



Houston Fire Department Life Safety Bureau (LSB)



LSB Standard No. 15, Rev. 05

Mobile Refueling/Wet Hosing

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LSB Standards are established in accordance with provisions of the City of Houston *Fire Code*. They are subject to the administrative sections covering alternative materials and methods, modifications, and the Board of Appeals.

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Mobile Refueling/Wet Hosing

Section 15.1 – General

15.1.1 Scope.

Mobile refueling, the transfer of fuel from one vehicle to another vehicle, creates a fire hazard and life-safety concern. Precautions shall be taken to help alleviate the hazards in regard to the site location, the exposure of property, the equipment used, and the vehicle used, as well as the operators-drivers conducting the refueling, in accordance with this standard and the City of Houston *Fire Code*.

15.1.2 Purpose.

The purpose of this standard is to provide guidance and instruction for fire and life-safety at a company's vehicle fleet site location. In addition, this standard provides guidance and instructions for the independent mobile refueling operations, practices, or functions in dispensing liquids from a tank vehicle into the fuel tanks of other mobile vehicles. (For Aircraft Refuelers see applicable sections of the City of Houston *Fire Code*.)

This standard is subject to periodic review and updates to accommodate changes in local need or requirements, changes in nationally recognized standards, changes in related technology, or changes where required by state or federal regulations.

Section 15.2 – Definitions

15.2.1 Fuel Limit Switch.

A mechanism located on a tank vehicle that limits the quantity of product dispensed at one time.

15.2.2 Mobile Fueling.

The operation of dispensing liquid fuels from tank vehicles into the fuel tanks of motor vehicles.

15.2.3 Remote Emergency Shut-Off Device.

The combination of an operator-carried signaling device and a mechanism mounted on the tank vehicle, activation of which sends a signal to the tanker-mounted mechanism that causes fuel flow to cease.

Section 15.3 – General Requirements

15.3.1 Permit Required.

Permit and plan approval are required for the conduct of any mobile vehicle fueling operations, practices, or functions.

Permit Office contact information is as follows:

The Houston Permitting Center
1002 Washington Avenue

Houston, Texas 77002
Hours of operation: 8:00am to 3:30pm (CST)
Monday through Friday
Office phone: (832) 394-8811
To E-mail Customer Service Questions: hfd.permitoffice@houstontx.gov
Link to City Wide Fee Schedule: www.houstoncityfees.org

15.3.2 Approved Locations.

Dispensing of Class I, II, and III motor vehicle fuel from tank vehicles into the fuel tanks of motor vehicles will be approved only at commercial, industrial, governmental, or manufacturing establishments.

15.3.3 Mobile Refueling Operating Company Permitted Sites.

An applicant shall submit the following with the permit application:

1. A minimum of three business references for verification of expertise in the field of mobile refueling.
2. A list of other jurisdictions (primarily in Texas) where mobile refueling of gasoline is being conducted by the applicant's company. If not applicable, the same list for mobile refueling of fuel other than gasoline.
3. Proof of Commercial General Liability (CGL) insurance coverage (with aggregate and per occurrence limits indicated).
4. List of additional qualifications, such as years of experience in the industry of mobile refueling.

15.3.3.2 Reserved.

15.3.3.3 Site Inspection.

All prospective mobile refueling sites shall be visited and physically inspected by an inspector from the Fire Marshal's Office prior to approval of mobile refueling at a site.

15.3.3.4 Storm Water Run-Off Plan.

The property owner shall develop and file a "Storm Water Run-Off Plan" with the Fire Marshal's Office.

15.3.3.5 Notification of Insurance Carrier.

The owner shall notify, in writing, their insurance carrier that mobile refueling is being conducted on the insurer's property.

15.3.3.6 Annual Inspection.

Permitted sites shall be inspected annually to assure compliance with the requirements of this standard. Inspection reports shall be made available to the public upon request.

15.3.3.7 Fuel Spill Response Plan.

The owner of a company engaging in mobile refueling operations shall provide to the Fire Marshal a written response plan that demonstrates its readiness to respond to a fuel spill, its plan to carry out appropriate mitigation measures, and

its process to properly dispose of contaminated materials when circumstances require.

15.3.3.8 Mobile Refueling Company Proof of Pollution Insurance.

The mobile refueling company shall show proof of pollution insurance to cover the cost of a potential spill and clean-up.

15.3.3.9 Authorization to Fuel on Private Property.

A copy of the "Certificate of Authorization" to dispense fuel on private property shall be completed and be located in the operational manual.

15.3.3.10 Operational Manual Contents.

The owner of the company or the owner's agent shall maintain an Operational Manual, which shall contain the items listed in Section 15.3.3 of this standard.

15.3.3.11 Mobile Refueling: Company Proof of Insurance

15.3.3.11.1 Site Insurance.

Proof of site insurance shall include:

1. Required Commercial General Liability Coverage:
 - a. \$2,000,000 – General Aggregate
 - b. \$1,000,000 – Personal and Advertising Injury
 - c. \$1,000,000 – Each occurrence
2. Required Umbrella/Excess Coverage (which shall apply to all other forms of insurance coverage listed):
 - a. \$2,000,000 – Each occurrence
 - b. \$4,000,000 - Aggregate
3. Environmental/Pollution/Hazardous Materials Coverage:
 - a. \$2,000,000 – Each occurrence

15.3.3.11.2 Vehicle Insurance.

The mobile refueling company shall show proof of insurance to include:

1. Required Commercial General Liability Coverage:
 - a. \$2,000,000 – General Aggregate
 - b. \$2,000,000 – Products and Completed Operations Aggregate
 - c. \$1,000,000 – Personal and Advertising Injury
 - d. \$1,000,000 – Each occurrence
2. Required Automobile Liability Coverage for any/all autos:
 - a. \$1,000,000 – Each accident
3. Required Umbrella/Excess Coverage (applies to all other forms of insurance coverage listed):
 - a. \$3,000,000 – Each occurrence
4. Environmental/Pollution/Hazardous Materials Coverage:
 - a. \$3,000,000 – Each occurrence

15.3.3.12 Mobile Refueling Sites for Dispensing of Gasoline.

The following are additional requirements for mobile refueling sites for dispensing of gasoline in the City of Houston:

1. Mobile refueling shall be restricted to commercial, industrial, governmental, or manufacturing sites where the parking lot is primarily intended for employee vehicles. Mobile refueling shall be conducted for customer company fleet vehicles only, and not for the general public. Commercial sites shall be restricted to office-type or similar occupancies that are not primarily intended for use by the public.
2. Mobile fueling is prohibited at sites or occupancies including, but are not limited to: assemblies, retail, institutional, residential, educational, parking garages, parking structures, public streets, public ways, or any enclosed area.
3. All mobile refueling sites shall be evaluated on a case-by-case basis and shall be individually inspected and permitted by the Fire Department prior to allowing any mobile fueling on the site.
4. The site plan must be submitted as per the City of Houston *Fire Code* and shall include a minimum 50 x 50 feet designated area on the site for mobile fueling that is not accessible to the public during times of mobile fueling. Mobile fueling will only be authorized to be conducted within this designated area.
5. The Fire Marshal is authorized to require warning signage for the designated fueling area.
6. When issued, a copy of the approved Mobile Fueling Tank Vehicle and Mobile Fueling Site permits must be kept on each vehicle so that it may be presented to the Houston Fire Department Inspector upon request. The mobile refueling vehicle and sites will be subject to inspection at any time.
7. Any site may be denied for mobile fueling permits at the discretion of the Fire Marshal.

15.3.4 Plan review.

As required by Section 15.3.1 of this standard plans shall be submitted to the Houston Permitting Center for review. Applicants shall submit plans complying with the minimum prerequisite plan review submittal requirements required in Form CE-1105 and include a detailed site plan with each application for a permit. The site plan must indicate:

1. All buildings, structures, and appurtenances on-site and their use or function.
2. All uses adjacent to the property lines of the site.
3. Location of storm drain openings.
4. Location of adjacent waterways or wetlands.
5. Information regarding slope, natural drainage, curbing, and impounding.
6. How a spill will be retained upon the site property.
7. Scale of the site plan.
8. Fire Department Access Roads.

Section 15.4 – Operational Requirements

15.4.1 Site.

15.4.1.1 Containment.

The mobile refueling containment area shall be subject to final approval by the Fire Marshal dependent upon the topography.

15.4.1.2 Access to Public.

Mobile refueling operations shall not be conducted in areas accessible to the public.

15.4.1.3 Distance to Buildings, Property Lines, Combustible Storage.

Mobile refueling operations shall not take place within 50 feet of any residential buildings or within 25 feet of other structures, property lines, public ways, or combustible storage.

15.4.1.4 Spills.

Mobile refueling vehicles (sites?) shall be equipped with absorbent materials, non-water absorbent pads, a drip pan, an approved container with lid, and a non-metallic shovel for use in mitigating small spills.

15.4.1.5 Ignition Source Precautions.

Prior to beginning dispensing operations, precautions shall be taken to assure ignition sources are not present.

15.4.1.6 Nighttime Refueling Operations.

Nighttime fueling operations shall only take place when approved and only in adequately lighted areas.

15.4.1.7 Electrical Wiring and Devices.

Electrical devices, ground wires to control static electricity, and wiring in areas where fuel dispensing is conducted shall be in compliance with the City of Houston *Electrical Code*.

15.4.1.8 Spill Notifications.

The fire department, Texas Commission on Environmental Quality (TCEQ), and other appropriate authorities shall be notified when a reportable spill or unauthorized discharge occurs.

15.4.1.9 Fire Department Access Roads.

Fire department access roads with an unobstructed width of 20 feet and a vertical height clearance of at least 13 feet, 6 inches shall be provided to the refueling site.

15.4.1.10 Tractor-Trailer Rigs.

Tractor-trailer rigs shall not be used as refueling vehicles.

15.4.2 Refueling Vehicles (Tank Vehicles).

15.4.2.1 Compliance with Other Agencies.

The tank vehicle shall comply with all applicable local, state, and federal requirements, and shall be one of the following:

1. A tank vehicle complying with NFPA 385 with chassis-mounted tanks that do not exceed an aggregate capacity of 1,200 gallons.
2. A vehicle with chassis-mounted tanks, each of which does not exceed 110 gallons, and that does not exceed an aggregate capacity of 1,200 gallons.

15.4.2.2 Pumps.

Mobile refueling trucks shall be equipped with Underwriters Laboratories (UL) listed, or other nationally approved, pumps that can transfer fuel without having to run the engine of the refueling truck, unless the refueling truck is specifically designed for such operations.

15.4.2.3 No Smoking Signs.

Signs prohibiting smoking or open flames within 25 feet of the tank vehicle or the point of fueling shall be prominently posted on 3 sides of the vehicle (back and both sides).

15.4.2.4 Fire Extinguishers.

A portable fire extinguisher with a minimum rating of 4-A, 40-B:C shall be provided on the vehicle, with signs clearly indicating the fire extinguisher location. All fire extinguishers shall have a current service tag affixed by an approved fire extinguisher service company.

15.4.2.5 Dispensing Nozzles and Hose.

The dispensing nozzles and hose shall be UL listed for such service. Latch open devices shall not be used. When required, vapor recovery systems must be incorporated into nozzles in order for the nozzle to be approved.

15.4.2.6 Length of Hose.

The dispensing hose shall not extend more than 100 feet in length from the hose reel.

15.4.2.7 Protection of Hoses.

The tank vehicle shall be positioned so that no vehicular traffic is capable of crossing between the tank vehicle and the motor vehicle being fueled to prevent traffic from driving over the delivery hose. Fuel hoses shall not be stretched across traffic lanes or areas capable of being used as a potential traffic lane.

15.4.2.8 Hose Reels.

The dispensing hose shall be properly placed on an approved reel or in an approved compartment prior to moving the tank vehicle to prevent any accidental discharge of fuel while in transit.

15.4.2.9 Brakes/Chocks/Warning Lights.

During fueling operations, tank vehicle brakes shall be set, chock blocks shall be in place, and warning lights shall be in operation.

15.4.2.10 Fuel Limit Switch.

All fuel pumps must be equipped with a UL listed or other approved high-low flow switch or similar device.

15.4.2.11 Mobile Refueling Tank Vehicles for Dispensing of Gasoline.

In addition to all requirements listed in this standard and the City of Houston *Fire Code*, the following shall be required to allow mobile refueling for dispensing of gasoline in the City of Houston:

1. Appropriate classified premise wiring systems shall be installed as required by the *Fire Code* and the *Electrical Code* (NFPA 70).
2. A means for bonding the mobile tank vehicle to the receiving motor vehicle shall be provided and employed during fueling operations.
3. The fuel pump on tank vehicle shall be equipped with a maximum 30-gallon fuel limit switch, so that no more than 30 gallons of gasoline may be dispensed at any one time.
4. Tank vehicles shall maintain a minimum 5-gallon spill kit designed to promptly and safely mitigate and dispose of leaks or spills.
5. All equipment utilized shall be listed for its intended purpose.
6. All tank vehicles that will be conducting mobile fueling in the City of Houston shall be individually permitted (VIN and/or license plate number shall be provided and identified on the permit application) and inspected by the Fire Department prior to the conduct of any mobile refueling operations.
7. Any tank vehicle may be denied for mobile fueling permits at the discretion of the Fire Marshal.

15.4.3 Drivers.

15.4.3.1 Constantly Attended.

The tank vehicle dispensing equipment shall be constantly attended and operated only by designated personnel who are trained to handle and dispense motor fuels. Vehicles shall be equipped with an approved operator's manual with all qualified operators listed.

15.4.3.2 Emergency Communication Device.

Operators of tank vehicles used for mobile refueling shall have in their possession at all times an emergency communication device to notify the proper authorities in the event of an emergency.

15.4.3.3 Hose Inspection and Reports.

Drivers shall provide to the Fire Marshal upon request daily written reports detailing inspections of the dispensing hose. All pressure hoses shall be inspected at intervals appropriate to service. With the hose fully extended, pressure shall be applied to the hose and couplings to the maximum operating pressure. Any hose

or coupling showing signs of leakage, material deterioration, or weakness shall be removed from service or repaired.

15.4.3.4 Topping Off of Vehicles.

Drivers shall not top-off motor vehicle fuel tanks.

15.4.3.5 Shut Off Engines.

Drivers shall ensure the engines of vehicles being refueled are shut off during dispensing operations, unless otherwise approved by the Fire Marshal.

15.4.3.6 Remote Emergency Shut-Off Device.

The driver shall be in control of the Remote Emergency Shut-off Device at all times to prevent over-fills.

15.4.3.7 License and Certification.

Mobile refueler drivers responsible for dispensing fuel shall possess a Commercial Driver's License with the appropriate endorsements. This license shall be presented to the Fire Marshal upon request. In addition, mobile refueler drivers must show a current certification indicating completion of the "Basic Plus" courses from the *Houston Area Contractors' Safety Council* (HACSC) or one of the *Association of Reciprocal Safety Councils* (ARSC) member councils.

Appendix A – Certification of Authorization to Fuel on Private Property

<p>SERVICE PROVIDER</p> <p>Date: _____</p> <p>Company name: _____</p> <p>Telephone number: _____</p> <p>HFD Vehicle fueling permit number: _____</p> <p>Date permit expires: _____</p>

<p>CUSTOMER</p> <p>Date: _____</p> <p>Name: _____</p> <p>Telephone number: _____</p> <p>Address: _____</p> <p>Customer grants authorization to fuel vehicles: _____</p>
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Fueling of vehicles shall be done in a safe manner and in compliance with the City of Houston *Fire Code* and LSB Standard No. 15, “Mobile Refueling/Wet Hosing,” the submitted operations manual and any other regulations that may be required by other regulating authorities. A copy of the operations manual, including a list of company-authorized operators, shall be maintained at each vehicle-fueling site and made available for inspection upon request.

Service provider signature: _____

Customer signature: _____

References

1. City of Houston *Fire Code*
2. City of Houston *Electrical Code*, (NFPA Standard 70, “National Electrical Code”), all editions
3. National Fire Protection Association (NFPA) Standard 385, “Tank Vehicles for Flammable and Combustible Liquids”

All reference materials used under this Life Safety Bureau standard shall be in accordance with the most current adopted City of Houston *Construction Code*.