Ind 9

Filed April 11, 1972

STATE OF WISCONSIN	)
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DEPARTMENT OF INDUSTRY,	)
LABOR AND HUMAN RELATIONS '	)

TO ALL TO WHOM THESE PRESENTS SHALL COME, GREETINGS:

I, Stephen J. Reilly, Executive Secretary of the Department of Industry, Labor and Human Relations, and custodian of the official records of said Department, do hereby certify that the attached rules to Wisconsin Administrative Code Chapter Ind 9, Liquefied Petroleum Gases, were adopted by the Department of Industry, Labor and Human Relations on April 10, 1972.

I further certify that said copy has been compared by me with the original on file in this Department and that the same is a true copy thereof and of the whole of such original.

IN TESTIMONY WHEREOF, I have hereunto set my hand and affixed the official seal of the Department at the Capitol, in the City of Madison, this 10 day of A.D., 1922.

Stephen (.) Reilly, Executive Secretary

## ORDER OF

## DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by sections 101.01 to 101.25, Wis. Stats., the Department of Industry, Labor and Human Relations hereby repeals, recreates and adopts rules of Wisconsin Administrative Code Chapter Ind 9, Liquefied Petroleum Gases.

The rules attached hereto shall become effective on the first day of the month following publication in the Wisconsin Administrative Code as provided in section 227, Wis. Stats. Subsection Ind 9.001(3) is repealed and recreated to read:

(3) The following standards are intended to apply to the design, construction, location, installation and operation of liquefied petroleum gas systems and storage.

Section Ind 9.002 is repealed and recreated to read:

Ind 9.002 Definitions. (1) "Alterations" means changes affecting the strength and/or safety of the installations.

- (2) "API-ASME" means the editions of the "Unfired Pressure Vessel Code of the American Petroleum Institute and the American Society of Mechanical Engineers," and the Wisconsin Boiler and Unfired Pressure Vessel Code.
  - (3) "Approved" means approval granted by the department.

Note: The department will ordinarily approve items approved by a nationally recognized testing laboratory.

- (4) "Artificial heat" means heat obtained from any other source than solar, atmospheric or ground.
- (5) "ASME" means the edition of the "Unfired Pressure Vessel Code of the American Society of Mechanical Engineers."
  - (6) "Column type guage glass" (See section Ind 9.16(8).)
- (7) "Container" means all vessels such as tanks, cylinders, bottles or drums used for transporting or storing of liquefied petroleum gas.
- (8) "Department" means the department of industry, labor and human relations.
  - (9) "Filling density" (See section Ind 9.11.)
  - (10) "Gas" means liquefied petroleum gas in either liquid or gaseous state.
  - (11) "Gas mixing device" means a device to mix gas and air.
- (12) "ICC" means the Interstate Commerce Commission (currently the U.S. Department of Transportation).
- (a) "ICC container" means a container as defined in subsection (7) bearing the ICC or U.S. Department of Transportation stamping.
- (13) "Mobile fuel tank" means a tank used to supply fuel to the motor of a mobile vehicle. (See section Ind 9.70.)
- (14) "Mobile vehicle" means any vehicle which comes under section Ind 9.50 of these orders.

- (15) "Saddle" means that part of supporting structure upon which the tank rests.
  - (16) "Skid tank" (See section Ind 9.36(6) and section Ind 9.66.)
- (17) "Systems" means an assembly of equipment consisting essentially of the container or containers, major devices such as vaporizers, carburetors, relief valves, excess flow valves, regulators, etc., and interconnecting piping.
- (18) "Truck tank" means a tank securely fastened to a truck frame and used to transport liquefied petroleum gases. (See section Ind 9.50.)
- (19) "Utility gas manufacturing plant" means a plant supplying gas (not liquid gas) to various consumers through pipe lines.
- (20) "Vapor pressure" means the pressure of saturated vapor in equilibrium over liquefied petroleum gas confined within a container.

## Section Ind 9.01 is repealed and recreated to read:

- Ind 9.01 Basic rules. (1) Every person, firm, association or corporation actually performing the work of installing equipment utilizing liquefied petroleum gas for fuel purposes shall furnish the customer or user of said equipment, at time of installation, a statement, a form which is acceptable to the department, showing that the design, construction, location and installation of said equipment conforms with the rules and regulations adopted by the department.
- (a) The written statement shall cover installations of 20 pound gas rated containers and larger.
- (2) Persons installing containers of 125 gallon water capacity up to and including 2,000 gallon water capacity for permanent\* installations shall submit a written report at time of such installations to the chief of the fire department, if there is one, otherwise to the department.

\*Note: The term "permanent" is intended to designate installations at a fixed geographic location.

- (3) Temporary installations at construction sites. (a) A written notification for use of liquefied petroleum gas deliveries of 100 pound gas rated containers or larger shall be made to the chief of the fire department, if there is one, otherwise to the department, by the responsible receiving contractor at the time of initial delivery.
- (4) Three sets of plans for all installations using containers over 2,000 gallon water capacity shall be submitted and approval granted by the department before such installations are made.

- (5) Odorizing Gases. (a) All liquefied petroleum gases shall be effectively odorized by an approved agent of such character as to indicate positively, by distinct odor, the presence of gas down to concentration in air of not over 1/5 the lower limit of flammability. Odorization, however, is not required if harmful in the use of further processing of the liquefied petroleum gas, or if odorization will serve no useful purpose as a warning agent in such use or further processing.
- Note: The lower flammable limits of the more commonly used LP-gases are: propane, 2.15%; butane, 1.55%. These figures represent volumetric percentages of gas in gas-air mixtures.
- (b) The odorization requirements of section Ind 9.01 shall be considered to be met by the use of 1.0 pounds of ethyl mercaptan, 1.0 pounds of thiophane or 1.4 pounds of amyl mercaptan per 10,000 gallons of LP-gas. However, this listing of odorants and quantities shall not exclude the use of other odorants that meet the odorization requirements of section Ind 9.01.

Pursuant to authority vested in the Department of Industry, Labor and Human Relations by section 227.02(1)(b), Wis. Stats., the Department of Industry, Labor and Human Relations hereby amends as follows, which amendments do not require notice or hearing:

Subsection Ind 9.001(2) is amended to read:

(2) This code shall apply to plants, stores, equipment and installations storing, handling and/or using liquefied petroleum gas; to reconstructions, alterations, and extensions; to existing plants, stores, equipment and installations which may constitute a life or fire hazard, except insofar as on special applications, the department shall waive strict compliance when in its opinion the requirements of this code cannot be reasonably fulfilled.

Subsection Ind 9.02(1)(c) is amended to read:

(c) Inspected and approved by the department.

Note: Where necessary to alter, or to repair such listed systems in the field in order to provide for different operating pressures, change from vapor to liquid withdrawal, and the like, such changes may be made by use of component parts which have been individually listed by one of the above for use with LP-gas.

Subsection Ind 9.02(2)(c) is amended to read:

(c) Inspected and approved by the department.

Subsection Ind 9.02(3)(c) is amended to read:

(c) Inspected and approved by the department.

Subsections Ind 9.05(4) and (5) are amended to read:

- (4) In cases of bulk storage in heavily populated or congested areas, the department shall determine restrictions of individual tank capacity, total storage, and distance to line of adjoining property which may be built on and other reasonable protective methods.
- (5) In industrial installations involving containers of 150,000 gallons aggregate water capacity or more, where serious mutual exposures between the container and adjacent properties prevail, the department may require fire walls designed and constructed in accordance with good engineering practice.

Subsection Ind 9.10(17) (intro. par.) is amended to read:

(17) Direct gas-fired tank heaters may be constructed and installed only upon authorization of the department and, when authorized, shall comply with the following requirements:

Subsection Ind 9.36(3) is amended to read:

(3) Any container may be installed with non-fireproofed ferrous metal supports if mounted on concrete pads or footings, and if the distance from the outside bottom of the container to the ground does not exceed 5 feet, provided the container is in an isolated location and such installation is approved by the department.

Subsection Ind 9.42(4) is amended to read:

(4) If deemed necessary by the department to minimize trespassing or tampering, the area which includes container appurtenances, pumping equipment, loading and unloading facilities and cyliner filling facilities shall be enclosed with at least a 6 foot high industrial type fence unless otherwise adequately protected. There shall be at least 2 means of emergency access.

Section Ind 9.46 is amended to read:

Ind 9.46 Lighting. At the discretion of the department, industrial installations shall be illuminated.

Section Ind 9.82 Note 2 is amended to read:

Note 2. Copies of Standards for the Installation, Maintenance and Use of Portable Fire Extinguishers, NFPA #10 and 10A, may be obtained for personal use from the National Fire Protection Association, 60 Batterymarch Street, Boston. Massachusetts 02110.

Section Ind 9.84 is amended to read:

Ind 9.84 Liquefied petroleum gas service stations. Liquefied petroleum gas service stations apply to storage containers and dispensing devices and pertinent equipment in service stations where liquefied petroleum gas is stored and is dispensed into fuel tanks of motor vehicles. (See section Ind 9.70 for requirements covering use of liquefied petroleum gas as a motor fuel.) All basic rules apply to this section unless otherwise noted. Containers and pertinent equipment shall comply with the requirements as outlined herein as well as with other requirements of the department.

Subsection Ind 9.89(1)(a) is amended to read:

(a) In heavily populated or congested areas, the department shall determine restrictions of individual tank capacity, total storage, and distance to line of adjoining property which may be built on and other reasonable protective methods.

Subsection Ind 9.97(9)(a) 2. is amended to read:

2. Approval by the department.

DEPARTMENT OF INDUSTRY, LABOR AND HUMAN RELATIONS

Stephen J. Reilly, Executive Secretar

Date'