spray, or a dead animal. Smell is the best way to identify a gas leak.

Safe Propane Storage Tips

- **Never store indoors** or in an enclosed area such as a basement, garage, dock-box, or shed.
- **Never store under an eave**, roof, porch, or other area attached to a building.
- **Do not store with other tools and objects** that could damage the tank.
- **Never store next to an “EXIT”** from the building.
- Storage area should be at least 25 feet from the property line.
- Should be stored in a **protected cage with proper signage**.
- All tanks should be transported, stored, and secured in an **upright position** so they cannot fall, shift, or roll.
- All tanks should be in **good condition and properly labeled**.
- Any employee or person handling propane tanks should wear leather or cotton gloves to protect the skin.
- Propane tanks must be **properly disposed of at a recycling facility**; propane tanks should never be put in a dumpster.
- **Tanks expire**. The manufacture date is stamped on the top of the handle (08-15 indicates month and year). All tanks should be used within 12 years of the manufacture date. Tanks can be re-certified for 5 more years.
- All propane storage tanks need to comply with **NFPA 58 regulations for Storage of LP-Gas**.

If you smell gas:

1. Put out all smoking materials and open flames.
2. Do not operate lights, appliances, telephones, or cell phones.
3. Leave the area immediately.
4. Turn off main gas supply valve if possible (right, clockwise).
5. Call 911 from outside the area to report the leak.
6. Do not return until told it is safe to do so.
7. Have cylinder inspected by service technician before restarting appliance.

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