

PORTABLE FIRE EXTINGUISHERS

PROPANE SAFETY MEETING OUTLINE

Summary

This outline covers procedures relating to fire extinguishers for LP-gas facilities, including offices.

NFPA 10, *Standard for Portable Fire Extinguishers*
29 CFR §1910.157, Portable Fire Extinguishers
49 CFR §393.95, Emergency Equipment on All Power Units

Who should attend

- Cylinder delivery vehicle drivers
- Bobtail drivers
- Cylinder plant employees
- Customer service representatives (front office staff)
- All other personnel

NOTE: Employees in these job categories who do not attend this meeting should be trained on this subject as soon as possible.

Additional Material

- Information from companies that supply and service fire extinguishers
- Fire Prevention Bureaus of larger fire departments provide training officers and may provide a “fire pan” demonstration or employee training.
- Most safety equipment and training providers offer fire-extinguisher training materials.

Key codes and standards for this topic

“Portable Fire Extinguishers,” RRC Propane Safety Bulletin
“Principles That Apply to Propane Fires and Emergencies” and
“Operating Characteristics and Limitation of Portable Fire Extinguishers,” Railroad Commission of Texas, Texas Propane Training Module 2.1, *Operating a Dispenser To Fill DOT Cylinders and ASME Motor/Mobile Fuel Tanks*, pp. 75-77.
National Fire Protection Association (NFPA) 58, *LP-Gas Code* (2001 edition), §§3.8.5, General Precautions; 3.10.2.4, Fire Protection; 5.5, Fire Protection; 6.2.4, Fire Extinguishers; 6.3.7, Fire Extinguishers; Appendix A, §§5.5 and 6.3.7.

Company Standard Operating Procedures (SOP)

Note any additional materials used on the attached documentation form, or indicate not applicable.

A company SOP may provide information to cylinder customers regarding proper supervision and training of employees who perform propane activities.

Documentation

Complete the attached documentation form listing the date, time and location of the safety meeting and the printed names and signatures of the attendees, name of persons who should have attended but did not, and copies of any materials distributed, video shown, or visual aids used in the demonstration. These materials should be properly filed in a safe location.



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PROPANE SAFETY MEETING HANDOUT

Workplace

- Where fire extinguishers have been provided for employee use in the workplace, employees must be trained on the principles of fire-extinguisher use and the hazards of initial-stage firefighting. Such training must be provided to new employees upon initial employment and for current employees at least annually thereafter.
- Employees who have been designated to use firefighting equipment as part of an emergency action plan must be trained in the use of the appropriate equipment upon initial assignment to the emergency action team and at least annually thereafter.
- Extinguishers must be mounted, located and identified so they are readily accessible to employees without exposing the employees to possible injury.
- Extinguishers must be maintained in a fully charged and operable condition and kept in their designated location at all times except during use.
- Extinguishers must be subjected to an annual maintenance check. The date of the check must be documented and the document retained for one year after the last entry or the life of the fire extinguisher shell, whichever is less.
- Extinguishers must be inspected, maintained and tested.

NOTE: The following rules do not apply to fire extinguishers provided for employee use outside of workplace buildings or structures.

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- Fire extinguishers must be provided for employee use and selected and distributed based on the classes of anticipated workplace fires and on the size and degree of hazard that would affect their use.
- Extinguishers for Class A fires (i.e., ordinary combustible materials such as paper, wood, cardboard, and most plastics) must be located no more than 75 feet away from an employee.
- Extinguishers for Class B fires (flammable or combustible liquids such as gasoline, propane, kerosene, grease and oil) must be located no more than 50 feet from the Class B hazard area.
- Extinguishers for Class C hazards (fires involving electrical equipment, such as appliances, wiring, circuit breakers and outlets) must be located on the basis of the appropriate pattern for Class A or Class B hazards.

[NOTE: Never use water to extinguish a class C fire. The risk of electrical shock is too great.]



Power Units

- Any power unit used to transport hazardous materials in a quantity that requires placarding must be equipped with a fire extinguisher having an Underwriters' Laboratories (UL) rating of 10 B:C or more.
- Any power unit not used to transport hazardous materials must be equipped with either:
 - (A) A fire extinguisher having an UL rating of 5 B:C or more; or
 - (B) Two fire extinguishers, each of which has an UL rating of 4 B:C or more.
- Extinguishers must be designed, constructed, and maintained to permit visual determination of whether they are fully charged.
- Extinguishers must be located so they are readily accessible for use.
- Extinguishers must be securely mounted to prevent sliding, rolling, or vertical movement.

Workplace/Power Units

- Follow any and all company procedures relating to portable fire extinguishers.
- Contact your supervisor immediately if you have any questions or safety concerns relating to portable fire extinguishers.

Ratings



Class A Extinguishers The numerical rating for this class of fire extinguisher refers to the amount of water the fire extinguisher holds and the amount of fire it will extinguish.



Class B Extinguishers The numerical rating for this class of fire extinguisher indicates the approximate number of square feet of a flammable liquid fire that a non-expert person can expect to extinguish.



Class C Extinguishers This class of fire extinguishers does not have a numerical rating. The letter "C" indicates that the extinguishing agent is non-conductive.

Training

Actual fire pan training in the use of fire extinguishers is recommended.

In any propane emergency where there is fire, flames should not be extinguished unless by doing so the fuel supply can be turned off. If the fire is extinguished and the supply of fuel is not turned off, an explosion hazard greater than the fire hazard may be created.

A dry chemical fire extinguisher has an effective range of about 5 to 20 feet and a discharge duration of 10 to 40 seconds.



Attempt to use a fire extinguisher if and only if:

- The fire department has been called. 911 is the emergency number.
- The fire is small and contained.
- You know your escape route and can fight the fire with your back to the exit.
- You know what type of extinguisher is required.
- The correct extinguisher is immediately at hand.
- You have been trained in how to use the extinguisher.

Figure 1a Wrong Way and Right Way To Apply a Fire Extinguisher

Always approach the fire from upwind.



WRONG WAY-When dry chemical is shot into the center of fire, the fire continues to burn.

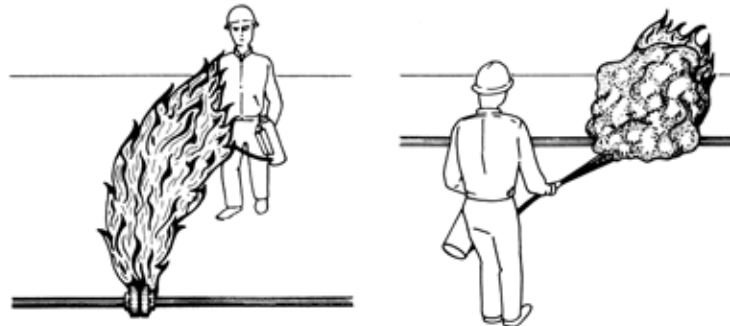
RIGHT WAY-Immediate extinguishment is achieved when dry chemical stream is directed at source of fuel through to the base of the fire.



Always approach the fire from upwind.

There is a right and a wrong way to handle small LP-Gas fires.

NOTE: Never extinguish an LP-gas fire, unless by doing so, the fuel supply can be shut off immediately.



WRONG WAY-This firefighter faces the possibility of facial burns from radiant heat by approaching from down-wind and by failing to take advantage of the heat shielding effect of the fire-killing dry chemical.

RIGHT WAY-Proper application of the dry chemical proves so effective in fighting a small propane fire that the firefighter is able to effectively extinguish the fire without feeling the heat.

Figure 1b Right Way and Wrong Way to Handle Small LP-Gas Fires

**PROPANE
SAFETY**

RAILROAD COMMISSION OF TEXAS

To remember how to use a fire extinguisher, think of putting out the fire as a test you must PASS.

P	Pull the locking pin.
A	Aim the nozzle at the base of the fire.
S	Squeeze the trigger all the way closed.
S	Sweep the extinguisher discharge side to side over the area of the fire.

General information on fire safety

If your clothing catches on fire, it is a natural response to panic and run. Don't panic and run. Running will just fan the flames and increase the potential for a serious injury.

The correct response is to

STOP, DROP, AND ROLL

on the ground to extinguish the flames. Cover your face with your hands to protect your face and lungs. If one of your co-workers catches on fire, panics, and starts to run, tackle him or her and smother the flames.



PROPANE SAFETY MEETING DOCUMENTATION FORM

Topic:

Name of Company: Location:

City: State: Zip:

Date:

Instructor (Print Name) Instructor (Signature)

If applicable, Instructor's Company/Address/Telephone and Cell Telephone No.:

Materials used at meeting (Attach copies of any printed materials distributed)

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