CONDITIONALLY APPROVED
DEPT OF SAFETY AND PROFESSIONAL SERVICES
DIVISION OF INDUSTRY SERVICES

SEE CORRESPONDENCE

DIVISION OF INDUSTRY SERVICES
141 NW BARSTOW ST FL 4TH
WAUKESHA WI 53188-3789
Contact Through Relay
dsps.wi.gov/programs/industry-services
www.wisconsin.gov

Tony Evers, Governor
Dawn Crim, Secretary

April 8, 2020

Project: Waukesha U-Haul
Permit No.: GS-042000014-PR
Pages: 1-4; Date: 4-8-2020

Dick Klein Felker Truck and Equipment Inc PO Box 139 Dale, WI 54931	U-Haul Moving and Storage of Les Paul PKWY 925 HWY 164 S WAUKESHA, WI County of: WAUKESHA

SITE INSPECTION REQUIRED FOR

CONDITIONAL APPROVAL
PLAN APPROVAL EXPIRES: 04/08/2021.

Identification Numbers
Site ID No. SIT-71405
Permit No. GS-042000014-PR
Please refer to both identification numbers, above, in all correspondence with the agency.

Description: New 1,150 Gallon Manchester Vertical LPG Storage Tank (Storage with Vehicle Fuel Dispensing)
Permit No.: GS-042000014-PR; National Bd. No.: TBD; MAWP: 250 PSIG; Cont. S.A.: 166.5 sq. ft.; Year Built: TBD

SITE REQUIREMENTS

- Contact both the State Inspector and the local municipality PRIOR to the start of construction.
- A full-size copy of the approved plans, specifications and this letter shall be on-site during construction and open to inspection by authorized representatives of the Department, which may include local inspectors. If plan index sheets were submitted in lieu of additional full plan sets, a copy of this approval letter and index sheet shall be attached to plans that correspond with the copy on file with the Department. If these plans were submitted in an electronic form, the designer is responsible to download, print, and bind the full-size set of plans along with our approval letter. A department electronic stamp and signature shall be on the plans which are used at the job site for construction.

The following conditions shall be met during construction or installation and prior to occupancy or use:

KEY ITEM(S)

- **SPS 340.34(2).** The installer shall notify Damarc Quality Inspection Services at (866) 361-4321, at least **5** business days prior to the start of construction to schedule the inspection. Fee for initial inspections in those counties will be billed to the installer directly by Damarc.
- **SPS 340.12.** This chapter does not limit cities, villages and towns from enacting more stringent regulations, provided the regulations do not conflict with this chapter, any other rule of the department or law.
- **SPS 340.31(1).** The local fire department shall be notified of installation with a "SBD-9656, Certificate of Installation" within 10 business days of the installation.
- **SPS 340.43(3)(a)** Location of key-, card- or code-operated dispensing systems.
- **(a)** *Public areas.* Vehicle-fuel dispensing systems may be located in areas accessible or open to the general public only if all of the following requirements are met, except subd. 3. does not apply to the fueling allowed in sub. (1):

  1. The system is equipped with key-, card- or code-operated dispensing devices listed or approved by a nationally recognized testing laboratory. **2.** The keys, cards or codes referenced in subd. 1. are provided only to trained and authorized personnel. **3.** An attendant is on duty at all times when gas is being dispensed.

- **SPS 340.43(4)** POSTING OF SIGNS. A permanent sign providing a 24-hour service-call telephone number in letters at least one-inch high shall be posted at the vehicle-fuel dispensing device in all non-attended locations.

- **NFPA-58 6.9.3.1** All metallic LP-Gas piping shall be installed in accordance with ASME B 31.3, Process Piping, for normal fluid service, or in accordance with Section 6.9.
- **NFPA-58 6.9.3.7** Piping in systems shall be run as directly as is practical from one point to another, with as few fittings as practical.

  6.9.3.8 Where condensation of vapor can occur, piping shall be sloped back to the container, or means shall be provided for revaporizing the condensate.
- **NFPA-58 6.9.3.9** Piping systems, including the interconnection of permanently installed containers, shall compensate for expansion, contraction, jarring, vibration, and settling.

  (A) Flexible metallic connectors shall be permitted to be used. **(B)** The use of nonmetallic pipe, tubing, or hose for permanently interconnecting containers shall be prohibited.

  6.9.3.10 Aboveground piping shall be supported and protected against physical damage by vehicles.

  6.9.3.11 The portion of aboveground piping in contact with a support or a corrosion-causing substance shall be protected against corrosion
- **NFPA-58 6.13** Hydrostatic Relief Valve Installation. A hydrostatic relief valve or a device providing pressure-relieving protection shall be installed in each section of piping and hose in which liquid LP-Gas can be isolated between shutoff valves so as to relieve the pressure that could develop from the trapped liquid to a safe atmosphere or product-retaining section.
- **NFPA-58 6.14** Testing Piping Systems.

  6.14.1 After assembly, piping systems (including hose) shall be tested and proven free of leaks at not less than the normal operating pressure.

  6.14.2 Piping within the scope of NFPA 54, National Fuel Gas Code, shall be pressure tested in accordance with that code.

  6.14.3 Tests shall not be made with a flame.
- **NFPA-58 6.6.1** General Requirements.

  6.6.1.1 Containers shall be positioned so that the pressure relief valve is in direct communication with the vapor space of the Container.

  6.6.1.2 LP-Gas containers or systems of which they are a part shall be protected from damage from vehicles.
- **NFPA-30A 4.3.7.2** Guard posts or other approved means shall be provided to protect tanks that are subject to vehicular damage. When guard posts are installed, the following design shall be acceptable:

  (1) They shall be constructed of steel not less than 100 mm (4 in.) in diameter and shall be filled with concrete. **(2)** They shall be spaced not more than 1.2 m (4 ft) on center. **(3)** They shall be set not less than 0.9 m (3 ft) deep in a concrete footing of not less than 380mm (15 in.) diameter.

  6.6.1.4 Aboveground containers shall be painted.

  6.6.1.5 Containers shall be installed so that all container operating appurtenances are accessible.
- **NFPA-6.6.4.3** Steel supports shall be protected against fire exposure with a material that has a fire resistance rating of at least 2 hours, except that a continuous steel skirts that have only one opening that is 18 in. (460 mm) or less in diameter shall have fire protection applied to the outside of the skirts.
- **NFPA-58 6.5.1** Liquid shall be transferred into containers, including containers mounted on vehicles, only outdoors or in structures specially designed for such purpose.

  6.5.2 Filling of containers located outdoors in stationary installations in accordance with Section 6.3 shall be permitted to be filled at that location.

  6.5.3 If the point of transfer of containers located outdoors in stationary installations is not located at the container, it shall be located in accordance with Table 6.5.3.

  6.5.4 Containers not located in stationary installations shall be filled at a location determined by the point of transfer in accordance with Table 6.5.3.
- **NFPA-58 6.3.1** Containers installed outside of buildings, whether of the portable type replaced on a cylinder exchange basis or permanently installed and refilled at the installation, shall be located with respect to the adjacent containers, important building, group of buildings, or line of adjoining property that can be built upon, in accordance with Table 6.3.1, Table 6.4.2, Table 6.4.5.8, and 6.3.2 through 6.3.11.
- **NFPA-58 6.18.3** Installation of Electrical Equipment. Installation of electrical equipment shall comply with 6.22.2.
- **NFPA-58 6.18.4** Security and Protection Against Tampering for Section 6.18 and Section 6.24 Systems.

6.18.4.1 The following security measures shall be provided to minimize the possibility of entry by unauthorized persons:

(1) Security awareness training **(2)** Limitation of unauthorized access to plant areas that include container appurtenances, pumping equipment, loading and unloading facilities, and container filling facilities

6.18.4.2 Areas that include features required in 6.18.4.1 (2) shall be enclosed with a minimum 6 ft (1.8 m) high industrial- type fence, chain-link fence, or equivalent protection.

(C) Fencing shall not be required where devices are provided that can be locked in place and prevent unauthorized operation of valves, equipment, and appurtenances.

- **NFPA-58 6.18.5** Lighting. If operations are normally conducted during other than daylight hours, lighting shall be provided to illuminate storage containers, containers being loaded, control valves, and other equipment
- **NFPA-58 6.24** Vehicle Fuel Dispenser and Dispensing Stations.

  6.24.1 Application.

  6.24.1.1 Section 6.24 includes the location, installation, and operation of vehicle fuel dispensers and dispensing stations.

  6.24.1.2 The provisions of Sections 6.2 and 6.3, as modified by Section 6.24, shall apply.

- **NFPA-58 6.24.2** Location.

  6.24.2.1 Location of vehicle fuel dispensers and dispensing stations shall be in accordance with Table 6.5.3.

  6.24.2.2 Vehicle fuel dispensers and dispensing stations shall be located away from pits in accordance with Table 6.5.3, with no drains or blow-offs from the unit directed toward or within 15 ft (4.6 m) of a sewer system opening.

- **NFPA-58 6.24.3** General Installation Provisions.

  6.24.3.1 Vehicle fuel dispensers and dispensing Stations shall be installed in accordance with the manufacturer's installation instructions.

  6.24.3.2 Vehicle fuel dispensers and dispensing stations shall not be located within a building, except as allowed in Chapter 10.

  6.24.3.3 Where a vehicle fuel dispenser is installed under a weather shelter or canopy, the area shall be ventilated and shall not be enclosed for more than 50 percent of its perimeter.

  6.24.3.4 Control for the pump used to transfer LP-Gas through the unit into containers shall be provided at the device in order to minimize the possibility of leakage or accidental discharge.

  6.24.3.5 An excess-flow check valve or a differential back pressure valve shall be installed in or on the dispenser at the point at which the dispenser hose is connected to the liquid piping.

  6.24.3.6 Piping and the dispensing hose shall be provided with hydrostatic relief valves in accordance with Section 6.13.

  6.24.3.7 Protection against trespassing and tampering shall be in accordance with 6.18.4.

  6.24.3.8 The container liquid withdrawal opening used with vehicle fuel dispensers and dispensing stations shall be equipped with one of the following:

  (1) An internal valve fitted for remote closure and automatic shutoff using thermal (fire) actuation **(2)** A positive shutoff valve that is located as close to the container as practical in combination with an excess-flow valve installed in the container, plus an emergency shutoff valve that is fitted for remote closure and installed downstream in the line as close as practical to the positive shutoff valve

  6.24.3.9 An identified and accessible remote emergency shutoff device for either the internal valve or the emergency shutoff valve required by 6.24.3.8(1) or (2) shall be installed not less than 3 ft (1 m) or more than 100 ft (30 m) from the liquid transfer point.

  6.24.3.10 Emergency shutoff valves and internal valves that are fitted for remote closure as required in this section shall be tested annually for proper operation.

  6.24.3.11 A manual shutoff valve and an excess-flow check valve shall be located in the liquid line between the pump and the dispenser inlet where the dispensing device is installed at a remote location and is not part of a complete storage and dispensing unit mounted on a common base.

  6.24.3.12 All dispensers either shall be installed on a concrete foundation or shall be part of a complete storage and dispensing unit mounted on a common base and installed in accordance with 6.6.3.1(G). Protection against physical darn- age shall be provided for dispensers.

  6.24.3.13 A listed quick-acting shutoff valve shall be installed at the discharge end of the transfer hose.

  6.24.3.14 An identified and accessible switch or circuit breaker shall be installed at a location not less than 20 ft (6.1 m) or more than 100 ft (30.5 m) from the dispensing device(s) to shut off the power in the event of a fire, an accident, or other emergency

  6.24.3.15 The markings for the switches or breakers shall be visible at the point of liquid transfer.

- **NFPA-58 6.24.4** Installation of Vehicle Fuel Dispensers.

6.24.4.1 Hose shall comply with the following:

(1) Hose length shall not exceed 18 ft (5.5 m) unless approved by the authority having jurisdiction. **(2)** All hose shall he listed. **(3)** When not in use, hose shall be secured to protect them from damage.

6.24.4.2 A listed emergency breakaway device complying with ANSI/UL 567, Standard Pipe Connectors for Flammable and Combustible Liquids and LP-Gas, and designed to retain liquid on both sides of the breakaway point, or other devices affording equivalent protection approved by the authority having jurisdiction, shall be installed.

- **6.24.4.3** Dispensing devices for LP-Gas shall be located as follows:

  (1) Conventional systems shall be at least 10 ft (3.0 m) from any dispensing device for Class I liquids. **(2)** Low-emission transfer systems in accordance with Section 6.26 shall be at least 5 ft (1.5 m) from any dispensing device for Class I liquids.

- **NFPA-58 6.25.2** Planning.

  6.25.2.1 The planning for the response to incidents including the inadvertent release of LP-Gas, fire, or security breach shall be coordinated with local emergency response agencies.

  6.25.2.2 Planning shall include consideration of the safety of emergency personnel, workers, and the public.

- **NFPA-58 6.25.4** Other Protection Requirements.

  6.25.4.1 Roadways or other means of access for emergency equipment, such as fire department apparatus, shall be provided.

  6.25.4.2 Each industrial plant, bulk plant, and distributing point shall be provided with at least one approved portable fire extinguisher having a minimum capacity of 18 lb. (8.2 kg) of dry chemical with a B:C rating. Where fire extinguishers have more than one letter classification, they shall be considered to satisfy the requirements of each letter class.

  6.25.4.3 LP-Gas fires shall not be extinguished until the source of the burning gas has been shut off.

  6.25.4.4 Emergency controls shall be conspicuously marked, and the controls shall be located so as to be readily accessible in emergencies.

- The submittal described above has been reviewed for conformance with applicable Wisconsin Administrative Codes and Wisconsin Statutes. The submittal has been CONDITIONALLY APPROVED. The owner, as defined in chapter 101.01(10), Wisconsin Statutes, is responsible for compliance with all code requirements. Only those object types listed above have been approved; other submittals such as plumbing and those listed above under REQUIRED SUBMITTAL(S), may also be required.
- All permits required by the state or the local municipality shall be obtained prior to commencement of construction/installation/operation. You are responsible for complying with state and federal laws concerning construction near or on wetlands, lakes, and streams.
- This plan has not been reviewed for compliance with fire code requirements, including those for fire lanes and fire protection water supply, so contact the local fire department for further information.
- In granting this approval, the Division of Industry Services reserves the right to require changes or additions, should conditions arise making them necessary for code compliance. As per state stats 101.12(2), nothing in this review shall relieve the designer of the responsibility for designing a safe building, structure, or component. The Division does not take responsibility for the design or construction of the reviewed items.

Inquiries concerning this correspondence may be made to me at the telephone number listed below, or at the address on this letterhead. We look forward to working with you to make this code-compliant construction.

Sincerely,

Christopher Derks

Christopher Derks
Consultant, Division of Industry Services
(920)492-7727, Mon-Fri, 7:30 a.m. - 4:15 p.m.
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