

APPLICATION FOR INSTALLATION OF LIQUEFIED PETROLEUM GAS (LPG) FACILITIES

This information is required under Act 207 of the Public Acts of 1941, as amended, being Section 29.3c of the Michigan Compiled Laws Annotated. Any owner who knowingly fails to notify or submits false information shall be subject to a misdemeanor and/or civil penalties not to exceed \$200 per day for each tank for which notification is not given or for which false information is submitted.

A plan review must be completed for the following LPG installations:

- 1) Any container filling location.
- 2) A container with water capacity greater than 2,000 gallons.
- 3) Two or more containers with an aggregate water capacity greater than 4,000 gallons.

A request for plan review must include:

- 1) A plot map showing the following information:
 - a) Location of buildings, public roadways, railroad main lines, public sidewalks and property lines.
 - b) Proposed location of the container(s).
 - c) Location of existing container(s); both LPG and flammable/combustible liquids.
 - d) Location of point of transfer in relationship to container, buildings, public ways, outdoor places of public assembly, driveways, main line railroad track center lines, and the line of adjoining property which may be built upon, as specified in Table 6.5.2.1 of the Liquefied Petroleum Gases Rules.
- 2) Completed form BFS-3861. Items on BFS-3861 marked with an asterisk (*) that are either not completed or have inadequate information, may cause the proposed plan to be disapproved.
- 3) A plan review fee of \$203.00 per tank. A plan review will not be completed without the plan review fee.

Make checks payable to the "State of Michigan". Mail the completed application and fee to:

LARA Cashiers Office UST/AST PO Box 30033 Lansing MI 48909	<u>Overnight mail</u> LARA Cashiers Office UST/AST 2407 North Grand River Avenue Lansing, MI 48906
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Regulated LPG facilities cannot be operated without permission from the Bureau of Fire Services. The LPG systems must be in compliance with the storage and handling of the *Liquefied Petroleum Gases* rules, 2014 AACRS R 29.6101 et seq. that adopt by reference the National Fire Protection Association Pamphlet 58, 2014 edition. If you need any further information or assistance, please contact the Bureau of Fire Services, Storage Tank Division, at 517-241-8847.

Department of Licensing and Regulatory Affairs, Bureau of Fire Services, Storage Tank Division
P.O. Box 30033, Lansing, MI 48909

APPLICATION FOR INSTALLATION OF LIQUEFIED PETROLEUM GAS FACILITIES

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FACILITY NAME	NEW ASSIGNED TANK NUMBER(S)	FACILITY ID NUMBER
FACILITY STREET ADDRESS (P.O. BOX NOT ACCEPTABLE)	CONTACT PERSON (AT LOCATION)	AREA CODE & TELEPHONE NUMBER ()
CITY	COUNTY	STATE MI ZIP CODE

SUBMITTER'S NAME	STREET ADDRESS	AREA CODE & TELEPHONE NUMBER ()
CITY	STATE	ZIP CODE

ITEM	DESCRIPTION	MANUFACTURER & PART NUMBER
1.*	CONTAINER DESIGN: Section 5.2: 250 psi working pressure.	_____ _____
2.	CONTAINER SUPPORTS/INSTALLATION: Section 5.2.7 & 6.6.3 & 6.6.4: Noncombustible; steel protection may be required.	_____ _____
3.	LOCATION OF CONTAINER: Section 6.2 & 6.3 and Table 6.3.1.1: To important buildings, property lines which may be built upon, between containers, to FL/CL Dikes, FL/CL ASTs & USTs, power lines, etc.	_____ _____ _____
4.*	LIQUID WITHDRAWAL CONNECTION AT CONTAINER: Table 5.7.4.2 & 5.7.4.2(B) & 6.25.3.8 Liquid withdrawal. Combination of valves to prevent uncontrolled/accidental release.	_____ _____
5.	PIPING INSTALLATION: Section 5.9, 6.9, & 6.24.5 Schedule 40 - welded. Schedule 80 - threaded. Approved nonmetallic piping - only underground.	_____ _____
6.	STRAINER: Section 5.17.1 & 6.18.4 Strainer element accessible for cleaning.	_____ _____
7.	FLEXIBLE CONNECTOR: Section 5.9.6 & 6.9.6 60 inch maximum length, approved hose or listed flexible connector. May be required due to vibration and/or movement.	_____ _____
8.	HYDROSTATIC RELIEF: Section 5.13 & 6.13: Where liquid is trapped between shutoffs or between shutoff and check valves or bypass valves. Minimum 400 psi.	_____ _____
9.	PUMP INSTALLATION: Section 5.17.2, 6.18.2, and 6.19.2: According to manufacturer's recommendation. Bypass, internal or external, for positive displacement pump; or secondary means of bypass that cannot be rendered inoperative. Pump operating control/disconnect switch near pump.	_____ _____

APPLICATION FOR INSTALLATION OF LIQUEFIED PETROLEUM GAS FACILITIES

(Continued from Page 2)

ITEM	DESCRIPTION	MANUFACTURER & PART NUMBER
10.	BYPASS PIPING: Section 6.9.3: Approved pipe or copper tubing.	_____ _____
11.*	LIQUID FILL/BYPASS CONNECTION AT CONTAINER: Table 5.7.4.1(D) & 5.7.4.2 and Section 5.7.4.2(F)- Liquid Fill (F): Combination of valves to prevent uncontrolled/accidental release. Special attention to type of pump and hydrostatic relief if positive shutoff valve is used.	_____ _____
12.*	VAPOR EQUALIZING/METER LINE CONNECTION AT CONTAINER: Table 5.7.4.1(D) & 5.7.4.2 and Section 5.7.7.2(A) & (E)- Vapor Equalizing (E): Combination of valves to prevent uncontrolled/accidental release.	_____ _____
13.	LIQUID TRANSFER: Section 6.19.2: Distributing plants, distributing points, industrial plants - excess flow or ESV is required if pipe is larger than ½ inch internal diameter.	_____ _____
14.	METER: Section 5.17.6 & 6.18.5: Installed as recommended by the manufacturer and securely mounted and protected against physical damage.	_____ _____
15.*	LIQUID TRANSFER: Section 6.25.3.5: Motor fueling - excess flow or differential back pressure valve required. Rule of thumb: excess flow rated at 1.5 times pump capacity.	_____ _____
16.	APPROVED BREAKAWAY COUPLING: Section 6.25.4.2: Required on self-service motor fueling. Does not take the place of excess flow valve.	_____ _____
17.	APPROVED HOSE: Section 5.9.6: Marked for LP use - may not be used in lieu of piping.	_____ _____
18.	LOCATION OF POINT OF TRANSFER: Table 6.5.2.1 and Section 6.5: Distances to buildings, property lines, etc.	_____ _____
19.	PIPING SUPPORT/PROTECTION: Section 6.9.3.10: Protected against physical damage. Painted or otherwise protected against corrosion. Nonmetallic piping - manufacturer's recommendation and not less than 12 inches underground.	_____ _____
20.*	EMERGENCY SHUTOFF VALVES/CONNECTIONS FOR FLOW CONTROL: Section 6-12: Required on new and existing installations over 4,000 GWC individual or 4,000 GWC aggregate with manifolded liquid lines and where hose/swivel type piping is 1 ½ inches or larger for liquid and 1 ¼ inches or larger for vapor. Backcheck OK if flow is only in one direction. If under 4,000 GWC, connection must be equipped in accordance with Table 5.7.4.1(D).	BOBTAIL LOADING: Vapor line: _____ Liquid line: _____ TRANSPORT UNLOADING: Vapor line: _____ Liquid line: _____

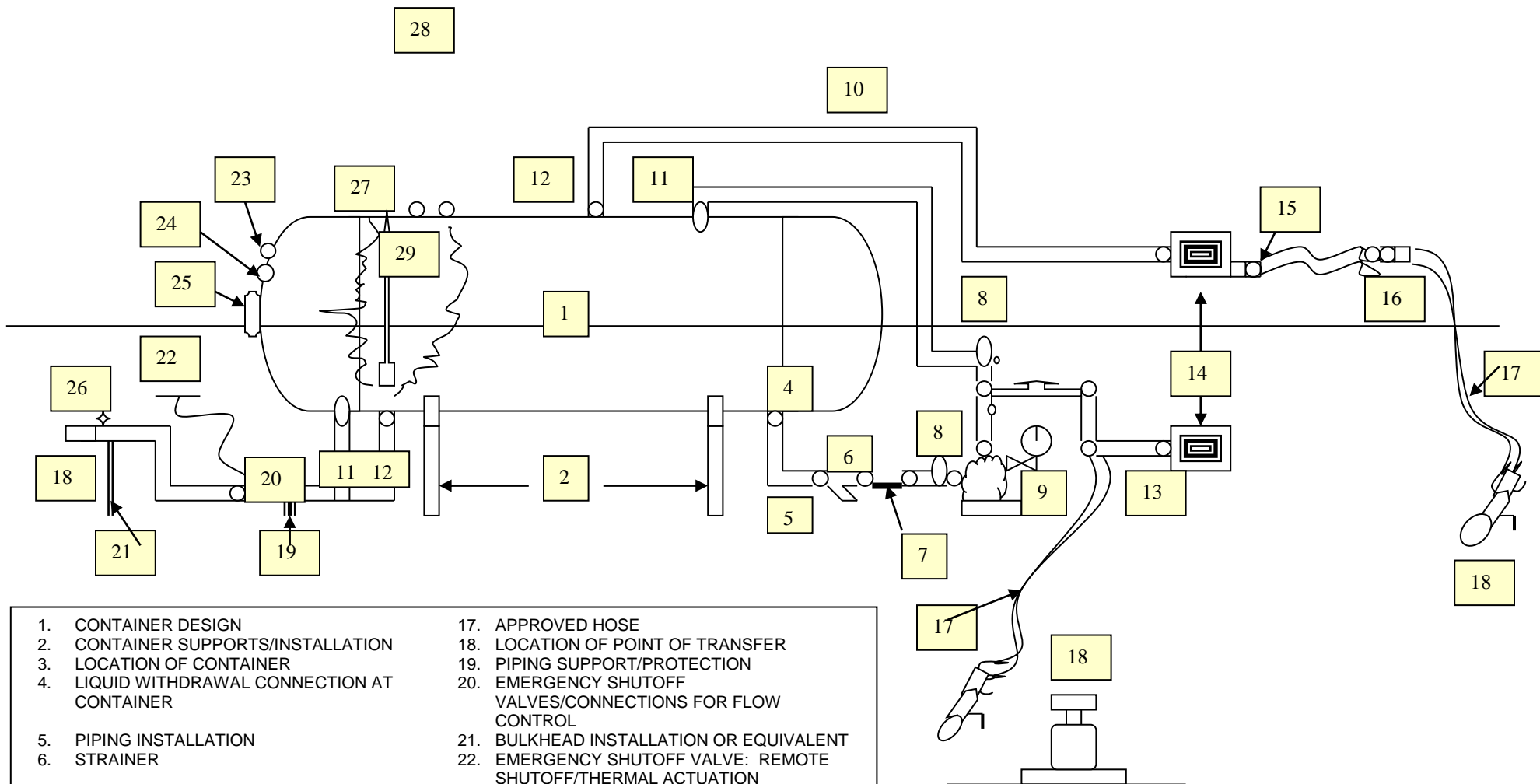
APPLICATION FOR INSTALLATION OF LIQUEFIED PETROLEUM GAS FACILITIES

(Continued from Page 3)

ITEM	DESCRIPTION	MANUFACTURER & PART NUMBER
21.	BULKHEAD INSTALLATION OR EQUIVALENT: Section 6.12.8.: Required on new and existing installations with ESV.	_____ _____
22.	EMERGENCY SHUTOFF VALVE: REMOTE SHUTOFF/THERMAL ACTUATION: Section 5.12.2.3: Required on new and existing installations with ESV and on all Internal Valves.	_____ _____
23.	FIXED LIQUID LEVEL GAUGE: Section 5.7.5.3: Required on storage containers constructed after December 31, 1965.	_____ _____
24.	PRESSURE GAUGE: Section 5.7.6: Required on containers over 2,000 GWC or any size container for LPG service stations.	_____ _____
25.	VARIABLE LIQUID GAUGE: Section 5.7.5.8: Magnetic float or rotary gauge.	_____ _____
26.	LABELING OF CONTAINER INLET AND OUTLET CONNECTION: Section 5.7.8.5: Required on containers of 2,000 GWC or more. Designate whether line communicates with liquid or vapor space.	_____ _____
27.	RAINCAPS: Section 6.7.2.4: Required for all pressure relief devices.	_____ _____
28.	CORROSION PROTECTION: Section 6.6.1.4 and 6.6.6.1 and 6.17 ANCHORING: Section 6.6.1.6	_____ _____
29.*	PRESSURE RELIEF DEVICES: Section 5.7.2 & 6.7.2 No shutoff valves between relief device and container. Device must be marked with start-to-leak pressure in psig; rated relieving capacity in CFM air at 60 degrees F and 14.7 psia; manufacturer's name and catalog number.	_____ _____
30.	PROTECTION AGAINST TAMPERING: Section 6.19.4.2: Six-foot high industrial-type fence with two means of egress and three-foot clearance to allow access to egress. Second gate not required if enclosure is not over 100 square feet, the point of transfer is within three feet of a gate, and containers being filled are not within enclosure; OR suitable locking devices to prevent unauthorized operation of appurtenances, system valves or equipment.	_____ _____
31.	FIRE PROTECTION: Section 6.27 & 8.5: Industrial plant, bulk plants, and dispensing stations. Fire safety analysis required for facilities over 4,000 gallon capacity. Fire extinguishers per rule for all facilities, typically one 18lb B:C	_____ _____
32.	PHYSICAL PROTECTION: Section 6.6.1.2: Where physical damage to LPG containers, or systems of which they are a part (e.g., piping, dispensing unit), from vehicles is a possibility, crash protection shall be provided.	_____ _____

TYPICAL INSTALLATION OF A LIQUEFIED PETROLEUM GAS FACILITY

(Numbers correspond to the item numbers on pages 1, 2, and 3 of the application)



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| 1. CONTAINER DESIGN | 17. APPROVED HOSE |
| 2. CONTAINER SUPPORTS/INSTALLATION | 18. LOCATION OF POINT OF TRANSFER |
| 3. LOCATION OF CONTAINER | 19. PIPING SUPPORT/PROTECTION |
| 4. LIQUID WITHDRAWAL CONNECTION AT CONTAINER | 20. EMERGENCY SHUTOFF VALVES/CONNECTIONS FOR FLOW CONTROL |
| 5. PIPING INSTALLATION | 21. BULKHEAD INSTALLATION OR EQUIVALENT |
| 6. STRAINER | 22. EMERGENCY SHUTOFF VALVE: REMOTE SHUTOFF/THERMAL ACTUATION |
| 7. FLEXIBLE CONNECTOR | 23. FIXED LIQUID LEVEL GAUGE |
| 8. HYDROSTATIC RELIEF | 24. PRESSURE GAUGE |
| 9. PUMP INSTALLATION | 25. VARIABLE LIQUID GAUGE |
| 10. BYPASS PIPING | 26. LABELING OF CONTAINER INLET AND OUTLET CONNECTION |
| 11. LIQUID FILL/BYPASS CONNECTION AT CONTAINER | 27. RAIN CAPS |
| 12. VAPOR EQUALIZING/METER LINE CONNECTION AT CONTAINER | 28. CORROSION PROTECTION |
| 13. LIQUID TRANSFER | 29. PRESSURE RELIEF DEVICES |
| 14. METER | 30. PROTECTION AGAINST TAMPERING |
| 15. LIQUID TRANSFER | 31. FIRE PROTECTION |
| 16. APPROVED BREAKAWAY COUPLING | 32. PHYSICAL PROTECTION |