

December 17, 2009

David W. Danner, Executive Director and Secretary  
Washington Utilities and Transportation Commission  
PO Box 47250  
Olympia, WA 98504-7250

Attn: David Lykken, Acting Pipeline Safety Director

**RE: 2009 Standard Inspection for Sumner Propane Gas Distribution, Pierce County. Docket PG-090051**

Dear Mr. Lykken,

PSE has received and reviewed your letter dated November 16, 2009, regarding the "2009 Standard Inspection for Sumner Propane Gas Distribution, Pierce County" and pursuant to your request is submitting the following written response.

PSE reviewed the five Areas of Concern of Title 49, CFR Part 192 and NFPA 58 which were noted as a result of the inspection of Puget Sound Energy's Sumner Propane Gas Distribution System. Our preparation for this submittal included performing thorough research specific to each item and interviews with key internal and external stakeholders.

Below are PSE's responses to these findings as well as actions that will bring the Areas of Concern into full compliance:

**AREAS OF CONCERN**

1. **49 CFR §192.616 Public Awareness**  
*(b) The operator's program must follow the general program recommendations of API RP 1162 and assess the unique attributes and characteristics of the operator's pipeline and facilities.*

**Charge:**

PSE's public awareness program is not comprehensive.

**Finding(s):**

During the review of the customer notices, it was discovered that the unique attributes and characteristics of propane were not addressed to protect persons and property from a propane leak.

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STATE OF WASH.  
UTILITY AND TRANSPORTATION  
COMMISSION

**PSE response:**

Public Safety continues to be the highest priority to PSE. Throughout PSE's service territory our customers as well as the general public in surrounding areas are provided regular and consistent messages on how to identify and report any potential gas emergencies. Individuals who suspect a gas leak are advised to leave the area immediately and report the leak regardless of the attributes and characteristics of the gas.

We believe that PSE's public awareness program is extensive and far reaching. To augment this awareness and address the subject brought in this finding, PSE has mailed specific notices to all five (5) customers currently connected to the Sumner propane gas distribution system. PSE included with the notices supplemental propane safety information issued by the Propane Education & Research Council which addresses the unique attributes and characteristics of propane gas. In addition, safety information and notices have also been mailed to the twelve (12) other residences in the area, ensuring that the local community is made aware of identifying and reporting any suspected propane gas emergencies. Please see enclosure for addresses and safety pamphlets. This action was completed on 12/15/09.

2. **49 CFR §192.739 Pressure Limiting and Regulating Stations**  
*a. Each pressure limiting station, relief device, and pressure regulating station and its equipment must be subjected at intervals not exceeding 15 months. But at least once each calendar ....*

**Charge:**

Maintenance records of the propane regulator and tank overpressure protection were not available.

**Finding(s):**

Ferrell Gas is the owner of the 1,000 gallon propane tank, they provide gas regulation for PSE's distribution system, and they provide maintenance for tank relief valve. The records for the distribution regulator and tank overpressure protection were not available from Ferrell Gas.

**PSE response:**

PSE considers record keeping and documentation an essential aspect of operating and maintaining all of its systems. In order to address this AOC, PSE met with Ferrellgas personnel on November 24 and December 09, 2009 to discuss maintenance record keeping. Following these discussions and in the absence of complete historical maintenance records, Ferrellgas conducted an inspection of the tank and equipment including valves and regulators on 12/15/2009. We have enclosed a copy of the Ferrellgas maintenance inspection record.

In our meeting with Ferrellgas, it was confirmed that their standard operating procedure is to perform a visual inspection of the tank and associated equipment during each filling operation. PSE has requested that Ferrellgas provide to PSE a written record of at least one such inspection annually, not to exceed 15 months, so as to comply with 49 CFR §192.739. In addition, PSE performs regular inspections of the system as required by 49 CFR and WAC, thus further satisfying ourselves that the system is in proper working order.

PSE is currently evaluating the overall system performance and maintenance requirements of the Sumner Propane Gas Distribution System and is considering numerous alternatives to ensure ourselves that we remain compliant to federal and state regulations. Once this evaluation is completed PSE will provide Staff an update as to how PSE will proceed.

3. **National Fire Protection Association 58 Liquefied Petroleum Gas Code**  
*5.7.10.1 Are container openings equipped with one of the following:*  
*(3) A backflow check valve, plugged.*

**Charge:**

The fill port on the propane tank was not equipped with a plug/cover.

**Finding(s):**

During the field inspection, the fill port to the 1,000 gallon tank was not equipped with a plug/cover.

**PSE response:**

PSE agrees that all openings subject to exposure should be capped and plugged. When PSE reviewed this matter with Ferrellgas, they indicated that this situation likely occurred following their most recent scheduled visit to perform fill and maintenance activities. Ferrellgas also confirmed that the backflow check valve is ordinarily equipped with a plug that is visually inspected at each fill. At the time of the audit, the cap was found missing and PSE took immediate steps to contact Ferrellgas. Ferrellgas replaced the missing cap on 11/27/09. Please see enclosed photograph confirming the installation of this cap.

4. **National Fire Protection Association 58 Liquefied Petroleum Gas Code**  
*5.7.2.4 (a) Are ASME containers for LP-Gas equipped with direct spring-loaded pressure relief valve conforming with applicable requirements of UL 132, Standard on Safety Relief Valves for LP-Gas, or other equivalent pressure relief valve standards?*

**Charge:**

During the record review, PSE did not have any documentation on the tank's relief valve.

**Finding(s)**

Ferrell Gas is the owner of the 1,000 gallon propane tank and relief valve. PSE did not have any documentation as to the type of relief valve, pressure setting, and valve design.

**PSE response:**

PSE agrees with WUTC Staff that in order to ensure the safe operation of a propane system which includes the propane tank, an appropriate pressure relief system is vital. PSE contracted with Ferrellgas to be the propane tank owner and gas supplier. Ferrellgas assured us that their tanks meet all NFPA requirements. In order to ensure both, PSE and WUTC Staff that this NFPA requirement is compliant, we have enclosed tank and valve information which confirms that this tank is equipped with an appropriate spring-loaded pressure relief valve.

5. **National Fire Protection Association 58 Liquefied Petroleum Gas Code**  
*6.10.10 Do all emergency shutoff valves comply with the following? (1) Each emergency shutoff valve shall have at least one clearly identified and easily accessible manually operated remote emergency shutoff device.*

**Charge:**

PSE's Emergency shutoff valve was not in compliance.

**Finding(s)**

During the field inspection, PSE's did not have an emergency shutoff valve identified.

**PSE response:**

In PSE's research of the referenced NFPA section (6.10.10), we believe the application of this code is on tanks with an aggregate water capacity of more than 4000 gallons. This tank has a 1000 gal capacity. PSE does agree that in this field application and in the interest of public safety, WUTC Staff's noted AOC is note worthy. Thus in order to enhance the visibility of the manual shutoff valves, Ferrellgas has added a new

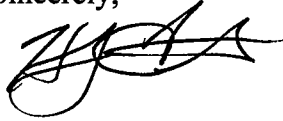
"Emergency Shutoff" sign on the tank which identifies the location of the tank shutoff device.

In addition, PSE has added a tag which identifies the PSE owned shutoff device located downstream of the tank shutoff device. Please see the enclosed photographs.

PSE regrets that the foregoing issues occurred, and is taking affirmative steps to ensure that they do not recur.

PSE trusts that the information provided fully responds to and satisfies your request. PSE respects the commission's responsibilities in auditing and enforcing pipeline safety regulations and we continue our efforts to construct, operate and maintain a safe gas pipeline system that meets high standards of excellence. If I can offer any further clarification, please feel free to contact me at 425-462-3967.

Sincerely,



Helge Ferchert  
Manager, Gas Compliance and Regulatory Audits

Attachment

cc: Michael Hobbs  
Duane Henderson  
Erik Markell  
Bert Valdman  
Sue McLain  
Karl Karzmar

Address	City	State	Zip Code
7521 171st Ave Ct E	Sumner	WA	98391
7423 171st Ave Ct E	Sumner	WA	98391
7417 171st Ave Ct E	Sumner	WA	98391
7510 171st Ave Ct E	Sumner	WA	98391
7516 171st Ave Ct E	Sumner	WA	98391
7522 171st Ave Ct E	Sumner	WA	98391
7601 171st Ave Ct E	Sumner	WA	98391
7609 171st Ave Ct E	Sumner	WA	98391
7615 171st Ave Ct E	Sumner	WA	98391
7621 171st Ave Ct E	Sumner	WA	98391
7622 171st Ave Ct E	Sumner	WA	98391
7507 171st Ave Ct E	Sumner	WA	98391
7501 171st Ave Ct E	Sumner	WA	98391
7502 171st Ave Ct E	Sumner	WA	98391
17136 410 HWY E	Sumner	WA	98390
17144 410 HWY E	Sumner	WA	98390
17018 76th St Ct E	Sumner	WA	98390

# FERRELLGAS

## Installation Review

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12/15/2009 06:47

Order No. 1030770328

Account No. 55696870

Performed by: 2768666 Rob B.

-----Customer-----

PUGET SOUND ENERGY

171ST AVE CT E

Sumner, WA 98390

- Containers, valves, and / or meters
- Piping and fittings
- Regulator
- Odor check / metered system

System Red Tagged - No

Customer at home - Yes

Customer smelled odorized propane and was shown shutdown procedure?

- Yes
- Declined
- Customer not available

Propane safety plan

- Left at residence
- Mailed to customer

The Product Installation Review (PIR) has been performed on my gas system if indicated above.

I know how to turn off gas in case of emergency.

I have smelled propane and can detect its odor.

I have received the consumer safety information and material.

I understand propane is flammable and can be explosive.

I know what to do when I smell gas.

I have had gas system deficiencies and/or corrections, if any, clearly explained to me.

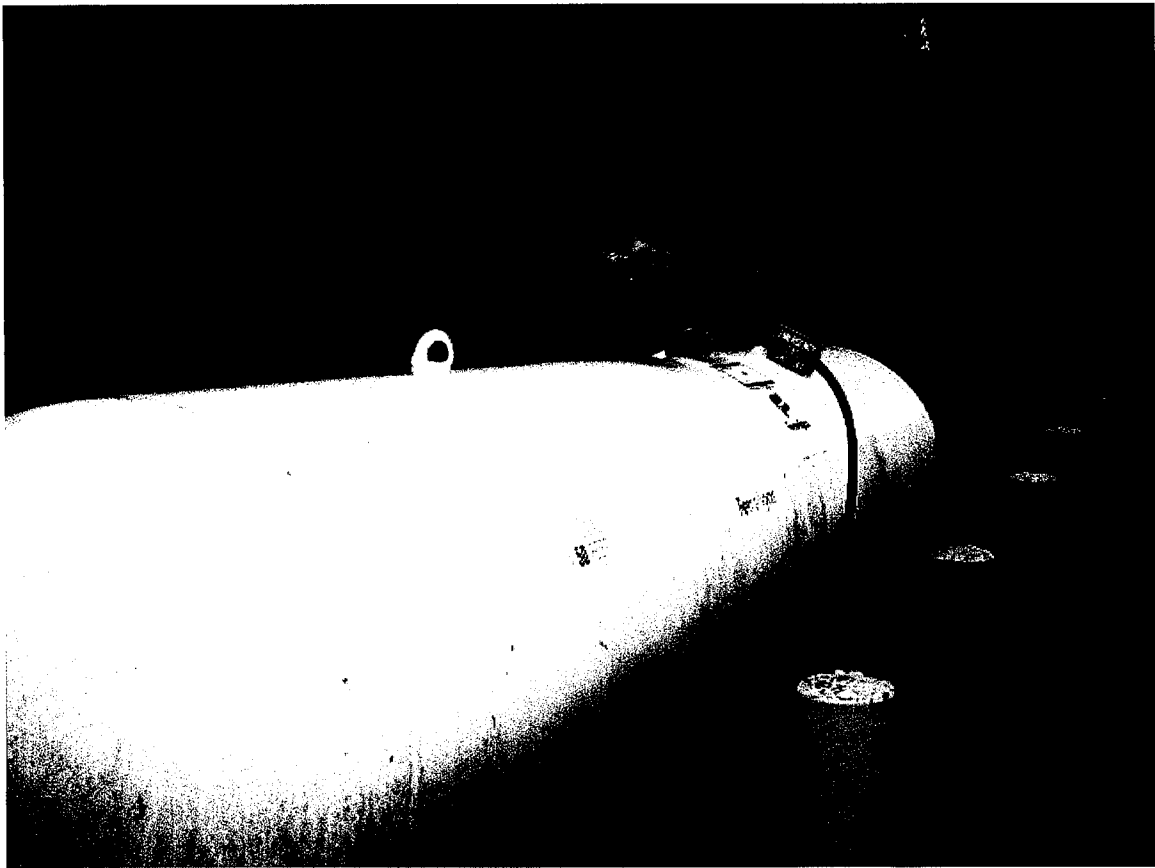
I will review the safety information and recommendations on the back of this form.

Customer Signature:

See important safety information on back of this form.







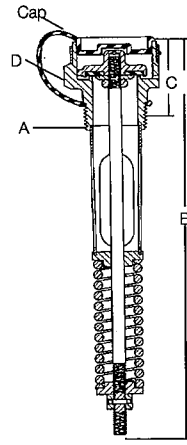
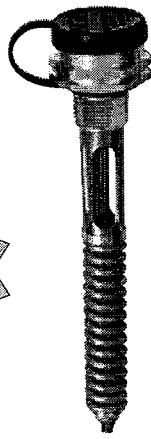
# Semi-Internal "Pop-Action" Pressure Relief Valves for ASME Containers 7583, 8684 and 8685 Series

## Application

Designed for use as a primary relief valve on ASME containers such as 250, 500 and 1,000 gallon tanks. Underwriters' Laboratories lists containers systems on which these types of valves are mounted outside the hood without additional protection, if mounted near the hood and fitted with a protective cap.

## Features

- Constructed of non-corrosive materials.
- "Pop-action" design keeps product loss at a minimum.
- ASME rated for use with LP-Gas.
- Request RegO® Relief Valves on all your original equipment ASME containers for reliable performance.



## Materials

Body ..... Brass  
 Spring ..... Steel  
 Stem ..... Stainless Steel  
 Seat Disc ..... Resilient Rubber

## Ordering Information

Part Number	Start To Discharge Setting PSIG	A Container Connection M. NPT	B Overall Height (Approx.)	C Height Above Coupling (Approx.)	D Wrench Hex Section	Flow Capacity SCFM/Air		Suitable for Tanks w/Surface Area Up To:**	Protective Cap (Included)
						UL (At 120% of Set Pressure)	ASME (At 120% of Set Pressure)		
7583G	250	3/4"	8 3/8"	1 1/8"	1 1/4"	1980	1806	80 Sq. Ft.	7583-40X
8684G		1"	9 3/8"	1 1/8"	1 1/2"	2620	2565	113 Sq. Ft.	8684-40
8685G		1 1/4"	11 1/8"	1 1/8"	2 3/8"	4385	4035	212 Sq. Ft.	7585-40X

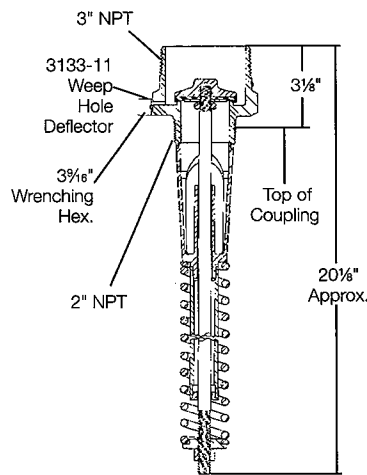
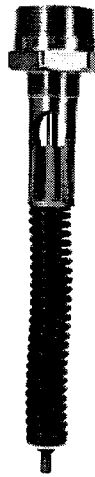
\* Per NFPA Pamphlet #58, Appendix D. Area shown is for UL or ASME flow rating—whichever is larger.

## Application

Designed especially for use as a primary relief valve on large stationary storage containers, these low profile relief valves are generally mounted in half couplings. However, they are designed so that the inlet ports clear the bottom of a full 2" coupling. This assures that the relief valve should always be capable of maximum flow under emergency conditions.

## Features

- High capacity, low turbulence design has a maximum guiding area providing for dependable shut-off after opening.
- Built-in spring stop limits the rise of the seat in full open position and prevents the spring from going "solid".
- External 3" NPT threaded body allows easy attachment of vent stacks. Optional pipeaway adapter has break-off groove to prevent damage to the relief valve should piping be stressed by damaging winds.
- "Pop-Action" design keeps product loss at a minimum.
- No guiding projections around the seat disc retainer to bind and hinder opening of valve if body is damaged.



## Materials

Body ..... Brass  
 Spring ..... Steel  
 Stem ..... Stainless Steel  
 Seat Disc ..... Resilient Rubber

## Ordering Information

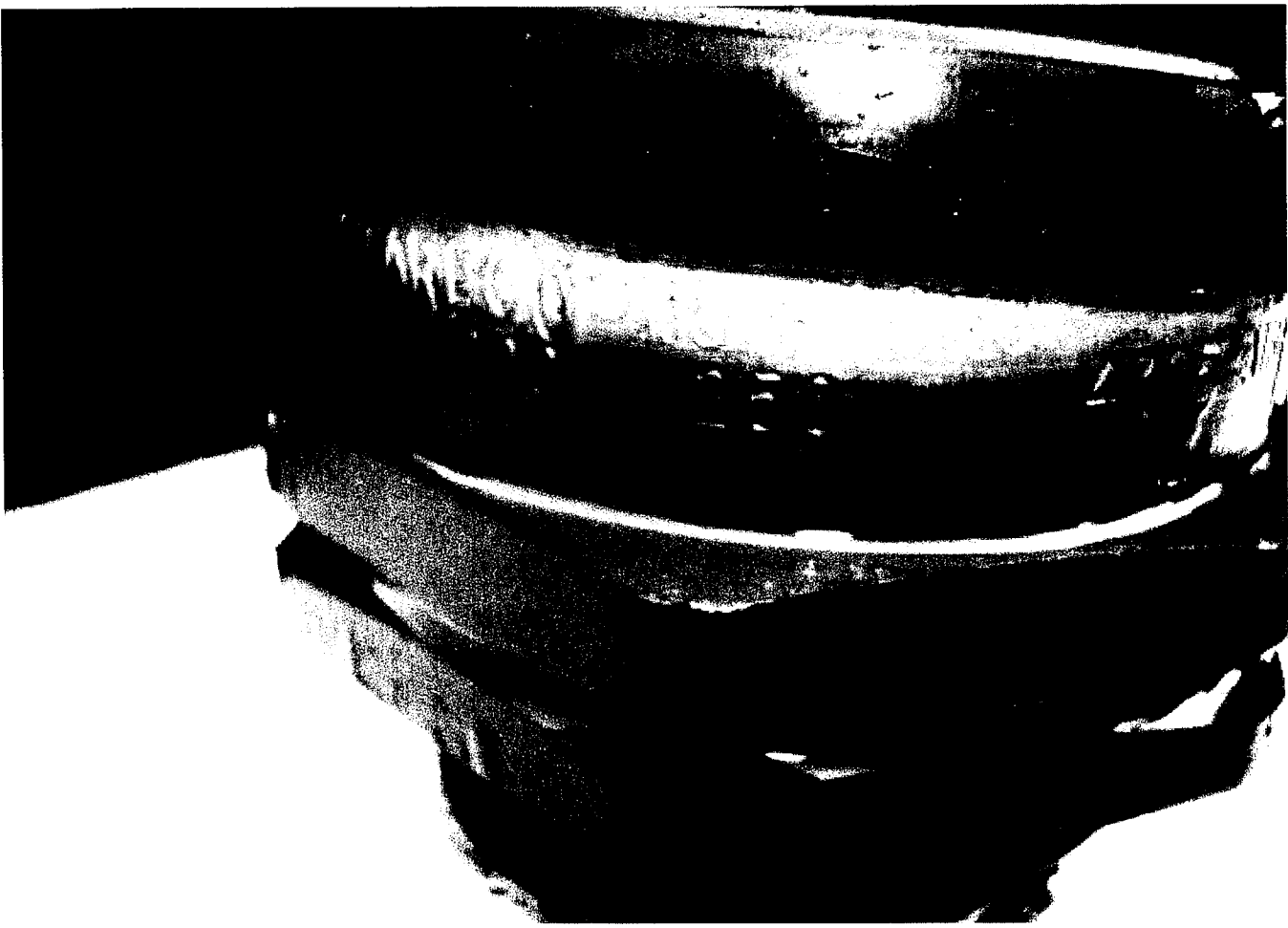
Part Number	Start To Discharge Setting PSIG	Container Connection M. NPT	Flow Capacity SCFM/Air*			Accessories	
			UL (At 120% of Set Pressure)	ASME (At 120% of Set Pressure)	Suitable for Tanks w/ Surface Area Up To:**	Protective Cap	Pipeaway Adapter
7534B	125	2"	6,025	-	319 Sq. Ft.	7534-40	7534-20***
7534G	250		11,675	10,422	708 Sq. Ft.		

\* Flow rates shown are for bare relief valves. Adapters and pipeaways will reduce flow as discussed in the forwarding information.

\*\* Per NFPA Pamphlet #58, Appendix D. Area shown is for UL or ASME—whichever is larger.

\*\*\* 3" F. NPT outlet connection.

D13







# Propane Safety

- What to Do in Case of Emergency
- How to Use Propane Safely
- Propane Scratch-and-Sniff Test
- Appliance Safety and Maintenance Tips

**PROPANE**  
EXCEPTIONAL ENERGY®

## IF YOU SMELL GAS

**1. NO FLAMES OR SPARKS!** Immediately put out all smoking materials and other open flames. Do not operate lights, appliances, telephones, or cell phones. Flames or sparks from these sources can trigger an explosion or a fire.

**2. LEAVE THE AREA IMMEDIATELY!** Get everyone out of the building or area where you suspect gas is leaking.

**3. SHUT OFF THE GAS.** Turn off the main gas supply valve on your propane tank if it is safe to do so. To close the valve, turn it to the right (clockwise).

**4. REPORT THE LEAK.** From a neighbor's home or other nearby building away from the gas leak, call your propane retailer right away. If you can't reach your propane retailer, call 911 or your local fire department.

**5. DO NOT RETURN TO THE BUILDING OR AREA** until your propane retailer determines that it is safe to do so.

**6. GET YOUR SYSTEM CHECKED.**

Before you attempt to use any of your propane appliances, your propane retailer or a qualified service technician must check your entire system to ensure that it is leak-free.

## TAKE THE SNIFF TEST

Scratch and sniff the blue circle. The odor is similar to propane odor. Have everyone in your family take the sniff test. Always take action if you smell any kind of foul odor.

## CAN YOU SMELL IT?

Propane smells like rotten eggs, a skunk's spray, or a dead animal. Some people may have difficulty smelling propane due to their age (older people may have a less sensitive sense of smell); a medical condition; or the effects of medication, alcohol, tobacco, or drugs. Consider purchasing a propane gas detector as an additional measure of security.

**ODOR FADE** is an unintended reduction in the concentration of the odor of propane, making it more difficult to smell. Although rare, several situations can cause odor fade:

- The presence of air, water, or rust in a propane tank or cylinder
- The passage of leaking propane through the soil

Since there is a possibility of odor fade or problems with your sense of smell, you should respond immediately to even a faint odor of gas.

## PROPANE GAS DETECTORS

Propane gas detectors sound an alarm if they sense propane in the air. They can provide an additional measure of security in homes with little-used areas or with occupants who have difficulty smelling propane.

**GUIDELINES** regarding propane gas detectors:

- Buy only units that are listed by Underwriters Laboratories (UL).
- Follow the manufacturer's instructions regarding installation and maintenance.
- Never ignore the smell of propane, even if no detector is sounding an alarm.

## CARBON MONOXIDE AND YOUR SAFETY

### WHAT IS CARBON MONOXIDE (CO)?

You can't taste or smell CO, but it is a very dangerous gas, produced when any fuel burns. High levels of CO can come from appliances that are not operating correctly, or from a venting system or chimney that becomes blocked.

**CO CAN BE DEADLY!** High levels of CO can make you dizzy or sick (see below). In extreme cases, CO can cause brain damage or death.

### Symptoms of CO poisoning include:

- Headache
- Dizziness
- Fatigue
- Shortness of breath
- Nausea

**IF YOU SUSPECT CO IS PRESENT, ACT IMMEDIATELY!**

1. If you or a family member shows physical symptoms of CO poisoning, get everyone out of the building and call 911 or your local fire department.

2. If it is safe to do so, open windows to allow entry of fresh air, and turn off any appliances you suspect may be releasing CO.

3. If no one has symptoms, but you suspect that CO is present, call your propane retailer or a qualified service technician to check CO levels and your propane equipment.

## TO HELP REDUCE THE RISK OF CO POISONING:

- Have a qualified service technician check your propane appliances and related venting systems annually, preferably before the heating season begins.
- Install UL-listed CO detectors on every level of your home.
- Never use a gas oven or range-top burners to provide space heating.
- Never use portable heaters indoors unless they are designed and approved for indoor use.
- Never use a barbecue grill (propane or charcoal) indoors for cooking or heating.
- Regularly check your appliance exhaust vents for blockage.

## SIGNS OF IMPROPER APPLIANCE OPERATION THAT CAN GENERATE HIGH CO LEVELS:

- Sooting, especially on appliances and vents
- Unfamiliar or burning odor
- Increased moisture inside of windows

## WHAT IS PROPANE?

Propane (also called LPG—liquefied petroleum gas—or LP gas) is a liquid fuel stored under pressure. In most systems, propane is vaporized to a gas before it leaves the tank. Propane is flammable when mixed with air (oxygen) and can be ignited by many sources, including open flames, smoking materials, electrical sparks, and static electricity. Severe freeze burn or frostbite can result if propane liquid comes in contact with your skin.

## LIGHTING PILOT LIGHTS

**IF A PILOT LIGHT REPEATEDLY GOES OUT** or is very difficult to light, there may be a safety problem. **DO NOT** try to fix the problem yourself. It is strongly recommended that only a **QUALIFIED SERVICE TECHNICIAN** light any pilot light that has gone out.

**YOU ARE TAKING THE RISK** of starting a fire or an explosion if you light a pilot light yourself. Carefully follow all of the manufacturer's instructions and warnings concerning the appliance before attempting to light the pilot.

## APPLIANCE MAINTENANCE

**LEAVE IT TO THE EXPERTS.** Only a qualified service technician has the training to install, inspect, service, maintain, and repair your appliances. Have your appliances and propane system inspected just before the start of each heating season.

## HELP YOUR APPLIANCES "BREATHE."

Check the vents of your appliances to be sure that flue gases can flow easily to the outdoors; clear away any insect or bird nests or other debris. Also, clear the area around your appliances so plenty of air can reach the burner for proper combustion.

## DO NOT TRY TO MODIFY OR REPAIR

valves, regulators, connectors, controls, or other appliance and cylinder/tank parts. Doing so creates the risk of a gas leak that can result in property damage, serious injury, or death.

## HAVE OLDER APPLIANCE CONNECTORS

**INSPECTED.** Certain older appliance connectors may crack or break, causing a gas leak. If you have an appliance that is more than 20 years old, have a qualified service technician inspect the connector. Do not do this yourself, as movement of the appliance might damage the connector and

**FLAMMABLE VAPORS ARE A SAFETY HAZARD.** The pilot light on your propane appliance can ignite vapors from gasoline, paint thinners, and other flammable liquids. Be sure to store and use flammable liquids outdoors or in an area of the building containing no propane appliances.

**DON'T RISK IT!** If you cannot operate any part of your propane system, or if you think an appliance or other device is not working right, call your propane retailer or a qualified service technician for assistance.

## RUNNING OUT OF GAS

**DON'T RUN OUT OF GAS. SERIOUS SAFETY HAZARDS, INCLUDING FIRE OR EXPLOSION, CAN RESULT.**

- If an appliance valve or a gas line is left open, a leak could occur when the system is recharged with propane.
- If your propane tank runs out of gas, any pilot lights on your appliances will go out. This can be extremely dangerous.
- **A LEAK CHECK IS REQUIRED.** In many states, a propane retailer or a qualified service technician must perform a leak check of your propane system before turning on the gas.

## IMPORTANT CONTACTS

POLICE:

FIRE DEPARTMENT:

PROPANE RETAILER:

## IMPORTANT PROPANE SAFETY INFORMATION

006 PROPANE EDUCATION & RESEARCH COUNCIL | PRC 003121

Please read and follow the safety rules in this brochure. Share this information with your family to help keep everyone safe and to reduce the risk of serious and potentially fatal injury, fire, or explosion.

# Important

# Information

for you and your family

