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LPG AUTOGAS Dispensing Station
Hazardous Area Classifications

LPFG Vehicle refueling stations are governed by several applicable codes. Code applicability may vary from Jurisdiction. In general, the following National enforceable codes apply:

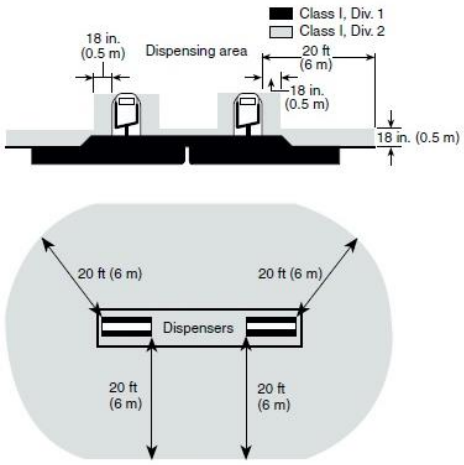
NFPA 58, Liquified Petroleum Gas Code, Chapter 6
NFPA 30A,Code for Motor Fuel Dispensing
NFPA 70, national Electrical Code

Additionally, the following standards may apply:

UL 495, Electrical dispensing devices for LP Gas
UL 1203, Standard for Explosion-Proof…
UL1238, Standard for Control Equipment for Use with flammable Liquid Dispensing Devices

Hazard areas within these standards are defined as:

NFPA58 table 6.23.2.2 (F) defines this area in vehicle fueling applications as:
Class 1, Division 1 "Entire space with-in the enclosure, and 18" horizontally from enclosure exterior up to 4" elevation above the dispenser base."
NFPA30A, Figure 8.3.1 Classified areas adjacent to dispensers:
Class 1, Division is defined as the area, 18” above grade, from a point 18” out from the dispenser structure, for a distance of 20’ in all directions



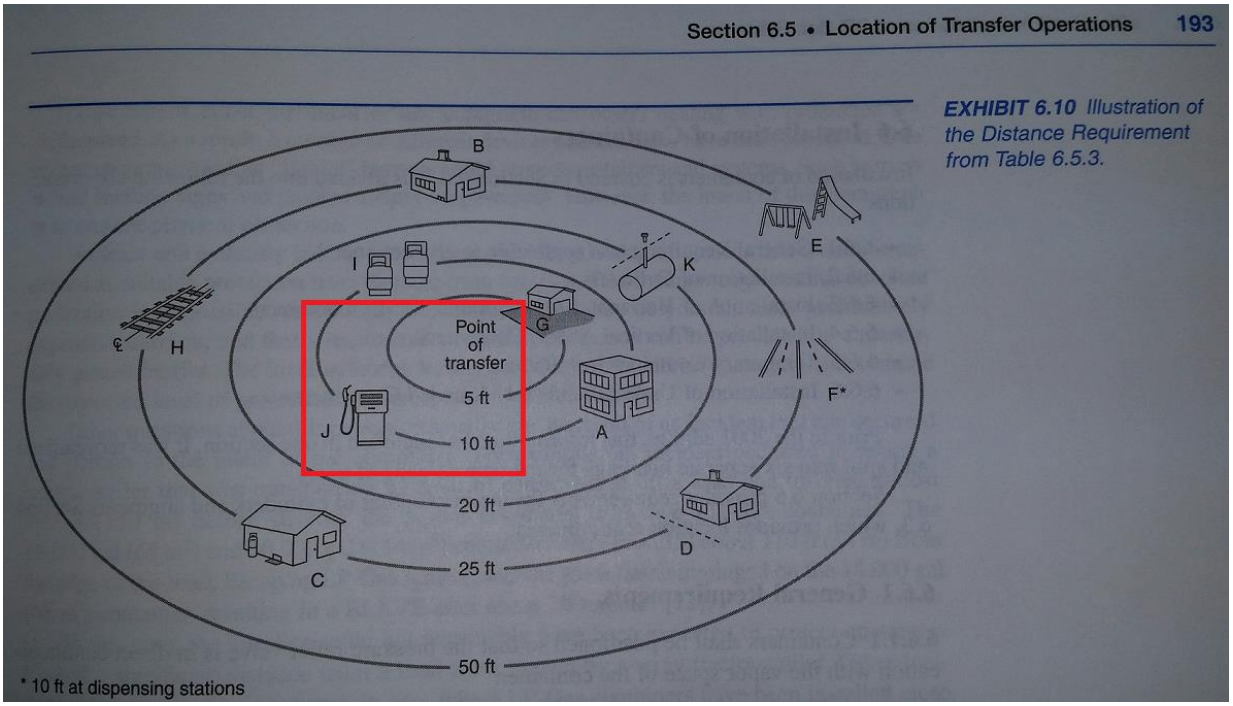
For the purposes of LPG storage tanks and refueling of either storage tank or vehicles:

NFPA58 table 6.5.2.1 F (1) “From points of transfer in LP-Gas dispensing stations and at vehicle refueling dispensers = 10’

Points of transfer are defined under NFPA 58, Section 6.3 and 6.5, Table 6.2

Stationary Containers, POT is “at the container” in specific, the filling connection and venting valve (which should not be used at a low emissions station, except when refueling the tank, at which point, the dispenser should not be operated until storage tank filling is completed and valves are closed)

Portable Containers, POT is “At the Container’. For the purposes of interpretation, the portable container / transportable of mobile container (including vehicle tanks for engine fuel supply) is considered to be a point at 75-8-% of the length of the extended hose from the dispenser, at the point where the mobile or portable container is positioned during refueling (ie for an 18’ hose, this point would be approximately 13.5’ from the dispenser nozzle boot)



Typical example of compliant LPG Fleet Fueling Station with UL/ETL listed dispenser and fuel management system.





General Requirements:

1. Listed Fuel management systems must be mounted no closer than 18” to the dispenser cabinet (Cabinet is Class 1, Div 1, for a distance of 18” from the cabinet, 48” vertical from base)
2. Listed Fuel management systems must be mounted with electrical connection iaw NEC & NRPA 30A. Electrical supply conduit must be rigid and installed with listed Class 1, Div1/2 fittings and components. Seal outs bust be installed between the electrical control panel and the dispenser / fuel management system
3. Dispenser and fuel management system must be installed a minimum of 10’ from the storage tank refueling connection, iaw NFPA58

NOTE: Parafour Innovations is a member of the following standards organization and contributor to standards committees: ASME, NFPA, NTEP

Parafour Innovations is an ETL listed manufacturer for UL 495, 1203, 1238 and 508 devices

Parafour Dispensing devices and many accessories are listed or approved by the following entities: ETL, CE, NTEP, GOST