

TITLE 19 NATURAL RESOURCES AND WILDLIFE
CHAPTER 15 OIL AND GAS
PART 112 RETAIL NATURAL GAS (CNG/LNG) REGULATIONS

19.15.112.1 ISSUING AGENCY: New Mexico State University, New Mexico Department of Agriculture
[19.15.112.1 NMAC - N, 05/14/2015]

19.15.112.2 SCOPE: The scope of these regulations is to set forth minimum standards for the operation of retail/wholesale natural gas fueling facilities, including mobile refueling vehicles and equipment, as defined by the Petroleum Products Standards Act.
[19.15.112.2 NMAC - N, 05/14/2015]

19.15.112.3 STATUTORY AUTHORITY: Granted to the board of regents of New Mexico state university under the Petroleum Products Standards Act, Chapter 57, Article 19, Sections 23 through 38, New Mexico Statutes Annotated 1978 Compilation.
[19.15.112.3 NMAC - N, 05/14/2015]

19.15.112.4 DURATION: Permanent.
[19.15.112.4 NMAC - N, 05/14/2015]

19.15.112.5 EFFECTIVE DATE: May 14, 2015, unless a later date is cited at the end of a section.
[19.15.112.5 NMAC - N, 05/14/2015]

19.15.112.6 OBJECTIVE: This part addresses the technical requirements of these regulations and are based on generally accepted state, national and international codes and standards (e.g. NIST) governing the minimum levels of acceptability for inspections, specifications, shipment notification, record keeping, labeling of containers, use of meters or mechanical devices for measurement, submittal of installation plans, and minimum standards for the design, construction, location, installation, and operation of retail natural gas systems, including mobile refueling vehicles and equipment .
[19.15.112.6 NMAC - N, 05/14/2015]

19.15.112.7 DEFINITIONS: Terms in these regulations shall have the same meaning as those found in the Petroleum Products Standards Act, Chapter 57, Article 19, Sections 23 through 38, New Mexico Statutes Annotated 1978. In addition, unless the context otherwise requires:

- A.** ASME international - *ASME international* was formerly the American society of mechanical engineers (ASME).
- B.** British thermal units or BTU - a scientific unit of measurement equal to the quantity of heat required to raise the temperature of one pound of water one degree fahrenheit at approximately 60 degrees fahrenheit.
- C.** Compressed Natural Gas (CNG) - natural gas which has been compressed and dispensed into fuel storage containers and is suitable for use as an engine fuel.
- D.** CNG gasoline gallon equivalent (GGE) - GGE = 5.660 pounds (2.567 kg) of CNG. CNG gasoline liter equivalent (GLE) - GLE = 0.678 kilograms (1.495 pounds) of CNG.
- E.** CNG diesel gallon equivalent (DGE) - 1 DGE = 6.384 pounds (2.896 kg) of CNG or CNG diesel liter equivalent (DLE) - 1 DLE = 0.765 kilograms (1.687 pounds) of CNG.
- F.** Liquefied natural gas (LNG) - natural gas that has been liquefied at - 126.1 °C (- 259 °F) and stored in insulated cryogenic tanks for use as an engine fuel.
- G.** LNG diesel gallon equivalent (DGE) - 1 DGE = 6.059 pounds (2.748 kg.) of liquefied natural gas (LNG) or diesel liter equivalent (DLE) - 1 DLE = 0.726 kilograms (1.600 pounds) of LNG.
- H.** Gallon equivalent - means either a gallon diesel equivalent or a gallon gasoline equivalent.
- I.** Gallon diesel equivalent - also known as diesel gallon equivalent (DGE) - means an amount of a motor fuel that contains an average lower heating value of 128,000 BTUø, but in no case contains a lower heating value of less than 124,000 BTUø.
- J.** Gallon gasoline equivalent - also known as gasoline gallon equivalent (GGE) - means an amount of a motor fuel that contains an average lower heating value of 114,000 BTUø, but in no case contains a lower heating value of less than 110,000 BTUø.

K. Mobile refueling - the use of a United States DOT approved vehicle or mobile equipment on site with tank(s), pump(s), or both that dispenses natural gas engine fuel directly to vehicles, storage vessels/cylinders, or secondary refueling equipment.

L. Natural gas - compressed natural gas (CNG) or liquefied natural gas (LNG) as defined by this regulation.

M. Natural gas fueling facility - a facility that has a natural gas container assembly and piping system, including mobile refueling equipment, which is used for retail motor vehicle fueling.

N. NIST - national institute of standards and technology.

O. ANSI - American national standards institute.

P. AGA - the American gas association.

Q. CGA - the Compressed gas association.

R. NGV 1 - the natural gas vehicle coalition.

S. Proved - the act of having verified the accuracy of meters used to measure fuel and petroleum products using a öproverö.

T. Prover - a calibrated volumetric receiver or mechanical device traceable to NIST standards.

[19.15.112.7 NMAC - N, 05/14/2015]

19.15.112.8 [RESERVED]

19.15.112.9 APPLICABILITY: The regulations contained herein shall apply to the operation of all retail natural gas systems when used for motor vehicle fueling.

[19.15.112.9 NMAC - N, 05/14/2015]

19.15.112.10 METHOD OF RETAIL SALE AND DISPENSER LABELING:

A. Method of retail sale (CNG): All compressed natural gas (CNG) kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be measured in terms of mass, and indicated in the gasoline gallon equivalent (GGE) or gasoline liter equivalent (GLE), or diesel gallon equivalent (DGE) units, or diesel liter equivalent (DLE), or by mass.

B. Dispenser labeling compressed natural gas: All retail compressed natural gas dispensers shall be labeled with the equivalent conversion factor in terms of pounds or kilograms. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have either the statement 1 gasoline gallon equivalent (GGE) is equal to 5.660 lbs. of compressed natural gasö or ö1 gasoline liter equivalent (GLE) is equal to 0.678 kg of compressed natural gasö consistent with the method of sale used. ö1 diesel gallon equivalent (DGE) is equal to 6.384 lbs. of compressed natural gasö or ö1 diesel liter equivalent (DLE) is equal to 0.765 kg of compressed natural gasö consistent with the method of sale used.

C. Method of retail sale (LNG): All liquefied natural gas (LNG) kept, offered, or exposed for sale and sold at retail as a vehicle fuel shall be measured in mass, and indicated in diesel gallon equivalent (DGE) units or diesel liter equivalent (DLE), or by mass.

D. Dispenser labeling of retail liquefied natural gas: All retail liquefied natural gas dispensers shall be labeled with the equivalent conversion factor in terms of pounds or kilograms. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have either the statement 1 diesel gallon equivalent (DGE) ö1 diesel liter equivalent (DLE).

E. Dispenser labeling of retail liquefied natural gas: All retail liquefied natural gas dispensers shall be labeled with the equivalent conversion factor in terms of pounds or kilograms. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have either the statement ö1 diesel gallon equivalent (DGE) is equal to 6.059 lbs. of liquefied natural gasö or 1 diesel liter equivalent (DLE) is equal to 0.726 kg of liquefied natural gasö consistent with the method of sale used.

[19.15.112.10 NMAC - N, 05/14/2015]

19.15.112.11 DISPENSING, LABELING AND FUEL QUALITY: Retail dispensing of natural gas - all retail dispensing of natural gas from either fixed equipment or mobile refueling equipment including vehicles, when used as a motor vehicle fuel shall be operated and maintained in accordance with the applicable requirements of the most current edition of NIST handbook 44.

[19.15.112.11 NMAC - N, 05/14/2015]

19.15.112.12 RETAIL MOTOR FUEL DISPENSERS (RMFD) INSPECTION AND TESTING:

- A. All RMFD shall be suitable for their intended use, be properly installed, and accurate, and shall be maintained in that condition by their owner/operator.
 - B. All RMFD shall be traceable to an active national type evaluation program (NTEP) certificate of conformance (CC) prior to its installation or use for commercial purposes.
 - C. All RMFD shall be capable of displaying delivered quantity in units of mass for calibration purposes. All adjustments and calibrations of RMFD shall be made utilizing mass measurement standards.
 - D. The department shall be notified when any new RMFD is placed in service at a new or existing installation by submitting a "place-in-service" (PIS) report provided by the department.
 - E. No owner/operator of any RMFD shall use the RMFD for the measurement of natural gas unless it has been proved in a manner acceptable to the department and sealed as correct by a state inspector or registered service agency.
 - F. Means shall be provided at the natural gas fueling facility to return all natural gas product used for proving meters back to the compression and storage equipment when proving is completed.
 - G. All RMFD shall comply with the minimum standards as prescribed by the applicable sections of NIST Handbook 44, "Specifications, Tolerances, and Other Technical Requirements for Commercial Weighing and Measuring Devices," "The New Mexico weights and measures law in the area of legal metrology and engine fuel quality" except as modified or rejected by this regulation or by the department.
 - H. All RMFD dispensing natural gas in terms of gallon equivalents used for motor vehicle fuel shall meet the requirements of the New Mexico Petroleum Products Standards Act.
 - I. All measuring devices installed on mobile refueling equipment including vehicles, used for retail sales of natural gas, shall meet the requirements of the New Mexico Petroleum Products Standards Act.
- [19.15.112.12 NMAC - N, 05/14/2015]

19.15.112.13 RETAIL DISPENSERS FOR COMPRESSED NATURAL GAS (CNG):

- A. For the purposes of this regulation, compressed natural gas shall be identified by the term "compressed natural gas" or "CNG."
 - B. All CNG kept, offered, or exposed for sale or sold at retail as a vehicle fuel shall be in units of mass (pounds or kilograms), or in units of volume (gallons or gallon equivalents).
 - C. Each retail dispenser of CNG shall be labeled as "compressed natural gas."
 - D. All retail CNG dispensers shall be labeled with the gallon equivalent conversion factor in terms of kilograms or pounds. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have either the statement "1 CNG gasoline gallon equivalent (GGE) is equal to 5.660 lbs. (2.567 kg) of CNG" or "1 CNG diesel gallon equivalent (DGE) is equal to 6.384 lbs. (2.894 kg) of CNG", consistent with the method of sale used.
 - E. CNG is dispensed into vehicle fuel containers with working pressures of 3000 PSI (20 684 kPa), or 3600 PSI (24 821 kPa). The dispenser shall be labeled 3000 PSI (20 684 kPa), or 3600 PSI (24821 kPa) corresponding to the pressure of the CNG dispensed by each fueling hose.
 - F. CNG fueling nozzles for use with vehicles less than 10,000 lbs. (4500kg) gross vehicle weight rating (GVWR) shall comply with ANSI/AGA/CGA NGV 1.
 - G. Alternate nozzles used for fueling larger vehicles such as buses and trucks shall be designed to prevent the connection of a lower service pressure vehicle to a higher service pressure source.
- [19.15.112.13 NMAC - N, 05/14/2015]

19.15.112.14 RETAIL DISPENSERS FOR LIQUIFIED NATURAL GAS (LNG):

- A. For the purposes of this regulation, liquefied natural gas shall be identified by the term "liquefied natural gas" or "LNG."
 - B. All LNG kept, offered, or exposed for sale or sold at retail as a vehicle fuel shall be in units of mass (pounds or kilograms) or in units of volume (gallons or diesel gallon equivalents (DGE)).
 - C. Each retail dispenser of LNG shall be labeled as "liquefied natural gas."
 - D. All retail LNG dispensers shall be labeled with the gallon equivalent conversion factor in terms of kilograms or pounds. The label shall be permanently and conspicuously displayed on the face of the dispenser and shall have either the statement "1 LNG diesel gallon equivalent (DGE) is equal to 6.059 lbs. (2.748 kg) or 1 LNG diesel liter equivalent (DLE) is equal to 0.726 kg (1.600 lbs.)."
 - E. LNG automotive fuel shall be labeled with its automotive fuel rating in accordance with 16 CFR Part 306. (e.g. *LNG 95% Methane*).
- [19.15.112.14 NMAC - N, 05/14/2015]

HISTORY OF 19.15.112 NMAC: [RESERVED]