Policy:	Effective Date:	Revised:
Portable LPG Containers	09/01/2019	08/01/2019
Awaiting Resale		
Policy Number:	Section:	Prior Policy Number:
FP014	Fire Prevention	N/A
Department:	Initial Policy Date:	Prior Effective Date:
District	07/01/2013	07/01/2013

Purpose: To provide a consistent method of control for the proper storage and handling of liquefied petroleum gas (LPG) containers awaiting resale. It shall be the responsibility of the Windsor Severance Fire Rescue's-Life Safety Division to inform potential distributors of the requirements within the WSFR response district and to inspect installations to ensure compliance with said requirements. It shall be the responsibility of the distributor to ensure their understanding of the requirements and to comply. This policy is general in nature and may not be all inclusive of all codes that may apply for each permitted site. For questions regarding permitting and WSFR policy, please call 970.686.2626.

Definitions:

• The District: all areas within the jurisdiction of Windsor Severance Fire Rescue (WSFR).

Procedures:

Details and restrictions contained in the following document are based on the 2018 International Fire Code (2018 IFC).

All businesses managing portable LPG container exchange systems on their premises shall be provided with a copy of this policy (FP014). The business will be required to ensure compliance with this policy. All LPG distributors operating exchange systems within the jurisdiction of Windsor Severance Fire Rescue will be provided with a copy of this policy. The propane distributor who maintains legal ownership of the LPG exchange system shall use this policy as an information source to be used while developing and maintaining site plans.

Permitting

- All LPG container exchange systems require a current and valid Hazardous Materials permit, issued by the Windsor Severance Fire Rescue-Life Safety Division.
- The LPG distributor shall provide plans and specifications for new installations to the Life Safety Division for review and approval prior to installations of any new distribution site or location. Plans must address all applicable sections of the 2018 IFC.
- The LPG distributor will notify the Life Safety Division at least 48 hours in advance to request a site inspection for all new installations or modifications to existing installations.
- No LPG tanks will be stored in new installations prior to a completed site inspection by the Life Safety Division.

- Upon successful completion of a site inspection, the Life Safety Division will issue the business with an appropriate hazardous materials permit, renewable annually. The distributor may receive a photocopy of this permit.
- The business, rather than the LPG distributor, will be required to maintain the appropriate hazardous materials permit with the Windsor Severance Fire Rescue-Life Safety Division.
- The business will be required to maintain the exchange system in the same condition and location as noted on the installation date.
- Requests to move and/or relocate the exchange system must be made in writing to the Life Safety Division.
- Requests must include a detailed site plan as required for new installations. Approved relocations will require a site inspection and any applicable fees.

Compliance with the following requirements shall be necessary for all LPG exchange systems in the Windsor Severance Fire Rescue:

LP-Gas Containers

Quantity

- **Quantity requirements apply** to all filled and any partial or empty containers that were previously filled with liquified petroleum gas.
- Maximum capacity within established limits Within the limits established by law restricting the storage of liquified petroleum gas (LPG) for the protection of heavily populated or congested areas, the aggregate capacity of any one installation shall not exceed the following limits (WSFR Amendment to 2018 International Fire Code)-
 - 1. As addressed by ordinance and/or zoning regulation adopted by a branch of local government with the District.
 - 2. Any area within unincorporated parts of the District which are not zoned industrial or agricultural by the zoning ordinance of the county of jurisdiction.

Exception: In particular installations, this capacity shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of the proposed LP-gas containers, degree of fire protection to be provided and capabilities of the fire department. These provisions shall not be interpreted as to conflict with the provisions of Colorado Revised Statute Title 8, Article 20 or Title 34 as amended. In the event of conflict, the more restrictive provision will prevail.

Location

 Prohibited storage locations The storage of LP-gas containers on roofs or any location where heavier than air gas might collect (basement, pit or similar location) is prohibited. Outside storage of LP-gas containers awaiting use, resale or part of cylinder exchange program shall be located in accordance with Table 6109.12 (2018 IFC).

TABLE 6109.12
SEPARATION FROM EXPOSURES OF LP-GAS CONTAINERS AWAITING USE,
RESALE OR EXCHANGE STORED OUTSIDE OF BUILDINGS

	MINIMUM SEPARATION DISTANCE FROM STORED LP-GAS CYLINDERS TO (feet):							
QUANTITY OF LP-GAS STORED (pounds)	Nearest important building or group of buildings or line of adjoining property that may be built upon	Line of adjoining property occupied by schools, places of religious worship, hospitals, athletic fields or other points of public gathering; busy thoroughfares; or sidewalks	LP-gas dispensing station	Doorway or opening to a building with two or more means of egress	Doorway or opening to a building with one means of egress	Combustible materials	Motor vehicle fuel dispenser	
720 or less	0	0	5	5	10	10	20	
721–2,500	0	10	10	5	10	10	20	
2,501-6,000	10	10	10	10	10	10	20	
6,001-10,000	20	20	20	20	20	10	20	
Over 10,000	25	25	25	25	25	10	20	

For SI: 1 foot = 304.8 mm, 1 pound = 0.454 kg.

- Must minimize container exposure to excessive temperature rise, physical damage or tampering.
- **Location shall be approved** by the Fire Marshal, or designee, and shall comply with applicable municipal and/or fire code standards in regard to screening, fire protection systems, etc.
- For all new installations, the distributor will provide a detailed site plan to the Life Safety Division for review and approval prior to the placement of any LPG containers or storage cages on the property. Businesses wishing to relocate their storage cages will be required to provide a similar site plan, along with written justification for the request, to the Life Safety Division for review. No cages or containers shall be placed on site or moved to new locations without prior approval from the Life Safety Division.
- **Precautions shall be taken against vehicle damage**. LPG exchange station cages shall be protected by bollards or similar structures capable of withstanding direct vehicle impact. Bollards shall be:
 - 1. Constructed of steel tubing not less than 4 inches in diameter and filled with concrete.
 - 2. Spaced no more than 4 feet on center between posts.
 - 3. Set not less than 3 feet deep in a 15-inch diameter concrete footer.
 - 4. Set with the top of the post no lower than 3 feet above the ground.
 - 5. Spaced no less than 3 feet from the cage or rack.
- Combustible materials shall be kept at least ten (10) feet from LPG containers and cages. The property manager shall mark walls and/or floors around the LPG storage cages to clearly indicate the 10-foot distance and to inform the public and employees that storage of any kind within the marked area is strictly prohibited.
- Adjacent and/or nearby incompatible hazardous materials shall be segregated by a
 distance of not less than 20 feet, a noncombustible partition or stored in approved
 cabinets.

Storage

- **Preventing unauthorized access** all containers shall be stored within a lockable ventilated metal locker or rack that prevents tampering and physical damage to the containers.
- **Containers shall be positioned** upright with pressure-relief valve unobstructed and clearly visible.
- Valves on full containers awaiting resale will be protected by screw-on-type plastic caps.
- Damaged containers showing serious denting, bulging, gouging, or excessive corrosion shall be removed from service, marked appropriately, and returned promptly to the distributor.
- **Defective containers and tanks** shall be promptly removed from service, repaired or disposed of in an approved manner within seven (7) days of acceptance or exchange.
- **A DOT approved label** saying "LIQUEFIED PETROLEUM GAS, UN 1075, FLAMMABLE" shall be applied to all tanks by the distributor.
- An approved warning label shall be applied to all containers of 100 lb. or less.

Fire Protection

• The business shall properly mount at least one (1) fire extinguisher no closer than five (5) feet to the LPG storage system an no further away than 50 feet. The extinguisher shall be no less than 15-pound dry chemical with a 2-A:20-B:C rating.

Signage

- All required signs shall be prominent and clearly posted.
- Signs shall be posted to prohibit smoking within 25-feet of storage area.
- **Signs shall be posted to inform customers** of exchange procedures, distributor company name, and 24-hour emergency contact phone number.
- **Signs shall be posted at building entrance(s)** to inform customers to leave LPG containers outside of the building.

Employee Training

- Business management will maintain records of all employees' training related to the LPG exchange system for a period not less than three (3) years. All training records will be made available to fire code inspection personnel upon request.
- All employees involved in the LPG exchange system shall be trained in proper handling and operating procedures.
- The business shall develop, implement, and maintain written procedures for the purpose
 of training employees involved in the propane exchange program on the chemical nature
 of LPG as well as appropriate mitigation and response activities necessary in the event of
 a fire, leak, or spill. A copy of all newly developed training programs must be provided to
 the Life Safety Division for review and approval prior to implementation.
- All employees shall have access to Safety Data Sheets (SDS) and shall be trained in the site emergency response procedures.

Hazardous Materials Documentation

- All businesses operating propane exchange stations shall apply for Special Permit for LPG
 Tanks and Cages during the first year of operations. All subsequent years of operation
 require a Hazardous Materials and Operations permit from the Life Safety Division of
 Windsor Severance Fire Rescue. All WSFR permits must be conspicuously posted at all
 times and must be renewed annually. The manager of the business and/or building is
 responsible to apply for the required permit to ensure that the business is in compliance
 with this policy.
- All Hazardous Materials Inventory Statement (HMIS) and Safety Data Sheets (SDS) shall be readily available on site at all times.
- Hazardous Materials Management Plan (HMMP), when required, shall be readily available on site.

WRITTEN INSPECTION CHECKLIST FOR RECEIVEING EMPTY CYLINDERS:

- 1. Protective collar in place.
- 2. Manual shutoff valve closed.
- 3. Safety valve OK. No bent valves or damaged threads.
- 4. Appropriate plug installed in outlet.
- 5. Cylinder shows no fire damage, dents, bulges, gouges, punctures, pin holes, corrosion, rust, pitting.

WRITTEN INSPECTION CHECKLIST FOR SELLING FULL CYLINDERS:

- 1. Manual shutoff valve closed.
- 2. Appropriate plug installed in outlet.
- 3. DOT container label (LIQUEFIED PETROLEUM GAS, UN1075, FLAMMABLE) in place
- 4. Cylinder warning label in place.



WINDSOR SEVERANCE FIRE RESCUE **LIFE SAFETY DIVISION**

100 N. 7th Street • Windsor • Colorado • 80550 970-686-2626 • inspections@wsfr.us

Special P	ermit A	Applica	ation
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BUSINESS NAME:		PHONE:		
RESPONSIBLE PERSON:		PHON	IE:	
	Γ, CITY, ZIP CODE)			
DATE(S) OF THE EVENT:				
applications must comply w	t to obtain a Special Permit from Wind with the WSFR policies, the 2018 <i>Intern</i> In g Code in your area. Contact WSFR for	ational Fire	Code and ado	pted version
SP	ECIAL PERMIT	FEE	QUANTITY	COST
Bon Fire with Engine sta	ndby	\$300.00		
Fireworks Display (Indoo	or and Outdoor)	\$200.00		
Haunted House/Maze		\$100.00		
Annual Mobile Food Tru	ick License and Inspection	\$50.00		
Retail Christmas Tree Sa	les	\$100.00		
Hazardous Materials Tar	nk Installation or Removal	\$100.00		
(temporary, abovegroun	nd and underground tanks)	per tank		
LPG Tanks and Cages		\$100.00		
		each		
Kitchen Hood Systems		\$250.00		
Annual Hazardous Mate	rials and Operations	\$100.00		
Contractor Licensing (valid for 2 years)		\$100.00		
Over the Counter/Scope Letter Submission		\$75.00		
Oil and Gas Well Permit	and Inspection	\$500.00		
		per well		
Oil and Gas Tank Battery	y Permit and Inspection	\$100.00		
		per tank		
Re-inspection Fee (paid	prior to re-inspection)	\$75.00		
	TOTAL COST OF PERMIT(S)			\$
Responsible Person Signature:		Title:		
Responsible Person (please print)		Phone Number:		
	For WSFR Use Only			
Date of Inspection:	Inspector:	Permit #:		
	Expiration Date:			